FEAR OF CRIME AMONG DAYAK COMMUNITIES RESIDING IN CRIME HOTSPOT AREAS IN SARAWAK, MALAYSIA

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ABSTRACT. Fear of crime is widely associated with the declination of an individual's subjective well-being and community cohesion. However, robust evidence is still scarce on how local crime is associated with the emotional domain of an individual. Thus, the aim of this research is to identify the relationship between anxiety and fear of crime among Dayak communities residing in crime hotspot areas in Sarawak, Malaysia. Data was quantitatively collected among 365 respondents from the cities of Kuching, Sibu, and Miri. Meanwhile, a correlation test was employed to measure the relationship between anxiety and fear of crime among Dayak communities residing in crime hotspot areas in Sarawak, Malaysia. The result of the study shows that a majority of the respondents were from the Kuching district (50.1%), females (74.8%), belonged to the Iban ethnicity (69.9%), and resided in terrace housing (43.8%) in urban areas (77.0%). The findings also depicted that there is a significant relationship between anxiety and fear of crime (r = .701, p < 0.01) among the Dayak communities residing in the crime hotspot areas. It is deemed important to identify the emotional regulation of the community members residing in crime hotspot areas; thus, the predictors of mental health and other contextual risk factors can be identified to propose crime prevention strategies that target vulnerable groups within the community.

Keywords: Crime hotspot, Dayak, Fear of Crime, Malaysia

I. INTRODUCTION

Fear of crime is described as an emotional response to anxiety, stress, paranoia, or dread of situations associated with crime [1]. The affective aspect of "fear" incorporates a number of emotions regarding the possibility of being a victim of crime, including having repetitive thoughts about uncertain harm (worry) which eventually leads to a low level of emotion (anxiety) [1]. According to Alonso et al. (2020) [2], fear of crime limits individuals' participation in the key environment (e.g., public life, school life, and work-life). Besides, the counter-productivity effect related to fear of crime also causes an individual to alter their daily living habits and practice precaution measures, particularly by avoiding strangers and limiting sociability and/or mutual trust to reduce the risk of victimisation [3]. Therefore, it is unsurprising that the reduction of fear of crime is now almost as important as the reduction of the crime itself.

Research on the phenomenon of fear of crime has been traditionally focused on socio-demographic characteristics alone. As a result, this has led to the accumulation of large information focusing on which social groups are more afraid of crime (e.g., age, sex, socio-demographic status, ethnicity, history of victimization, etc.). However, over the years, criminological studies have undertaken a systematic exploration in capturing individuals' expressions of emotions about fear of crime. The emergence of new theoretical viewpoints and methodological advancement has inspired many scholars in addressing the psychological approach, particularly focusing on the intra-individual domain and its relationship to fear of crime.

II. CURRENT STUDY

Dayak communities are non-Muslim indigenous people in Malaysian Borneo. At the run of the 21st century, the Dayak population in Sarawak could be estimated roughly at 2.2 million [4]. The two biggest ethnic groups within the Dayak communities are Iban and Bidayuh; other ethnicities include Kayan, Kenyah, Kelabit, Kedayan, Murut, Punan, Penan, Bisaya, and Berawan [4]. Dayaks who live in the interior of Sarawak are referred as people from the interior (*Orang Ulu*). Members of these communities typically live in longhouses and practice shifting cultivation whereas only a few hundred of the Eastern Penan continue to live as nomadic people of the rainforest [4]. The Dayak communities perceive their culture as a way of life and

embedded them into their customs, values, attitudes, and traditions. Despite their unique way of living in harmony with nature, however, a report documented by Amnesty International [5] disclosed that the indigenous people of the Dayak communities are facing countless obstacles, relentless harassment, intimidation, arrest, and violence, particularly those residing in the rural areas of Sarawak.

In the pursuit of combating the fear of crime, reducing the crime rate has been one of the major concerns of the Malaysian Government Transformation Plan (GTP) [6]. However, in the context of Sarawak, the overall crime index in the Kuching district is reported to have increased by 6.27% in 2019, particularly in cases involving armed robberies [7]. According to the latest data released by the Statistics Department, the Kuching district recorded 215 violent crime cases (murder, rape, robbery, and causing injury) in 2019, followed by Miri (168), and Sibu (124) [8]. The Sibu district recorded a sharp increase in violent and property crime (242 cases) between January and March 2020, compared with 140 cases in 2019 [8]. Furthermore, the Sibu district police chief, ACP Stanley Jonathan Ringgit mentioned that the increase in violent and property crime was due to the spike in the number of theft cases, house break-ins, and robbery without a firearm [8]. Although the crime index is reportedly increasing in Sarawak, howbeit there is no official data available to address the level of fear of crime among the community members. In a way, the under-represented data related to fear of crime will further marginalise the community members, notably those residing in the crime hotspot areas such as Kuching, Sibu, and Miri. Acknowledging the importance of addressing this issue, the current study was carried out particularly in the crime hotspot areas (Kuching, Sibu, and Miri) to identify the association between anxiety and fear of crime among the Dayak community members.

Studies related to fear of crime have proliferated since the early 1970s, however, the ambiguity on how the fear is interpreted, measured, and defined has led researchers to call for a clear articulation of this phenomenon. Earlier research has focused heavily on an individual's sociodemographic characteristics (e.g., age, race, and gender) and their connection to fear of crime [1, 9], while later works have emphasized on the importance of neighbourhood conditions in relation to fear of crime [10]. Nevertheless, based on the

existing research, very little exploration has been done to examine the relationship between anxiety and fear of crime. While there are some general findings related to the link between anxiety and fear of crime [9,10], such self-reports are not a substitute for empirical research conducted specifically among community members residing in crime hotspot areas. Although considerable academic research has been carried out in Malaysia related to public safety and fear of crime, however, the selection of the sample in those studies was mainly focused on the general public alone [11]. To bridge the gap, this study directly targeted the Dayak communities (Iban, Bidayuh, and Orang Ulu which comprised around 43.4% of the total ethnic groups in Sarawak) residing in crime hotspot areas to identify the association between anxiety and fear of crime.

III. RESEARCH OBJECTIVE

The research objective of this study is to:

- (i) Identify the profile demographic of the Dayak communities in Sarawak, Malaysia.
- (ii) Measure the relationship between anxiety and fear of crime among the Dayak communities in Sarawak, Malaysia.

IV. RESEARCH DESIGN

A cross-sectional survey design was employed to collect data from 365 respondents to measure the relationship between anxiety and fear of crime. The survey questions included sociodemographic questions about respondents' gender, ethnicity, residency area, and type of housing. The respondents were also required to answer questions about their neighbourhood and experience related to anxiety and fear of crime. The research instrument used in this study is the Fear of Crime Survey developed by Ferraro (1995) and the Beck Anxiety Inventory developed by Beck et al. (1988). Some of the survey questions were modified to suit the study context and to increase the respondents' understanding and facilitate quick responses.

Independent Variable: Anxiety

Anxiety is operationalised in this study by focusing on the feelings of fear, uneasiness, tension, restlessness, and dread experienced by an individual. Anxiety was measured using the Beck Anxiety Inventory [12] which contained 21 questions. Respondents were given the possibility to answer using the five-point Likert scale ranging from "not at all" (score 1) to "it bothered me a lot" (score 5). Respondents were also asked about how often they feel nervous, scared, or worried if bad things befall them. As the Cronbach's alpha of the scale is sufficiently high (0.92), the items are considered reliable indicators of anxiety.

Dependent Variable: Fear of Crime

Fear of crime is operationalised in this study by focusing on the general sense of feeling unsafe, safety perception, perceived risk, and precautionary behaviour related to crime. Fear of crime was measured using the Fear of Crime Survey [13] which contained 25 questions. This instrument is comprised of five domains, namely (i) sexual abuse, (ii) physical abuse, (iii) housebreaking, (iv) theft, and (v) fraud. Respondents were given the possibility to answer using the five-point Likert scale ranging from "not worried at all" (score 1) to "very worried" (score 5). Respondents were also asked about how scared they will be if some horrific incidents befall them (e.g., being mugged, robbed, home being broken into, being raped, things being stolen from

their car, or car being stolen). As the Cronbach's alpha of the scale is sufficiently high (0.80), the items are considered reliable indicators to fear of crime.

Sample and Location of Study

The study data was gathered among the Dayak (Iban, Bidayuh, and Orang Ulu) communities residing in Kuching, Sibu, and Miri districts. Due to the travelling restriction during the outbreak of the COVID-19 pandemic, participants were recruited online and by word of mouth. A total number of 365 respondents participated in this study based on a nonrandom sampling.

Procedure

The data collection began in September 2021. The researcher formatted the questionnaire for online use and made it available through Google Form. The questionnaire contained a consent form that includes questions such as (i) "Do you belong to Dayak ethnicity (Iban, Bidayuh, or Orang Ulu)" and (ii) "Do you reside in Kuching, Sibu, or Miri district", before being granted access to the survey. If the participant did not answer "yes" to both items, they were not allowed to continue. For the current study, the inclusion criteria required respondents to be 18 years of age or older, belong to the Dayak ethnicity (Iban, Bidayuh, or Orang Ulu), reside in Kuching, Sibu, or Miri city, and able to read English or Bahasa Malaysia, as the survey was prepared in both languages. Conversely, individuals under the age of 18 were not included as respondents, as they are unable to consent to participate in the study without parental permission.

Data Analysis

The obtained data were analysed using the Statistical Package for the Social Sciences (SPSS). Meanwhile, a correlation test was employed to measure the relationship between anxiety and fear of crime among Dayak communities residing in crime hotspot areas in Sarawak, Malaysia.

Ethical Consideration

The respondents' participation in this study was completely voluntary and individual responses were recorded anonymously. The study objective was also clearly stated in the survey form. Besides that, it was made compulsory for all the respondents to tick the "YES" checkbox in the Google Form that denotes their consent to take part in this study. No provision of benefits or incentives was given to the respondents.

V. RESULT

The study results are presented in two primary sections, namely (i) demographic profile, and (ii) the relationship between anxiety and fear of crime among the Dayak communities residing in crime hotspot areas in Sarawak, Malaysia.

Demographic Profile

A demographic profile essentially represents the respondents' basic information. Based on the descriptive analysis, most of the respondents were from the Kuching district (50.1%), females (74.8%), belonged to the Iban ethnicity (69.9%), and resided in terrace housing (43.8%) in the urban areas (77.0%).

Relationship Between Anxiety and Fear of Crime

Based on the Pearson correlation analysis, there is a significant relationship between anxiety and fear of crime (see Table 1). The hypothesis is presented as follows:

H₁: There is a significant relationship between anxiety and fear of crime.

The result shows that there is a positive and significant strong relationship between anxiety and fear of crime (r = .701, p < 0.01) among the Dayak communities residing in crime hotspot areas in Sarawak, Malaysia. Thus, the alternative hypothesis is accepted. The positive relationship indicates that the greater the anxiety, the higher the fear of crime among Dayak communities residing in crime hotspot areas.

Table 1. Summary of Correlation Analysis

Coefficient	Fear of Crime	
	Correlation	Significant
	Value (r)	Level (p)
Anxiety	.701	0.01

^{**.} Correlation is significant at the 0.01 level (2-tailed)

VI. DISCUSSION

Growing attention has been given to individual-level risk factors linked to fear of crime. The current study investigated the associations between anxiety and fear of crime among the Dayak communities residing in the crime hotspot areas in Sarawak, Malaysia. As hypothesised, there is a significant relationship between anxiety and fear of crime. The obtained output provides further evidence supporting that fear of crime may lead to an aversion to hazards and threats [14]. In the study context, crime-related fear can be associated with the micro, meso, and macro-level; in which respondents with high anxiety levels experienced escalated levels of fear towards crime incidents. This clearly underlines that some respondents involved in this study have a weaker capacity in managing their emotional response to crime, are easily provoked by social problems occurring around them, and are highly vulnerable to the negative impact of crime. The outcome of the study also shows that some respondents with traits of anxiety experienced regular episodes of worry and had low levels of confidence in their local police force. Hence, the authors urge that more mindful future work is needed to unfold the role of the emotional and functional aspects towards fear of crime, particularly among individuals residing in the crime hotspot areas.

Crime is a complex phenomenon causing unexpected social behaviour and reciprocation among individuals. At the micro-level, fear of crime leads an individual to worry about becoming a victim of crime. In reality, crime is not only limited to mugging, but the term also covers a wide range of undesired behaviours including fraud, murder, burglary, theft, and rape. Hence, fear of crime is not only limited to one type of threat howbeit it also includes different types of threats such as physical harm, humiliation, shame, or material harm. Therefore, individuals experiencing fear of crime might also encounter physical health consequences known as "fight or flight" syndrome [14]. Indirectly this causes the body to produce minor physiological responses such as shortness of breath, sweating, trembling, quickening of the heart rate, ulcer, and high blood pressure in the long term while thinking about the potential of becoming the victim of crime [14]. The findings from this research is in line with previous studies which unveiled that the occurrence of crime and violence in a neighbourhood may increase the threat of victimisation, causing residents to become vulnerable to mental health issues such as anxiety and inducing chronic fear of crime [15]. For instance, around 50.7% of respondents disclosed that their bodies start to tremble when a criminal incident occurs in their neighbourhood. Additionally, 49.3% of respondents stated that they have encountered difficulty breathing, are afraid to die (30.1%), and feel extremely nervous (28.2%) when a crime takes place in their neighbourhood.

The result obtained from this study is also consistent with the findings by Weisburd et al. (2018) [16] which showed that trait anxiety heightened vigilance for danger processing. For instance, the respondents stated that house break-ins, robbery, dispute among neighbours, drugs and alcoholrelated problems, gangsterism, loitering, and street racing happen in their neighbourhood. These incidents cause some of the respondents to set up CCTV in their houses, hire security guards, build a fence around their houses, avoid going out alone at night, and tend to bring a pocket knife or pepper spray as a safety measure to protect themselves. The emerges from the analyses clearly indicate that individuals with weaker capacity in managing their emotional response feel more susceptible to the impact of crime causing them to express intense worries about victimisation and motivating the implementation of costly precautions. The plausible explanation suggested by the authors is also consistent with the findings by Baranyi et al. [10] and Weisburd et al. (2018) [16] which stated that trait anxiety, personality traits, or phobic disorder heightened vigilance for danger processing, ultimately causing an individual to be worried about the impact of crime on them. However, other studies showed that the impact of anxiety on neighbourhood safety is significant for women but not men [14]. Thus, the authors suggested that longitudinal studies are needed to explicate the impact of anxiety on the public concern for neighbourhood safety based on gender domain, particularly among those residing in crime hotspot areas.

VII. CONCLUSION

In sum, emotions about crime impart some important information on how an individual feels about their neighbourhood. Incontrovertibly, a high level of anxiety and fear of crime does heighten the feelings of threat and vulnerability among individuals residing in crime hotspot areas. Hence, multi-level intervention addressing individuals and environmental domains should be developed to reduce the fear of crime and the negative sequelae that it causes. The results obtained from this study is hoped to provide some direction for the policymakers in reducing community members' fear of crime. Strategies to decrease fear of crime and increase social cohesion should be adopted more organically hereafter.

By using a small-area level measure, this study provided prospective evidence related to how neighbourhood crime is associated with anxiety and fear of crime among the Dayak communities. Thus, it is prudent for healthcare providers/planners to enhance mental health services in crime vicinity areas by providing preventative measures or treatment opportunities, especially for at-risk individuals to the effects of crime. Besides, a screening tool related to fear of crime should be developed to assess variety of mental health conditions among individuals who screen positive. While the present work contributes to the literature on fear of crime by focusing on the emotions about crime, more empirical studies in this area are warranted to further explore the relationship between these characteristics in other metropolitan cities and rural areas in Malaysia.

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