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Exploring the Gender Difference in Fear of Crime among Older People

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The purpose of this study was to evaluate anew fear of crime scale that accurately reflects the current criminal experiences of older people and test gender differences in fear of crime in a number of items, in the item wording, and in choice response categories. A series of chi-square tests compared the fear of crime scale of older people according to their gender, and then logistic regression models were created and tested between males and females. The finding presents the odds ratios, which suggest that older female odds were 168% higher than older men odds of the item 'Someone forcibly taking your property'. They were 43% lower than older men odds of the item 'Some strangers wandering around your home at midnight' and were 170% higher than older men odds of the item 'Some drag racing adolescents trying to hurt you'. Odds were 141% higher in older women than in older men of the item "Someone trying to abduct you". In conclusion, older women are more afraid of crime than older men. This study suggests that the fear of crime in older women focuses more on bodily injury than in property damage.

Keywords: Older people, fear of crime, gender difference

The high level of fear of crime may create a higher risk to the overall quality of life to those who are vulnerable, especially older people. In the fear of crime literature, numerous studies of older people have been published in the last 3 decades. Some older people feel vulnerable and unable to protect themselves physically or economically [14]. Some people perceive their environment to be threatening [20; 28]. Older people usually are aware of the potential for crimes; however, they often lack the ability to prevent crime, largely because of their own physical limitations.

With regard to the fear of crime, older people are more afraid of crimes against their person than crimes against their property [30]. McKee and Milner [19] assessed 60 community-dwelling older people, aged 65 and over, in Sheffield, and found that older people had more fear of personal crime (e.g., mugging, assault, rape and murder) than property crime (e.g., burglary, car theft, vandalism and shoplifting). They also had more fear of the possibility of crime than the reality of crime. Just the fear of crime alone may be a causal factor in reduced activity, thus leading to poor quality of life among older people. Previous research has

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demonstrated that fear of crime is associated with lower morale, lower subjective well-being, and reduced neighborhood satisfaction [28]. Smith et al. [25] also concluded that being a victim of crime directly, and indirectly, affects older people' s quality of life.

The past thirty years of research into the relationships between gender and fear has shown that women are more afraid of crime or becoming a victim of crime. Paradoxically though, women are far less likely to be the victims of crime [18; 22]. In addition to the fear women perceive when coming into bodily harm, women also fear the inability to resist the act of crime when it occurs. These emotional perceptions of powerlessness lead to an increase in the fear of crime [8].

There are four main explanations for men's reactions to crime. First, society doesn't portray men as victims but rather the protectors of women, especially women at risk [22]. After men get married they feel a responsibility to play the male protector role for their wives, in part to better conceal their own fears [21]. Second, society's expectations of the masculine role model: men learn that fear of crime cannot be shown, not even in small doses, as it would detract from their own masculinity [27]. Third, men can be afraid of crime, but only in special circumstances, such as the elevated anxiety of being a stranger in a new city [24]. Fourth, men are not actually afraid for themselves, but for other people's welfare. This phenomenon is called "altruistic fear". Research conducted by Warr and Christopher [29] found that men are more fearful for their wives then for themselves.

Most of the current research shows that women fear crime more than men, despite the fact that there are differences in men's and women's fears related to crime [17; 23]. These differences between the genders maybe explained as different levels of extent of the fear of crime. Franklin and Franklin found in their research that women's fear of crime decreased with increasing age [11]. The level of Men's fear of crime did not vary with age, but it did with income. Men with higher incomes are more afraid of crime. In another study into the fear of crime between the genders, Snedker [26] found that both men and women both fear the crime of physical assault the most, but there is less evidence to support that women have an especially high fear of rape [26].

In the previous sections, the author reviewed the literature and its' examination of many facets affecting gender differences on fear of crime. Most studies are based on a single question to measure fear of crime for example; "How safe do you feel walking alone in this area after dark?" [3; 5]. Whilst this may not tap fully the emotional dimensions of fear, it has been the method adopted in most researches. However, multiple-item indices are also not a panacea for social measurement. Unless properly constructed and tested, one cannot be assured that composite indices and measurement scales possess appropriate psychometric properties [16]. Ferraro and LaGrange [9] make a distinction between 'formless' and 'concrete' fears. These discreet fear types cannot be measured by asking a single question. As the review demonstrates, fear of crime gender differences are affected by multiple variables. The purpose of this study is to evaluate anew fear of crime scale that accurately reflects the current criminal experiences of older people and test gender differences of fear of crime in the number of items, in the item wording, and in choice response categories.

METHODS

-Ethics and Participants

This study was approved by the University Research Committee, Kainan University. Participants were informed about the study's purpose, their anonymity and the confidentiality of their individual data. Participants were advised of their right to withdraw from the research study by simply failing to complete the questionnaire.

The purposive sample was taken from a community in Taoyuan Taiwan from April to June 2011. The inclusion criteria of recruiting the participants in this study were as follows: (1) community-dwelling residents; (2) aged over 65 years; and (3) having ability to answer questionnaire. The participants who had a diagnosis of dementia or substance abuse were excluded. A total of 200 participants filled and completed the structured questionnaire survey. Data from participants who did not fully complete the questionnaire was excluded from the study (n = 24). Data from totally completed questionnaires of the remaining 176 participants included 89 (50.6%) male and 87 female (49.4%). Participants ranged from 65 to 83 years of age with a mean age of 70.73 years.

-Measures

Several socio-demographic characteristics including age, gender, marital status, education, religion, and living arrangement were controlled. Age was coded into two dummy variables: 65-70 years old = 1 and 70+ = 0 (reference category). Gender was dummy-coded as male = 1 and female = 0 (reference category). Marital status was dichotomized as married = 1, unmarried = 0 (single, divorced, widowed or separated; reference category). Education was dummy-coded as literate = 1 and illiterate = 0 (reference category). Religion was dichotomized as having a religion = 1 and no religion = 0 (reference category). Living arrangement was coded into two dummy variables: living with others = 1 and living alone = 0 (reference category). For purposes of this study, all these socio-demographic characteristics were controlled.

The original Chinese fear of crime scale (Cronbach α =0.9) was developed by Professor Hsieh [13]. The 20-item fear of crime scale uses 10-point Likert response format ranging from strongly disagree (1) to strongly fearful (10). Higher scores indicate very high level fear in relation to crime. Although the fear of crime scale has been applied to Chinese people in general to test fear of crime; unfortunately, published psychometric data on the use of the fear of crime scale in older people could not be found that was specific to the Taiwanese population.

The fear of crime scale contained 20 items, was of the 10-point Likert type, and ranged from not being fearful at all to being extremely fearful. In this study, repeated exploratory factor analysis (EFA) and Cronbach's [7] reliability tests were performed to purify measure and to refine scale as first-order analysis. The data was suitable for factor analysis (KMO = 0.873, Bartlett's test of sphericity = 2340.955, df = 171, p< .001)). Dimensions were interpreted if the item loaded on the dimension at 0.4 or above. However, only item 9 had a factor loading value below 0.4; most of the coefficients are higher or closer to the benchmark of 0.4 Thus, item 9 was dropped from the scale and the results revealed a clear pattern of item loading across the two factors named 'concrete fear' and 'formless fear' and satisfied Kaiser's [15] eigenvalue criterion. An alpha score of 0.7 or greater is generally considered to be an acceptable reliability measure for research [6]. The Cronbach's reliability tests were show on the

fear of scale (19 items) was 0.923, factor 1 was 0.930, and factor 2 was 0.817 as the Table 1. The alpha values of scale reliability resulted in acceptable levels of internal consistency.

	Factor Item	F1	F2
F1 (concrete fear)			
1	Someone threatening you with a weapon	.865	.080
3	Someone forcefully taking your property	.819	.148
4	Someone defrauding you of your money	.570	.409
5	Someone trying to assault you	.617	.126
7	Someone trying to murder you	.599	.018
10	Being sold contaminated food (toxic substances)	.518	-.011
11	Someone breaking in your home when you are not at home	.510	.452
12	Someone whom you know beating you	.818	.130
13	Your car or motorcycle being stolen	.592	.334
14	A drunken driver injuring you	.800	.179
16	Someone breaking in your home when you are at home	.710	.152
17	Some drag racing adolescents trying to hurt you	.844	.131
18	Someone robbing you when you withdraw money	.579	.448
19	Someone try to set fire your property	.567	.334
20	Someone trying to abduct you	.866	.095
F 2 (formless fear)			
2	Someone making harassing phone calls	.085	.746
6	Some beggars trying to approach to you	.045	.809
8	Some strangers wandering around your home at midnight	.079	.762
15	Some adolescents loitering around your home	.141	.844
Eigenvalues		7.329	3.442
Percentage of variance		38.58%	18.12%
Cumulative percentage of variance		38.58%	56.70%
Cronbach's Alpha		.930	.817

Table 1. Factor Loadings for the Fear of Crime Items

A confirmatory factor analysis (CFA) was produced that examined the validity of the fear of crime scale. The criteria of good-fit-index were (1) the relative chi-square criterion for acceptance ranging from more than 2 to less than 5 [2]; (2) comparative fit index, CFI) was > 0.9 [1]; (3) the incremental fit index (IFI) was > 0.9 for avoiding the underestimation of fit in small samples [2]; and (5) the root mean square error of approximation (RMSEA) values ≤ 0.05 as a good fit; 0.0 5-> 0.08 as an adequate fit; 0.08-0.10 as mediocre fit; and > 0.1 indicating not acceptable [4]. The loadings of the items on their respective factors in the model range from 0.45 to 0.88 with all being significant at the 0.05% level (Table 2). Standardized estimates for fully model were χ^2 = 699.85 (p< .001, χ^2/df = 4.63); CFI = 0.9;

IFI = 0.9; PGFI = 0.6; and RMSEA = 0.14 (90% CI = 0.13 – 0.15). Not surprisingly, the chi-square was significant; the model therefore is regarded as unacceptable. However, the relative chi-square for the study was 4.63 which did fit the study criterion of less than 5 [27]. Although chi-square and the RMSEA were somewhat below expectation, the relative chi-square, CFI, IFI, and PGFI were indicative of reasonable model fit in this sample.

	Factor Item	λ	E	*t*
F1	(concrete fear)			
1	Someone threatening you with a weapon	.85	.28	13.82*
3	Someone forcibly taking your property	.82	.33	13.05*
4	Someone defrauding you of your money	.63	.60	9.17*
5	Someone trying to assault you	.59	.65	8.43*
7	Someone trying to murder you	.55	.70	7.69*
10	Being sold contaminated food (toxic substances)	.45	.80	6.14*
11	Someone breaking in your home when you are not at home	.60	.64	8.51*
12	Someone whom you know beating you	.82	.33	13.02*
13	Your car or motorcycle being stolen	.63	.61	9.05*
14	A drunken driver injuring you	.80	.36	12.68*
16	Someone breaking in your home when you are at home	.70	.51	10.42*
17	Some drag racing adolescents trying to hurt you	.84	.30	13.52*
18	Someone robbing you when you withdraw money	.64	.59	9.37*
19	Someone trying to set fire to your property	.61	.63	8.68*
20	Someone trying to abduct you	.85	.27	13.97*
F2	(formless fear)			
2	Someone making harassing phone calls	.68	.54	9.45*
6	Some beggars trying to approach to you	.74	.45	10.58*
8	Some strangers wandering around your home at midnight	.61	.63	8.26*
15	Some adolescents loitering around your home	.88	.22	13.39*

* $p < .05$

Table 2. Measurement Model

The reliability in CFA was measured by the CR for two factors were 0.93 (concrete fear) and 0.82 (formless fear) as shown in Table 3. In this study, AVE ranged were 0.50and 0.54and did match the recommended threshold of 0.5 [10]; however, Hair et al. [12] suggested that CR>AVE, MSV<AVE, and ASV<AVE. In this study, all indices matched this criterion, indicated good convergent validity for each construct, and also support discriminant validity. Based on these evidences for reliability, convergent and discriminant validity, the measurement model was deemed acceptable. The fear of crime scale was dummy-coded as very fearful = 1 and slightly fearful = 0 (reference category) by mean.

	Variance and Reliability						Factor Correlations*	
					Convergent Validity	Discriminant Validity		
	CR	AVE	MSV	ASV	CR>AVE AVE>.5	MSV<AVE ASV<AVE	Concrete fear	Formless fear
Concrete fear	.93	.50	.14	.14	Yes	Yes	**.96**	
Formless fear	.82	.54	.14	.14	Yes	Yes	.38	**.91**

* Square root of AVE in bold on diagonals

Table 3. Results of Reliability, Convergent and Discriminant Validity

RESULTS

Table 4 presents the baseline numbers, percentages, means, and standard deviations data for age, gender, marital status, education, religion, living arrangement, and fear of crime scale of 176 participants. Participants were more likely to be male, married, having a religion, literate, and living with others.

Variables	N	%	Mean	SD
Age	176		70.73	3.802
Gender	176			
Male	89	50.6		
Female	87	49.4		
Marital status	176			
Unmarried	79	44.9		
Married	97	55.1		
Education	176			
Illiterate	52	29.5		
Literate	124	70.5		
Religion	176			
No religion	16	9.1		
Having a religion	160	90.9		
Living status	176			
Living alone	17	9.7		
Living with others	159	90.3		
Fear of crime scale				
1. Someone threatening you with a weapon	176		7.27	2.304
2. Someone making harassing phone calls to you	176		3.49	1.951
3. Someone forcibly taking your property	176		7.17	2.058
4. Someone defrauding you of your money	176		6.00	2.280
5. Someone trying to assault you	176		6.88	2.539
6. Some beggars trying to approach to you	176		3.57	2.334
7. Someone trying to murder you	176		7.53	2.783
8. Some strangers wandering around your home at midnight	176		4.12	2.306
9. Being sold contaminated food (toxic substances)	176		7.24	1.571

10. Someone breaking in your home when you are not at home	176	5.86	2.332
11. Someone that you know hitting you	176	7.59	2.370
12. Your car or motorcycle being stolen	176	5.86	2.177
13. A drunk driver injuring you	176	7.66	2.182
14. Some adolescents gathering around your home	176	4.24	2.349
15. Someone breaking in your home when you are at home	176	6.93	2.482
16. Some drag racing adolescents try to hurt you	176	7.99	2.265
17. Someone robbing you when you withdraw money	176	7.16	2.288
18. Someone trying to set fire your property	176	7.61	2.307
19. Someone trying to abduct you	176	8.74	2.232

Table 4. Descriptive Statistics of the Sample by Socio-Demographic Characteristics and the Fear of Crime

It can be seen from Table 5 that there was a significant gender difference in 'Someone forcibly taking your property' (χ^2=5.003; p=0.025), 'Some strangers wandering around your home at midnight' (χ^2=5.901; p=0.015), 'Some drag racing adolescents trying to hurt you' (χ^2=4.566; p=0.033), 'Someone trying to set fire your property' (χ^2=4.917; p=0.027), 'Someone trying to abduct you' (χ^2=4.553; p=0.033).

Variable	Female N (%)		Male N (%)		χ^2	*p*-value
Someone threatening you with a weapon						
Slightly fearful	13	(41.9)	18	(58.1)	0.846	0.358
Very fearful	74	(51.0)	71	(49.0)		
Someone making harassing phone calls						
Slightly fearful	76	(49.7)	77	(50.3)	0.027	0.869
Very fearful	11	(47.8)	12	(52.2)		
Someone forcibly taking your property						
Slightly fearful	8	(29.6)	19	(70.4)	5.003	0.025 *
Very fearful	79	(53.0)	70	(47.0)		
Someone defrauding you of your money						
Slightly fearful	32	(49.2)	33	(50.8)	0.002	0.967
Very fearful	55	(49.5)	56	(50.5)		
Someone trying to assault you						
Slightly fearful	15	(45.5)	18	(54.5)	0.257	0.612
Very fearful	72	(50.3)	71	(49.7)		
Some beggars trying to approach to you						
Slightly fearful	67	(48.9)	70	(51.1)	0.069	0.793
Very fearful	20	(51.3)	19	(48.7)		
Someone trying to murder you						
Slightly fearful	14	(46.7)	16	(53.3)	0.111	0.739
Very fearful	73	(50.0)	73	(50.0)		
Some strangers wandering around your home at midnight						
Slightly fearful	70	(55.1)	57	(44.9)	5.901	0.015 *
Very fearful	17	(34.7)	32	(65.3)		
Of being sold contaminated food (toxic substances)						
Slightly fearful	6	(35.3)	11	(64.7)	1.505	0.220
Very fearful	81	(50.9)	78	(49.1)		
Someone breaking in your home when you are not at home						
Slightly fearful	33	(46.5)	38	(53.5)	0.415	0.519
Very fearful	54	(51.4)	51	(48.6)		
Someone that you know hitting you						
Slightly fearful	14	(46.7)	16	(53.3)	0.111	0.739
Very fearful	73	(50.0)	73	(50.0)		
Your car or motorcycle being stolen						

Slightly fearful	36	(49.3)	37	(50.7)	0.001	0.979
Very fearful	51	(49.5)	52	(50.5)		
A drunk driver injuring you						
Slightly fearful	8	(33.3)	16	(66.7)	2.881	0.090
Very fearful	79	(52.0)	73	(48.0		
Some adolescents gathering around your home						
Slightly fearful	65	(49.2)	67	(50.8)	0.008	0.931
Very fearful	22	(50.0)	22	(50.0)		
Someone breaking in your home when you are at home						
Slightly fearful	20	(43.5)	26	(56.5)	0.883	0.347
Very fearful	67	(51.5)	63	(48.5)		
Some drag racing adolescents trying to hurt you						
Slightly fearful	7	(29.2)	17	(70.8)	4.566	0.033 *
Very fearful	80	(52.6)	72	(47.4)		
Someone robbing you when you withdraw money						
Slightly fearful	12	(35.3)	22	(64.7)	3.370	0.066
Very fearful	75	(52.8)	67	(47.2)		
Someone try to set fire your property						
Slightly fearful	11	(32.4)	23	(67.6)	4.917	0.027 *
Very fearful	76	(53.5)	66	(46.5)		
Someone trying to abduct you						
Slightly fearful	5	(26.3)	14	(73.7)	4.553	0.033 *
Very fearful	82	(52.2)	75	(47.8)		

* p <.05. ** p <.01. *** p< .001

Table 5. The Difference of Gender on Each Item of the Perception of Fear

A high proportion of older women verses older men felt very fearful of 'Someone forcibly taking your property', 'Some drag racing adolescents trying to hurt you', 'Someone trying to set fire to your property', and 'Someone trying to abduct you'. The older men reported being only slightly fearful of these potential threats.

A higher percentage of older men verses older women felt very fearful of 'Some strangers wandering around their home at midnight'. The older women reported to being only slight fearful of this potential threat.

Logistic regression was conducted to assess whether gender significantly predicted whether the type of crime made older people slightly fearful or very fearful. As can be seen in Table 6, the odds ratios and confidence interval for the item of 'Someone was forcibly taking your property' was 2.68 (95% CI=1.105− 6.504; p=0.029), for the item of 'Some strangers wandering around your home at midnight' was 0.433 (95% CI=0.218− 0.858; p=0.016), for the item of 'Some drag racing adolescents trying to hurt you' was 2.698 (95% CI=1.058− 6.880; p=0.038), for the item of 'Someone try to set fire to your property' was 2.408 (95% CI=1.092− 5.308; p=0.029), and for the item of 'Someone trying to abduct you' was 3.061 (95% CI=1.052− 8.908; p=0.040).

Table 6 presents the odds ratios, which suggest that older female odds were 168% higher than older men odds of the item 'Someone forcibly taking your property', were 43% lower than older men odds of the item 'Some strangers wandering around your home at midnight', were 170% higher than older men odds of the item 'Some drag racing adolescents trying to hurt you', and were 141% higher than older men odds of the item 'Someone trying to abduct you' .

Variable (reference category)	B	OR	95% CI	*p* value
Someone forcibly taking your property (very fearful)	0.986	2.680	1.105−6.504	0.029*
Some strangers wandering around your home at midnight (very fearful)	-0.838	0.433	0.218−0.858	0.016*
Some drag racing adolescents trying to hurt you (very fearful)	0.993	2.698	1.058−6.880	0.038*
Someone trying to set fire your property (very fearful)	0.879	2.408	1.092−5.308	0.029*
Someone trying to abduct you (very fearful)	1.119	3.061	1.052−8.908	0.040*

* p <.05. ** p <.01. *** p< .001

Table 6.The Difference of Gender on Selected Items of the Fear of Crime Scale

DISCUSSION

The research shows that older women are more afraid than older men for the following scenarios: someone seizing your property, being hit by reckless teenager drivers, house or vehicle arson, and abduction. Older men are more afraid than older women of strangers prowling around the house at night. In general, older women are more afraid of crime than older men. The founding of present study showed that the fear of crime in older women focuses more on taking property, hurting you, and abducting you.

The results of this study are consistent with previous related studies: women's fear of crime is significantly higher than men's [17; 23; 26]. The main reasons for this premise are given as follows: first, women's bodies are inherently physically weaker than men's and women have weaker self-defense skills [22]. This leads a woman to experience fear and anxiety for her personal safety and she has a heightened awareness of crime in order to avoid the threat of physical suffering, abuse and violence. Second, society overtly encourages men, but not women, to be brave and show no fear in the

face of danger [21]. Therefore women are more likely to show fear when facing a dangerous situation. If women have severe anxiety and they perceive that they will have a lack of emotional control in a dangerous situation then their overall fear of being a potential victim of crime will increase. Third, society has set expectations of gender and behavioral differences. Women in traditional Asian society are taught to obey, be gentle and avoid displaying any manly behavior [27]. These traditional female values lead women to form a victim's attitude in response to crime, such as feeling incompetent when presented with problems, and instills a serious fear of crime and a fear of becoming a victim of crime in the process. According to the material from the researchers, society teaches women to play a more passive and weaker role than that of men, rather than taking the initiative in social situations. In the event of a crisis, women feel an inability to deal with the situation, but instead display the emotions of panic, fear and worry. This can lead to a constant state of unease and fearfulness of being a victim of crime. Lastly, older men and women differ not only in the degree of fear of becoming a victim of crime but also in the nature of their fears. Women reflect more on personal safety concerns, while men tend to worry about themselves as well as their friends and family. After a man is married, he feels responsible for his wife's and family's protection, which is the male protector role. This traditional male role is also used to hide his own fears. Another element of difference in comparing the genders is that older men are more afraid than older women of strangers prowling around the house at night.

Previous research studies suggest that there are no gender differences when measuring fear of becoming a victim of a property crime [17]. The greatest contribution of this study is the contrary finding that significant gender differences of fear of property crime do exist. In this study, older women include financial loss in their fear of crime, which is probably related to their economic status. Taiwan's birth rate has decreased while the average female life expectancy has increased. 27% of women aged 65 or older have their own financial economic security, such as employment and investment income or retirement insurance. Up to 58% of older women rely on their children for support in Taiwan. If the family's property were lost, the living conditions of older women would be seriously affected [22].

As the actual living conditions of older men and women can be different, the personal experience brought on by fear of crime is much higher than the actual documented crime rates in an area [20]. In addition to experiencing crime first-hand, the coverage of crime through mass media adds to the fear of crime. Listening to and watching crime victims' share their painful experiences leads the viewer to also be vicariously emotionally traumatized [22]. The fear of crime is just one element of perceived risk in any given danger situation. Emotions of anxiety and insecurity will often proceed rising levels of fear and psychological pressure when an individual is exposed to a hazardous situation leading to impact on the well-being of older people. Although the communities of Taiwan are generally very safe and violent crime and muggings are very rare, older women should be cautious when walking on the street alone at night. This study suggests that older people evaluations of vulnerability or poor health are strong indicators of fear of crime for men and women. Future research is needed to investigate the influence of environmental surroundings upon the individual's fear of crime as well as the effect of environmental surroundings on the older community's fear of crime.

It is worthwhile to consider some of limitations of this research. First, although this sample has a good explanatory model; a larger sample could help to reveal small population effects. Another limitation of this study model is the absence of any demographic or other factors, such as education, social economic status, community location, experience, and so on. It is possible that a more heterogeneous sample taken from more divergent geographic locations in Taiwan will better represent the feelings of fear of crime in older people. This study used cross-sectional data from questionnaires at the community level (not the individual level) to gain an understanding of the social environmental dimension. Variable changes over time were not tracked and so are unknown. It is suggested that future research could have fixed samples for long-term tracking. In addition, although quantitative analysis can be taken in a short time period from a large amount of questionnaire data collection, this may not be enough to correctly measure complex human behavior. Supplementing this data with a series of interviews would help to better understand the true nature of this issue, and highlight the relevant factors related to each individual's fear of crime.

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