

Stranger Danger: Explaining Women's Fear of Crime

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ABSTRACT

Using logistic regression techniques with the Canadian Violence Against Women Survey, this paper examines the effects of demographic characteristics, previous experience with victimization, and risk management and avoidance behaviors on fear of crime. Results indicate higher explanations of variance are largely attributed to women having had negative experiences with strangers. Negative experiences include being followed, receiving unwanted attention, and having received obscene phone calls. One implication of this study is that women fear "stranger-danger" most, and they are more likely to be acutely aware of danger when there are unknown men nearby. Further implications of the supposed paradoxical relationship between stranger danger and actual victimization risk are discussed.

KEYWORDS: fear of crime; women; fear of strangers

Although not everyone has been the victim of a crime, criminal acts may touch upon everyone. Those fortunate enough not to have been victimized, nor to know someone who has, will have probably read, watched, or listened to news, film, television, or radio stories about those who have been victimized (Kennedy and Sacco 1998). Repeated exposure to criminal events and the after-effects of such events, on the whole, may come to be a powerful socializing force affecting people both directly and indirectly. Research on criminal victimization indicates that many people fear crime (Ferraro 1995) and engage in a variety of activities to prevent crime (Skogan and Maxfield 1980), yet may also choose not to report crimes to police. For example, women who are physically abused at home, or who have been sexually assaulted, tend not to report the crimes to police (Johnson 1996; Statistics Canada 1993a). The hidden nature of women's victimization necessarily means that there is much about violence against women that we do not understand (Koss 1992, 1996; Sessar 1990).

The primary focus of this study is women's fear of victimization. This work expands on the work by Keane (1995) by extending the analysis to two other fear variables: fear while using public transportation, and fear while using a parking garage alone. Unlike Keane's paper, this study also examines self protective behaviors and their relationship to fear. Given the growing awareness of the hidden nature of women's victimization, research at this point in time is particularly appropriate. A statistical analysis was undertaken, using the 1993 Violence Against Women Survey conducted by Statistics Canada, in order to estimate the nature and

extent of women's victimization, and how women react to it given certain life experiences.

LITERATURE REVIEW

Fear

Stanko (1992) noted that although traditional victimization surveys demonstrate that young men are at the highest risk for victimization, women consistently report, on average, fear of crime that is three times higher than males. One would expect that fear of crime is related to likelihood of victimization. Yet, women report higher fear even though official reports indicate they are less likely to be targets of crime than males. This paradox has led Skogan (1987) to observe that fear of crime has often been perceived as "irrational." Stanko agrees with Smith (1988) that this fear of crime paradox may fail to capture the lived experiences of women's physical and sexual violence. Stanko argues that conventional criminology tends to look at street crime and not crimes happening behind closed doors between non-strangers and thereby undermines the detection of crimes of violence against women.

Statistics indicate that men are roughly eleven times less likely than women to experience "being forced to do something sexual" over their lifetime (Tjaden and Thoennes 1998). Research investigating women's fear of victimization led Warr (1984, 1985) to suggest that women report more general victimization fears because of an intertwining of general fear with their fear of sexual assault. Therefore, he suggests that women's fear of victimization may be founded on a different basis than those fears held by men, as men rarely fear sexual assault (Warr 1985, 1987). Ferraro's research (1995,

1996) observes that women and men reported the same fear levels for nonviolent crime. However, when the crime of rape was added into the fear category, women's reported fear rose significantly. Gordon and Riger (1989) argue that this is because women fear not only the violent act of rape, but the aftermath of rape as well.

Alternatively, Keane (1995) argues that there is a dual nature to women's fear: concrete fear and formless fear. Concrete fear is the fear associated with certain crimes. The implicit assumption here is that some criminal activities elicit more fear than others. For example, rape elicits more fear than theft. Formless fear, however, is a more generic or less specific fear of crime. Keane found that women who were younger reported higher levels of both types of fear. In particular, his results indicate that younger women reported highest results for concrete fear, or fear of specific crimes. To this end, his work supports research that women perceive the seriousness of rape as almost equal to (Warr 1985) or exceeding (Ferraro 1996) the perceived seriousness of murder. The purpose of this paper is to establish whether women with certain demographic characteristics, experiences with criminal victimization, who avoid risky situations, and/or use risk-management in potentially dangerous situations, will report higher levels of fear.

Demographics and Fear

Results of research examining the age/fear of victimization relationship have been mixed (Ferraro, 1995). Simply, studies confirm that both older and younger individuals have high levels of fear. Ferraro (1995), in an extensive review of this literature, concludes that the relationship between age and fear is actually curvilinear. That is, both the youngest women and the oldest women queried in various surveys report the highest levels of fear. Emerging evidence suggests that older women and younger women may have different bases for their fear of victimization, respectively. In 1996, Ferraro's continued research examining the age/fear of crime paradox revealed that although women rank consistently higher with respect to fear of all victimization types, that most of the variance explained diminishes or is reversed when fear of rape is taken out of the equation. Ferraro (1996) further asserts that the fear women hold, especially by those who are young, operates in the shadow of sexual assault. These findings again support Warr's (1985) research: younger women (those under the age of 35) fear the act of sexual assault most. As young women age, their fears subside to some degree (Ferraro, 1996). However, as women get older their fear begins to resurface as they become increasingly more vulnerable, physically (Kennedy and Silverman, 1984). Elderly women are more concerned

with personal injury during the course of any crime, because they are physically weaker and the potential for harm is greater.

Using the variables of education and income as proxies for socio-economic status (SES), Keane (1995) found that women with lower SES were more likely to worry about walking alone outside the home after dark and about being alone inside the home at night (See also Schmideberg 1980). Keane suggests that fear was stronger for single women than for married women. According to Statistics Canada (1998), single women generally have the lowest average yearly income (\$30,130) when compared to other groups. Single women, typically having fewer financial resources than men or married women, are more vulnerable. Research conducted by Pantazis (2000) reveals that the financial constraints are not the only obstacle to those in poverty. Poverty is associated with physical situational correlates that accompany low-income living such as poor living and working conditions, which contribute to an increased risk of victimization. Therefore, not only do women who live in poverty have fewer financial resources to deal with victimization, they must also continue to live and work in conditions that may put them at higher risk. Women in poor working and living conditions may have to take public transportation more often, and after dark, as they are less likely to be able to afford and insure an automobile. They are probably less likely to have choice about where they can afford to live, fewer resources to ensure self protection such as adequate locks on doors, etc., and may have to take jobs that are more likely to put their personal safety at risk.

Past Experience

Warr (1987) reports that there is an increased sensitivity to fear of victimization depending on both the type of crime and the characteristics of the individual. Previous experience with victimization may indirectly affect fear of crime (Mesch 2000). Keane (1995) finds that experiencing specific offences may be a better predictor of fear than others. In particular, along with more serious personal offences such as sexual assault, crimes that posed even the threat of sexual assault; such as being followed, getting obscene phone calls, or indecent exposure also elicited high fear responses. Macmillan, Nierobisz, and Welsh (2000) report that harassment from strangers is not only more common but more extensive than non-stranger harassment, and it results in high fear of victimization. An implication of this finding is that threatening behavior from an unknown source will elicit more potential for sexual violence and that more fear is generated.

Avoidance and Risk-Management Behavior

Skogan and Maxfield (1980) have suggested that routine crime prevention behaviors can be broken down into two major categories: avoidance and risk-management strategies. They argue that one can reduce the risk of victimization by avoiding dangerous situations and settings, thereby reducing the risk of running into a potentially threatening situation. Risk-management practices are used when one finds oneself in a potentially dangerous situation and/or location and takes precautionary measures to be a less suitable target for victimization. After a considerable search, no studies were found that specifically looked at the effect of utilizing these techniques on resulting fear levels. However, it stands to reason that those who use these strategies more frequently are enacting them as they feel less safe and, therefore, are more fearful generally.

PROPOSITIONS AND HYPOTHESES

From the literature, three general propositions are made. First, demographics, or core characteristics, will have an effect on fear. Given that women predominantly fear sexual violence, it is hypothesized that those demographic factors that leave women more vulnerable to potential victimization will predict higher levels of fear. Therefore, women who are younger, have lower incomes, less education, are single, living alone, and/or living in an urban environment will report higher levels of fear. Second, those women who report past experience with victimization or negative experiences with strangers will report higher fear levels. Third, women who actively engage in situational specific avoidance and risk-management strategies or who have had no previous training in self-defense will report higher fear levels.

METHODOLOGY

The data source for this paper is the Violence Against Women Survey (VAWS; See Statistics Canada 1993b or Johnson and Sacco 1995 for a full description of the study). Random Digit Dialing telephone interviews were conducted by Statistics Canada from February through June of 1993. The sample population included women in Canada who were 18 years of age and older. In all, 12,300 women were interviewed by telephone representing a 67.3% response rate.

Independent Variables

Respondents were 18 years of age and older. However, the VAWS public use microdata file coded all respondents over the age of 75 as 75 to protect identities. Educational attainment of the respondent was recoded as: some elementary education or no schooling (1), elementary school diploma (2), some high school

education (3), high school diploma (4), some trade, technical, or vocational training (5), some community college (6), some university (7), receiving a trade, technical, or vocational diploma (8), receiving a college degree (9), receiving a Bachelors, undergraduate, or law diploma (10), and having a medical degree, Masters, or Doctorate (11). As with the Keane (1995) study, the respondent's personal income was measured as: having no income (1), less than \$5000 (2), \$5000 - \$9999 (3), \$10,000 - \$14,999 (4), \$15,000 - \$19,999 (5), \$20,000 - 29,999 (6), \$30,000 - \$39,999 (7), \$40,000 - \$49,999 (8), \$50,000 - \$59,999 (9), \$60,000 - \$69,999 (10), and \$70,000 or more (11). Additional demographic measures such as being single, living in an urban area, and living alone are recorded as yes (1) or no (0).

The VAWS survey asked about victimization experiences in the last twelve months and since age 16. If the respondent reported having experienced an assault in the last twelve months, had received an obscene phone call, had reported being followed by a male stranger in a manner that frightened them, or had received unwanted attention from a male stranger, each response coded as yes (1) or no (0). The total number of violent incidents a woman reported over her lifetime is also coded from 0 (no incidents) to 7 (7 incidents or more).

Respondents were asked about self-protective behaviors. Whether they had taken a self-defense course in the past year was coded as yes (1) or no (0). How frequently they did any of the following when alone: a) carried something to defend themselves or to alert other people, b) avoided walking by teenage boys or men, c) locked car doors for personal safety, and d) checked the back seat for intruders before getting into a car were coded as never (1), sometimes (2), usually (3), and always (4). Respondents were further asked how often they engaged in three activities when they were alone: a) walked in their neighborhood, b) used parking garages, and c) used public transport. Response categories were: never (1), less than once a month (2), at least once a month (3), at least once a week (4), and daily (5).

Dependent Variables

Respondents were asked to rate how worried they would feel if alone at night in four situations: a) walking in their neighborhood at night, b) taking public transport, c) using a parking garage, and d) being home. The response categories were coded as: not at all worried (0), and worried (1). Logistic regression was utilized to determine the effect of demographic, experiential, and behavioral variables on fear in four situations.

RESULTS

The descriptive statistics for this study are presented in Table 1. Women’s age was normally distributed ($M = 42.37$, $SD = 15.54$). Most women reported having some post secondary education. Nonetheless, for the sample, women’s average personal income fell below \$15,000. For living arrangement, about 1 in 7 women reported living alone, and almost 7 of 10 reported living in an urban area. Approximately 1 in 5 women reported being single at the time the survey was conducted.

Considering victimization experiences, about half of women reported at least one incidence of violence. Approximately 7.9 percent of Canadian women said they had experienced a violent crime in the last 12 months. Almost two thirds (66.4%) of respondents reported receiving an obscene phone call, while three out of five reported receiving unwanted attention from a

stranger. Almost one third (32.4%) reported being followed by a stranger in a way that frightened them.

With respect to protective behavior, about 1 in 10 women stated they had taken a self-defense course over their lifetime. Almost one third (31.5%) of women reported instances where they avoided walking by boys or men, and almost two of every three women surveyed (64.4%) stated that they walked alone at night in their neighborhood after dark less than once a week. Of those who reported using public transport, the majority (78.1%) stated they used it less than once a week after dark when they were alone. Of those who reported using or owning a car, the majority of these women (63.5%) reported usually or always locking car doors, usually or always checking the back seat of the vehicle (61.6%), and reported using parking garages less than once a week (75.4%).

Table 1. Descriptive Statistics on both Precursory and Protective Behavior of Female Respondents.

Variables	N	Percent
<i>Demographics</i>		
High school education	12885	53.1
Personal income under \$15000	11477	61.7
Single	12300	20.3
Living in urban area	12300	69.7
Lives alone	12300	14.1
<i>Past Experiences</i>		
Reported at least one incidence of violence	12300	53.1
Reported violent incident in last 12 months	12299	7.9
Received an obscene phone call	12300	66.4
Followed in a way that frightened	12298	32.4
Received unwanted attention from a stranger	12292	60.0
<i>Current Protective Behavior</i>		
Taken a self defense course	12300	10.0
Always/usually carry defense weapon	12300	15.9
Always/usually avoid walking by boys/men	11939	31.5
Walks alone after dark <1/wk.	10652	62.4
Uses public transportation alone after dark <1/wk.	5459	78.1
Always/usually lock car doors when alone	9757	63.5
Always/usually checks back seat of car	9757	61.6
Uses parking garages alone after dark <1/wk.	7738	75.4
<i>Fear: Somewhat or Very worried while:</i>		
Walking alone in neighborhood at night	10641	61.0
Using public transport alone at night	5447	75.4
Using parking garages alone at night	7724	81.3
Being at home alone at night	12156	39.0

A large proportion of women reported being somewhat or very worried walking in their neighborhood at night (61.0%). Of those who reported using public transport, 3 out of 4 stated they were somewhat or very worried using this service after dark when alone. Approximately 4 out of 5 women who used cars stated that they were very or somewhat worried when using them at night when alone. Almost 2 out of every 5 respondents reported being somewhat or very worried when home alone in the evening.

Table 2 presents estimates of the bivariate correlations between the four fear of crime items and the independent variables. Given the large sample size of the VAWS, fear is significantly correlated with almost all of the independent variables. Substantive results in Table 2 are women's past experiences with violence and are associated with higher fear in each of the situations. Additionally, having negative experiences with unknown men raises fear. Factors associated with reduced fear among respondents are increased age and walking alone more frequently alone at night in one's neighborhood.

Living alone was associated with higher fear levels in all situations except fear when walking alone in one's neighborhood at night. Being single had only a weak and positive association with walking alone in one's neighborhood at night. The effects of education and levels of personal income had mixed effects across situations.

Table 3 shows logistic regression coefficients, standard errors, Wald statistics, and odds-ratios [Exp(β)] for fear in four situations. The Wald statistic is used to estimate the significance of relationships between variables. Odds ratios greater than 1 indicate an increase in the likelihood of fear with a one unit increase in a predictor variable. Odds ratios less than 1 show that odds are less likely with a one unit change. According to the Wald criterion, in each of the models, age had a significant effect on fear. The unstandardized coefficients (β) show that there are negative or inverse relationships as fear in each situation decreases as age

Table 2. Bivariate Correlations between Fear Variables and Demographic, Past Experience, and Present Behavior of Women Surveyed.

Variables	Fear Walking		Fear Transport		Fear Parking		Fear Home	
	r	N	r	N	r	N	r	N
<i>Demographics</i>								
AGE	-.093**	10641	-.123**	5447	-.103**	7724	-.113**	12156
EDUC	.026**	10630	.121**	5441	.087	7715	-.012	12141
PINCOME	.006	10063	.066**	5182	.063**	7353	-.026**	11357
SINGLE	.063**	10641	.022	5447	.013	7724	.013	12156
URBAN	.212**	10641	.125**	5447	.110**	7724	.024**	12156
ALONE	.012	10641	-.057**	5447	-.051**	7724	-.095**	12156
<i>Experience</i>								
#INCID	.093**	10641	.100**	5447	.103**	7724	.116**	12156
12 MO	.048**	10640	.068**	5446	.033**	7723	.048**	12155
OBSCENE	.128**	10641	.139**	5447	.132**	7724	.097**	12156
FOLLOW	.134**	10639	.133**	5446	.119**	7722	.114**	12154
UNWANT	.136**	10633	.186**	5443	.160**	7719	.106**	12148
<i>Current Behavior</i>								
DEFENSE	.021*	10641	.054**	5447	.042**	7724	.026**	12156
WEAPON	.132**	10641	.151**	5447	.129**	7724	.094**	12156
BOYSMEN	.243**	10487	.256**	5389	.205**	7605	.218**	11818
WALKALN	-.241**	10639	-.150**	5135	-.077**	7051	-.106**	10573
TRANALN			-.099**	5446				
CARDOR					.204**	7724		
BACKSEAT					.204**	7724		
USEPARK					-.012	7724		

*p<.05, **p<.01

increases. The odds ratio show a proportion decrease of 0.7 percent (calculated as $1 - .993 = .007 * 100$) less likely to report fear while walking alone in their neighborhood, and 0.8 percent less likely to report fear in all other situations. Although these may appear to be small changes, notice that this is an estimated change for one unit of age. There would be substantial differences in reported worry levels if we compared estimated change in odds between a 20 and a 70 year old. In this instance one would multiply these odds by 50 times. Moving to the respondents' education and income, the Wald criterion shows mixed effects across situations. Significant results were detected in all scenarios except worried while walking in one's neighborhood at night. Reported personal income was not a significant factor in predicting fear while using public transportation alone at night. Looking at the odds ratios, women with higher levels of education were 5.2 percent more likely to be

worried while in the transportation situation, 5.1 percent more likely to report being worried while in a parking garage alone at night, but 3.2 percent less likely to report fear while home alone in the evening. As personal income levels rose fear changed across situations. Women were 2.9 percent less likely to report fear walking alone in their neighborhood and 2.7 percent less likely to report fear for home in the evening, but they were 3.8 percent more likely to report fear while using the parking garage alone in the evening.

Being single significantly increased the odds of reporting worry when out in one's neighborhood at night by 18.5 percent, but had no other significant effect in these models. The odds ratios show living in an urban environment had substantially increased worry in all situations except worry while being home alone (odds ratios: walking 2.20, transport 1.51, parking 1.42 alone n.s.). Living alone increased the odds ratio of reporting

Table 3. Logistic regression analysis of demographic, past experience, and current behavior variables with fear in four situations.

Variable	Fear walking alone at night (N=9910)				Fear using public transportation (N=4870)			
	β	S.E.	Wald	Exp (β)	β	S.E.	Wald	Exp (β)
AGE	-.007	.002	11.702	.993	-.008	.003	4.990*	.992
EDUC	-.014	.009	2.341	.986	.050	.015	12.036**	1.052
PINCOME	-.029	.011	6.928**	.971	.024	.019	1.612	1.024
SINGLE	.170	.067	6.491*	1.185	-.113	.099	1.305	.893
URBAN	.787	.050	247.281**	2.197	.412	.087	22.270**	1.510
ALONE	.242	.078	9.566**	1.274	-.120	.114	1.116	.887
#INCID	.018	.018	1.018	1.019	-.001	.028	.001	.999
12 MO	.057	.090	.401	1.059	.315	.138	5.230*	1.370
OBSCENE	.234	.051	20.96**	1.264	.286	.082	12.156**	1.331
FOLLOW	.318	.053	35.493**	1.374	.314	.085	13.771**	1.369
UNWANT	.265	.053	24.591**	1.303	.393	.086	20.933**	1.482
DEFENSE	-.067	.076	.771	.935	.111	.120	.852	1.118
WEAPON	.157	.024	41.662**	1.169	.214	.040	28.185**	1.239
BOYSMEN	.415	.023	322.841**	1.515	.510	.038	175.945**	1.665
WALKALN	-.502	.019	673.129**	.605	-.307	.032	91.587**	.735
TRANALN	--	--	--	--	-.129	.031	16.890**	.879
CARDOR	--	--	--	--	--	--	--	--
BACKSEAT	--	--	--	--	--	--	--	--
USEPARK	--	--	--	--	--	--	--	--
Constant	.292	.143	4.164*	1.339	.014	.231	.004	1.015
R ² (Nagelkerke)	.234				.205			
R ² (Cox & Snell)	.172				.136			
-2 LL	11333.173				4613.462			
χ^2	$\chi^2=1871.960$ (p=.001) d.f.=15				$\chi^2=712.663$ (p=.001) d.f.=16			

Table 3. continued.

Variable	Fear of using parking garage (N=3270)				Fear of home alone at night (N=9855)			
	β	S.E.	Wald	Exp (β)	β	S.E.	Wald	Exp (β)
AGE	-.008	.003	5.220*	.992	-.008	.002	16.220**	.992
EDUC	.049	.014	12.963**	1.051	-.033	.008	14.892**	.968
PINCOME	.038	.017	5.100*	1.038	-.022	.011	4.543*	.978
SINGLE	-.144	.102	1.985	.866	-.092	.062	2.242	.912
URBAN	.354	.075	22.043**	1.424	-.001	.049	.000	.999
ALONE	-.165	.121	1.879	.848	-.318	.076	17.717**	.727
#INCID	.067	.029	5.253*	1.070	.073	.017	19.757**	1.076
12 MO	-.060	.140	.184	.942	-.048	.081	.343	.953
OBSCENE	.294	.076	14.995**	1.342	.182	.050	13.362**	1.199
FOLLOW	.227	.083	7.523**	1.255	.257	.049	27.719**	1.293
UNWANT	.333	.079	17.944**	1.396	.106	.052	4.240*	1.112
DEFENSE	.048	.119	.160	1.049	-.019	.070	.077	.981
WEAPON	.142	.040	12.541**	1.152	.076	.021	12.821**	1.079
BOYSMEN	.384	.039	99.092**	1.469	.361	.021	308.281**	1.435
WALKALN	-.168	.029	34.431**	.846	-.188	.017	117.241**	.828
TRANALN	--	--	--	--	--	--	--	--
CARDOR	.257	.032	65.321**	1.293	--	--	--	--
BACKSEAT	.256	.028	82.076**	1.292	--	--	--	--
USEPARK	-.099	.029	12.041**	.906	--	--	--	--
Constant	-1.110	.234	22.395**	.330	-.477	.136	12.368**	.620
R ² (nagelkerke)			.192				.107	
R ² (Cox & Snell)			.117				.079	
-2 LL			5411.184				12465.389	
χ^2			$\chi^2=826.123$ (p=.001) d.f.=18				$\chi^2=815.720$ (p=.001) d.f.=15	

Note: *p<.05, **p<.01

fear while walking alone by 27.4 percent but decreased odds of reporting fear by 27.3 percent while home alone at night. Living alone had no significant effect on either the parking or public transit situations.

Looking at women's past experiences, the strongest predictors of fear are negative experiences that women reported having had with strangers, but not necessarily the number or recency of victimization experiences. If respondents reported higher numbers of victimization experiences since age 16, they were seven percent more likely to report fear in a parking garage and 7.6 percent more likely to report fear while at home alone at night. If women had reported a recent victimization within the last year, they were 37 percent more likely to report fear while using public transport alone at night, but not significantly more likely to report worry in the other three situations asked about in this survey. Across all fear situations, having received an obscene phone call, having been followed by a male stranger, or receiving unwanted attention from a stranger significantly increased respondents' reporting of worry. Having received an obscene phone call increased reported worry

from 19.9 to 34.2 percent depending on the situation (walking 26.4, transport 33.1, parking 34.2, home 19.9). Likewise, having been followed by a male stranger increased reported worry from 25.5 percent to 37.4 percent across situations (walking 37.4, transport 36.9, parking 25.5, home 29.3). Receiving unwanted attention from a male stranger increased the odds of reporting fear from 11.2 percent to 48.2 percent (walking 30.3, transport 48.2, parking 39.6, home 11.2).

Looking to current behavior, if respondents reported engaging in risk reduction protective measures they were more likely to have high levels of fear with the exception of having received self-defense training. Having this training served neither to significantly increase nor decrease worry in any situation asked about in the survey. However, carrying a weapon significantly increased the odds of women reporting worry in these situations by 7.9 to 23.9 percent with the highest odds being reported while using public transportation while alone at night (walking 16.9, transport 23.9, parking 15.2, home 7.9). Changing one's behavior strongly and significantly increased the odds of reporting fear.

Women who frequently reported avoiding walking by boys or men in these situations were anywhere from 43.5 percent to 66.5 percent more likely to report being worried in these situations (walking 51.5, transport 66.5, parking = 46.9, home 43.5) with the highest odds being fear while walking in one's neighborhood or using public transportation at night. Women who reported fewer incidents of walking alone at night were remarkably 39.5 percent less likely to report worry in these situations. Walking alone less frequently also decreased the odds of reporting worry in the other situations, but to a lesser extent, from 15.4 percent to 26.5 percent (transport 26.5, parking 15.4, home 17.2).

Of those who reported using public transport, those who used it less frequently were 12.1 percent less likely to be worried when using it. Of those who reported using or owning a car, worry increased by 29.3 percent if they reported locking their car doors while in the vehicle, and by 29.2 percent if they checked the back seat of a car before getting into it. However, worry decreased by 9.4 percent if they reported using parking garages more frequently.

The Nagelkerke measure of explained variance adjusts the Cox and Snell R-square statistic so that a value of 1 can be achieved (Tabachnick and Fidell 2001). It is similar to an R-square statistic in regular OLS regression. This study shows that there are substantial differences in explained variance depending on location. Fully 23.4 percent of variance is explained in reported fear levels for walking alone in the respondent's neighborhood at night. Using these variables this study accounted for 49.9 percent of "not worried" responses and 83.3 percent of the "worried" responses, for an overall prediction rate of 70.4 percent. When looking to more situationally specific fears for those using public transportation or parking garages, the explanation of variance for these situations drops to 20.5 percent and 19.2 percent, respectively. This second analysis was only able to predict "not worried" responses in the public transit situation 23.1 percent of the time but was able to predict "worried" responses 95.6 percent of the time, allowing for a 78.5 percent accuracy rate. The third analysis was unable to predict "not worried" responses (0 percent) in the parking garage situation, yet 100 percent of all "worried" responses, for an overall accuracy in prediction of 82.2 percent of cases. Fear at home when alone at night has the lowest level of variance explained at 10.7 percent. In opposition to the third analysis, this final analysis could predict all of the "not worried" responses but none of the "worried" responses for an accuracy of prediction of only 59.8 percent.

DISCUSSION

Contrary to the first proposition made, the effects of demographic variables on predicting fear were mixed. Overall, the first hypothesis stating that demographic variables indicating potential vulnerability are more likely to predict fear when alone in various situations is strongly supported in only one of four conditions: walking alone in one's neighborhood at night. There is only weak support for the first proposition while using public transport or parking garages, in which younger respondents and those living in an urban area were most likely to report higher levels of fear. There was slightly stronger support for this proposition in the home situation, with the exception of those who reported they did not live alone. These findings suggest that certain demographic variables come into play in different situations. Where many demographic variables increase fear while walking in one's neighborhood or being home alone at night (i.e. lower education levels, lower reported personal income, and living in an urban area), some of these variables have the reverse effect (i.e. education level, personal income) where women reported using other public spaces such as using public transit or parking garages. Given that most of our understanding of fear of crime has centered around findings using respondent's feelings of fear or worry while walking in their neighborhood at night, it is not entirely unexpected that situationally specific fear questions may challenge some of these findings.

Although most of the variables placed into the logistic regression analysis were associated with fear, at a bivariate level, the nature of many of these associations changed when other variables were held constant. For example, taking self defense training was significantly and positively correlated with increased worry in these four situations. However, this variable ceased to have any significant effects in the model, once other variables were held constant. Personal income and education levels were significantly and positively correlated with worry while walking alone in one's neighborhood in the evening, but had a negative causal relationship when other variables were held constant. Odds of reporting fear increased significantly in the home alone situation or walking alone in their neighborhood alone at night if personal income was lower. Also interesting is that being single is positively associated with fear, and only significantly in the first situation. Use of logistic regression techniques, however, reveals that only the neighborhood situation maintains directionality and significance with respect to fear. In fact, what becomes clear, many of the demographic variables that have been predictive of fear in other research projects are only predictive of fear in one's neighborhood. One exception is the rather strong

and positive effect of living in an urban environment on fear in situations outside the home.

The role of past experiences also had mixed effects on predicting fear. Only a weak and positive relationship exists between using public transport if the respondent had been reported being assaulted in the last 12 months. What is telling is that those who reported one or more incidents of violence since age 16 were significantly more likely to report feeling worried while at home than in any other situation. This result may be tapping into experiences of repeated violence, which may be at the hands of someone who lives within the home, such as a spouse or other family member. Women in this survey who reported not living alone were also more likely to report fear while home alone in the evening. It is suggested here that repeat victimization of someone who the offender has access to in a controlled environment, such as the home, is far more commonplace than repeat victimization by unknown men. Women who report higher numbers of violent incidents are not significantly more likely to report higher levels of fear while in the other more public situations listed in this paper. This suggests that their source of fear may actually lie within the home.

When comparing the specific locations of waiting for public transport, or using parking garages while alone in the evening, some interesting patterns emerge. In many cases there was a stronger predictive effect of behavioral practices on fear while using public transportation, when compared with those who report using parking garages. This is somewhat commonsensical. If one uses public transportation, a woman's routines would place her out in the open, and for longer periods of time while waiting for transportation to arrive. Transportation stops are placed along busy corridors which increase the potential for becoming a suitable target. Further, particularly remote transportation locations may also produce anxiety and fear, due to the lack of capable guardianship (Cohen and Felson 1979). Automobiles allow more accessible, and safer modes of transportation, as the driver must only be concerned with getting to the car, rather than walking comparatively longer distances to bus stops and waiting for the transportation vehicle to arrive. Further, these automobiles can be parked on residential streets, which can provide less exposure to potential predators when compared to a busy thoroughfare. Therefore carrying a weapon, controlling when and how one walks alone, and avoiding unknown groups of boys and men may serve to allay more tangible safety concerns for those using public transportation, than those who use cars as a principal mode of maneuvering around their environment.

The strongest effects on the reporting of higher levels of fear are past experiences that women have had

with unfamiliar males, thus partially confirming the second proposition tested. Receiving obscene phone calls, or having been followed by an unknown male, and/or receiving unwanted attention from unknown males were all strongly and significantly predictive of higher levels of fear in all situations. What this suggests is that experience with male strangers plays a stronger formative role in fear production in the lives of women than how old they are, whether they are single, what their financial resources may be, and to a lesser extent what educational achievements they may have made over their lives.

This fear of strangers has been aptly referred to as "stranger danger." As young children, many of us are told to be wary of strangers. Children in schools are taught how to cope with strangers through various programs including verbal rehearsing, modeling, and feedback programs (Holcombe, Wolery and Katzenmeyer 1995). These programs, which are also to be backed by reinforcement of parents, serve to equip children with identifying verbal and physical ruses that predators may use as well as to educate children about verbal and physical resistance strategies they can use in such situations. Children are less likely to be taught to be fearful of people they know. This taught fear of predators, or strangers, has had repercussions into adult life. These repercussions are so widespread, that effects have been noted in the political sphere. Websdale (1999) has argued that implementation of sexual predator laws through the United States has created a moral panic around violence against women and children by people identified as predators. He argues further that this has served to limit women's participation in public spheres.

Most striking are findings in this analysis that reveal that women who restrict their behavior, avoiding walking by boys and men, not walking alone at night, not using public transportation in the evening, and not using parking garages after dark, have the highest odds of reporting fear. These types of self-protective behaviors are obstacles to participation in evening activity, and thereby reduce women's ability to leave the home. Women who report avoiding walking by boys and men are especially fearful, being roughly one and a half times more likely to report being worried in all situations than those who do not avoid these groups. In fact, all techniques with the exception of taking a self-defense course, regardless of the situation, held the strongest predictive effects on fear. In essence, with the exception of self-defense training, women who altered their routines in order to carry out daily living tasks were estimated as having the highest fear levels. This is almost an overall confirmation of the third proposition tested. Women who accommodate feelings of lack of

safety, and take measures to enhance their security, have the highest fear levels. What is telling is that those who reported using public transportation or parking garages more often were more likely to report lower levels of fear. While this finding is commonsensical, future research into the area should look not only for what generates fear, but for situational factors that generate feelings of safety.

CONCLUDING REMARKS

This paper has examined the relationship between demographic, experiential, risk management and avoidance techniques, and fear. Most important for predicting fear were women's reports that they had altered their routines to avoid or manage risky situations. Less strong, but still highly significant across all situations was the power of having frightening experiences with unknown men. When the effects of these experiences are held constant, the predictive value of demographic variables, such as the age of the victim, almost disappears. It is argued that the past experiences that women have had with strangers, and the daily protective routines women engage in, are more salient predictors of fear than more basic demographic variables. This analysis served to explain higher levels of variance than one done earlier by Keane (1995), which looked at fear of crime using the same data set. Future research into fear of crime should seek to more fully understand the role of experiences, especially those with strangers, in generating fear.

Finally, it is ironic that this study demonstrates, for the most part, that women fear the danger posed by strange men even though statistics show that women are more likely to be victimized by individuals they know. It would appear that they are most afraid of the surprise sexual attack by the unknown assailant, despite the fact that statistics and public service media campaigns are making women aware of dangers of dating and marital situations. It is argued here that there is something more at stake with the unknown assailant: predictability. Level of intimacy between the victim and the offender, with few exceptions, offers a buffer to thoughts of victimization. If a woman is approached by an unknown man from behind, and he grabs her arm in this process, she is likely to become alarmed. However, if she turns around to find that it is her neighbor, a friend, or an intimate, her anxiety will probably lessen. The fact remains that she is more likely to be assaulted by someone she knows, but it is her very relationship with the potential assailant that will allow her to let her guard down. In essence the author is suggesting that knowing someone allows for a false sense of security in that one may feel that they can predict more accurately, and thereby possibly control, the behavior of someone if

they have met in the past. Future research on fear of crime should assess what allows people to have a heightened sense of vulnerability around strange men, while feeling more at ease around those whom they have met before.

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