



A Sociological Study of Lifestyle, Victimization, and Perceived Fear of Crime

Akbar Aliverdinia¹ | Nader Razeghi² | Mohaddese Dadgar³ | Seiede Sahar Enderajemi⁴

1. Corresponding Author, Department of Social Sciences, Faculty of Humanities, University of Mazandaran, Babolsar, Iran.
E-mail: aliverdinia@umz.ac.ir
2. Department of Social Sciences, Faculty of Humanities, University of Mazandaran, Babolsar, Iran.
E-mail: razeghi@umz.ac.ir
3. Department of Social Sciences, Faculty of Humanities, University of Mazandaran, Babolsar, Iran .
E-mail: m78.dadgar@yahoo.com
4. Department of Social Sciences, Faculty of Humanities, University of Mazandaran, Babolsar, Iran .

Article Info	ABSTRACT
<p>Article type: Research Article</p> <p>Article history: Received: 14 May 2025 Received in revised form: 04 July 2025 Accepted: 01 August 2025 Published online: 22 December 2025</p> <p>Keywords: Deviance, Lifestyle, Perceived Fear of Crime, Routine Activities, Victimization</p>	<p>Becoming a victim of crime is a major concern for citizens of any society. Fear of crime is a real, logical or illogical concern that arises from the inference that a person is at risk of being victimized. The Purpose of the present study is to examine the effect of victimization on fear of crime, relying on Routine activities and lifestyle theories.</p> <p>The research method is a survey and the data collection tool is a questionnaire. The statistical population of the study consists of all students studying at the University of Mazandaran in 1403-1404, of which a total of 400 students were selected using a stratified sampling method.</p> <p>The description of the dependent variable shows that 30.3% of respondents experienced fear of crime at a low level, 57.5% at a medium level, and 12.3% at a high level. This rate was higher among girls than among boys. The results of the study show that of all the variables included in the regression model, the intensity of attachment to deviant friends and social ties had a significant effect on student victimization. The variable of intensity of attachment to deviant friends had a positive relationship and social connection had a negative relationship with victimization. The variable of intensity of attachment to deviant friends was also the most important explanatory variable of victimization. In addition, the variable of victimization as a mediating variable had a significant effect on perceived fear of crime .</p> <p>Students who are most concerned about the risk of being a victim of crime are the ones who fear crime the most. The fear of crime, the symbol or symbol of being a victim, is criminal, so that payment and abundance of victims become crimes, the intense feeling of fear of crime leads to crime. explained. However, fear of crime varies between individuals, depending on factors such as the individual's status, type, and environment, as well as important social and psychological factors.</p>

Cite this article: Aliverdinia, A., Razeghi, N., Dadgar, M. & Enderajemi, S.S. (2025). A Sociological Study of Lifestyle, Victimization, and Perceived Fear of Crime. *Social Studies and Research in Iran*, 14(4),717-747.
<https://doi.org/10.22059/jsr.2025.395285.1622>



© Author(s) retain the copyright.

Publisher: University of Tehran Press.

DOI: <https://doi.org/10.22059/jsr.2025.395285.1622>

1. Introduction and Statement of the Problem

Fear of crime is defined as “*an emotional reaction characterized by feelings of danger and anxiety*” or as “*an emotional and attitudinal phenomenon.*” Ferraro and LaGrange (1987) define fear of crime as “*a negative emotional response that arises from crime or symbols associated with crime, and which is conceptually distinct from both judgments (perceived risks) and concerns (values) about crime.*”

More recently, researchers have shown that reactions to crime contain both a cognitive dimension (perceived risk of crime: *How likely do you think it is that you will become a victim?*) and an emotional dimension (emotional response to crime, such as fear or dread). One of the major advances in this field is the distinction between fear of crime and perceived risk. The former refers to a negative emotional reaction to crime or crime-related cues, while the latter refers to a general negative assessment of safety and the likelihood of becoming a victim (Mesch, 2000: 47). Perceived risk of crime can be one of the strongest predictors of fear of crime, yet the two constructs are not synonymous. From this perspective, traditional indicators of fear of crime reflect two fundamental issues: 1) They have failed to distinguish between perceived risk and fear of crime, and 2) Assessing their reliability is impossible because they rely on single-item measures (Meisel et al., 2004: 777).

It is preferable, for developing reliable and valid indicators, that the type of crime be specified for respondents (Ferraro & LaGrange, 1987). According to Ferraro and LaGrange (1987), some indicators used in previous studies suffer from conceptual problems due to their general reference to the word “crime.” Such general indicators cannot distinguish between concerns and fears associated with specific types of offenses, nor can they identify variations between them, their explanatory factors, or the fear associated with different categories of crime (e.g., property crimes versus crimes against persons). Additionally, some items used in earlier studies have limited the measurement of fear of crime by relying on general and non-emotional indicators, mostly focusing on judgments related to victimization risk (Zhao et al., 2002: 48).

Rader (2004), in an article titled *“Fear of Victimization: A Theoretical Reconceptualization of Fear of Crime,”* urges researchers to reconsider the way fear of crime is measured and assessed. According to Rader, numerous studies have examined the correlates of fear of victimization, perceived risk of victimization, and defensive or avoidance behaviors. However, despite this, there is still limited consistency in the nature of these variables. Some studies have shown that perceived risk predicts fear of crime and defensive or avoidance behaviors, while other studies have shown the opposite relationship, considering fear as the cause and independent variable, and perceived risk as well as avoidance and defensive behaviors as dependent variables (Rader, 2004). Rader’s reconceptualization deepens and expands early conceptualizations of fear of crime and offers new insights for researchers and policymakers. Rader (2004, 2007) identifies four components for the concept of fear of victimization: fear of victimization, perceived risk of victimization, avoidance behaviors, and defensive behaviors. Iksiong (2011: 34–35), by adding the component of perceived insecurity as one of the key cognitive pillars of “fear of victimization,” has further developed and completed Rader’s theory.

Today, fear of crime in urban spaces has become a social issue (Zhao et al., 2010: 4; O’Mahony et al., 1999: 231). Fear of crime is one of the serious issues of contemporary times. At the psychological level, it can negatively affect individuals by producing anxiety, distrust, alienation, dissatisfaction with life, and even mental illness. At the behavioral level, it may lead to restrictive behaviors such as staying home at night, withdrawing from social activities, buying weapons, moving to suburban areas, and similar actions. Fear of crime can also negatively affect communities by reducing social cohesion and solidarity, and by cultivating a “security ideology” that may provide a basis for legitimizing racism and xenophobia (Wyant, 2008: 39; Meisel et al., 2004: 777; Means, 2007: 219; Chiu et al., 2012: 480).

Fear of crime refers to *“a wide range of emotional and behavioral responses to crime that individuals and communities may display.”* Fear of crime is an indication of one’s sense of being at risk. It is not an inherent personal trait, but rather a temporary condition dependent on personal experiences—particularly as they relate to an individual’s position in society. Overall, research

indicates that fear of crime is influenced by five major factors: the physical environment, the social environment, victimization experiences, specific crimes, and the issue of crime in neighborhoods (Aliverdina & Hassani, 2014).

Becoming a victim of crime is a major concern for citizens of any society (Price et al., 2018: 821). Fear of crime emerges as a social phenomenon that, in severe cases, affects quality of life. At the individual level, significant levels of fear are often reported by people who have low levels of victimization (Prieto & Bishop, 2018: 2). One of the most consistent predictors of fear of crime is the perceived risk of victimization (Henson et al., 2013: 2). Overall, the number of people who are fearful is far greater than the number of actual victims (Henson et al., 2013: 2; Collins, 2016: 23; Prieto & Bishop, 2018: 2; Johnson et al., 2019: 79). This is because perceptions rather than objective indicators of danger drive fear of crime (Collins, 2016: 23). Previous research on fear of crime has produced important findings. For example, women and older adults tend to feel more insecure. Crime is rare and highly concentrated, meaning that fear of crime is far more widespread than crime itself (Prieto & Bishop, 2018: 2).

Fear of crime is a hypothetical and emotional reaction to the possibility of threat, whereas victimization refers to the direct experience of being a crime victim (Singer et al., 2018: 823). Fear of crime is also often described as a stable phenomenon that is largely explained by the characteristics of the individuals who experience it (Engström & Kronkvist, 2023: 694). Fear of crime is one of several negative consequences of experiencing victimization, and studies have shown that fear of crime and victimization are correlated (Singer et al., 2019: 824).

The relationship between prior victimization and fear of crime is not definitive (Haghighi & Sorensen, 1996). Skogan and Maxfield (1981) argue that there is a causal relationship between prior victimization and fear of crime, while Liska et al. (1988) found no relationship between these two constructs. Further research suggests that direct experience may not be necessary: individuals who know victims or have witnessed victimization also report high levels of fear of crime (Bailey, 2002: 15–16). It has also been shown that fear of crime varies depending on the

type of victimization. For example, in one study, victims of theft had slightly higher levels of fear than victims of violent crime (Kwon & Hong, 1989).

Since 1967, studies have confirmed that the impact of crime victimization extends beyond those directly involved, affecting a broad range of citizens (Bouilly, 2023: 1). Becoming a victim of crime is a major concern for citizens of any nation, and universities around the world are no exception to crime-related issues. Both administrators and students are concerned about campus security (Price et al., 2018: 822). Universities play a fundamental role in educating, producing, and promoting knowledge in society (Aliverdinia & Ghahremanian, 2016: 10). Students, as a distinct and important segment of society, face multiple pressures at both micro and macro levels. At the micro level, they experience the transitional period from adolescence to adulthood, which can be one of the most stressful stages of life (Aliverdinia & Mirzaei, 2019: 318).

According to the findings of Fateminia et al. (2021), conducted among students of various academic levels at Allameh Tabataba'i University, about 37% of students had been victimized at least once in the past year, and only 22% reported the incident to relevant authorities. Evidence also shows that students exhibit higher rates of deviant behavior compared to their non-student peers of the same age (Aliverdinia & Shahriari, 2017: 92). In general, the lifestyle model is based on the assumption that individuals who are frequently exposed to risky situations are more likely to become victims (Tibbets, 2001: 223).

Both lifestyle theory and routine activity theory conceptualize victimization as the convergence of a motivated offender, an attractive target (victim), and the absence of capable guardianship (Pratt & Turanovic, 2015: 335). Based on the review of previous studies, it appears that no research in Iran has simultaneously examined the effects of lifestyle characteristics, routine activities, and victimization experiences on fear of crime among students from a sociological perspective.

This research addresses the following questions:

Do lifestyle and routine activities increase students' likelihood of victimization? Additionally, what is the mediating role of victimization in shaping students' fear of crime? And finally, how do these variables (lifestyle and routine activities) affect fear of crime directly?

2. Research Background

Three main theoretical approaches are commonly discussed in the literature on fear of crime: the vulnerability/victimization approach, disorder models—which emphasize factors that facilitate fear—and the social integration model, which focuses on elements that reduce fear (Franklin, 2008: 85). Below, the most important theoretical models explaining fear of crime are briefly reviewed.

2-1. Victimization Model

Victims of crime, compared to non-victims, generally display greater fear of future victimization. The victimization model argues that personal vulnerability reflects likelihood of future victimization. High levels of fear among women and younger individuals are often attributed to their perceived physical vulnerability. Similarly, correlations between economic deprivation and fear of crime—and the relationship between race or religious minority status and fear—are explained by the higher exposure of these groups to vulnerability (Gibson et al., 2002: 450; Zhao et al., 2010: 5).

Vulnerability is generally divided into two categories: physical vulnerability and social vulnerability. Physical vulnerability refers to an increased perceived risk of assault or physical harm. This form of vulnerability stems from limited mobility or lack of physical strength or capability to resist attack—characteristics commonly associated with women and the elderly (Ozasillar, 2013: 2). Overall, the victimization model emphasizes personal victimization experiences and demographic characteristics in explaining fear of crime.

2-2. Disorder / Incivility Model

The disorder model expands the analysis of fear of crime by incorporating neighborhood environmental characteristics. It suggests that perceived disorder in one's residential area increases fear of crime. Scholars studying disorder divide neighborhoods based on the presence or absence of social and physical incivilities. The “incivility thesis” refers to a set of theoretical assumptions explaining how physical deterioration of neighborhoods and socially disorganized behavior generate concerns about personal safety and disrupt social cohesion and attachment (Robinson et al., 2003: 238).

According to LaGrange et al., as cited in Gibson (2002), incivility is defined as a breakdown of social norms and values. Indicators of disorder include social incivilities (e.g., public drinking, juvenile delinquency, drug use) and physical incivilities (e.g., vandalism, litter, abandoned cars). Both types are used to construct neighborhood disorder indices (Gibson et al., 2002: 541). Extensive physical and social disorder weakens informal social controls and mechanisms that regulate interactions. As a result, crime increases and fear emerges (Iksyu et al., 2005: 148).

2-3. Social Integration Model

Some scholars argue that individual characteristics associated with fear of crime in neighborhoods largely align with residents' levels of social integration. High social integration—measured by the ability to identify strangers and a sense of belonging to the neighborhood—may reduce fear of crime in local communities (Gibson et al., 2002: 541). Empirical findings on the relationship between social integration and fear, however, have been mixed (ibid: 542).

Domestic Research Background

Fear of crime has been examined in criminology, the humanities, and sociological studies in Iran. Theoretical frameworks used include media consumption (Bakhshizadeh, 2021), subcultural diversity, feminism, victimization, lifestyle, social capital, collective efficacy, broken windows, and social disorganization. Most studies used quantitative methods, with fewer qualitative works (e.g., Ghaderzadeh & Khazaei, 2014). Questionnaires are the dominant research tool, with some

studies using mixed questionnaires/interviews (e.g., Fasaee & Mirhosseini, 2009; Ghazi Nejad & Shakeri, 2012).

Findings show that media exposure to crime, ethnic–social identity, social distance, social deprivation, women’s subordination, gender discrimination, socialization, lifestyle, lack of police presence, quality of living environment, and education level influence fear of crime. Most studies focus on urban settings, with limited attention to universities and students; instead, student deviance has received more attention. Therefore, examining fear of crime among students is both important and necessary.

International Research Background

International studies have examined fear of crime and its relationship with gender, risky lifestyles, deviant friends, leisure activities, and past victimization. Some findings show that being female is associated with higher personal victimization (Gower et al., 2011: 47). In this context, Iloma et al. (2023) conducted a study at the University of Nigeria using data from 106 students (average age 23.4). Their analysis found that female students reported higher fear of crime and perceived the campus as less safe than male students.

Some studies have examined risky lifestyles and victimization. For example, Choi & Dailles (2019) found that high-risk lifestyles increased fear of victimization in prison contexts. Lee et al. (2011) concluded that demographic factors, lifestyle, and victimization experiences influence students’ fear of crime (Averdijk, 2011: 127). Price et al. (2018) found that women and prior victims fear crime more.

Overall, international findings reveal a positive relationship between association with deviant peers and victimization. Studies by Zhou et al. (2016), Panping Jiang et al. (2016), and others show that deviant friends increase victimization. Some research found a positive relationship between friendship quality and victimization among men (e.g., Kao et al., 2023) but not among women. International evidence consistently shows that victimization directly increases fear of

crime. Studies by Russo & Rocatto (2010), Averdijk (2011), Henson et al. (2013), Choi & Dailles (2019), Singer et al. (2019), and Noble & Jardeen (2020) support this finding.

3. Theoretical Framework

3-1. Routine Activity Theory

Cohen and Felson (1979) proposed routine activity theory to explain rising crime rates in the U.S. after World War II. According to this theory, Americans began spending more time outside their homes or engaging in leisure activities, which increased exposure to victimization (Lee et al., 2011: 649). Although criminologists often focus on motivated offenders, Cohen and Felson argued that post-war crime trends resulted from changes in the other two elements: suitable targets and lack of capable guardianship. Despite declines in poverty and inequality during this period, crime increased. They argued that national prosperity changed daily activities in ways that created more opportunities for crime (McNeeley, 2015: 31).

Routine activity theory explains crime events through three essential elements:

1. **Suitable Target:** A person, object, or place attractive to an offender due to visibility, accessibility, and value—something that provides immediate benefit (Argun & Daglar, 2016: 1189).
2. **Absence of Capable Guardian:** A person or mechanism (friend, police, lighting, locks, alarms) whose presence deters crime.
3. **Motivated Offender:** When a suitable target lacks guardianship, crime becomes possible. The offender must be present and motivated (ibid: 1190).

3-2. Lifestyle Theory

Hindelang et al. (1978) proposed a similar explanation, using individuals' lifestyle patterns to account for victimization risk. This theory argues that certain personal traits and lifestyle choices increase or reduce victimization likelihood. High-risk lifestyle activities—alcohol use, drug use, going to bars/clubs—particularly increase women's exposure to victimization (Lee et al., 2011: 649). The theory was later combined with routine activity theory to form the “lifestyle–routine activities approach.”

Lifestyle includes both professional activities (work, school, housework) and leisure activities (McNeeley, 2015: 32).

3-3. Routine Activities, Lifestyle, and Fear of Crime

The integration of routine activity and lifestyle theories is unsurprising because both emphasize the convergence of a motivated offender, a suitable target, and lack of capable guardianship. Although similar, the two frameworks differ in how they conceptualize **risk**. Lifestyle theory treats risk probabilistically—exposure to risky times, places, and people increases the likelihood of victimization. Routine activity theory, however, frames crime as the result of the simultaneous presence/absence of the three elements, focusing on the **event** rather than probabilistic risk (Pratt & Turanovic, 2015: 336).

Cohen, Kluegel, and Land (1981) were the first to clearly integrate lifestyle–routine activity theory using five mediators explaining the relationship between demographic characteristics and victimization: Exposure; Proximity; Attractiveness; Capable guardianship; Crime-type characteristics. Exposure and proximity determine visibility/accessibility to offenders; attractiveness relates to value, ease of attack, and victims’ defensive capability; guardianship reduces risk; and crime-type characteristics influence opportunity structure (McNeeley, 2015: 33–35). Finally, the research hypotheses are formulated as follows: victimization is associated with structured activities, unstructured activities, strong ties with deviant peers, individual leisure activities, social ties, family leisure, the presence of authority figures, and fear of crime.

4. Research Methodology

This study uses a cross-sectional survey design. The unit of analysis is the individual, and analysis occurs at the micro level. Data were collected using a questionnaire. The target population consists of all students enrolled at the University of Mazandaran in the academic year 2024–2025.

According to the university's education system, the total student population in 2023–2024 was 12,923 students (7,848 women and 5,075 men). A proportional stratified random sampling method was used, stratified by gender and faculty. Using a 5 % margin of error, we calculated that a sample of 400 students was required. (DeVaus, 1996: 78). A total of 435 questionnaires were collected; after removing incomplete forms, 400 questionnaires were analyzed.

Data were analyzed using SPSS with descriptive statistics (charts and frequency tables) and inferential statistics (mean comparison tests and multiple regression). Content validity was used to assess the validity of the variables, and construct validity was used for the dependent variable. Based on mean comparison tests (Table 3), female students had higher levels of fear of crime than male students—consistent with prior findings (Chiricos et al., 1997; May et al., 2010). Therefore, the dependent variable scale possesses acceptable construct validity. Cronbach's alpha was used to assess the reliability of the study variables.

Table 1. Results of reliability assessment of research scales

Number of items	Alpha coefficient	Variable
4	0.70	structured activities
5	0.77	unstructured activities
6	0.53	spending leisure time alone
12	0.65	traditional victimization
12	0.64	cyber victimization
13	0.84	perceived fear of crime
11	0.81	attachment to deviant friends
7	0.81	social bonding
2	0.79	spending leisure time with family
4	0.85	presence of authority figures

The main variables of this study are as follows:

1. Level of perceived fear of crime (dependent variable): Fear of crime includes emotions, thoughts, and behaviors that all focus on the subjective threat of becoming a victim (Jackson & Gouseti, 2014: 1). There are some issues related to the measurement and assessment of fear of crime. One major debate is whether to use general measures or specific measures. General measures are single indicators that do not refer to any particular type of crime—for example,

“feeling safe walking alone in the neighborhood at night.” The main problem with general measures is their ambiguity and the tendency to overestimate the prevalence of fear of crime.

Specific measures, on the other hand, can distinguish between different dimensions of fear of crime (such as emotional or cognitive judgments; crimes against property or persons; and hypothetical or real situations), as well as identify important times, places, and social contexts when measuring fear of crime. However, despite the advantages of specific measures—especially for targeted purposes or constructing composite indices—researchers often use general measures because they are less costly and time-consuming overall (McCrea, 2005: 41).

In this study, the dependent variable, level of fear of crime, was measured using 13 items, based on the research of Aliverdina et al. (2016).

2. Level of victimization (mediating variable): Victimization is an asymmetric interpersonal relationship that is offensive, painful, destructive, and unjust between offenders and those who experience such acts (Sempronio & Haddon, 2021: 732). Victimization can be divided into traditional victimization and cyber victimization. Traditional harassment is a negative and aggressive act intentionally carried out by one or more individuals against victims over time. Cyber harassment occurs through electronic systems, where the harasser uses messages, photos, or web pages to harass the victim (Aliverdina & Rismanchi, 2019: 107).

The mediating variable (traditional and cyber victimization) was measured using 24 items, based on the study by Aliverdina and Rismanchi (2019).

3. Strength of attachment to deviant friends: Based on the principle of proximity in lifestyle/routine activity theory, the more individuals are physically and socially proximate to offenders, the more likely they are to be victimized. Accordingly, it is hypothesized that closeness and proximity to deviant friends increases the likelihood of victimization (Aliverdina & Alimardani, 2017).

4. Levels of structured activities, unstructured activities, and spending leisure time alone: *Unstructured activities* are those performed in situations without the presence of authority figures, typically when individuals spend time with friends. These activities are more likely to

lead to deviant behavior. *Structured activities*, by contrast, place individuals in situations where they may take responsibility for social control and have fewer opportunities for deviant acts.

Cohen and Felson measured unstructured activities with items such as: driving around for fun, hanging out informally with friends, going to parties, and going out in the afternoon for entertainment and recreation (ibid: 47).

5. Level of social bonding: In this study, the variable social bond—including academic commitment and family attachment—was examined because it fits with routine activity theory.

- In the dimension of family attachment, attachment refers to the strength of emotional ties and affection one has toward their family.
- In the dimension of academic commitment, commitment refers to the time and energy an individual devotes to conventional activities (ibid: 48).

6. Spending leisure time with family: According to routine activity theory, time spent with family acts as a protective factor that mitigates the negative effects of time spent with peer groups (ibid).

7. Presence of authority figures: According to routine activity theory, a capable guardian is defined as the ability of a person or object to prevent crime, and can be either physical or social in form (ibid: 49).

To construct the independent variables—strength of attachment to deviant friends, structured activities, unstructured activities, spending leisure time alone, social bond, spending leisure time with family, and presence of authority figures—44 items from the study of Aliverdinia and Alimardani (2017) were used.

5. Research Findings

The present study examines the effect of lifestyle on victimization and the effect of victimization on fear of crime. In this research, 60.8% (243 persons) of respondents were female and 39.3% (157 persons) were male. The average age of respondents was 21.35 years, with an age range from 18 to 43 years. A total of 91.8% of respondents were single, and 83.5% of them lived in urban areas.

Table 2. Frequency and percentage distribution of perceived fear-of-crime items by gender

Total		female		male		perceived fear of crime
percentage	Frequency	percentage	Frequency	percentage	Frequency	
30.3	121	14.3	35	55.1	86	low
57.5	230	67.6	165	41.7	65	moderate
12.3	49	18	44	3.2	5	high
100	400	100	244	100	156	Total

Based on Table 2, most respondents (57.5%) reported a moderate level of perceived fear of crime. Among them, 41.7% were male and 67.6% were female. Additionally, 30.3% reported a low level of perceived fear of crime, of whom 55.11% were male and 14.3% were female. Furthermore, 12.3% of students reported a high level of perceived fear of crime, consisting of 3.2% male and 18% female respondents. Overall, perceived fear of crime among female students is clearly higher than among male students.

Table 3. Test of the difference in mean fear of crime by sex

Significance level	Degree of freedom	T	Standard deviation	Average Fear of crime	Frequency	Sex
0.000	398	11.22	8.60	27.70	156	male
			8.31	37.40	244	female

Table 3, presents the results of the t-test used to examine the difference in mean fear of crime between male and female students. The mean fear of crime among male students is 27.70, with a standard deviation of 8.60. The mean fear of crime among female students is 37.40, with a standard deviation of 8.31.

Based on the data in this table, the t-value is 11.22 with 398 degrees of freedom, and the significance level is 0.000. Therefore, it can be concluded that there is a significant difference between the mean fear of crime of male and female students, because the significance level is less than 0.05. In fact, the mean fear of crime among female students is higher than that of male students.

Table 4. Multiple regression model explaining victimization and its dimensions based on independent variables

victimization			cyber victimization			traditional victimization			Variable	Independent variables
Total Beta	female Beta	male Beta	Total Beta	female Beta	male Beta	Total Beta	female Beta	male Beta		
0.085	0.169**	-0.037	0.051	0.128*	-0.062	0.090	0.160**	0.014-	structured activities	
0.052	0.066	-.084	0.001	0.018	-0.134	0.075	0.083	-0.036	unstructured activities	
0.070	-0.016	0.117	0.066	-.0039	0.149	0.058	0.001	0.074	spending leisure time alone	
0.300	0.379	0.420**	0.313**	0.369**	0.432**	0.237**	0.309**	**0.332	attachment to deviant friends	
-0.217**	-0.242**	-0.090	-0.143	0.191**	-0.002	-0.222**	0.225**	0.129	social bonding	
0.025	0.033	0.022	0.029	0.047	0.012	0.018	0.018	0.024	spending leisure time with family	
0.060	0.011	-0.026	-.0007	-.0037	-0.086	0.568	0.039	0.018	presence of authority figures	
0.410	0.511	0.457	0.384	0.459	0.459	0.356	0.446	0.377	R	Model Summary
0.167	0.261	0.209	0.147	0.211	0.211	0.127	0.199	0.142	R square	
11.336	11.889	5.586	9.666	9.022	5.649	8.127	8.379	3.503	F	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	Sig	

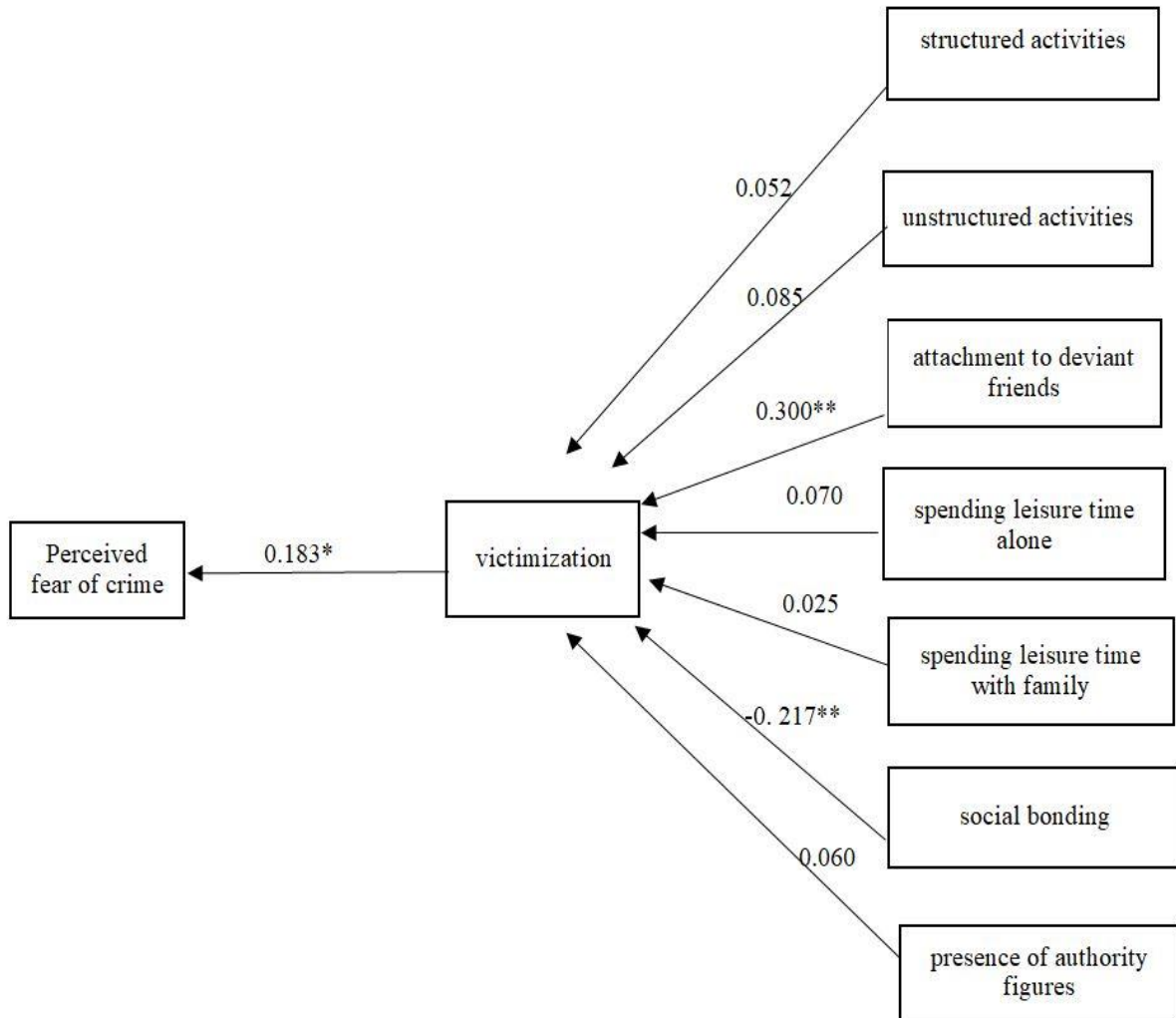
The findings of Table 4, indicate that the multiple correlation of the independent variables with victimization is 0.457 for males and 0.511 for females. The coefficient of determination is 16 percent for males and 26 percent for females. This means that approximately 16 percent of the variation in victimization among males and about 26 percent of the variation among females is explained by the independent variables.

Table 5. Multiple regression model explaining fear of crime based on the mediator variable and independent variables

perceived fear of crime						Variables	
Total		female		male			
Sig	Beta	Sig	Beta	Sig	Beta		
0.000	0.183	0.051	0.142	0.606	0.046	victimization	Mediate variable
0.003	0.152	0.0003	-0.200	0.441	-0.070	structured activities	Independent variables
0.408	-0.042	0.097	-0.110	0.358	-0.082	unstructured activities	
0.050	0.099	0.335	0.066	0.075	0.154	spending leisure time alone	
0.000	-0.277	0.003	-0.217	0.765	0.029	attachment to deviant friends	
0.281	-0.066	0.454	0.061	0.049	-0.205	social bonding	
0.120	0.088	0.574	0.041	0.442	0.075	spending leisure time with family	
0.058	0.112	0.626	-0.036	0.410	0.084	presence of authority figures	
0.365		0.292		0.264		R	Model Summary
0.133		0.085		0.069		R square	
7.503		2.729		1.372		F	
0.000		0.007		0.214		Sig	

The findings of Table 3 show that the multiple correlation coefficient is 0.365 and statistically significant. Accordingly, it can be stated that 36 percent of the independent variables and the mediating variable are correlated with the dependent variable, fear of crime. Among female students, a significant relationship is also observed, with 29 percent of the independent and mediating variables being correlated with fear of crime. The coefficient of determination is 0.133, meaning that the independent variables together with the mediating variable (victimization) explain 13 percent of the changes in fear of crime.

Model 1 shows that the variable “strength of attachment to deviant friends,” with a beta coefficient of 0.30, has the greatest effect on victimization. After that comes the variable “social bond,” with a beta of -0.22 . The direction of the variable “strength of attachment to deviant friends” is positive, meaning that as attachment to deviant friends increases, victimization also increases. In contrast, the direction of the social bond variable is negative, meaning that as social bonding decreases, victimization increases. Victimization acts as the mediating variable, and its effect on fear of crime has been measured. The beta coefficient of victimization is 0.18, and it has a significant relationship with fear of crime. Among male students, the variable “strength of attachment to deviant friends” has the highest effect on victimization, with a beta of 0.42. Among female students, the same variable has the greatest effect on victimization, with a beta of 0.38. After that comes the social bond variable with a beta of -0.24 , and the structured activities variable with a beta of 0.17.



Model 1. Path analysis for all students

Model 1. Path analysis for all students

Table 5 shows the direct, indirect, and total effects of the variables in the analytical model of the study. The most important predictors of fear of crime, in order, are victimization, strength of attachment to deviant friends, social bond, structured activities, spending leisure time alone, unstructured activities, presence of authority figures, and spending leisure time with family.

Table 6. Direct and indirect effects of research variables on perceived fear of crime

Total effect	Direct effect	Indirect effect	Variables
0.006	0.006	-	structured activities
.0004	0.004	-	unstructured activities
0.024	0.024	-	attachment to deviant friends
0.005	0.005	-	spending leisure time alone
0.002	0.002	-	spending leisure time with family
-0.017	-0.017	-	social bonding
0.004	0.004	-	presence of authority figures
0.082	-	0.082	victimization

6. Discussion and Conclusion

To explain the relationship between routine activities, lifestyle, personal characteristics, and fear of crime, the routine activity and lifestyle theories offer a suitable theoretical foundation. Routine activity theory highlights the convergence in time and space of a suitable target, a motivated offender, and the absence of a capable guardian. Lifestyle theory proposes that certain lifestyle characteristics increase or decrease an individual's risk of victimization. Together, these theories have been used by criminologists to explain how, where, and why criminal events occur (Lee & Hilinski, 2011: 648).

According to the first hypothesis of this study, victimization is negatively associated with structured activities. This means that with an increase in structured activities, victimization decreases. This hypothesis was not supported by the findings. Some previous studies have also rejected the negative relationship between structured activities and victimization. Good and colleagues found that participation in associations and sports activities was positively correlated with deviant behavior. Hirschi also noted that participating in structured activities can reduce time spent in delinquent activities but may simultaneously increase opportunities for deviant behavior (Aliverdina & Alimardani, 2017: 113). Schreck and Miller (2003) found that forms of school security had a direct relationship with fear of crime, stating that perceptions of community insecurity influence fear of victimization. Similarly, Beck and Seal Soo (2023) found no significant relationship between social support or school safety and cyber victimization.

The second hypothesis proposed that victimization is positively associated with unstructured activities, meaning that as unstructured activities increase, victimization increases. This hypothesis was not supported. Some previous studies also rejected the positive relationship between unstructured activities and victimization. Henneberger et al. (2021) found that unstructured activities alone cannot increase risk; instead, their effects depend on the nature of social interactions. If adolescents engage in unstructured activities with positive, supportive groups, risk may actually decrease. Lee and Hilinski (2011) showed that lifestyle activities such as drinking alcohol, avoidance behaviors, and attending parties were related to fear of crime (theft), and that criminal tendencies were associated with higher fear. Zhang et al. (2001) found that deviant lifestyles (measured through drug use, alcohol use, and delinquency) influence victimization. Chen (2009) also found a relationship between deviant lifestyles (time spent in unsupervised activities) and victimization.

The third hypothesis stated that victimization is positively associated with strength of attachment to deviant friends. This hypothesis was supported. Studies by Zhou et al. (2016), Panping Jiang et al. (2016), and Aliverdinia and Alimardani (2017) have also confirmed this hypothesis. Kao et al. (2024) found a positive relationship between friendship quality and victimization for men, but not for women. Ozdemir (2018) found that peer bullying victimization was directly associated with high-risk deviant behaviors. Chen (2009) also showed a relationship between deviant lifestyles (attachment to deviant peers) and victimization. Eareth et al. (2008) showed that victimization was associated with lower interest in school among students who had higher levels of friendship support. Bernburg and Thorlindsson (2001) noted that the effects of unstructured socializing depend on whether peers are deviant. Svensson and Oberwittler (2010) found significant interactive effects between unstructured activities and association with delinquent friends; unstructured activities amplify the effect of delinquent peers. Holt and Bossler (2008) reported that individuals whose friends engage in computer-related offenses face higher cyber victimization risk due to proximity to motivated offenders and reduced social monitoring.

The fourth hypothesis proposed that victimization is negatively associated with spending leisure time alone. This hypothesis was not supported, meaning that as solitary leisure time increases, victimization doesn't decrease. Some previous studies also did not confirm a relationship between solitary leisure time and victimization. For example, Podavani et al. (2015) found that the relationship between loneliness and violent behavior was significant only for boys. Felson et al. (2013) found that adolescents who visit public places at night increase their risk of being victimized by acquaintances. Many risks associated with spending time in public environments depend on victims' own risky behaviors. Penn and Tanner (2009) found that time spent away from parents increases victimization. Bill Gill (2025) found that unstructured leisure time among youth positively affects deviant behavior and may predict risky lifestyles and victimization. Messner and Blau (1987) argued that differences in crime rates could be explained by patterns of leisure activities: home-based leisure (e.g., watching TV) had a negative relationship with crime, while out-of-home leisure (e.g., cinemas, sports centers) had a positive relationship (McNeeley, 2015: 31).

According to the fifth hypothesis, victimization is negatively associated with social bonding; meaning that as social bond increases, victimization decreases. This hypothesis was supported. In this study, social bonding was measured using both family attachment and academic commitment. Bouilly (2023) found that strong social bonds protect youth from victimization. Penn and Tanner (2009) found an inverse relationship between school commitment and victimization. Weak social bonds reduce sensitivity to societal norms (Aliverdinia & Fahimi, 2014: 174). Routine activity theory defines capable guardianship as the ability of a person or object to prevent crime, either physically or socially. Strong social bonds can function as a supervisory mechanism. When individuals have strong family or community bonds, informal monitoring increases, reducing victimization opportunities.

The sixth and seventh hypotheses stated that victimization is negatively associated with time spent with family and presence of authority figures. Both hypotheses were not supported. Both hypotheses were based on the principle of capable guardianship in routine activity theory. Some

studies, such as Penn and Tanner (2009), show an inverse association between guardianship and delinquency, meaning that the further students are from parents, the higher their victimization. Averdijk (2010) found that spending more time with a spouse at home (marriage) was linked to lower victimization. Megan et al. (2011) found that higher levels of guardianship reduce crime. However, Beck and Seal Soo (2023) found that school safety and social support were not significant predictors of cyber victimization. Pop (2012) showed that students' proximity to motivated offenders and crime-prone environments is associated with bullying victimization at school. According to routine activity theory, individuals who use protective factors face less victimization risk. However, some researchers argue that when actual proximity to victims exists, fear of crime does not correlate with protective actions. Overall, lifestyle and routine activities that increase students' exposure to risky settings are the strongest predictors of victimization (Truman, 2007: 14).

According to the eighth hypothesis, fear of crime is positively associated with victimization. This hypothesis was supported, meaning that as victimization increases, fear of crime increases. Previous studies have shown mixed results. Some studies, including Smith & Hill (1991), Witterath (2000), Russo & Roccato (2010), Averdijk (2011), Henson et al. (2013), Price et al. (2018), Choi & Dallis (2019), Singer et al. (2019), Noble & Jardin (2020), Bouilly (2023), and Kaiser et al. (2024), found a positive relationship between victimization and fear of crime. However, Chanklingam (2009) did not find a positive relationship. Price (2018) noted that although 40 percent of people experience fear of crime, only 10 percent are actual victims. This difference helps explain why victimization and fear of crime are positively correlated. According to routine activity and lifestyle theories, potential victims become more attractive based on proximity, visibility, attractiveness, and level of guardianship. Lynch (1987) emphasized the role of environmental "domains" in shaping risk factors (exposure, proximity, attractiveness, guardianship). Individuals who work are more exposed to victimization than those who stay home. Sigel and Raymond (1992) noted that campus design, architecture, and social interaction among faculty, staff, and students influence victimization risk. Exposure to risky circumstances

may also be linked with fear of crime, as such exposure stems from lifestyle and routine activities. Personal and lifestyle characteristics—such as alcohol use, drug use, frequent partying, outdoor recreational activities, participation in criminal acts, and prior victimization—also influence fear of crime.

Scholars believe that routine activities are shaped through life structures. Much criminological literature shows that individuals who adhere to high-risk lifestyles are more likely to be victimized (Cohen & Cantor 1980; Cohen & Felson 1979; Gottfredson 1984; Hindelang et al. 1978; Lynch 1991). Empirical studies consistently show that victims, compared to non-victims, face higher future victimization risk, and prior victimization is one of the strongest predictors of future victimization (Averdijk, 2011: 126–127). Additionally, many studies suggest that the more we know about delinquency, the more we can understand victimization and vice versa (Penn & Tanner, 2009: 2).

Some studies examining gender differences in victimization have shown that being female is associated with higher victimization (Gower et al., 2011: 47). However, other researchers (Craven, 1997; Di Tella et al., 2008; Lauritsen & Heimer, 2008) found that men are more likely to be victimized, and although men face higher risk, women report higher fear of crime in universities and in broader society (Price et al., 2018: 826). Lee and Hilinski (2011) found that lifestyle and victimization experiences are significantly related to fear of sexual assault, and female students have greater fear of sexual assault.

Policy Implications

Prevention programs should be considered as strategies for preventing victimization. Routine activity theory suggests that victimization can be prevented by reducing opportunities for criminal behavior. Crime prevention and reducing fear of crime cannot be the sole responsibility of formal policing but it must involve active community participation. In other words, a large part of social control should be delegated to local communities and informal surveillance.

Research shows that students who worry more about crime risk also report higher fear. Raising awareness about crime and victimization is important, as awareness should lead to caution. However, universities must ensure that awareness does not lead to exaggerated perceptions of crime risk. Misinterpretations can have debilitating effects (Lee & Hilinski, 2011: 664). Policies addressing fear of crime should identify root causes—often perceived, not actual, risk.

Another strategy is providing accurate information about victimization risk on campuses. Accurate information can help especially female students calibrate their fear to match actual threat levels. Student affairs and cultural departments should implement scientific preventive measures. Prevention is a key strategy in social control, involving direct and indirect measures aimed at reducing opportunities for crime and victimization. Evidence shows that proper implementation and use of global best practices—especially environmental design strategies on campuses—can make prevention more effective than reactive strategies. However, effective crime prevention management is far more complex than it may seem.

There is no conflict of interest in this article.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. This research was conducted independently without any external funding or institutional conflict.

References

- Aliverdina, A.; Hasani, M. (1397). Collective Impact and Fear of Crime in Urban Neighborhoods. *Collection of Articles on City, Space and Daily Life*. Tehran: Tisa.
- Aliverdina, A.; Rismanchi, N. (1398), The effect of cyber and traditional victimization on students' deviant behaviors, *Cultural Strategy*, 12(45), 97-130.
- Aliverdina, A., Alimardani, M., (1396). The empirical application of the theory of Routine Activities in investigating students' deviant behaviors, *Applied Sociology*, 28(3), 24-1
<https://doi.org/20.1001.1.20085745.1396.28.3.2.4>.

- Aliverdina, A.; Shahriari Yanesari, N. (1393), The Study of Students' Deviant Behavior: Evaluation of Explanatory Power of Classic Strain and Control Theories, *Cultural Society*, 8(2), 81-113.
- Aliverdina A.; Mirzaei, S. (1398), Policy Implications of Agnew's General Strain Theory & Messner and Rosenfeld's Institutional Anomy Theory to Reduce Students' Deviant Behaviors, *Sociology of Social Institutions*, (14)6. 317-357. <https://doi.org/10.22080/ssi.2020.17774.1699>.
- Aliverdina, A. and Fahimi, A. (1393). Gender Generalizability of Social Bonding Theory in Explanation of Girl Students' Deviant Behaviors. *Social Studies and Research in Iran*, 3 (1), 165-191. <https://doi.org/10.22059/jisr.2014.52468>.
- Aliverdina, A.; Ghahramanian, D. (1395), Sociological study of deviant behaviors among university students: An application of rational choice theory, *Sociology of Social Institutions*, (8)3, 42-9. <https://doi.org/10.22080/ssi.2017.1420>.
- Aliverdini, A.; Janalizade, H.; Panjtani, M. (1395). Sociological Study of Fear of Crime: An Empirical Test of the Theory of Collective Efficacy and Broken Windows, *Applied Sociology*, 27(1), 43-66. <https://doi.org/10.22108/jas.2016.20480>.
- Argun, U., & Dağlar, M. (2016). Examination of Routine Activities Theory by the property crime", *Human Sciences*, 13(1), 1188-1198. <https://doi.org/10.14687/ijhs.v13i1.3665>.
- Averdijk, M. (2011). Reciprocal effects of victimization and routine activities. *Quantitative Criminology*, 27(2), 125–149. <https://doi.org/10.1007/s10940-010-9106-6>.
- Bayley, B. K., (2002). *Fear of crime and perceptions of law enforcement among American youth*. Dissertation for degree of doctor of philosophy, Utah State University.
- Back S., & Suh, E.S. (2023). The effect of capable guardians on the risk of cyberbullying victimization. *Journal of Criminology and Criminal Justice Studies*, 1(2), 185-201. <https://doi.org/10.47509/JCCJS.2023.v01i02.05>.
- Bakhshizadeh, H. (1400). The relationship between media consumption and fear of crime among citizens of Tehran. *Social Studies and Research in Iran*, 10 (1), 277-312.
- Bolli, P. (2023). Social bonds and fear of crime victimization among youth: An analysis using Ferraro's risk assessment framework. Ph. D Dissertation. Prairie View A &M University.
- Buil-Gil, D. (2025). The structure of unstructured time and crime: A spare time model. *Criminology*. XX, 1–22. <https://doi.org/10.1093/bjc/azaf035>.

- Cao, J., Yuan, W., Xu, X., & Liu, X. (2023). Reciprocal links between friendship quality and peer victimization among middle adolescents. *Journal of Interpersonal Violence*, 39(9-10), 2127-2147. <https://doi.org/10.1177/08862605231218684>.
- Chen, X. (2009). The linkage between deviant lifestyles and victimization: An examination from a life course perspective. *Interpersonal Violence*, 24(7), 1083-1110, <https://doi.org/10.1177/0886260508322190>.
- Chiricos, T., Eschholz, S., & Gertz, M. (1997). Crime, News and Fear of Crime: Toward an Identification of Audience Effect. *Social Problems*, 44(3), 342-357. <https://doi.org/10.1525/sp.1997.44.3.03x0119o>.
- Choi, J., & Dulisse, B. (2021). Behind closed doors: The role of risky lifestyles and victimization experiences on fear of future victimization among South Korean inmates. *Interpersonal Violence*, 36(21-22), 10817-10841. <https://doi.org/10.1177/0886260519888186>.
- Chui, W. H., Cheng, K. K.-Y., & Wong, L.-P. (2012). Gender, Fear of Crime, and Attitudes Toward Prisoners Among Social Work Majors in a Hong Kong University. *International Journal of Offender Therapy and Comparative Criminology*, 57(4), 479-494. <https://doi.org/10.1177/0306624X12436524>.
- Cohen, L. E. & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44(4), 316-353. <https://doi.org/10.2307/2094589>.
- Collins, R. (2016). Addressing the inconsistencies in fear of crime research: A meta-analytic review. *Criminal Justice*, 47, December, 21-31. <https://doi.org/10.1016/j.jcrimjus.2016.06.004>.
- Dewas, D., A. (1374), Survey in Social Research, translated by Houshang Naiebi, Tehran: Nei.
- Erath, S.A., Flanagan, K.S., & Bierman, K.L. (2008). Early Adolescent School Adjustment: Associations with Friendship and Peer Victimization. *Social Development*, 17(4), 853-870. <https://doi.org/10.1111/j.1467-9507.2008.00458.x>.
- Engström, A., & Kronkvist, K. (2023). Examining experiential fear of crime using STUNDA: Findings from a smartphone-based experience methods study. *Criminology*, 20(2), 693-711. <https://doi.org/10.1177/14773708211035301>.
- Fateminia, M., Kazemi, Gh.; Parvin, S. (1401). Victimology of Crimes against Youth (Case Study: Allameh Tabataba'i University Students). *Strategic Studies in Sports and Youth*, 21(55), 9-30. <https://doi.org/10.22034/ssys.2022.734>.

- Ferraro, K. F., & Grange, R. L. (1987). The measurement of fear of crime. *Sociological Inquiry*, 57(1), 70-97. <https://doi.org/10.1111/j.1475-682X.1987.tb01181.x>.
- Felson, R., Savolainen, J., Berg, M., & Noora, E. (2013). Does spending time in public settings contribute to the adolescent risk of violent victimization? *Quantitative Criminology*, 29(2), 273-293. <https://doi.org/10.1007/10940-012-9179-5>.
- Franklin, C. A., & T. W. Franklin (2008). Predicting fear of crime: Considering differences across gender. *Feminist Criminology*, 4(1), 83-106. <https://doi.org/10.1177/1557085108325196>
- Gibson, C., Zhao, J., Lovrich, N. P., & Gaffney, M. J. (2002). Social integration, individual perceptions of collective efficacy, and fear of crime in three cities. *Justice Quarterly*, 19(3), 537-564. <https://doi.org/10.1080/07418820200095341>.
- Ghaderzade, O.; Khazaei, S. (1393), A qualitative study of semantic implications women's sense of insecurity in public spaces, *Applied Sociology*, 12(3), 405-424. <https://doi.org/10.22059/jwdp.2014.53691>.
- Ghazinezhad, M.; Shakeri, F. (1391). A sociological study and analysis of fear of crime and uncivilized behaviors among women in Tehran (with emphasis on gender identity and civil identity). *Social Issues of Iran*, 3(2), 181-202. <https://doi.org/20.1001.1.24766933.1391.3.2.7.2>
- Gover, A.R., Tomsich, E.A., Jennings, W.G., & Higgins, G.E.(2011). An exploratory study on perceptions of safety, fear of crime, and victimization experiences among faculty and staff at an urban university: A focus on gender. *Criminal Justice Studies*, 24(1):37-55 <https://doi.org/10.1080/1478601X.2011.544193>.
- Haji Dehabadi, M. A. and Salimi, Ehsan. (1397). The cause of women's victimization on social networks; a case study of the social network Facebook, *Women and Society (Sociology of Women)*, 3 (35), 117-142. <https://doi.org/20.1001.1.20088566.1397.9.35.6>.
- Henson, B., Reyns, B. W., & Fisher, B. S. (2013). Fear of crime online? Examining the effect of risk, previous victimization, and exposure on fear of online interpersonal victimization. *Contemporary Criminal Justice*, 29(4), 475-49. <https://doi.org/10.1177/1043986213507403>.
- Henneberger, A. K., Mushonga, D. R., & Preston, A. M. (2021). Peer influence and adolescent substance use: A systematic review of dynamic social network research. *Adolescent Research Review*, 6(1), 57-73. <https://doi.org/10.1007/s40894-019-00130-0>.

- Hill, G. (1991). Victimization and Fear of crime. *Criminal Justice and Behavior*, 18(2), 217-232. <https://doi.org/10.1177/0093854891018002009>.
- Hindelang, M. J., Gottfredson, M. R., & Garofalo, J. (1978). Victims of personal crime: An empirical, foundation for a theory of personal victimization. Cambridge, MA: Ballinger.
- Holt, T. J., & Bossler, A. M. (2008). Examining the applicability of lifestyle-routine activities theory for cybercrime victimization. *Deviant Behavior*, 30(1), 1-25. <https://doi.org/10.1080/01639620701876577>.
- Iloma, D. O., Nnam, M. U., Effiong, J. E., Eteng, M. J., Okechukwu, G. P., & Ajah, B. O. (2023). Exploring socio-demographic factors, avoiding being a victim and fear of crime in a Nigerian university. *Security Journal*, 36(1), 201-220. <https://doi.org/10.1057/s41284-022-00336-3>.
- Jackson, J., & Gouseti, I. (2013). Fear of crime. The encyclopedia of theoretical criminology. In book: Encyclopedia of Theoretical Criminology. Publisher: Wiley-Blackwell. 1-5.
- Jiang, Y., Yu, C., Zhang, W., Bao, Z., & Zhu, J. (2016). Peer victimization and substance use in early adolescence: Influences of deviant peer affiliation and parental knowledge. *Child and family Studies*, 25, 2130-2140. <https://doi.org/10.1007/s10826-016-0403-z>.
- Johnson L. M., Watson D., & Pino, N. W. (2019). Police officers' fear of crime: An analysis of interviews with officers in Trinidad and Tobago. *International Journal for Crime, Justice and Social Democracy*, 8(4), 77-93. <https://10.5204/ijcjsd.v8i4.1204>.
- Kaiser, F., Oberwittler, D., Janssen, H., & Hoffman, L. (2024). Exploring heterogeneous effects of victimization on changes in fear of crime: The moderating role of neighborhood conditions. *Justice Quarterly*, 42(1), 1-30. <https://doi.org/10.1080/07418825.2024.2304775>.
- Lagrange, R., Ferraro, K. F., & Supancic, M. (1992). Perceived risk and fear of crime: role of social and physical incivilities. *Journal of Research in Crime and Delinquency*, 29(3), 311-334. <https://doi.org/10.1177/0022427892029003004>.
- Lee, D., & Hilinski-Rosick, C. (2011). The role of lifestyle and personal characteristics on fear of victimization among university students. *American Journal of Criminal Justice*, 37(4), 1-22. <https://doi.org/10.1007/s12103-011-9136-0>.
- Marcum, C. D., Ricketts, M. L., & Higgins, G. E. (2010). Assessing sex experiences of online victimization: An examination of adolescent online behaviors using routine activity theory. *Criminal Justice Review*, 35(4), 412-437. <https://doi.org/10.1177/0734016809360331>.

- May D.C., Rader.N. E., & Goodrum.S.(2010). A gendered assessment of the threat of victimization: Examining gender differences in fear of crime, perceived risk, avoidance, and defensive behaviors. *Criminal Justice Review*, 35(2), 159-182. <https://doi.org/10.1177/0734016809349166>.
- Mcgarrell, E. F. (1997). Neighborhood disorder, integration, and the fear of crime. *Justice Quarterly*, 14(3), 479-500. <https://doi.org/10.1080/07418829700093441>.
- McGarrell, E. F., Giacomazzi, A. L., & Thurman, Q. C. (1997). Neighborhood disorder, integration, and the fear of crime. *Justice Quarterly*, 14(3), 479–500. <https://doi.org/10.1080/07418829700093441>.
- McNeeley, S. (2015). Lifestyle-Routine Activities and Crime Events. *Contemporary Criminal Justice*, 31(1), 30–52. <https://doi.org/10.1177/1043986214552607>.
- Meghan E. H., Danielle M. R., Maud B., Henk, E., & Brandon, C.W. (2011). Guardianship for crime prevention: a critical review of the literature. *Crime Law and Social Change*, 56(1), 53-70. <https://doi.org/1007/s10611-011-9309-2ff>.
- Mens, N. S. (2007). Towards an understanding of fear as an intangible cost of crime. *International Review of Victimology*, 14(2): 219-235. <https://doi.org/10.1177/026975800701400203>.
- Mesch, G. S. (2000). Perceptions of risk, lifestyle activities, and fear of crime. *Deviant Behavior*, 21(1) 47–62. <https://doi.org/10.1080/016396200266379>.
- Miceli, R., Roccato, M., & Rosato, R. (2004). Fear of crime in Italy: Spread and determinants. *Journal of Environment and Behavior*, 36(6), 776-789. <https://doi.org/10.1177/0013916503261931>.
- Noble, J., & Jardin, A. (2020). From victimization to fear: Fear of crime and its variations among victims, *The British Journal of Criminology*, 60(2), 468-489. <https://doi.org/10.1093/bjc/azz051>.
- 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(3), 231-251. <https://doi.org/10.1177/026975809900600305>.
- Özascilar, M. (2013). Predicting fear of crime: A test of the shadow of sexual assault hypothesis. *International Review of Victimology*, 19(3), 269-284. <https://doi.org/10.1177/0269758013492754>.

- Özdemir, S. (2018). Analysis of deviant friends' mediator effect on relationships between adolescent risk behaviours and peer bullying, abuse experiences and psychological resilience", *Education and Science*, 43(195), 223-239. <https://doi.org/10.15390/EB.2018.7509>.
- Penn, E., & Tanner, J. (2009). An examination of delinquency and victimization using social bonding and routine activities", *Knowledge and Best Practices in Juvenile Justice and Psychology*, 3(1), 33-40. <https://digitalcommons.pvamu.edu/cojip-contemporaryissues>.
- Popp, A.M. (2012). The effects of exposure, proximity, and capable guardians on the risk of bullying victimization. *Youth Violence and Juvenile Justice*, 10(4), 315-332. <https://doi.org/10.1177/1541204011434833>.
- Pratt, T., & Turanovic, J. (2016). Lifestyle and routine activity theories revisited: The importance of "risk" to the study of victimization. *An International Journal of Evidence-based Research, Policy, and Practice*. 11(3), 335-354. <https://doi.org/10.1080/15564886.2015.1057351>.
- Prieto C., & Bishop, R. (2018). Fear of crime: the impact of different distributions of victimization. *Palgrave Communications*, 4(1), 1-8. <https://doi.org/10.1057/s41599-018-0094-8>.
- Pryce, D., Wilson, G., & Fuller, K. (2018). Gender, age, crime victimization, and fear of crime: findings from a sample of Kenyan College students", *Security Journal*, 31(2), 821-840. <https://doi.org/10.1057/s41284-018-0134-5>.
- Povedano, A., Cava, M., Monreal, M., Varela, R., & Musitu, G. (2015). Victimization, loneliness, overt and relational violence at the school from a gender perspective. *International Journal of Clinical and Health Psychology*, 15(1), 44-51. <https://doi.org/10.1016/j.ijchp.2014.09.001>.
- Quann, N., & Hung, K. (2002). Victimization Experience and the Fear of Crime. A Cross-National Study. In P. Nieuwebeerta (Ed.), *Crime Victimization in Comparative Perspective* (pp. 301-316). NSCR, BJU.
- Rader, N. E. (2004). The threat of victimization: a theoretical reconceptualization of fear of crime, *Sociological Spectrum*, 24(6), 689-704. <https://doi.org/10.1080/02732170490467936>.
- Robinson, J. B., Lawton, B. A., Taylor, R. B., & Perkins, D. D. (2003). Multilevel Longitudinal Impacts of Incivilities: Fear of Crime, Expected Safety, and Block Satisfaction. *Journal of Quantitative Criminology*, 19(3), 237-274. <https://doi.org/10.1023/A:1024956925170>.
- Russo, S., & Roccato, M. (2010). How long does victimization foster fear of crime? A longitudinal study", *Community Psychology*, 38(8), 960-974. <https://doi.org/10.1002/jcop.20408>.

- Sadeghi Fasaei, S.; Mir Hosseini, Z. (1388), Sociological analysis of fear of crime among women in Tehran, *Social Sciences Letter*, 17(36), 125-152.
- Schreck, C., & Miller, M. (2003). Sources of fear of crime at school: What is the relative contribution of disorder, individual characteristics, and school security? *School Violence*, 2(4). 57-79. http://dx.doi.org/10.1300/J202v02n04_04.
- Singer, A. J., Chouhy, C., Lehmann, P. S., Walzak, J. N., Gertz, M., & Biglin, S. (2019). Victimization, fear of crime, and trust in criminal justice institutions: A cross-national analysis. *Crime & Delinquency*, 65(6), 822–844. <https://doi.org/10.1177/0011128718787513>.
- Smith, L. N., & Hill, G. D. (1991). Victimization and fear of crime. *Criminal Justice and Behavior*, 18(2), 217-239. <https://doi.org/10.1177/0093854891018002009>.
- Tiby, E. (2001). Victimization and fear among lesbians and gay men in Stockholm. *International Review of Victimology*, 8(2), 217-243. <https://doi.org/10.1177/026975800100800207>.
- Truman, J. (2007). Fear of crime and perceived risk of victimization among college students. Masters Thesis, University of Central Florida.
- Wyant, B. R. (2008). Multilevel impacts of perceived incivilities and perceptions of crime risk on fear of crime: isolating endogenous impacts. *Journal of Research in Crime and Delinquency*, 45(1), 39-64. <http://dx.doi.org/10.1177/0022427807309440>.
- Weinrath, M. (2000). Violent victimization and fear of crime among Canadian Aboriginals”, *Offender Rehabilitation*, 30(1-2), 107-120. http://dx.doi.org/10.1300/J076v30n01_07.
- Xiong, L. (2011). *A Cognitive Behavioral Perspective of Drivers of Threat of Victimization Involving Local and International Tertiary Students*. Dissertation ph. D, School of Management, College of Business, RMIT University.
- Xu, Y., Fiedler, M.L., & Flaming, K.H. (2005): “Discovering the Impact of Community Policing: The Broken Windows Thesis, Collective Efficacy, and Citizens' Judgment”, *Journal of Research in Crime and Delinquency*, 42(2), 147-186. <https://doi.org/10.1177/0022427804266544>.
- Zhang, L., Welte, J., & Wieczorek, W. (2001), Deviant lifestyle and crime victimization. *Criminal Justice*, 29(2), 133-143. [https://doi.org/10.1016/S0047-2352\(00\)00089-1](https://doi.org/10.1016/S0047-2352(00)00089-1).

- Zhao, J. S., Gibson, C., Lovrich, N., & Gaffney, M. (2002). Participation in community crime prevention: are volunteers more or less fearful of crime than other citizens? *Journal of Crime and Justice*, 25(1), 41–61. <https://doi.org/10.1080/0735648X.2002.9721144>.
- Zhao, J. S., Lawton, B., & Longmire, D. (2010). An examination of the micro-level crime–fear of crime link. *Crime & Delinquency*, 61(1), 19-44. <https://doi.org/10.1177/0011128710386203>.
- Zhu, J., Yu, C., Zhang, W., Bao, Z., Jiang, Y., Chen, Y., & Zhen, S. (2016). Peer victimization, deviant peer affiliation and impulsivity: Predicting adolescent problem behaviors. *Child Abuse & Neglect*, 58, 39-50. <https://doi.org/10.1016/j.chiabu.2016.06.008>.