

The Systematic Review on Safety in Urban Neighborhoods

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Abstract: Previous researches focused on the safety issue as a significant factor for neighborhood's quality. The aim of this research is to establish a comprehensive overview on literatures in terms of the significance of safety issue for urban neighborhoods and its influencing factors. To do so, 27 research articles associating to urban neighborhood's safety criteria are evoked and reviewed. Considering the existing inconsistencies of the results, the important factors influencing urban neighborhood's safety are revealed. Most of undertaken articles that were focused on statistical strategies were validated and reliable safety is standardized. Moreover, the possible moderation of effects are surely investigated and warranted.

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1. Introduction

Chavis et al (2002) highlighted that the lack of safety and wrongdoings in urban neighborhoods is the main reason of their residents to be involve of fear which cause neighborhoods less attractive to be lived in, worked, visited and active. Bigdeli Rad et al (2014) highlighted the association among safety and physical activity in urban neighborhoods. In addition, the issues related to safety are gradually identified as significant social problem in urban neighborhoods. Meanwhile, managing neighborhood insecurity factors and their negative effects on neighborhoods' social fabric highlighted by entire public service as main concern of public policy. Doyle et al (2006), pointed many civilizations and their history of undertaking the built environment due catching the social public safety requirements. In accordance to the problems occurred by modern designs and social system disappointments in terms of crime prevention in twentieth century, the concept of designing a safe neighborhoods was revealed. These have been formulated to well established and meticulously elaborated approaches of how to design of safety (Zilbershtein, 2013).

Based on the importance of safety issue for urban neighborhoods, the number of researches focusing on its associated factors was increased. Hamed Najafpour, et.al (2014) revealed the safety and security of urban neighborhoods as important

factor influencing quality of their residents' life. Therefore, providing a holistic and comprehensive research due gathering all those factors affecting safety of urban neighborhoods is vital. The aim of this research review is to investigate on providing a holistic overview of previous research articles focusing the factors influencing safety in urban neighborhoods.

2. Methods

According to the aim of this research, the most extensive investigation on related research articles with urban neighborhoods' safety and its relative factors is undertaken.

2.1. The strategy of research

Nine electronic databases consist of Taylor & Francis, Web of Science, Google Scholar, The Southern Criminal Justice Association, Active Living by Design, JSOR, Sage Publication, JAI Press and Northwestern University School of Law were undertaken as electronic search approach for this research. Moreover, the research's scope identified in accordance with English research articles published from July 1980 to November 2010. When reviewing the articles abstracts and conclusions, the most appropriate research articles with most association with urban safety criteria and research principles were undertaken. As final part, undertaken articles

were examined with asking the experts in urban neighborhood safety criteria to establish the robustness and accuracy of the research.

2.2. Selection of criteria

Examining the research articles with focus on urban neighborhoods' safety and associating factors to this area was the main part of this research's scope. Meanwhile, those articles which exclusively considered the urban neighborhoods, safety, crime, urban policy, fear of crime and urban incivilities were evoked and interventional and qualitative studies, proceedings of conferences and the opinions of experts were undertaken.

3. Research results

3.1. The characteristics of research

As shown in Table 1, the characteristics of 27 reviewed articles were focused on urban neighborhoods' safety with the diverse point of views. In addition, instead of articles with the number 1 and 11 which were theoretical (e.g. book review etc), all other articles were based on demographic statistical analysis. The research articles undertook in this research was mostly considered American urban

neighborhoods (22) and the rest were based on Europe and Australian urban neighborhoods. Furthermore, the range of undertaken sample sizes was from 108 to 1700 participants with mostly focus on females and males as gender variety. To provide a comprehensive and detailed overview on concluded results from the reviewed articles, each extracted factor associating with urban neighborhoods' safety are explained with addressing different reviewed points of views. Moreover, the factors influencing urban neighborhoods' safety are tabulated and illustrated in Table 2 to summarize the achievements of this research.

3.2. Assessment of Factors Affecting Urban Neighborhoods' Safety

According to DeFrances et al (1993), the concern of issues relating urban neighborhoods' safety are still significant issues for their residents. Moreover, Keane et al (1998), C. E. Ross and Mirowsky (1999) argued that the residents' compromised safety were associating with limitations on social isolation, personal freedom and trusting to others.

Table 1: The Characteristic of Research based on 27 reviewed articles

References	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	Total
Sample size																												
n ≤ 150																												0
150 (n ≤ 500)					X		X				X				X								X	X	X	X		8
500 (n ≤ 1000)	X			X						X			X														X	5
n ≥ 1000		X	X			X		X					X		X	X	X	X	X		X	X						11
Country																												
America	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X		X	X	X		X	X		22
Europe							X																				X	2
Australia																								X				1
Setting																												
References	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	24
Sample size																												
n ≤ 150																												
150 (n ≤ 500)		X	X	X		X	X	X	X	X			X	X	X	X	X	X	X		X	X	X	X	X	X	X	22
500 (n ≤ 1000)				X								X																2
n ≥ 1000																												

References: 1: LaGrange et al (1987), 2: Nasar et al (1997), 3: Skogan et al (1981), 4: May et al (2000), 5: Perkins et al (2002), 6: Baba et al (2002), 7: Brown et al (2004), 8: Lewis et al (1980), 9: Skogan et al (1990), 10: Gilchrist et al (1998), 11: Smith et al (1997), 12: Taylor et al (1993), 13: Austin et al (1994), 14: Covington et al (1991), 15: Angel et al (1968), 16: Jacobs et al (1961), 17: Garofalo et al (1981), 18: Greenberg et al (1984), 19: Crane et al (1991), 20: Lane et al (2000), 21: Riger et al (1981), 22: Ross et al (1999), 23: Kawachi et al (1999), 24: Sampson et al (1997), 25: Gustafson et al (2001), 26: Painter et al (1996), 27: Wood et al (2008).

Table 2.2: Factors Affecting Urban Neighborhoods' Safety

No	Author(s)	Factors Influencing Safety
1	LaGrange and Ferraro (1987), Nasar and Jones (1997), Skogan and Maxfield (1981), May and Dunaway (2000) and Perkins and Taylor	Neighborhood Incivilities (Deteriorating buildings, trash, the presence of unsupervised youth)
2	Baba et al (2002)	Built Environment Characteristics
3	Baba et al (2002), B. B. Brown et al (2004), Lewis and Maxfield (1980), Skogan and Maxfield (1981), Skogan (1990), Wood et al (2008) and Painter, Kate. (1996)	Physical Environment (Building design, land use mix, residential density, street lightings, house and garden maintenance, the condition and maintenance of suburban neighborhoods)
4	Skogan and Maxfield (1981), Baba et al (2002), Lagrange and Ferraro (1987), Perkins and Taylor (2002), Taylor and Covington (1993), Austin, Woolever and Baba (1994) and Covington and Taylor (1991)	Demographic Effects (Gender, age, socioeconomic status, education, individual attitude, ethnic minorities)
5	Angel (1968), Jacobs (1961) and Gustafson, Per. (2001)	Natural Surveillances
6	Garofalo (1981), S. W. Greenberg and Rohe (1984), Skogan and Maxfield (1981)	Victimization Experience
7	Crane (1991), Covington and Taylor (1991) and Lane and Meeker (2000)	Neighborhood and Urban Conditions (House quality, neighborhood quality, predictor of psychological well-being, and dramatic changes in racial, youth and elderly composition)
8	Riger, LeBailly and Gordon (1981), R. Ross (1993), Kawachi, Kennedy and Wilkinson (1999) and Sampson, Raudenbush and Earls (1997)	Satisfaction with Local Environment (Litter, appearance, noise, and trust)

The overview on selected articles in this research revealed eight factors associating with urban neighborhoods' safety such as (1) Neighborhood Incivilities, (2) Built Environment Characteristics, (3) Physical Environment (4) Demographic Effects, (5) Natural Surveillances, (6) Victimization Experiences, (7) Neighborhood and Urban Conditions, (8) Satisfaction with Local Environment that are well explained as follow:

3.2.1. Urban Neighborhood Incivilities

Deteriorating buildings, trash, the presence of unsupervised youth are the examples of urban neighborhood incivilities which routinely were considered in the models relating to perceptions of safety. In this regard, LaGrange and Ferraro (1987), Rountree et al (1996) and Skogan and Maxfield (1981) highlighted such conditions affect interpretations of the seriousness of crime, fear and perceived risk. Nasar and Jones (1997) revealed that

women's fear occurred when they were exposed to places in which an attack could be launched. The continued that places with the potential of being trapped or attacked and dark spaces could conceal them brought about fear responses. Meanwhile, high school students in neighborhoods consisting of incivilities are reported to feel more unsafe at school (May & Dunaway, 2000). Perkins and Taylor (2002) pointed that the deterioration of non-residential property had strong association with fear of crime than deterioration in residential properties which homeowners' perception of safety is lower than renters when facing such incivilities in their neighborhoods (Taub et al, 1981).

According to Mayhew et al (1979), the social composition of neighborhoods was more effective than surveillance. Skogan and Maxfield (1981) highlighted that physical disorders or incivilities like vandalism, graffiti and litter associated with increasing of burglary and reduction in safety.

Meanwhile, Skogan (1990) revealed that urban neighborhoods may perceive worse that it really is if incivilities do not remedied quickly. In this regard, Lewis and Maxfield (1980) identified neighborhoods' incivilities as intermediate indicator which improves the concerns of unsafe situation in neighborhoods.

3.2.2. Built Environment Characteristics

Marans and Rodgers (1975) argued that assessing the social environmental attributes was depend on the way that neighborhoods' residents perceived the standards and attributes against which the attribute was judged. Individual differences were associated with subjective impact of local conditions. Baba et al (2002) highlighted that Deteriorated housing, neighborhood quality, and high crime rates had association with increased social and psychological problems for residents, but the impact could differ significantly among individual residents.

3.3.3. Physical Environment

Garden and house maintenance as physical environment characteristics associated with urban neighborhoods' safety. According to B. B. Brown et al (2004), the well maintained gardening and housing identifies the properties of residents in neighborhoods and provides a symbolic distinction among private and public spaces. He continued that unkempt lawns and litter associated with suburbs' unsafe vulnerability. As discussed by Baba et al (2002) and Wood et al (2008), the maintenance of suburban neighborhoods is related with safety. Painter (1996) argued that obvious safety measures in public space (e.g., observation cameras) were postulated with urban neighborhoods that may signal pedestrians to be unsafe in that area. Considering accuracy of this notion reveals that visible home safety precautions may also generate concerns about safety, and may represent another form of incivility, particularly in suburban neighborhoods. According to Hamed Najafpour et al (2013), legible environmental of urban neighborhood also can promote the residents' safety there.

3.3.4. Demographic Effects

Perkins and Taylor (2002) and Skogan and Maxfield (1981) highlighted sex, age, and socioeconomic status as three demographic indicators to be associated with safety and crime attribute. In addition, they revealed that women are more likely to be unsafe in comparison to men in urban neighborhoods. In other research, Covington and Taylor (1991) pointed that although men experienced more victimization rates in the night, women were more likely to be unsafe in urban neighborhoods. Gilchrist, Bannister, Ditton and Farrall (1998) argued

that a portion of expressed insecurity was altruistic in both genders, but the focus of concern might be different as men reported worrying about women and women reported worrying about children. Smith and Torstensson (1997) argued that Socialization, physical stature, victimization to rape, different sensitivities to risk and discounting of fear and risk by men as indicators that explain the higher levels of fear experienced by women. Keane et al (1998) revealed that heightened insecurity as reason that women more limiting their social and personal activities comparing to men.

As second demographic variable associated with urban neighborhoods' safety, age was undertaken by Janson and Ryder (1983), Skogan and Maxfield (1981) and Baba et al (2002). They highlighted that actual victimization rates between elderly were less than young residents but older residents were more concerned about safety than those youngers. Moreover, lack of safety experienced by elderly is partially related to social isolation. While Rountree et al (1996) highlighted that older residents were actually less unsafe; LaGrange and Ferraro (1987) argued that the level of wordiness about safety between elderly was not significantly higher than other age groups.

Austin, Woolever and Baba (1994) revealed a significant positive association among socioeconomic status such as education and increased feeling of perceived safety as third demographic indicator associating with urban neighborhoods' safety. Skogan and Maxfield (1981) and Toseland (1982) pointed that lower level of safety was resulted by higher socioeconomic status but these results were not universal. Austin et al (1994) which constructed measure of socioeconomic status (utilizing family income, education of respondent, and occupation of head of household) and Baba et al (2002) revealed no significant association between socioeconomic status and perceived levels of neighborhood safety in a multivariate analysis. On the other hand, Hale (1996) argued that certain socio-demographic groups of urban neighborhoods' residents were more unsafe than others. As an instance, women and elderly in accordance to their greater concern about safety issues had reported more unsafe in urban neighborhoods than others. Covington and Taylor (1991) highlighted that lower socioeconomic groups and ethnics minorities were ecologically vulnerable because they were lived in urban neighborhoods with concentrated deprivation and had fewer financial resources to protect themselves or their homes against unsafe conditions. Additionally, other researches also revealed the significance of socioeconomic status on people perception of safety (Mohsen Ghods et al (2014), Mohsen Ghods et al

(2014), Vahid Bigdeli Rad and Ibrahim Ngah (2014) and Vahid Bigdeli Rad and Ibrahim Ngah (2013)).

3.3.5. Natural Surveillances

According to Angel (1968), Jacobs (1961) and Newman and Space (1972), safety will be increased by improving the possibility of pedestrian and vehicle traffic's observation from buildings and it also discourages the offenders. Zelinka and Brennan (2001) highlighted that residential areas' natural surveillances in housing design an improver inhabitants in observing their neighborhoods by minimizing the obstacles that restrict visibility. In addition, Jacobs (1961) pointed that streets become lively and safe if pedestrians can cross there and simultaneously watch surveillance from adjacent buildings. Moreover, walk-ability improvement in urban neighborhoods (e.g. by improving the connectivity of the streets or accessible destinations) can be cause of increasing safety and pedestrians' traffic in urban neighborhoods.

3.3.6. Victimization Experience

Victimization experience affects people attitude on perception of safety. Discovering the association among fear and potential of victimization, Garofalo (1981) reported that victims were more fearful comparing to non-victims. Taub et al (1981) highlighted the association among perception of risk in neighborhoods and being the victim to crime. According to S. W. Greenberg and Rohe (1984), Skogan and Maxfield (1981) and Toseland (1982) contact with past victims (vicarious victimization) and direct victimization both have negative association with urban neighborhoods' safety. This conclusion might be more applicable to Whites than other racial and ethnic groups. Aforementioned researches revealed that the concerns over the safety will increase by increasing victimization experiences in urban neighborhoods but some other researches highlighted the unexpectedly small effects of victimization experience on urban neighborhoods. Toseland (1982) argued that people might continue walking alone in their neighborhoods and feel safe while levels of crime reported there. In addition, Covington and Taylor (1991) neighborhoods with higher crime had more attached when residents controlling for stability and education. In their research, Gustafson (2001) and Skogan and Maxfield (1981) identified actual rates of victimization and crime as only a part of personal and neighborhoods' web context factors affecting attitude and behavior regarding crime.

3.3.7. Neighborhood and Urban Conditions

The behavioral and emotional outcomes of urban neighborhoods' residents associated with physical and social situation of urban neighborhoods. Lawton (1990) mentioned the neighborhood quality and housing as an instance for predicting psychological well-being in urban neighborhoods. Moreover, Crane (1991) highlighted that after controlling the residents characteristics, the adolescence inhabited in so-called worst urban neighborhoods were encountered with sharp increases in personal issues like having a child or dripping out of the school. Additionally, researches revealed that residents' perception about their neighborhoods' condition and their attitudes in terms of crime was associated with social dynamics' in urban neighborhoods. Rountree et al (1996) as an instance highlighted that the association among perception of safety and urban neighborhoods' condition were particularly pronounced in heterogeneous neighborhoods. In this regard, Covington and Taylor (1991) revealed that urban neighborhoods with dramatically changes in racial, youth and elderly compositions shown more levels of fear comparing to those with less changes. They pointed that the reason of mentioned differences of fear is because physical and social problems improved not in respond to the changes themselves, but in terms of the past changes in racial compositions of urban neighborhoods. Additionally, Lane and Meeker (2000) also revealed that the amount of fear of crime exhibited by urban neighborhoods' residents was attributed to concern over diversity and the perceived increasing heterogeneity of the urban neighborhood.

3.3.8. Satisfaction with Local Environment

Hale (1996) highlighted that the negative effects of vulnerable and unsafe urban neighborhoods can be reduced by residents contribution in social network by providing safe urban neighborhoods' environment. In this regard, Riger, LeBailly, and Gordon (1981) argued that the safety will be improved with stronger bounds of urban neighborhoods. In addition, the social connection among urban neighborhoods' residents can be reduced by safety reduction there. As an instance, limiting connection with other neighbors is the cause when people feel unsafe in their urban neighborhoods. Therefore, as R. Ross (1993) pointed, reducing the safety increase the social connection and reduce the social contact and exaggerating psychological. According to Kawachi, Kennedy and Wilkinson (1999), the association among crime property and violent with low social capital and relative deprivation reflects the social environment. Sampson, Raudenbush and Earls (1997) revealed that

collective efficacy such as trust among residents to intervene for society's benefit has strong negative relationship with violence.

4. Conclusion

Twenty-seven research articles met the criteria of this review research. Eight factors influencing urban neighborhoods' safety revealed. Crime as a reliance on global measure of safety has not explicitly mentioned in some studies which do not openly state the source of unsafe urban neighborhoods. Nonetheless, global measures of safety have generally been adopted to gauge perceptions of crime-related safety, and are therefore highly relevant to the review. In addition, this review paper highlighted some inconsistencies and limitations with the research to date. Particularly, safety's measurement and conceptualization required serious attention in urban neighborhoods. In addition, inadequate approval documents were revealed in most of reviewed researches in terms of explicating the source of urban neighborhoods being unsafe. It can be concluded that residents' behavior may not be influenced by judgments about crime unless they perceive crime caused the emotional reactions. Very few reviewed research articles provided the group of items by undertaking some guidance and principles due to urban neighborhoods' safety. This research started on explicating the significance of safety in urban neighborhoods and then the factors influencing urban neighborhoods' safety are revealed with the purpose of providing a comprehensive and holistic group of factors influencing urban neighborhoods' safety from previous researches. As a result, factors such as neighborhood incivilities, built environment characteristics, physical environment, demographic effects, natural surveillances, victimization experiences, neighborhood and urban conditions and satisfaction with local environment are highlighted as factors influencing urban neighborhoods' safety.

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