Application of Routine Activities Approach in Rural Homicide of Bangladesh

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Abstract

Since its introduction, Routine Activity Theory (Cohen and Felson, 1979) has attracted much scholarly interest for explaining and preventing crime. However two notable gaps exist. Many researchers have tested the Routine Activities Approach and found support for it in urban and national contexts; however, the rural context has been relatively neglected and an empirical question remains as to whether the findings from urban environments are generalisable to rural settings. Moreover, as most studies focus on the developed world, it remains unclear whether Routine Activity Theory is applicable to developing nations. To address these gaps in knowledge, this study uses data from Bangladesh, a developing country, to test the theory’s ability to explain rural homicide victimization. This present study replicates the hypotheses of Messner and Tardiff (1985), but while the findings are broadly consistent with those of Messner and Tardiff, some differences were observed in relation to socio-demographic and temporal variables. This has implications for future research and policy. This thesis extends our understanding of the nature and patterns of rural homicide victimization.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

(Signed)_____________________________

Forhad Mamun
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Chapter 1
Introduction

Criminology is the study and explanation of crime and deviant behaviour. Scholars test theories of crime and criminality partly by exploring crime problems in diverse contexts. For instance, studying vehicle crime in different countries will reveal commonalities that suggest generalisable relationships that may be context invariant, and differences, that point to context dependent facets of vehicle crime. Clearly, both are important to locate as they deepen our understanding of the driving forces that promote or frustrate crime. This study will extend current understanding, of the risk of victimization in a rural setting, a setting that appears to be overlooked in the literature. Moreover, the study region will be a developing nation, Bangladesh, a setting neglected by most Western criminologists.

Cohen and Felson introduced the “Routine Activity Approach” (RAA) in 1979. Before then criminologists explained variation in crime rates by using social patterns as independent variables. Cohen and Felson introduced the idea of convergence or the meeting of suitable targets, motivated offenders and a lack of capable guardians in time and space to explain the occurrence of crime. This was demonstrated by analysing lifestyle, survey data and types of urban crime. Cohen and Felson (1979) created a household activity ratio and observed an important relationship between this ratio and changes in official crime rates.

The introductory study of the RAA was tested at the macro level, however, Cohen and Felson (1979) claim the approach was in fact created to be tested at the micro level. The argument for testing at the macro level was to
test the approach in a broader context before moving to the micro level. The noteworthy findings at the macro level gave other researchers the impetus to test the approach in micro-level studies. A significant number of studies have since tested the RAA at both macro and micro levels to explain criminal victimization and even criminal offending (for example Kennedy & Forde, 1990; Bennett, 1991; Mustaine & Tewksbury, 2000; Osgood et al., 1996). Most of the studies found support for the RAA. These studies revealed positive relationships between the suitability of targets and victimization, lack of capable guardians and victimization and the presence of motivated offenders and victimization, which supported expected victimization (for example, Kennedy & Forde, 1990; Miethe et al., 1987; Mustaine & Tewksbury, 2000). Studies focused on criminal offending also found positive relationships between the RAA concepts and the chances of committing a criminal act (Osgood et al., 1996).

**The Gap**

In their recent research Spano and Freilich (2009) carried out a meta-analysis of lifestyle/routine activities studies published in reputable academic journals from 1995 to 2005. They found a significant amount of 33 studies tested the RAA and there were 219 important findings in support of the RAA. However, only one study tested the RAA with samples of rural area (Spano & Nagy, 2005). Except for this study, all others used urban or national probability samples. The relevance of the RAA in a rural environment has therefore been overlooked. The rural study was conducted with data on rural adolescents. As, such variables are lacking in the other RAA studies, it is difficult to compare the rural results with other studies.
In addition, most of the studies of the RAA have been conducted in affluent developed nations; however, the developing world also experiences problems with crime and sometimes the situation is much worse than it is in the developed world. Moreover, a much greater proportion of the world’s population- 5.9 billion out of global population of 7.1 billion (2013 world population data sheet) - lives in developing countries. The absence of studies in rural settings in the developing world makes it difficult to compare urban studies in the developed world with rural studies in the developing world, and highlights the challenges that policy makers and practitioners face in trying to learn from crime-control policies in other countries. The purpose of the present study is to address this obvious gap in the academic literature and provide valuable insight into the RAA’s ability to describe victimization in a rural, developing world rural setting.

**Present Study**

As per Cohen and Cantor (1980), the basic premise of the RAA is that variation in an individual’s daily activities either increases or decreases the chance of the three components of the RAA meeting in time and space and thereby creates opportunity for crimes to occur. A major idea developed from the RAA is that an individual’s lifestyle (routine activities) can make an individual a suitable or an unsuitable target for criminal victimization. Moreover, the socio-demographic characteristics of one person and the temporal features of the situation determine the person’s routine activities.

This study will investigate the relationship between routine activities and the probability of being a victim of different types of homicide.
The studies of Wolfgang (1958), Pokorny (1965), Voss and Hepburn (1968) and Swigert and Farrell (1976) investigated the relationship between gender and patterns of homicide. They found that females are more likely than males to be victimized by a family member and they have a greater chance of becoming a victim at home. There is also support for the RAA in terms of racial characteristics and the location of homicide in the studies of Wolfgang (1958) and Harlan (1950). Wolfgang’s (1958) study also reveals a pattern of homicide with respect to time of year: in summer, homicide is more likely to occur away from home. In a nutshell, it can be said that all these studies researched the RAA and homicide patterns or victimization in isolation.

Messner and Tardiff (1985) focused on a wide range of victims’ socio-demographic characteristics and temporal situations and correlated these with patterns of homicide. This study takes a more comprehensive approach that allows a better understanding of homicide patterns and the routine activities of victims.

All the seminal homicide studies in the criminological literature focus on samples in the developed world. There is a possibility that the factors that operate in urban and/or developed nations do not feature consistently in rural and/or developing countries. This study will provide insight into the consistencies and differences in homicide patterns in the context of rural communities in a developing country.

**Theoretical Framework**

Before describing the work of scholars with respect to the RAA, one should have a clear conception of its origins and development. In the early to mid-nineteenth century, Quetlet and Guerry identified that criminal activities are
distributed in a regular pattern in connection to basic socio-demographic characteristics. Shaw and Mckay (1998) reaffirmed this idea in 1931 with their discovery of a systematic distribution of illegal behaviour with respect to geographic and social boundaries. Cohen and Felson (1979) strengthened this proposition with the incorporation of the RAA and. Cohen et al. (1981) developed this perspective further with the incorporation of lifestyle theory.

Social Disorganization Theory
Clifford Shaw and Henry McKay (1998) examined patterns of juvenile delinquency in cities from the 1920s to the 1960s by using Park and Burges’s theories. Social, cultural and economic factors were the bases used to describe delinquency in Shaw and McKay’s study. They took the idea from social ecology and concentric-circle models; but evidence of ecological adaptation was not visible in their study (Herbert, 1982). They observed that with distance from the city centre the juvenile delinquency rate decreased in a consistent way (Bottoms, 2007). Although the city centre’s racial composition changed, these patterns were static over decades (Bottoms, 2007). It was identified that those areas had population and cultural volatility with economic deprivation (Bottoms & Wiles, 2002). Shaw and McKay hypothesized that detachment from traditional groups, fragile societal bonds and little social control were the causal factors for juvenile delinquency and crime, which formed the basis of social disorganization theory. As this theory tests the social dimension and distribution of crime across space, it is a meso-theory (Wortley & Mazerolle, 2008). When the influence of existing social rules is not reflected in an individual’s behaviour, it results in competition and distrust, which ultimately leads to a breakdown in the community’s ability to regulate itself (Shaw & McKay, 1998).
By decreasing the effects of social control networks between neighbours and increasing criminal behaviour, social disorganization affects crime rates. Interaction between neighbours and their ability to maintain effective social controls decrease, which ultimately leads to higher crime rates (Paulsen & Robinson, 2004). If the composition of a neighbourhood changes rapidly, it will be more likely to experience delinquency and crime compared with a slowly changing neighbourhood (Einstadter & Henry, 2006). Residential communities with higher socio-economic status and, conventional norms have lower rates of delinquency, while urban communities with lower socio-economic status and larger immigrant and migrant populations have higher delinquency rates (Shaw & McKay, 1998).

Critics of social disorganization theory suggest that it is applicable only to inner-city environments and urban areas and that it only describes variation in area level crime rates and does not explain individual behaviour (Paulsen & Robinson, 2004). Social, cultural and economic factors such as substandard housing, poverty, proportion of foreign-born population and levels of mobility were the basic measures used to describe delinquency in Shaw and McKay’s study. They took the idea from social ecology and economic circle models but evidence for ecological adaptation that is local communities’ adaptation to changes in urban dynamics which describes the relationship between the amount of change in the characteristics of an area and related changes in local arrest rates is absent.

Social and economic disadvantage play an important role in explaining assaults, robberies, and homicides (Kitchen, 2006). Studies have found relationships between crime and low socio-economic status, minority populations, the proportion of young males, crowded housing and proximity to
an offender’s residence (Harries, 1980). In urban areas, the probability of personal victimization is high for low-income households, whereas property victimization is high for high-income households (Kitchen, 2006). Population change, immigration, ethnic heterogeneity, unemployment, rental housing and single-parent families are recognized as having a positive relationship to crime, on the other hand, education and, income are identified as having a negative relationship with crime (Andersen, 2011).

Social disorganization theory explains the dynamics of groups of people in a limited objective space, while environmental criminology examines subjective space (Brantingham & Brantingham, 1984). Subjective space is the space perceived by an individual. An individual’s behaviour and movement patterns are complex and depend on the mobility knowledge, experience and biases of that individual and on their decision-making model of delinquency, which weighs the benefit of an illegal act against the cost of losing any investment the individual has made in conventional behaviour, institutions and other people (Brantingham & Brantingham, 1984). This conception of subjective space consequently led to the RAA.

**Routine Activity Approach**

Cohen and Felson (1979) developed the RAA to explain increased property crime that corresponded with economic development in the United States after World War II. They argued that the dispersion of activity away from the home and family created increased opportunities for crime. After World War II, the house and its valuable good became unprotected as women started to take jobs beyond the home. The boost in the production and consumption of costly and portable products created ample opportunities for potential deviants. On the
other hand, the increased costs of labour caused unemployment, which ultimately increased the rate of victimization to property crime. (Cohen & Felson, 1979).

The main premise of the RAA is that, for crime to occur there needs to be contact in time and space between a motivated offender, a suitable target and the absence of a capable guardian (Cohen & Felson, 1979). The RAA has both a micro and a macro approach to describe crime. The micro approach describes the meeting between the offender, target and guardian in time and space (Felson, 2008); whereas the macro approach describes the characteristics of the wider society and social structure that make the meeting of these three elements possible (Felson, 2008). Thus, the RAA implies that increasing crime rates can be the result of an increase in the rate of convergence of these three actors, and not simply the result of an increase in the motivation of offenders.

Motivated offenders are people who have sufficient motivation to act on a criminal opportunity during the course of their routine activities (Brantingham & Brantingham, 1993). A target's (an object or person) suitability depends on their characteristics and surroundings for example, value, visibility, accessibility and lifestyle (Brantingham & Brantingham, 1993). Who or what protects the target can be labelled the as capable guardian, such as a place manager, security guard or system, supervisor or employer (Paulsen & Robinson, 2004). A person's routine activities such as work, leisure and so on- create the opportunity for bringing people together at a specific place and time; including motivated offenders, suitable targets and capable guardians (Cohen & Felson, 1979).
As both the RAA and social disorganization theory place emphasis on the role that place plays in describing criminal behaviour, they correspond with one another (Andersen, 2006). Both these theories presume motivation. While social disorganization theory presumes motivation is a product of neighbourhood characteristics (poverty, ethnic composition, population mobility) and a lack of community controls, the RAA presumes that all offenders are motivated (Rice & Smith, 2002). The RAA assumes that there is implication of activities and risky lifestyle upon both victims and offenders (Daday, et al., 2005). To examine the characteristics of the environment that motivates offenders, social disorganization theory can be used, while the RAA can be used to examine the characteristics of the environment that brings offenders and targets together in time and space.

The RAA also provides the framework for important explanatory variables. “Crime rates are affected not only by the absolute size of the supply of offenders, targets, or guardianship, but also by the factors affecting the frequency of their convergence in space and time” (Sherman, et al., 1989). The social and physical characteristics of a place for example population density and, socio-demographic characteristics such as age, sex and so on- can affect the meeting of motivated offenders, suitable targets, and the absence of guardians (Sherman et al., 1989).

**Lifestyle Exposure Theory**

Hindelang and his colleagues present their lifestyle-exposure theory in their 1978 book “Victim of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization”. The purpose of the book was to describe the findings for victimization data in the context of people’s risk of victimization. The 1972-74
National Crime Survey (NCS) data provided the basis for the development of their theory. They show that victimization risk was not distributed consistently across demographic groups, and that certain individual and demographic features, such as age, sex and race, influence the likelihood of whether someone will be a victim (Hindelang, et al., 1978). For example, they state that males were more likely than females to be a victim of personal crime while younger people had a greater chance than older people of being victim. Observing this, they concluded that an individual’s lifestyle plays a role in determining their victimization risk (Hindelang et al., 1978).

The differences in victimization risk in the various demographic groups observed in the NCS depend on the differences in a person’s lifestyle. Lifestyle denotes an individual’s daily routine activities, including leisure activities such as going to the cinema, and professional activities, such as work or, school (Hindelang et al., 1978). According to Hindelang et al.’s theory, demographic characteristics (age, sex, race, income, marital status, education, occupation) have a significant influence in shaping lifestyle. For example, married people are more likely to spend their leisure time at home, while single people are more likely to engage in leisure activities in public places. Differences in lifestyle can be easily found among different age groups. In addition, young people’s lifestyles differ to older people’s lifestyles because young people usually want to spend more time in public places with friends while older people tend to spend more time at home with family.

Lifestyle is considered a key theoretical concept in this theory because it plays a key role in determining exposure to motivated offenders (Hindelang et al., 1978). Hindelang et al. Argue, for instance, that variations in lifestyle features and daily activities result in variations in exposure to motivated
offenders and, in turn, to victimization risk. Hindelang et al. (1978) hypothesize that as younger people’s routine behaviours expose them more than older people to the motivated offender during the period that is most favourable for victimization; younger people’s rate of victimization is high in the NCS report.

Although this theory hypothesizes that demographic characteristics outline an individual’s lifestyle and victimization risk, Hindelang et al. did not predict that there would be a direct relationship between demographic characteristics and lifestyle. Moreover, they assert that lifestyle is the product of role and structural expectations and the adaptations one makes to these two elements. Role expectations are the cultural norms expected of individuals and are defined as preferred behaviour (Hindelang et al., 1978). They are the behaviour that society views as correct and appropriate for individuals based on the individual’s demographic characteristics. For example, married people are expected to spend time at home with their family, which limits the amount of time they are exposed to offenders encountered in public. Thus, it is argued that role expectations can outline an individual’s lifestyle.

Hindelang et al. (1978) also posit that social structural constraints have an important impact on lifestyle, in addition to role expectations. Structural constraints are limitations on behavioural options that are the outcomes of the arrangements of familial, economic, educational and legal institutions. When a person accepts these structural expectations, they also develop routine activities and associations with similar people (Miethe & Meier, 1993). For example, the behaviour of school-aged children is largely limited by educational constraints and school attendance requirements. It is anticipated that there is an influential but not causal, effect of demographic characteristics on both role expectations and structural constraints.
In conclusion, lifestyle-exposure theory asserts that personal victimization is the direct result of exposure to potential offenders. Lifestyle plays an important role in describing the risk of exposure to offenders, whereas demographic characteristics with cultural norms, environmental limitations and adaptations determine an individual’s lifestyle. Last, this theory was an important development in the victimology field as it asserts that an individual’s daily professional and leisure activities provide opportunities for victimization.

**Figure 1: Hindelang et al. (1978) Theoretical Model**

Source: Hindelang et al. (1978)

**The Lifestyles-Routine Activities Framework**

Due to the common assumption of non-random distribution of crime and similarities between lifestyle and routine activity theories, these two theories have been integrated into a single framework, which can be used for examining the factors influencing victimization (Gottfredson, 1981; Maxfield, 1987). Cohen, et al. (1981) tested this lifestyle-routine activities framework in the micro-level extension of Cohen and Felson’s (1979) aggregate-level routine activities
theories. Cohen and his colleagues (1981) identified four principal theoretical concepts from the lifestyle and routine activity theories, which are hypothesized as shaping the opportunity for victimization within this framework. These principal concepts are exposure to crime, proximity to crime, target attractiveness and guardianship.

Exposure to crime refers to “the physical visibility and accessibility of persons or objects to potential offenders at any given time or place” (Cohen, et al., 1981). This is a hypothesis similar of Hindelang et al.’s theory that states there is a positive relationship between exposure and victimization risk, as exposure determines whether or not a suitable target will come into contact with potential offenders. Though this is not clearly discussed by Cohen and Felson (1979) in their approach, the motivated offender is closely related to Hindelang et al.’s (1978) idea as it is assumed in the RAA that a victim and an offender must meet in time and space. Cohen and his colleagues (1981) expect that frequent exposure to offenders increases the likelihood of victimization.

Proximity refers to the “physical distance between areas where potential targets of crime reside and areas where relatively large populations of potential offenders are found” (Cohen et al., 1981). Though there is similarity between proximity and exposure; proximity differs in that it focuses on the real distance between offenders and victims whereas exposure focuses on the accessibility or visibility of a target (Cohen et al., 1981). The lifestyle-routine activities theory hypothesizes that there is a positive relationship between high victimization and targets located near pools of motivated offenders. Neither Hindelang et al.’s (1978) and Cohen nor Felson’s (1979) original theories includes proximity explicitly; however, it is complementary to both standpoints as proximity influences the probability of victim and offender meeting in time and space. For
example, victim and offender will meet frequently if there is a small distance between them (Cohen et al., 1981).

Target attractiveness refers to the “material or symbolic desirability of persons or property targets to potential offenders” (Cohen et al., 1981), and it is usually divided into two dimensions: the instrumental and the expressive attractiveness of the target as the offender’s motivation. Generally in terms of instrumental attractiveness, an offender commits any criminal act to achieve a tangible goal or desired outcome (for example burglary) so this is related mainly to property crime. On the other hand, in terms of expressive attractiveness, a criminal act brings an intrinsic reward (for example, physical assault), so this is related to personal crime.

**Figure 2: Conceptualization of Lifestyle-Routine Activities Framework**

Guardianship refers to the effectiveness of people or objects in preventing criminal acts from occurring (Cohen et al., 1981), and occurs in the
presence of a guardian or action that can protect the target. The hypothesis about guardianship is different than other concepts in this theory. It is hypothesized that guardianship and victimization have a negative relationship. The concept of guardianship in this theory is the same as in Cohen and Felson’s (1979) RAA, which means both theories view the absence of a capable guardian as necessary for criminal victimization to occur.

**Literature Review**

Scholars have used the RAA to explain various types of victimization such as violent crime victimization, property crime victimization and even the probability of committing criminal acts. Though the most popular use of this approach is for understanding victimization, it can also be used to explain many other things. The types of victimization can also differ in many ways. This literature review is provided to familiarise readers with the current literature on the RAA, findings with methodology and an overall comparison of the studies.

**Different Features of Analysis**

Researchers have used the RAA to explain a range of hypotheses and victimizations. Spano and Freilich’s (2009) analysis of 33 articles from 1995 to 2005 shows that three articles focused on property crime victimization, 13 focused on violent crime victimization, 10 explained both violent and property crime victimization, while only seven dealt with the factual activities of crime. This literature review is important as it reveals the main topics of research relating to the RAA.

A number of studies focus on violent crime victimization. Spano and Nagy (2005) describe assault and robbery victimization among rural adolescents. Mustaine and Tewksbury (2000) surveyed college students to
measures their chances of assault victimization. The RAA has been used to explain sexual victimization (for example, Cass, 2007; Tewksbury & Mustaine, 2001) and homicide (for example, Kennedy & Silverman, 1990).

The RAA has also been used to explain theft victimization (Mustaine and Tewksbury, 1998) burglary incidence (for example, Tseloni, et al., 2004) and different property crimes such as break-in and vandalism (for example, Massey, et al., 1989).

It is revealed in Spano and Freilich’s (2009) research that both violent crime victimization and property crime victimization can be explained using the RAA in 10 of 33 articles, which is the second most popular subject among the researchers. These studies have similarities in their methodologies and all used national and international data on victimization (for example, Bennett, 1991; Miethe, et al., 1987; Stahura & Sloan, 1988). Due to data availability, the national and international studies are popular among those testing the RAA. Compared with researchers conducting their own surveys, using a national victim survey is cheaper and faster. In this way researchers do not have to create their own questionnaire, they avoid the complexity regarding ethics approval and so on. The research tenure is kept within an acceptable time frame and therefore also within a limited budget.

Victimization is not the only topic that is explained through the RAA. The fluctuation of crime rates (Maxfield, 1987), patterns of offender’s acts (Osgood et al., 1996), exposure to violence, probability of committing crime (Nofziger and Kurtz, 2005) and criminal behaviour (Bernburg and Thorlindsson, 2001) are described through this approach. All these studies relied on survey data to reveal the relationship between the RAA and the social relations of offenders and their probability of committing an offence.
The RAA in Violent Crime Victimization

Although some researchers have attempted to explain particular criminal victimization such as assault or robbery, most studies have examined “violent victimization” (for example, Miethe et al., 1987; Schreck & Fisher, 2004; Spano et al., 2008). In these studies, researchers conceptualized victimization as being a victim of any crime of assault, robbery or personal larceny. Some studies consider situation-specific victimization. Schreck and Fisher (2004) conducted research in which they used data of Add Health study from 1994 to 1995. In their study, violent victimization was operationalized as becoming a victim by being threatened with a knife or gun, being shoot or stabbed. Koo et al, (2008) and Spano et al. (2008) use a similar operationalization.

Shreck and Fisher (2004) revealed that routine activities that involved being away from home (for example, driving around, sneaking out, and exercising) increased the chance of violent victimization. It was also discovered that peer delinquency increased the risk of an individual’s violent victimization. It is argued that when juveniles spend significant time with peer delinquents, they increase their contact time with motivated offenders and also increase the time absent a capable guardian. This leads directly to the increased risk of violent victimization.

Spano et al. (2008) examined “violent victimization” associated with the effects of gang membership, employment, and gun carrying and it is found that the number of hours the respondent worked (employment) and personal violent behaviour were associated with an increased possibility of violent victimization. In connection to the RAA, the researchers describe that the more the respondent works, the more money he/she will earn, and thus the respondent become a suitable target. On the other hand, it is also argued that when a
respondent works for long hours, he/she travels home late at night and thus creates an opportunity for a motivated offender due to the lack of a guardian at night. Moreover, violent behaviour such as threatening someone with a knife or gun, fighting and so on obviously places the victim at high risk of victimization. One important contradiction found in this study was that when employment was controlled; the relationship between drug and alcohol use and violent victimization became insignificant. This finding is also contradictory to the findings of Koo et al. (2008).

Both Schreck and Fisher (2004) and Spano et al. (2008) support the RAA for violent victimization. Koo et al. (2008), in their study of 900 active drug users, also discovered support for the RAA using a combined variable for violent victimization. Koo and his colleagues found an association between a higher possibility of violent victimization and frequent use of crack and powder cocaine, which was dissimilar to the findings of Spano et al. (2008). This also supports other RAA literature that reveals that drug use increases the possibility of violent crime victimization (for example, Cass, 2007; Tewksbury & Mustaine, 2001). The logic behind this proposition is that using drugs decreases one’s ability for self-protection and thereby makes one a suitable target for motivated offenders. The researchers also describe variables of drug stealing and carrying weapon. These studies provide a significant explanation for the combined variable of violent victimization using the RAA.

Other researchers have attempted to explain violent victimization in terms of the crime itself (that is, robbery, assault and sexual assault) (for example, Kennedy & Forde, 1990, Miethe et al., 1987; Mustaine & Tewksbury, 2000). Miethe et al. (1987) carried out a detailed study using 1975 National Crime Survey data to explore the RAA. In their research variables were
constructed to measure key activities in the day-time (work, school) and night-time (outings for fun, entertainment). Logistic regression analysis then revealed that higher levels of night-time activity enhanced the risk for violent crime victimization (robbery, assault, personal larceny). In contrast with day-time workers, individuals engaged in night-time work had a greater chance of becoming victim of violent crime. This supports the RAA with respect to crime-specific variations.

Relying on the work of Miethe et al. (1987), Kennedy and Forde (1990) utilised telephone survey data from the Canadian Urban Victimization Study of 1984 in a more specific way to examine the RAA. In place of the “composite” measures of routine activities (that is, major night-time and daylight activities) used by Miethe and his colleagues, Kennedy and Forde used specific activity measures such as going to a bar, the cinema and playing sports. The purpose of using specific measures was to separate the interaction effects of demographic and activity variables, which were the focus of Miethe et al.’s (1987) study. It was found that being married decreased the risk of becoming victim of robbery and assault which can be explained by the fact that a married person has someone else (a capable guardian) present during many activities day or night. In general, researchers identified specific demographic characteristics that controlled the chance of being victimized during individual’s many activities.

Mustaine and Tewksbury (2000) and Spano and Nagy (2005) examined the effects of the RAA on assault and robbery victimization. Mustaine and Tewksbury used a survey of college students whereas Spano and Nagy used a survey of rural adolescents. Mustaine and Tewksbury (2000) found that those who drank alcohol frequently and who had troublesome neighbours had a
greater chance of being a victim of assault. On the other hand, involvement in community activities lowered the chance of assault victimization.

Spano and Nagy (2005) discovered an association between a higher risk of violent victimization and one’s peer drug use and personal criminal behaviour. This is consistent with other studies that concentrated on describing crime-specific victimization and offending (for example, Osgood et al., 1996; Spano & Freilich, 2009). Nevertheless, researchers did not find important associations between personal drug use and the risk of violent crime victimization- a finding contradictory to Koo et al., (2008). However, Koo et al.’s finding that personal deviant behaviour and peer deviant behaviour increase the chance of one’s violent crime victimization is consistent with the RAA.

Stahura and Sloan (1988) tried to replicate Cohen and Felson’s findings, introducing changes to the independent variables. They incorporated variables such as the area’s percentage of poor people, African Americans, youths and the unemployed to capture the dominance of motivated offenders, whereas Cohen and Felson’s study had assumed the presence of motivated offenders. Stahura and Sloan used crime rate data for 676 suburbs with similar demographic characteristics and found that variations in the presence of capable guardians, suitable targets and motivated offenders were related to changes in violent crime rates. However, a positive relationship is found between guardianship and violent crime that is contrary to the RAA and the findings of Cohen and Felson (1979). Stahura and Sloan explain that measures of guardianship were conceptualized as the presence of police in the neighbourhood.

This section has described how the RAA can explain violent crime victimization. All of these studies successfully predicted the victimization risk for
combined variables of violent victimization and even crime-specific variables of victimization. Significantly some studies have revealed differing effects for guardianship (for example, police presence) and suitable target variables (for example, drinking/using drugs) on violent crime victimization (for example, Spano & Nagy, 2005, Stahura & Sloan, 1988). However, the consensus is that the RAA can successfully explain the variation of violent crime victimization as well as variation in violent crime rates.

**Routine Activities and Property Crime Victimization**

The RAA is much clearer with respect to property crime victimization as the dependent variable. Researchers have attempted to explain the variation in different types of property crime victimization. Some scholars have considered one type of crime while others have considered different types such as burglary, breaking and entering, and robbery and have separated these through analysis (for example, Kennedy & Forde, 1990; Tseloni et al., 2004). Scholars have even prepared a property crime index in which one dependent variable is incorporated with different property crimes (for example, Massey et al., 1989; Miethe et al., 1987). Then either the individual’s victimization rate is calculated (for example, Massey et al., 1989) or the property crimes are merged into one dichotomized dependent variable (for example, Miethe et al., 1987). Property crime victimization is captured as a dependent variable in many ways.

The studies of Massey et al. (1989) and Miethe et al. (1987) are examples of the earliest RAA studies dealing with individual property crime victimization. Miethe and his colleagues describe a combined variable of property crime victimization (yes or no for burglary, household larceny and motor vehicle theft) on the basis of analysis of survey data from 13 major cities
in the United States. With respect to violent crime victimization the same study also tried to explain the RAA. Strong support was found for temporal patterns of activities (employment, school, entertainment). Increases in property crime victimization were found to correlate with the length of time spent away from home. An interesting finding was of higher property victimization among married couples and a lower victimization risk among rich people- as couples tend to spend the same amount of time away from home for work and rich people tend to live in secured neighbourhoods with a lower prevalence of motivated offenders.

Massey et al. (1989) created a property crime index that incorporated the frequency of crime against the home for example, “break in of the residence”, and/or “vandalism” to the residence,- in a different way to the study of Miethe et al. (1987). Only two of the RAA variables were recognized having predicted effect on property crime victimization: housing type and neighbourhood crime level. Type of housing worked as a measure of suitable targets while neighbourhood crime worked as a measure of motivated offenders. It is very interesting that no higher risk of victimization was found for longer stays away from home (contrasting with the study by Meithe et al., 1987). Also observed was a positive association between increased security and increased property crime victimization. These findings do not support the RAA and other studies (for example, Mustaine & Tewksbury, 1998) however, the authors tried to explain this finding by temporal ordering- that is, it was unclear whether the security measures or the victimization occurred first. A higher security level could be a response to victimization.

Other researchers have concentrated on describing the variations in a specific type of property crime victimization. Kennedy and Forde (1990) used
Canadian survey data to examine the ability of the RAA to forecast the crimes of breaking and entering and vehicle theft. They discovered that the longer an individual stayed away from home the higher was the probability of being a victim of breaking and entering a finding that differs to that of Massey et al. (1989). Another significant finding is that being married decrease the risk of property crime victimization, a finding that also differs to that of Miethe et al. (1987), who found that being married increased the risk of property crime victimization. Mustaine and Tewksbury (1998) and Tseloni et al. (2004) also examined the RAA on specific property crime dependent variables. Mustaine and Tewksbury (1998) used survey data from 1,000 college students to estimate the risk for major and minor larceny-theft victimization (major: > $50; minor: <$50). It was found that increases in the number of outings for eating or studying were associated with an increased level of risk of both major and minor larceny-theft victimization. This finding supports the RAA. The study also found a negative correlation between the use of security measures and property crime victimization, which was different to the finding of Massey et al. (1989). Due to the cross-sectional nature of these studies the effect of guardianship is difficult to ascertain.

Tseloni et al. (2004) attempted to explain the RAA with respect to burglary across international border in a study similar to that of Bennett (1991), although Bennett used data at the aggregate level. Tseloni et al. (2004) found a close association between an increased risk of victimization of burglary and urbanization and single-parent family status. These findings support the RAA as there is a connection between urbanisation and increasing numbers of motivated offenders and higher levels of crime and single-parent households represent a lack of capable guardians in the house. This study also made a
similar finding to Massey et al. (1987) about guardianship an increased level of preventive measures increases the chance of being a victim of burglary. Again, the absence of temporal precedence means these results do not necessarily contradict the RAA.

It is also important to describe the findings of the RAA in the area of macro level property crime victimization, as it was discussed in respect of violent crime victimization. Cohen and Felson (1979) and Stahura and Sloan (1988) successfully explained variation in property crime rates through the RAA. Both studies used Uniform Crime Record data, and again Stahura and Sloan discovered a negative effect of guardianship on property crime victimization. The same thing was also explained with the help of temporal ordering of cross-sectional design. These two early studies paved the way for future studies of the RAA. Bennett’s (1991) international study of crime rates strengthened the study of the RAA at the macro level in property crime victimization and found the effect of guardianship supported the RAA.

In general, different studies of the RAA and its capacity to explain the variation in property crime victimization have revealed support for the approach. The three components- lack of a capable guardian, presence of suitable target, and motivated offender- are directly related to the probability of property and violent crime victimization. The recent meta-analysis of Spano and Freilich (2009) also confirms that almost all RAA studies effectively forecast property and violent crime in the predicted directions. However, it is obvious that there is a lack of insight into the RAA in rural contexts. Only one RAA study has employed a rural sample, and it used only rural adolescents. In addition, most of the RAA studies use samples from developed countries. We might expect
different relationships for victimization from the RAA in the developing world due to different socio-economic environments and cultural and religious settings.

**This Study**

The purpose of this study is to use the RAA to interpret patterns of homicide in rural areas of Bangladesh. Homicide was selected as the crime of interest because there are fewer reporting issues with this type of offence.

In Bangladesh, many false and frivolous criminal cases are filed to harass people but there is less chance of modifying the facts in a murder case. As highlighted in the previous section, there is an obvious gap in research of the RAA using rural data and that from developing countries.

Data on homicide will include the types of homicide—more specifically the place of occurrence and the offender-victim relationship. The following sections outline the reasoning from the RAA perspective for how various socio-demographic, geographical and temporal factors might be associated with homicide risk.

To understand this, it is also necessary to provide a brief overview of the country and the places from which data will be collected. Bangladesh, officially known as the People’s Republic of Bangladesh is situated in the Bengal Delta in South Asia. It borders India to its north, east and west, has a border with Myanmar to its south-east and with the Bay of Bengal to its south. It has a population of more than 150 million in an area of 147,570 square kilometres, which makes it one of the most densely populated countries on earth. Ninety per cent of the population is Muslim with the remainder following other religions. Geographically, Bangladesh is 80 per cent alluvial plains with hill country in the south-east and north-east. Forest and woodland cover roughly 16 per cent of its
land area. Bangladesh has three main seasons: a hot summer from March to June, a monsoon rainy season from June to November and a dry winter from November to February. In Bangladesh almost 80 per cent of the population lives in rural areas and they are mostly employed in agriculture. Life expectancy at birth is 70 years. Per capita income is US$ 840 (A$ 1130) (data taken from the World Bank website). Administratively, Bangladesh has seven divisions, each of which is divided into districts. There are 64 districts in Bangladesh and each is also divided into upazilas (or police stations) which have unions consisting of villages.

Data will be collected from Gaibandha, Dinajpur, Patuakhali, Barisal, Moulavibazar and Habiganj districts. Gaibandha and Dinajpur are situated in the northern part of the country on alluvial plains. Barisal and Patuakhali are river-bound districts with many rivers flowing into them. Last, Habiganj and Moulavibazar are hilly districts. A variety of districts has been selected for the best representation of Bangladesh. Moreover, these districts are comparatively large in terms of area and population, so it is hoped significant amounts of data will be collected from these districts.

It is anticipated that the RAA will have implications for the relationship between socio-demographic characteristics, temporal factors and the probability of being involved in different kinds of homicide. Simple assumptions can be derived from the RAA with respect to these variables.

In Bangladesh, most people are employed in agriculture and most people’s lands are located within their village; therefore, most people are engaged in work either at home or in their home village. Those who are service providers and labourers generally work outside their home village.
In terms of gender, females unquestionably spend more time than males at home than male in Bangladesh, as most females undertake household work in rural areas and very few work outside the home. Therefore, female homicide victims are more likely than males to be killed at home. For the same reason, females should be more likely than males to be killed by a relative rather than by either a friend or a stranger.

Age is another demographic characteristic that determines different lifestyles. Children largely depend on the parents and guardians and as a result spend a significant amount of time at or near their own household. Old people, due to their physical weakness, cannot work outside- hence, they also pass a significant amount of time at home. Therefore, homicides involving children and old people should take place at or near home and, as a consequence, should largely be committed by relatives. On the other hand people outside these two age groups mostly work outside the home and they have a chance of being killed outside or in the village and by friends or strangers.

Religion is another key socio-demographic characteristic that is likely to be related to routine activities as it has influence on income. High incomes allow more freedom for activities to cover greater physical and social space, whereas, a low income limits activities to the area around the household. Generally, minority groups receive lower incomes than dominant groups. In Bangladesh, such groups are determined by religion: Muslims are the dominant group and other religions such as Hindu and Buddhism are in the minority. It is predicted that Hindus and others are more likely than members of the dominant group to be killed at home and are more likely to be killed by a family members.

Marital status is the fourth characteristic that influences the concentration or dispersal of routine activities. It is expected that a married person spends
greater amounts of time at home than an unmarried person. Hence, the proportion of married homicide victims killed at or near home should be significantly greater than for unmarried persons. In the same way, friends and relatives are more likely to be the offenders in the homicide of a married person than in the homicide of an unmarried person.

Employment status is the final socio-demographic characteristic that will be considered. According to Cantor and Land (1983) unemployed people spend a disproportionate amount of time at home. In Bangladesh, unemployment is not a big issue as people live by agriculture. Most of the people who have land work in their fields and those who have no land, live mainly by providing various types of labour, such as rickshaw pulling and, working on other people’s agricultural land. Those who have no land and live mainly as labourers tend to travel longer distances to find work. In contrast, people who live by agriculture, mostly work in their own village as, in most cases, their harvesting land is situated within their village. The theoretical model thus implies that people employed in agricultural work should be more likely than those work as labourers to be killed at home in their village. Moreover, those engaged in agricultural work should be more likely than labourers to be killed by a family member or friend.

It is also expected that temporal characteristics have a great influence on routine activities. As a result, location and type of homicide are related to temporal characteristics. With respect to season, it seems reasonable to assume that activities are more likely to be intense around the home during the rainy season and winter than during other seasons in Bangladesh. Hence, homicides committed during the rainy season and winter should be more likely to happen at home with family members as offenders.
Time of day is the second temporal characteristics. The relationship between time of day and routine activities, in rural Bangladesh is straightforward. People engaged in both agricultural work and labour return home after dusk and generally stay at home as there are very few recreational opportunities and a large number of villages have no electricity. Moreover, agricultural work starts early in the morning, generally just after sunrise. Hence, it is logical to assume that activities are likely to be intense around home between dusk and sun rise (from 7 pm to 7 am). As a consequence, homicide during this period should be occurring disproportionately at home and carried out by family members or other relatives.

The final temporal characteristic is the day of the week. In Bangladesh, Friday and Saturday form the weekend. Generally, agricultural work does not stop at weekends, but offices and shops remain closed. As a result, it is plausible that, on average, more time is spent around the home on weekends than during the week. This corresponds with high levels of “home homicides” and “family homicides” during weekends.

To summarize, the following hypotheses are included in this study:

**H1:** Female homicide victims are more likely than male homicide victims to be killed at home.

**H2:** Female homicide victims are more likely to be killed by a family member or friend than by a stranger.

**H3:** The very young (children) and the very old are more likely than the other age group to be killed at home.

**H4:** The very young (children) and the very old are more likely to be killed by a family member or friend than by a stranger.
H5: Members of a religious minority group are more likely to be killed at or near home than away from home.

H6: Members of a religious minority group are more likely to be killed by a family member or friends than by a stranger.

H7: Married homicide victims are more likely to be killed at or near home than away from home.

H8: Married homicide victims are more likely to be killed by a family member or friend than by a stranger.

H9: Persons employed in agricultural work are more likely than those employed in other jobs to be killed at home.

H10: Persons employed in agricultural work are more likely than those employed in other jobs to be killed by a family member or friend.

H11: Homicides committed during the rainy season and winter are more likely to occur at home than away from home.

H12: Homicides committed during the rainy and winter are more likely to be committed by a family member or friend than by a stranger.

H13: Homicides committed between 7 pm and 7 am are more likely to occur at home than away from home.

H14: Homicides committed between 7 pm and 7 am are more likely to involve a family member or friend than a stranger.

H15: Homicides committed during weekends are more likely to occur at home than away from home.

H16: Homicides committed during the weekend are more likely to be committed by a family member than by a stranger.
Chapter 2

This chapter discusses the research methodology that will be utilized to examine the relationship between rural homicide patterns in Bangladesh and the RAA. The data source and statistical analyses are described in this chapter. The same analysis as that used by of Messner and Tardiff (1985) will be applied in this study to test the hypotheses based on the RAA in connection with rural homicide.

Data

Study Region

This current study will use secondary data for homicide cases in six police districts of Bangladesh from 2010 to 2012. In Bangladesh, homicide cases are predominantly lodged at police stations. After completing investigation of cases, police submitted their report to the Chief Judicial Magistrate’s Court. Homicide cases are then forwarded to the District and Sessions Judge’s Court for exclusive trial before Sessions Judge. During the investigation period district magistrates supervise all murder cases and, when the cases are ready for trial they are forwarded to the Sessions Judge’s Court of the district. All homicide case records contain an autopsy report, offender’s and victim’s details, and the time and place of occurrence.

There are some problems with using police/court files. These records are not prepared with scientific research in mind. The available information in the records may have been gathered by different individuals, who, as a consequence of different training and experience, record only information pertinent to the juridical administrative functions of their agency (Lundsgaarde,
For instance, investigators only collect information considered significant and meaningful to the purpose of a trial. Moreover, the existence of wrongful convictions suggests that police investigations may not operate in a perfectly objective manner (Weathered, 2003). Yet, despite these problems, police records are considered an important source of documentation for the following reasons.

First, police records offer the most comprehensive collection of available information on homicides, including both solved and unsolved cases. There is no other source of information about homicides in Bangladesh except newspaper reports.

Second, the required information on the characteristics of victims—such as age, gender, religion and so on; as well as details of the relationship between the victim and offender—are contained in police records. They also contain data on matters relating to the time, place and method of the murder as well as statements from witnesses and the accused. They therefore provide ample scope to check any discrepancies regarding the above mentioned information.

In Bangladesh, there is no alternative to the case records, as a source from which to collect all the required data about homicides. Moreover, case records are highly reliable as they offer formation about both parties that is, the victim and the offender (the offender’s lawyer’s submission is kept with the case record).

The data source used for this research may follow bureaucratic and judicial conventions. Due to the judicial view any murder can be reported as voluntarily causing grievous hurt. However, no information was adhered without confirmation. Yet, as McClintock (1976) argued, when drawing conclusions
about crime as a phenomenon, any knowledge of the various features of
criminal offences cannot be gained independently of the criminal justice system.
Hence, studying homicide is unavoidably connected to the social processes of
reporting and classification by law enforcement agencies and the subsequent
definitions of the criminal justice system.

In Bangladesh there are only a few areas that can be considered urban
or used for industrial development. Beyond these, the majority of Bangladesh is
given over to agriculture. The districts selected for this study are remote in
terms of geography and access to communication, and the people in these
districts are dependent on agriculture for employment. Two districts cover
largely alluvial plains land, two are river-bound and two are in hilly districts. This
geographical variation is considered to provide representation of the three
prominent geological types in Bangladesh.

Bangladesh has 64 administrative districts. It would be most appropriate
for this study if it were possible to collect homicide data for all districts for a
particular period. As there is no central electronic database, however, it is not
possible to collect such data within a reasonable time span. The average
volume of recorded homicide cases is 3,900 per year (Bangladesh Police
website) throughout the 64 districts of Bangladesh, which equates to about 61
cases per district annually (if uniformly distributed). Based on these rates, I
anticipated that approximately 1,000 murder cases would be recorded in six
districts over three years, which is a sufficient sample for the type of analysis I
planned to carry out.
Variables Recorded

For this study, victim’s socio-demographic characteristics (age, gender, religion, marital status and employment status), temporal characteristics (time and date of occurrence), place of occurrence and victim-offender relationship will be collected from case records of the courts. Data were collected from Dinajpur, Gaibandha, Moulavi Bazar, Habiganj, Patuakhali and Barisal districts of Bangladesh.

For the purpose of this study, the place of occurrence was categorized as at home, in the victim’s village or outside the victim’s village. It is anticipated that with respect to different socio-demographic characteristics and temporal characteristics, people’s activities are variable. People with different socio-demographic characteristics spend different amounts of time at home, and the amount of time spent at home varies during different times of the day, different days of the week and different seasons of the year. Hence the probability of being killed near home or in other places depends upon the socio-demographic characteristics of the victim and temporal characteristics.

Sample

Data for 900 murder cases were collected from the above mentioned six districts. There were some further murder cases for which due to unavoidable circumstances, data could not be collected- mostly as the records were with a higher court for judicial purposes. This range of data allowed examination of whether there is any relationship between the place of occurrence and victim-offender relationship and socio-demographic characteristics of the victim and temporal characteristics.
Independent Variables

**Gender.** In terms of role expectations and structural constraints that ultimately determine the individual’s lifestyle or routine activities, gender is always considered one of the most important factors (Massey and McKean 1985). In Bangladesh males still spend more time away from home than females for their occupational and leisure activities.

Females in rural Bangladesh largely undertake domestic work in or around the home, such as poultry raising, animal husbandry, homestead gardening and so on. The major economic activities for males are crop cultivation, non-farm service, business, shop keeping and transport operation. Hence, different lifestyles for each gender are observed in rural Bangladesh and, for this research, gender is divided into male and female.

**Age.** In view of the fact that this present study focused on the influence of age on homicide victimization risk, the primary measure of target suitability used was chronological age. As discussed earlier, age is considered an important factor that influences individual lifestyles and routine activities. Age is frequently included as a key demographic variable in research using the RAA framework (Clarke, et al., 1985; Cohen, et al., 1981; Kennedy & Forde, 1990; Kennedy & Silverman, 1990; Miethe, et al., 1987; Messner & Tardiff, 1985; Nelsen & Huff-Corzine,1998) and age has been used as a proxy measure for target suitability (Massey, et al., 1989). Researchers are of the opinion that offenders may perceive elderly people and children as suitable targets because they see them as being weak and physically vulnerable (Clarke, et al., 1985; Setterlund et al., 2007).

In the current study, age is divided into two categories. In Bangladesh, by the age of 15-16, students sit for their first public exam, which is known as the
Secondary School Certificate Examination. Until this age, they are considered children too physically and mentally immature to take decisions and are kept under the supervision of parents. A large number of village children do not reach this level of study and they help their parents in their work. The retirement age from government service is 59, and generally by this age, people in Bangladesh become less active in outside work. Hence, one group is formed by those under the age of 15 and over the age of 59, and the other group is those aged 15-59.

**Religion.** Earlier studies have suggested that offenders treat higher-income earners as suitable targets especially for property crime (Cohen, et al., 1981). Researchers have also long studied the relationship between poverty and minorities. The relationship between poverty and the proportion of Mexican Americans and African Americans was studied by Frisbie and Neidert (1977), who found these minority groups are relatively poor and suffer from inequality. Blalock (1957), Brown and Fuguitt (1972), and Tienda, et al., (1987) also found similar results in their studies. Poverty has implications for the daily activities of the individual, with poor people generally spending more time in their homes than the wealthy. Hence, the determining factors for minority groups are always used as an important variable in RAA research.

In Bangladesh, religion is the main determinant of population status, with Muslims comprising the majority of the population (90 per cent) and followers of Hindu, Buddhist and other religions considered the minority,- in aggregate comprising 10 per cent. As in countries, in Bangladesh, these minority groups are less affluent than the majority and typically are at the lower end of the socio-economic scale. They are also engaged in work that is concentrated near their domicile. For instance, people in the Hindu community are predominantly
engaged in the pottery industry, a cottage industry that is generally based in workers’ home. Some other occupations are also undertaken largely by minorities, such as, shoe making and repairs and, fishing and these people also work in their village market or in wetlands within their village. On the other hand, the majority of people (that is, Muslims), are engaged in various higher-income occupations which helps them to engage in various activities outside the home. Therefore, religion was operationalized as a binary variable with: “Muslims” forming one category and “all other religions” the other.

Marital Status. Hindelang et al. (1978) found that married people spend more time at home than unmarried people and also pass more leisure time with other married couples and family members. In contrast “single persons are more likely to pursue leisure activities away from home, alone or with other single persons” (Massey and McKean, 1985).

The average age for marriage in Bangladesh is 15.5 years for females and 26 years for males (UNFPA Bangladesh website). When a person marries, he/she typically gains some responsibilities such as rearing children, which limits his/her activities outside the home. From this perspective, people who have been married (and are now separated or widowed) are included in the category of married persons. All other individuals are considered “unmarried”.

Employment Status. Many previous studies of the RAA have examined victimization and find that that the victim’s lifestyle is what exposes him or her to the higher risk of victimization (Hindelang et al. 1978; Jensen and Brownfield 1986; Mustaine and Tewksbury 1998). Generally, a lifestyle that takes a person away from home increases their chance of victimization. For example, playing sports at a certain time and, going to bars, movies or regular meetings; all increase the risk of victimization in the Canadian Urban Victimization Study
(Kennedy and Forde, 1990). In the same way, one’s employment status also determines how much time they spend outside the home. An unemployed person spends more time at home than one who is employed.

The economy of Bangladesh is agrarian and unemployment is not common in rural areas as most people find work in the agricultural sector—either as land owner or as agricultural labourers. Those people who are not engaged in agricultural work provide other kinds of labour such as running a small businesses or providing manual labour. Their lifestyles vary according to their profession and therefore their chance of being a victim of homicide differs in terms of the place of attack and the offender. In this study, being engaged in agricultural work is treated as one category and being involved in other professions or other types of labour is treated as another category.

**Temporal Variables**

**Time of Day.** Voss and Hepburn (1968) found that the greatest frequency of criminal homicides occurred between 8 pm and midnight. They also observed that males’ victimization to homicide is higher during this period. On the other hand, females become victims of homicide mostly between 2 pm and 8 pm. This variation is a result of the differing lifestyles of males and females.

Standard office hours in Bangladesh are from 9 am to 5 pm. People do not spend much time commuting as they generally live close to their workplace. As mentioned above, however, most rural people in Bangladesh work in the agricultural sector, so they start work early in the morning and often work until dusk. People engaged in other professions, such as—labourers in various sectors, craftsmen; rickshaw pullers and so on—also start their work early in the morning and work until the sun sets. As there is a shortage of electricity in
Bangladesh, most rural areas remain dark after sunset and there is little to do. In this research therefore hours of the day are divided into two categories: 7 am to 7 pm and, 7 pm to 7 am.

**Day of Week.** Voss and Hepburn (1968) observed that most criminal homicides in Chicago occurred on weekends and there were differences in homicide rates in terms of gender and race for different days of the week. They argue that an individual’s lifestyle varies according to the day of the week - for example; an employed person spends more time at home during the weekend than during weekdays.

Friday and Saturday form the weekend in Bangladesh. Although, in rural Bangladesh agricultural work is not affected by weekend, there is an overall impact from weekends. Generally, most shops as well as public and private offices remain closed on Fridays, which mean people spend more time at home than on weekdays. Accordingly, in this research, weekends are one category and weekdays are another.

**Season.** It is always hypothesized that there is a relationship between the occurrence of homicide and the season of the year (Wolfang, 1958). The assumption is that summer should see the highest frequency of criminal homicide and winter should see the lowest. In spring and autumn, there should be relatively lower homicide counts than in summer (Voss & Hepburn, 1968). Accordingly, season has an enormous influence on lifestyle.

Although, it is said that Bangladesh is the land of six seasons, the three most significant are summer, winter and the monsoon, while the remainder are of relatively limited duration. In the monsoon season, people’s work is obstructed and their life becomes more concentrated in the home. The same happens during winter. In summer and other seasons, people feel more liberty
to expand their work and leisure activities. In this study, therefore, winter and the monsoon season form one category and summer is the other. In Bangladesh, the monsoon season extends from June to August and winter from December to February.

**Dependant Variables**

**Place of Occurrence.** According to Voss and Hepburn (1968), “more criminal homicides occurred in the home than in any other single location.” Obviously, however, because of differences in victim’s demographic and temporal characteristics, the place of homicide varies. As discussed earlier, the demographic characteristics of victims and temporal settings have the greatest impact on lifestyles and routine activities.

In this research, places of occurrence are operationalized into three categories that have been selected by considering the chances of being a victim of homicide in different places in rural Bangladesh. As mentioned above, rural people are mostly engaged in agriculture and a person’s agricultural land is generally situated in the village they live. Hence, the place of homicide is divided into “at victim’s home”, “at victim’s village” and “beyond victim’s village”. It is also worth mentioning that, due to the country’s poor communication system, rural people who are not employed in agriculture usually try to find work in the village in which they live.

**Victim-Offender Relationship.** For a predatory crime to occur, the victim and the offender must come into contact in time and place. The victim-offender relationship gives an indication of the lifestyle of a victim. In their research, Voss and Hepburn (1968) observed that most female victims are killed by a family member or close friend. In this research, the victim-offender relationship is
divided into three categories—“family members”, “friends” and “strangers”.
People, related by blood and by marriage are included in “family members”.
Friends are those with whom the victim had a good relationship for a specific period and with whom the victim spent time in day-to-day life for various purposes. Strangers are those with whom the victim had no relationship. Hence, neighbours with whom the victim had no relationship are included in the stranger category, in this research.

**Data Analysis**

The same data analysis as that used by Messner and Tardiff (1985) will be employed in this study. First, this study will examine the relative frequency of different kinds of homicide— for example, homicides taking place at home and, homicides committed by family members— for every category of socio-demographic and temporal variable expected to be related to routine activities. Through simple chi-square analysis, a comparison of percentages and an evaluation of statistical significance will be done in this section.

Chi square analysis is the most suitable form of analysis with which to inspect the variables of this research for the structure of the data collection as all variables are categorical. The age variable could have been collected at the interval or ratio level, but the structure of the questions allowed it to be collected in ordinal measures. Other variables, such as gender, and religion are generally nominal and without arbitrary dummy-coding they cannot be the subject of any other mode of analysis.

The chi-square test was actually adopted to test statistical significance, but to get meaningful substantive significance the gamma coefficient was computed to observe the strength of the relationship. So the second stage of
interpretation of data will be conducted by means of calculating gamma correlation, an ordinal-level measure of association that is used to explain the relationships between pairs of variables (Babbie, 2012). Gamma coefficients can vary from -1 to +1; indicating the “direction as well as the magnitude of the association” (Babbie, 2012).

The use of the gamma coefficient requires the variables to be ordinal. To this end the same coding methods as those used by Messner and Tardiff (1985) will be used in this study. The location of a homicide and the relationship between offender and victim are the two dependant variables that have observable ordinal characteristics. On the basis of geographical distance of the place of offence from the victim’s home, the variable “location” is ordinal. As a result, in terms of geographical distance, “at home” represents the lowest value, “at victim’s village” indicates an intermediate value; and “beyond victim’s village” represents a high value. In terms of social distance between victim and offender, the variable “relationship” can similarly be conceptualized in ordinal terms. For the “relationship” variable, the category of “family members” represents the lowest value; “friends/acquaintance” indicates the intermediate value; and “stranger” constitutes the greatest value of social distance.

The socio-demographic and temporal characteristics do not have any similar inherent rank ordering for categories; however, as these variables have been dichotomized, they can be treated as “dummy” variables. These variables can be assigned as per the theoretical arguments mentioned above. Hence, “0” can be assigned for those dummies that have a hypothesised lower influence on the activities dispersed away from home. In contrast, “1” can be assigned for those dummies that have higher influence on the activities dispersed away from
home. According to this logic, independent variables are coded in the following ways:

**Table 1. Coding of Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Under 15 or over 59</td>
<td>0</td>
</tr>
<tr>
<td>15 to 59</td>
<td>1</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Hindu and others</td>
<td>0</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Ever married</td>
<td>0</td>
</tr>
<tr>
<td>Never married</td>
<td>1</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Engaged in agriculture</td>
<td>0</td>
</tr>
<tr>
<td>Engaged in labour and others</td>
<td>1</td>
</tr>
<tr>
<td>Time of Day</td>
<td></td>
</tr>
<tr>
<td>7 pm to 7 am</td>
<td>0</td>
</tr>
<tr>
<td>7 am to 7 pm</td>
<td>1</td>
</tr>
<tr>
<td>Day of Week</td>
<td></td>
</tr>
<tr>
<td>Friday and Saturday</td>
<td>0</td>
</tr>
<tr>
<td>Sunday to Thursday</td>
<td>1</td>
</tr>
<tr>
<td>Season</td>
<td></td>
</tr>
<tr>
<td>June to August (monsoon) and December to February (winter)</td>
<td>0</td>
</tr>
<tr>
<td>March to May and September to November</td>
<td>1</td>
</tr>
</tbody>
</table>

**Ethics**

During the progress of the research ethical issues have been taken into consideration. Authority for access to and use of homicide data was obtained from courts by completing the necessary forms. The procedure in Bangladesh is
to make an application in the prescribed form and pay specified fees to receive a copy of court records. The authorities were contacted for data collection as per the prevailing rules in Bangladesh. Public officials are responsible for providing data for any legitimate request. In addition, the Griffith University Code for the Responsible Conduct for Research (2012) was followed strictly in every aspect of the research. This document will be the main guideline during the research.

It was necessary to visit different courts in Bangladesh to collect data and therefore to meet with respective court officials. As, these people are responsible for providing the data to those who request it, there is no question of physical, psychological or social harm coming to them. Moreover, decency was maintained in all communications.
Chapter 3

The central aim of this research was to investigate whether the routine activities of victims are associated with different types of homicide. This study was guided by a number of research questions pertaining to the socio demographic characteristics of the victim and the offender and the temporal characteristics of the event.

First, simple frequency distributions are presented for the location and victim-offender relationship, for the socio-demographic characteristics and for the temporal features related to homicide. Cross-tabulations are then reported for every socio-demographic and temporal characteristic with the location of homicide and victim-offender relationship.

Table 2. Frequency Distributions

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Number of Victims</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>At victim’s home</td>
<td>330</td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>At victim’s village</td>
<td>232</td>
<td>25.8</td>
</tr>
<tr>
<td></td>
<td>Beyond victim’s village</td>
<td>338</td>
<td>37.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>900</td>
<td>100.0</td>
</tr>
<tr>
<td>Victim-Offender Relationship</td>
<td>Family members</td>
<td>274</td>
<td>30.4</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>87</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Strangers</td>
<td>539</td>
<td>59.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>900</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>221</td>
<td>24.6</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>678</td>
<td>75.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>899</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td>Under 15 and over 59</td>
<td>154</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>15-59</td>
<td>746</td>
<td>82.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>900</td>
<td>100.0</td>
</tr>
<tr>
<td>Religion</td>
<td>Hindu and others</td>
<td>75</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>824</td>
<td>91.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>899</td>
<td>100.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Ever married</td>
<td>578</td>
<td>69.7</td>
</tr>
<tr>
<td></td>
<td>Never married</td>
<td>252</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>830</td>
<td>100.0</td>
</tr>
<tr>
<td>Employment Status</td>
<td>Engaged in agriculture</td>
<td>438</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Engaged in labour and</td>
<td>389</td>
<td>47</td>
</tr>
</tbody>
</table>
The data reveal that with respect to location, the proportions of homicides occurring either in the victim’s home or outside the victim’s village are almost the same (36.7% and 37.5% respectively); whereas more than one-quarter of all homicides took place in the victim’s village. In terms of the victim-offender relationship, most homicides are committed by strangers (59.9%). Just over 30 percent of homicides were committed by family members, with the smallest category (friends) comprising 9 percent of the sample. These results differ from those of Wolfgang (1958), who found homicides are mostly committed by family members rather than by strangers.

The frequency distributions for the socio-demographic characteristics show that almost three-quarters of homicide victims are male, more than four-fifths are in the middle-age bracket and, more than 90 per cent are Muslim. Most of the victims (69.7%) have been married, whereas the numbers of victims employed in agriculture and employed in labour and other professions are almost the same (53% and 47% respectively).
In the temporal patterns, more homicides occurred on weekends once the number of days in each time period was taken into account. Even though more than two-thirds of homicides took place during the week, there are more days in the week than in the weekend. The homicide rate for weekends is 142.5 (285/2), whereas during the week it is 122.8 (614/5). No significant patterns are found with respect to time of day and season. Here both sub categories of the two temporal categories are almost the same.

It is worth noting that although data for 900 case records were collected, in some records information was missing for some variables or some variables were not applicable. For instance, one case record was found for which the date of occurrence was not mentioned and, as the investigation was ongoing the date of occurrence could not be disclosed. There are case records for which the victims are children; so employment and marital status are not applicable. In addition, there were some case records for which the victim’s religion, marital status and employment status could not be determined. There was one case where the victim was transgender.

Socio-Demographic Characteristics

In the following tables, cross-tabulations of each socio-demographic characteristic with the place of homicide and the victim-offender relationship are presented.

Victim’s Gender

The results for victim’s gender are consistent with theoretical explanations and previous studies. Males are significantly more likely to be victimized beyond the village, whereas females are more likely to be victimized at home. In terms of the victim-offender relationship, males are commonly victimized by strangers.
and females by family members. The magnitude of the gamma coefficient for the victim-offender relationship (.70) is also significant. These patterns reflect the fact that females are largely engaged in household and family activities.

Table 3. Place and Victim-Offender Relationship by Gender of Victim

<table>
<thead>
<tr>
<th>Location</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>At home</td>
<td>65.2</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td>At victim’s village</td>
<td>18.1</td>
<td>28.3</td>
<td></td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>16.7</td>
<td>44.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>(221)</td>
</tr>
<tr>
<td></td>
<td>(221)</td>
<td>(678)</td>
<td></td>
</tr>
<tr>
<td>Gamma = .59 X2 = 1.0</td>
<td>p = .00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members</td>
<td>63.8</td>
<td>19.6</td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td>8.1</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Strangers</td>
<td>28.1</td>
<td>70.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>(221)</td>
</tr>
<tr>
<td></td>
<td>(221)</td>
<td>(678)</td>
<td></td>
</tr>
<tr>
<td>Gamma = .70 X2 = 1.5</td>
<td>p = .00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Victim’s Age

Although hypotheses relating to age, the place of occurrence and the victim-offender relationship are supported by the data, they are not statistically significant. Adult homicide victims are more likely to be killed beyond the village than the very young and very old age group (39.4% versus 28.6%). The positive gamma coefficient of .09 indicates a relationship in the direction predicted by the RAA but this relationship is very weak. With respect to age and the victim-offender relationship, adult homicide victims are more likely to be killed by strangers than very young and old victims (61.3% versus 53.2%). Although it supports the hypothesis, the gamma coefficient of .14 does not reach the conventional threshold for statistical significance.
Table 4. Place and Victim-Offender Relationship by Age of Victim

<table>
<thead>
<tr>
<th>Location</th>
<th>Age Group</th>
<th>Under 15 and Over 59</th>
<th>15 to 59</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Home</td>
<td></td>
<td>35.7</td>
<td>36.9</td>
</tr>
<tr>
<td>At Victim’s Village</td>
<td></td>
<td>35.7</td>
<td>23.7</td>
</tr>
<tr>
<td>Beyond Victim’s Village</td>
<td></td>
<td>28.6</td>
<td>39.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(154)</td>
<td>(746)</td>
<td></td>
</tr>
</tbody>
</table>

Gamma = .09  X2 = 11.2  p = .18

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Age Group</th>
<th>Under 15 and Over 59</th>
<th>15 to 59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members</td>
<td></td>
<td>35.1</td>
<td>29.5</td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td>11.7</td>
<td>9.2</td>
</tr>
<tr>
<td>Strangers</td>
<td></td>
<td>53.2</td>
<td>61.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(154)</td>
<td>(746)</td>
<td></td>
</tr>
</tbody>
</table>

Gamma = .14  X2 = 3.5  p = .09

Victim’s Religion

Table 5 shows the results of the associations between religion and types of homicide. In both types of homicides, hypotheses relating to the routine activities perspective are not substantiated by the data. Hindu and other religion homicide victims are more likely than Muslim victims to be killed beyond their village (41.3% versus 37.1%). The negative gamma coefficient of -.18 indicates that the data do not support the hypotheses. According to the RAA Hindu and other religion homicide victims are more likely than Muslims to be at home but, in this study, it is found that Muslims are more likely to be killed at home than Hindu and other religion victims (38% versus 22.7%). In terms of the victim-offender relationship, Hindu and other religion homicide victims are more likely than Muslims to be killed by a stranger (73.3% versus 58.6%). The negative gamma coefficient of -.28 also reflects the fact that the data do not corroborate the hypothesis. One explanation for these results could be the decline of traditional professions for Hindus and other religions in Bangladesh. The rise of modern products has seen the decline of traditional crafts, for instance, due to
the development of plastic and polythene, the pottery and jute-work cottage industries are struggling to survive. At the same time, such former crafts people have largely become labourers, which sees them having to travel beyond their village where they are more likely to encounter strangers. Hence, Hindu and other religion homicide victims are more likely than Muslims to be killed by strangers beyond their village.

**Table 5. Place and Victim-Offender Relationship by Religion of Victim**

<table>
<thead>
<tr>
<th>Location</th>
<th>Hindu and Others</th>
<th>Muslims</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Home</td>
<td>22.7</td>
<td>38.0</td>
</tr>
<tr>
<td>At Victim’s Village</td>
<td>36.0</td>
<td>24.9</td>
</tr>
<tr>
<td>Beyond Victim’s Village</td>
<td>41.3</td>
<td>37.1</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(75)</td>
<td>(824)</td>
</tr>
</tbody>
</table>

Gamma = -.18  X2 = 8.01  p = .05

**Marital Status of Victims**

Table 6 presents the relationship between marital status and patterns of homicide. In both types of homicide, the data support the theoretical expectations of the RAA. In terms of the place of occurrence, the number of never married homicide victims killed beyond the village is significantly more than the number of married persons (56% versus 26.1%). Similarly, married persons are more likely than those never married to be killed at home (46.7% versus 17.9%). The gamma coefficient of .53 also indicates that the relationship is moderately strong. In terms of the victim-offender relationship, 65.5 per cent of never married homicide victims are killed by a stranger, whereas the figure
for married victims is 55.7 per cent. The gamma coefficient of .29 also indicates a considerable relationship. According to Hindelang et al. (1978), marital status can be considered a less perfect variable of victimization as there are many people in Western societies who are not formally married but who live as a married couple. This is unthinkable in a society like Bangladesh. Accordingly, the prediction about the RAA for married and unmarried homicide victims is supported by the data for Bangladesh.

Table 6. Place and Victim-Offender Relationship by Marital Status of Victim

<table>
<thead>
<tr>
<th>Location</th>
<th>Ever Married</th>
<th>Never Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>46.7</td>
<td>17.9</td>
</tr>
<tr>
<td>At victim’s village</td>
<td>27.2</td>
<td>26.2</td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>26.1</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>(578)</td>
<td>(252)</td>
<td></td>
</tr>
</tbody>
</table>

Gamma = .53  \( X^2 = 82.94 \)  \( p = .00 \)

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Ever Married</th>
<th>Never Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members</td>
<td>38.2</td>
<td>14.3</td>
</tr>
<tr>
<td>Friends</td>
<td>6.1</td>
<td>20.2</td>
</tr>
<tr>
<td>Strangers</td>
<td>55.7</td>
<td>65.5</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>(578)</td>
<td>(252)</td>
<td></td>
</tr>
</tbody>
</table>

Gamma = .29  \( X^2 = 69.42 \)  \( p = .00 \)

Victim’s Employment Status

Employment status is the final socio-demographic characteristic that needs to be considered. Table 7 contains the results of the hypotheses relating to employments status. These results support the hypotheses. Persons engaged in agricultural work are more likely to be killed at home than those engaged in labour and other activities (56.4% versus 17%). The gamma coefficient, .69, is positive and considerably strong. The hypothesis to the relating victim-offender
relationship also receives quite strong support. The gamma coefficient, .40, represents quite a strong relationship. Persons engaging in agricultural work are more likely than those engaging in labour and other work to be killed by family members (45.2% versus 14.7%). In contrast, the differences in the proportions of people engaging in agricultural work and labour and other works and being killed by strangers are small (51.6% versus 67.1%), which ultimately reduced the significance of the gamma coefficient.

**Table 7. Place and Victim-Offender Relationship by Employment Status of Victim**

<table>
<thead>
<tr>
<th>Location</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engaged in Agriculture</td>
</tr>
<tr>
<td>At home</td>
<td>56.4</td>
</tr>
<tr>
<td>At victim's village</td>
<td>27.4</td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(438)</td>
</tr>
<tr>
<td>Gamma = .69</td>
<td>X2 = 1.81</td>
</tr>
<tr>
<td>Family members</td>
<td>45.2</td>
</tr>
<tr>
<td>Friends</td>
<td>3.2</td>
</tr>
<tr>
<td>Strangers</td>
<td>51.6</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(438)</td>
</tr>
<tr>
<td>Gamma = .40</td>
<td>X2 = 1.16</td>
</tr>
</tbody>
</table>

**Temporal Characteristics**

In the following tables, the relationship between temporal characteristics and types of homicide is shown.

**Time of Day**

There is no systematic relationship between time of day and type of homicide.

With respect to location, the gamma coefficient is, -.11, so-- the hypothesis
about a connection between time of day and place of occurrence is not
supported by the data. It is revealed that slightly more homicides are committed
at home during the 7 am to 7 pm period than during the 7 pm to 7 am period
(38.2% versus 35%), which is contrary to the hypothesis. In fact, the distribution
of homicides between time of day and victim-offender relationship, is in the
theoretically expected direction, though the strength of association is weak
(gamma = .09). Hence, more homicide victims are killed by strangers during the
7 am to 7 pm period than during the 7 pm to 7 am period (63% versus 56.4%).
The reason for the weak relationship is that almost the same numbers of
homicide victims are killed by family members in each period (30.6 versus
30.4).

Table 8. Place and Victim-Offender Relationship by Time of Day of
Victimization

<table>
<thead>
<tr>
<th>Location</th>
<th>7 PM to 7 AM</th>
<th>7 AM to 7 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>35.0</td>
<td>38.2</td>
</tr>
<tr>
<td>At victim’s village</td>
<td>23.0</td>
<td>28.4</td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>42.0</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(431)</td>
<td>(468)</td>
</tr>
</tbody>
</table>

Gamma = -.11  X2 = 7.70  p = .04

<table>
<thead>
<tr>
<th>Relationship</th>
<th>7 PM to 7 AM</th>
<th>7 AM to 7 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family members</td>
<td>30.4</td>
<td>30.6</td>
</tr>
<tr>
<td>Friends</td>
<td>13.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Strangers</td>
<td>56.4</td>
<td>63.0</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(431)</td>
<td>(468)</td>
</tr>
</tbody>
</table>

Gamma = .09  X2 = 12.42  p = .17

Day of Week

Table 9 represents the relationships for the day of the week and patterns of
homicides. In terms of the place of occurrence, the gamma coefficient is, -.08,
so the data do not support the hypothesis. In contrast to the hypothesis, homicide victims are more likely to be killed beyond the victim’s village on weekends than on weekdays (42.1% versus 35.3%). Although the data for the relationship support the hypothesis, the association (gamma = .04) is very weak. Homicide victims are more likely to be killed by strangers during weekdays than during weekends (60.9% versus 57.5%). The difference between the percentages of homicides committed by strangers is very small. Moreover, one very interesting thing is that the same percentage of homicide victims is killed by a family member during weekdays as is killed during weekends.

Table 9. Place and Victim-Offender Relationship by Day of Week of Victimization

<table>
<thead>
<tr>
<th>Location</th>
<th>Friday and Saturday</th>
<th>Sunday to Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>35.8</td>
<td>37.1</td>
</tr>
<tr>
<td>At victim’s village</td>
<td>22.1</td>
<td>27.5</td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>42.1</td>
<td>35.3</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(285)</td>
<td>(614)</td>
</tr>
<tr>
<td>Gamma = -.08</td>
<td>X² = 4.69</td>
<td>p = .19</td>
</tr>
<tr>
<td>Relationship</td>
<td>Friday and Saturday</td>
<td>Sunday to Thursday</td>
</tr>
<tr>
<td>Family members</td>
<td>30.5</td>
<td>30.5</td>
</tr>
<tr>
<td>Friends</td>
<td>11.9</td>
<td>8.6</td>
</tr>
<tr>
<td>Strangers</td>
<td>57.5</td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(285)</td>
<td>(614)</td>
</tr>
<tr>
<td>Gamma = .04</td>
<td>X² = 2.56</td>
<td>p = .51</td>
</tr>
</tbody>
</table>

**Season**

The final temporal characteristic is season of the year. Table 10 shows the data did not support either hypothesis about the season and types of homicide. More homicides are committed at home during summer than in the monsoon season,
which is the opposite of the hypothesis. The same is also true of the victim-offender relationship in that the data show the opposite of the hypothesis, more victims are killed by a family member in summer than in the monsoon season and winter.

Table 10. Place and Victim-Offender Relationship by Season of Victimization

<table>
<thead>
<tr>
<th>Location</th>
<th>Monsoon and Winter</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>34.3</td>
<td>39.3</td>
</tr>
<tr>
<td>At victim’s village</td>
<td>23.4</td>
<td>28.3</td>
</tr>
<tr>
<td>Beyond victim’s village</td>
<td>42.3</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(461)</td>
</tr>
<tr>
<td>Gamma = -.14 X2 = 9.45 p = .01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>Monsoon and Winter</td>
<td>Summer</td>
</tr>
<tr>
<td>Family members</td>
<td>29.1</td>
<td>32.0</td>
</tr>
<tr>
<td>Friends</td>
<td>10.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Strangers</td>
<td>60.5</td>
<td>59.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(461)</td>
</tr>
<tr>
<td>Gamma = -.04 X2 = 1.22 p = .53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11. Results of Hypotheses and the Gamma Co-efficient

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Outcome of Test</th>
<th>Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female homicide victims are more likely to be killed at home than are male</td>
<td>Supported</td>
<td>.59</td>
</tr>
<tr>
<td>homicide victims.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female homicide victims are more likely to be</td>
<td>Supported</td>
<td>.70</td>
</tr>
<tr>
<td>killed by family members or friends than by strangers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide victims who are very young (children) or very old are more</td>
<td>Supported</td>
<td>.09</td>
</tr>
<tr>
<td>likely to be killed at home than are those in the other age group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide victims who are very young (children) or very old are more</td>
<td>Supported</td>
<td>.14</td>
</tr>
<tr>
<td>likely to be killed by family members or friends than by strangers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide victims who are members of a religious minority group are</td>
<td>Not Supported</td>
<td>-.18</td>
</tr>
<tr>
<td>more likely to be killed at or near home than away from home.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homicide victims who are members of a religious minority group are</td>
<td>Not Supported</td>
<td>-.28</td>
</tr>
<tr>
<td>more likely to be killed at or near home than away from home.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
killed by family members or friends than by strangers.

Married homicide victims are more likely to be killed at or near home than away from home.  
Married homicide victims are more likely to be killed by family members or friends than by strangers.

Homicide victims employed in agricultural work are more likely to be killed at home than are persons employed in other jobs.

Homicide victims employed in agricultural work are more likely to be killed by family members or friends than are persons employed in other jobs.

Homicide victims employed in agricultural work are more likely to be killed at home than are persons employed in other jobs.

Homicide victims employed in agricultural work are more likely to be killed by family members or friends than are persons employed in other jobs.

Homicides committed between 7 pm and 7 am are more likely to occur at home than away from home.

Homicides committed between 7 pm and 7 am are more likely to involve family members or friends than strangers.

Homicides committed during weekends are more likely to occur at home than away from home.

Homicides committed during weekends are more likely to be committed by family members than by strangers.

Homicides committed during the monsoon season and winter are more likely to occur at home than away from home.

Homicides committed during the monsoon season and winter are more likely to be committed by family members or friends than by strangers.

The data do not support six hypotheses. In terms of religion, the explanation is quite straightforward. The traditional professions that were undertaken largely by those in of minority religious groups are now decline.

Some of these professions have disappeared altogether while others have been replaced with large industry. Due to the economic constraints, some of those in minority religious group have been forced to leave their ancestral professions and go in search of other work. Hence, no systematic association is found in between religion and type of homicide.
The results for temporal features are quite interesting. There are no associations found between the time and day of homicide and the place of occurrence. On the contrary, the results for the victim-offender relationship are as expected, although the association is very weak; the relationship does have a clear effect on the routine activities of persons for time and day. For the same reason, the RAA indicates that there should be a clear relationship between the place of homicide and the time and day. If we look at the frequency of place of occurrence (Table 2), almost the same percentages of victims are killed in the village and beyond the victim’s village. Moreover, the figure for “in the village” is also significant. In Bangladesh, most households comprise extended families; people generally live with their parents, brothers and sisters, and even sometimes with uncles and other relatives. It would therefore be very difficult for an offender to find only one person alone in the home. This is one of the explanations for homicide outside the home.

Another factor is that, in this research, time, day, and season are dichotomized into categories which could have a negative impact on the results as it is rare to not find any relationship between time, day and season and types of homicide. For a clear picture, time is broken into 12 categories with two-hour intervals. Homicides for every category of place are then calculated for each two-hour interval (displayed in Figure 3). In the same way, days of week are displayed in seven categories and the months of the year in 12 categories.
This diagram about the relationship between time and place of homicide does not show any consistent trend except that all types of homicide start to increase after 1 pm. It is observed that from late night (1 am) to 1 pm there are slightly more homicides at home than other types of homicide. Meanwhile, other types of homicide increase after 1 pm, and homicides beyond the village, reach their peak between 11 pm and 1 am. It was noted earlier that in Bangladesh most people live by agriculture and generally work in the same village in which they live. If both homicides in the village and homicides beyond the village are considered together there is support for the hypothesis regarding the time frame of 7 am to 7 pm. Moreover, we should also bear in mind that, in Bangladesh most women are engaged in household activities whereas men go out for agricultural and other works- creating an opportunity for offenders during the day. This could be the reason for the high rate of homicides occurring at home during the day. On the other hand, rates for homicides beyond the village are higher after 7 pm and reach their peak at 1 am. During this time, most family
members would be at home, making it difficult to kill a person in front of many witnesses. Offenders therefore, sometimes take their victim to a quiet place to kill them. Overall, the diagram supports the hypothesis regarding time and place of homicides.

**Figure 4. Counts of Homicides at Places of Occurrence during Weekdays and Weekends**

![Chart showing counts of homicides at different places]  

Hypotheses relating to day of the week and place of occurrence are not supported by the data. In Figure 4, counts of every type of homicide are shown on a day-to-day basis. This diagram does not have any systematic distribution. Interestingly, on Fridays and Saturdays, more homicides occurred beyond the village, which is contrary to the hypothesis. This could be because on these days most family members stay at homes; so, it is difficult to kill someone at home (especially with the extended family structure, which is common-place). It could also happen for another reason, - family members may be more likely to take part in entertainment activities such as going to the cinema or, visiting a relative’s house on these days; meaning victims are more likely to come into
contact with offenders beyond the village. On other days, more homicides occur at home than beyond the village. Again, we should bear in mind that, most people are engaged in agricultural work and generally work in the village in which they live. Moreover, in this study, it is found that about one-quarter of homicide victims are female and most females are engaged in household activities, which leads to the high rate of homicides at home.

**Figure 5. Counts of Homicides at Place of Occurrence by Month**

![Graph showing counts of homicides by place of occurrence by month.](image)

Figure 5 shows the counts for every category of homicide in every month relating to place of occurrence. This figure does not reflect any significant systematic distribution. It was predicted that in the monsoon and winter season homicides would occur more often at home than beyond the village. These seasons have an impact on the lives of people who are employed labour such as in works like rickshaw pulling and, construction; however, the seasons do not have much effect on the activities of people engaged in agricultural work. Figure
Figure 6 shows the distribution of homicides with respect to the victim-offender relationship and month. It also shows no systematic distribution for the same reason.

**Figure 6. Counts of Homicides by Victim-Offender Relationship by Month**

![Graph showing counts of homicides by victim-offender relationship by month. The graph indicates trends for family members, friends, and strangers throughout the year.]
Chapter 4
Discussion

This dissertation had two objectives. The first was to describe the homicide patterns of rural Bangladesh. The second was to assess the general utility of the Routine Activities Approach (RAA) in explaining these homicide patterns by applying the findings to a rural setting. The relevance of the findings for this purpose is discussed below.

Homicide in Rural Bangladesh

Findings indicate that individuals’ different socio-demographic and different temporal characteristics show different patterns of homicide victimization. As there was a varied range of findings for these socio-demographic and temporal characteristics, these findings will be described separately.

Socio-Demographic characteristics

Victims’ gender, age, religion, marital status and employment status were used as socio-demographic characteristics in this study. The results of the analysis show that varying socio-demographic characteristics have different patterns of homicide victimization. With respect to gender it was hypothesised that females were more likely than males to be killed at home and by a family member or friend. It was predicted this was because females are more concentrated in household activities than males and the RAA suggests this hypothesis. The data support these hypotheses. In both hypotheses, the result of the gamma coefficient was significant.

Victim age is also a very important socio-demographic variable. It is hypothesised in this study that the very young and old are more likely than others to be killed at home and by a family member or friend. Obviously, people
in different age groups have different lifestyles, which also create different opportunities for offenders. It was therefore proposed, as per the RAA that people in different age groups should have a different risk of victimization. Though the results were in the expected directions, they were not statistically significant. There could be many reasons for these findings. One of the main reasons could be that in Bangladesh most children are killed outside their home or village such as being killed after being kidnapped, a homicide pattern that could influence the results of the data analysis.

Religion is a socio-demographic characteristic that has significant influence on people’s live. For example, a person who is guided by Islam must attend the mosque five times a day for prayer. In this study, this socio-demographic characteristic is taken as being that which determines the racial composition of Bangladesh. There is discrimination on the basis of religion in Bangladesh and this, has some influence on people’s professional activities. For example, in Bangladesh, most fishermen follow the Hindu religion.

According to the RAA, it is anticipated that homicide victims belonging to the Hindu or other religions are more likely to be killed at home and by a family member or friend compared with homicide victims who follow Islam. Surprisingly, the result of the data analysis is the opposite of the hypothesis, although the gammas are significant. The determinants for people becoming homicide victims beyond their village and at the hands of strangers are varied. Bangladesh has experienced the influence of the open market economy that is changing the world, and many, traditional professions have disappeared in recent times because of economic and technological developments. As a result, those engaged in such traditional activities, mainly Hindus have had move to other professions. As the opportunities are few, they usually end up as
labourers. This change in profession of the minority group could have an impact on the results of the data analysis. However, the finding is the opposite of that of previous studies.

Marital status has a great impact on people’s routine activities. A married person needs to return to his/her home after work—something that may not always be necessary for an unmarried person. Moreover, an unmarried person is usually engaged in more activities outside the home, such as going to the cinema or, meeting with friends compared with married persons. Hence, the RAA assumes that married persons are more likely than unmarried persons to be killed at home and by a family member. The data also support these hypotheses. Although previous studies reveal the same findings, the association is found to be stronger in this study.

Employment status has played a great role in shaping people’s daily activities. As stated above, Bangladesh is an agricultural country and most people are engaged in agricultural or related work. Unemployment is rare, as those who do not own land tend to find even a small income providing labour with. The RAA hypothesises that those employed in agricultural work are more likely than those employed as labourers and in other professions to be killed at home and by a family member. Results of the data analysis also support these hypotheses the results are very significant and the association is very strong. Hence, the RAA nicely describes the patterns of homicide in terms of people’s employment in Bangladesh.

**Temporal Characteristics**

Time of day, day of the week and season of the year are the three independent variables that make up the temporal characteristics. In this study, the results for
these variables are quite varied. The data do not support four of the six temporal hypotheses. Moreover, although the data support two hypotheses, the result is not statistically significant.

Generally, time of day and day of the week determine many of people’s daily activities and the influence of these variables on life is great. The hypothesis relating to time of day is that those who become homicide victims between 7 pm and 7 am are most likely to be killed at home and to be killed by a family member. With respect to the place of occurrence, the hypothesis is not supported by the data and the result is statistically significant. Although the results relating to the victim offender relationship accord with the hypothesis the association is weak and statistically insignificant.

Regarding the day of the week, it is predicted that homicides occurring on Friday and Saturday (the weekend) are more likely to occur at home and be carried out by a family member compared with other days of the week. In this variable, the results are the same as for the time of day variable, with the only difference being that both results are statistically insignificant. In agricultural work, it is very difficult to define the length of a working day or define a week according to a structured timetable. Although an attempt was made to establish a time frame of work for the whole year, it was unsuccessful. And, in fact, agricultural work varies considerably in relation to the type of crop and the season. An in-depth study to find the pattern of homicides would require differing time frames for the different seasons.

The final temporal characteristic is season of the year. In a least-developed such as Bangladesh, the season should provide a very strong influence on human activities. It is therefore predicted that homicides committed during the monsoon and winter are most likely to occur at home and be
committed by a family member. Surprisingly, the results for both dependant
variables, - place of occurrence and victim-offender relationship- do not support
the prediction. There could be many reasons for these findings- for instance,
Bangladesh is a tropical country and no one season is extreme. Another factor
is that as most people are engaged in agricultural work, rain or winter weather
will not keep them at home when they need to work their land.

As a whole, the RAA describes the homicide patterns in Bangladesh very
effectively with respect to gender, marital status and employment status. In
other areas the results are either insignificant or negative. It is notable that, -
where the segmentation is straight forward, the routine activities theory works
efficiently. On the other hand, where, it needs more segmentation, the theory
fails to provide and efficient description.

**Comparison of Urban and Rural Results**

This current study is influenced by Messner and Tardiff (1985). We will have a
clearer conception of the patterns of homicides in both urban and rural areas if
we combine the results of both studies. Gamma coefficients of all dependant
and independent variables for this study and for Messner and Tardiff’s (1985)
study are listed in table 12.

**Table 12. Comparison of Gamma Coefficients for Current Study and**
**Messner and Tardiff’s (1985) Study by Place of Occurrence and Victim-
Offender Relationship**

<table>
<thead>
<tr>
<th></th>
<th>Current Study</th>
<th>Messner and Tardiff (1985) Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gamma</td>
<td>P</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.59</td>
<td>.00</td>
</tr>
<tr>
<td>Age</td>
<td>.09</td>
<td>.18</td>
</tr>
<tr>
<td>Religion/race</td>
<td>-.18</td>
<td>.05</td>
</tr>
<tr>
<td>Marital status</td>
<td>.53</td>
<td>.00</td>
</tr>
</tbody>
</table>
Table 12 shows that, in this study, place of occurrence showed statistically significant associations with all independent variables except age and day of the week. In comparison, this significance is found only with gender, age and employment status in Messner and Tardiff's (1985) study. There are many differences between rural and urban areas revealed in the two studies. First, age and place of occurrence do not have strong associations in the rural study but do the urban study. In the rural study, the gamma coefficient for the association between religion and place of occurrence is opposite to the expected direction and the association is statistically significant. The reverse is true in the urban study. The association between marital status and place of occurrence is statistically significant in the rural study but it is not in the urban study. In both studies, associations between employment status and, time of day and place of occurrence are similar; however, associations between day of week and season and place of occurrence are just the opposite.

Examination of the victim-offender relationship in the rural study shows that six of the eight independent variables are in the predicted directions and four are statistically significant. Among these variables, gender shows the strongest relationship, followed by employment status, marital status and age. In the
urban study, meanwhile, all variables are in the expected directions and five are statistically significant. Gender shows the strongest association, followed by religion, day of week and season. Associations between religion, season and victim-offender relationship are opposite to the predicted direction in the rural study, whereas, these are in the expected directions in Messner and Tardiff’s (1985) urban study. Moreover, employment status and victim-offender relationship show a strong association in the rural study but not in the urban study. Last, a strong association is found between day of week and victim-offender relationship in the urban study but not in the study.

**Support for a Routine Activities Approach**

The second purpose of this study is to investigate the efficacy of the Routine Activities Approach (RAA) in explaining homicide patterns in a rural setting in Bangladesh. Although there are some limitations, as a whole, the results of the Bangladesh analysis can be treated as supportive of the RAA as an instrument for examining rural homicides. Among the 16 hypotheses investigated, 10 support the RAA. In Messner and Tardiff’s (1985) urban study, 15 of 16 hypotheses supported the RAA, although not all were statistically significant and they did not always involve the same variables. The most significant similarities between the two studies are that the socio-demographic characteristic of gender has the strongest association for both types of homicide and employment status has the strongest association in terms of the place of homicide. Although in this study 10 associations are in the expected direction, only seven are statistically significant. In Messner and Tardiff’s (1985) urban study there were eight in number.
Of the six associations from this study that are not supportive of the related hypotheses four are statistically significant, but in a direction opposite to the prediction. Possible explanations are given above for the non-supportive relationships.

In conclusion, the result for the RAA is mixed. This study definitely shows partial support for the RAA; however, more specific evidence is necessary before deciding whether the approach is fully reliable, at least in the case of homicide.

Implications
As a means of criminological explanation, the RAA has gained popularity in recent academic literature. This thesis has analyzed and discussed significant numbers of studies to describe the degree of knowledge relating to this criminological theory. In general, the RAA and its capacity to explain both violent and property crime victimization are expressed in the review of literature, including a recent meta-analysis (Spano & Freilich, 2009). There is noticeable gap in the research involving rural samples. Hence, this current study employed a sample of 900 rural homicides. A gamma coefficient analysis is carried out to examine the effects of various variables on the patterns of homicide victimization. The gamma coefficient tests revealed a significant association for most of the socio-demographic variables of victims, but a very limited association for temporal characteristics of the RAA in a rural context. Moreover, religion, as a socio-demographic characteristic, showed a significant negative association. These findings have interesting implications for policy and future research.

The findings suggest that policy makers should focus on socio-demographic characteristics of homicide victims for deeper insight into homicide
patterns. People with different socio-demographic characteristics fall victim to different types of homicide. Policy makers may find success if they try to implement different protective actions taking into consideration different socio-demographic characteristics of victims. Successful interventions in the environment that create different opportunities for the offender for different victims could lead to a significant drop in offences. In addition, taking victim’s socio-demographic characteristics into consideration would help in understanding the crime as a whole. One very important finding is that, using the same intervention program for all types of victims of different age, gender and, employment status will not bring successful results.

This study has contributed to the literature extending the RAA to rural areas and also to the crime of homicide. This study reveals that the socio-demographic characteristic of marital status can be a strong variable in effectively describing the pattern of homicides. This same variable proved unsuccessful in urban studies. In addition, temporal variables have not proved to be significant variables with which to describe the pattern of homicides in this study. This suggests that, temporal variables, which are used as important means by which to describe homicide patterns in urban areas, may not work effectively in rural areas.

It is very interesting that the independent variable of religion shows a result that is opposite to the predicted direction. This also has significant implications. As mentioned above, it reflects the decline of traditional professions for minority people in Bangladesh. Hence, this study, not only reveals the patterns of homicide in Bangladesh, it also supports the recent economic transition in the country.
Limitations and Future Research

This study is not without its limitations, both methodological and theoretical. In terms of methodological limitations there is a limited population or sample size with which to conduct multivariate analyses, such as log linear analysis. There is a chance of greater confidence in results and of revealing significant findings where ones were not found, or where only marginally significant findings were identified, with this study, whereas larger samples may preclude this. This study is limited to six districts and three years. If data from more districts and more years could be collected, the results could be different.

Another methodological limitation is measurement of temporal variables that are dichotomized. This has a crude effect on revealing significant relationship between these temporal variables and various aspects of routine activities. If, temporal variables can be analysed in a larger frame, they could reveal significant relations, that this study fails to show.

Regarding theoretical limitations, this present study utilizes variables available in the case documents. There are variables beyond those used in this research that have an impact on homicides, and victimizations. As there are limitations in terms of the reporting of variables in the case documents, this research fails to conduct detailed study for other variables in relations to homicide victimization.

The lack of support in those hypotheses for the RAA in this study supplies a new dimension for criminological researchers, particularly in relations to temporal variables and religion. This study is the first examination of the RAA for a sample of rural homicides. The results suggest that the RAA might have some problems with respect to temporal variables for rural samples. Hence, testing of the RAA in a rural context should be continued to provide additional
insight into its rural applicability. That said the RAA has some difficulties explaining homicide patterns for some variables in a rural setting. Therefore, a comparison of rural and urban variables for victims may give a better understanding of homicide victimization and even the conceptualization of the RAA.
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