EXPLAINING "EVERYDAY CRIME": A TEST OF ANOMIE AND RELATIVE

DEPRIVATION THEORY

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CHAPTER 1

INTRODUCTION

Every day, individuals commit acts which are considered immoral, unethical, even criminal. They may do so to gain material advantage by obtaining or saving money, goods, services, or other economic resources. Many people consider speeding, padding work expenses, cheating on taxes, cheating on tests, claiming false damages for insurance, bribing, avoiding train fare, or violating copyright to be wrong, but they do them anyway. Working "off-the-books" to evade taxes may be just a part of doing business. Offenses such as white-collar crime and crimes "without victims" are not considered to be serious, according to surveys (Rossi, Wait, Bose, & Berk, 1974). While some of these acts may not be formally illegal, they are, at best, considered morally dubious or unethical.

While most people may never consider armed robbery or murder, many would consider engaging in deviant behaviors which may seem minor or trivial. These acts have been referred to as "everyday crime" as they are not unusual or remarkable but are prevalent and have become a "part of life" (Gabor, 1998; Karstedt & Farrell, 2006; Lopes, 2008; Messner & Rosenfeld, 2009). It also has been linked to the "moral economy"—the process of economic activity within a given context of norms and values (Arnold, 2001). Sometimes known as the counter-normative or morally ambiguous "underground economy," they are thought to undermine the processes of the economic and legal institutions which individuals depend on for development (Priest, 1994).

Individually these everyday crimes are small; however, in total they amount to considerable damage. Following are some examples which include everyday crime. In Denton, Texas, there were 3,333 property crimes in 2008 (United States Department of Justice, 2011). The Federal Bureau of Investigation (2009) reported 10 million property crimes in the U.S. in 2005. Testimony was given before Congress which described an estimated 10.5 million misdemeanor prosecutions in 2006, thought to overwhelm the court system (Hall, 2009). The Federal Trade Commission (Anderson, 2004, p. 115) reported that an estimated 35.6 million consumers were victims of fraud in 2002. Consulting firm Jack L. Hayes International (2010) reported that "Shoplifters and dishonest employees stole over $6.0 billion in 2009 from just 25 major retailers." Off-the-books sales of food and repairs in the U.S. were $42 billion in 1981 (Smith, Moyer, & Trzcinski, 1982). Shoplifting, employee theft, vendor fraud, and administrator errors cost an estimated $32 billion in the United States according to *Stores* (2002, p. 16). Finally, counterfeiting and piracy were estimated at $200 billion in the U.S. in 1996 (Senate Report No. 104–177, 104th Cong., 1st Sess. 1–2, 1995).

These figures underscore the collective costs caused by these types of crimes. Understanding the causes of everyday crime is important not only because of the effect of its considerable damage, but because of the potential for everyday crime to become acceptable and normal. If it is perceived that small crimes will go unchecked, these crimes can lead to larger ones (Kelling & Coles, 1996; Wilson & Kelling, 2006). Everyday crime can lead society to a contradiction of norms, where it becomes acceptable to commit crimes because so many others are committing them. In a system

where material accumulation is a priority, "playing by the rules" becomes less important and small acts of crime become a part of doing business. If individuals are aware of the immoral or illicit nature of these acts, why do they commit them? When minor crime becomes routine, everyday crime becomes justifiable in one's mind (Snyder, 2003).

This study generally follows the anomie model of Konty (2005) and the relative deprivation (RD) model of Crosby (1976), testing two competing theories that attempt to explain everyday crime. Both theories attribute the social structure as a factor in crime— social forces which foster deviant attitudes and behavior of individuals.

Anomie is a condition in which society's norms and values are not adequately conveyed to the individual. Norms and values provide rules of conduct for a particular culture. Decisions based on incomplete or distorted norms and values can result in deviant behavior. These distorted messages of social values need not necessarily be characterized as pathological, but can be seen as an imbalance of competing values. These values can be seen as dual dimensions of social responsibility and economic individualism (Bobo, 1991). Pro-social traits reflect socially responsible values and take the form of being helpful, following tradition, respecting the environment, and living in a secure environment (Schwartz, 1994). Pro-self traits reflect individualist values such as wanting to be rich and creative, taking risks, and spoiling one's self (Schwartz, 1994). It is thought that when the social pressure to acquire things becomes greater than the pressure to "play by the rules," crime can result (Messner & Rosenfeld, 1994; Karstedt & Farrell, 2006).

Relative deprivation (RD) is a condition in which injustice is perceived from a social comparison between what one has and what others have. A perceived discrepancy between a current and expected situation can produce anger and aggression and undermine commitment to social norms (Crosby, 1976; Reis, 1987). It is theorized that RD leads to various ways of adapting to this plight, including actual crime. A built-up frustration calls for an amelioration of this dilemma either by accepting, changing, or escaping the situation.

Rationale and Significance of the Study

Do certain types of people justify everyday crime more than others? Using quantitative analysis, this study examined the degree to which 1) anomie and 2) RD explains the tendency towards everyday crime. Criminals are often perceived by others as deviant and atypical—different than themselves (Henshel & Silverman, 1975; Maclin & Herrera, 2006). Yet everyday crime is often committed by those like them—normal and average (Braithwaite, 1985).

While the anomie theory of crime has had a long history, RD emerged shortly after WWII. Merton and Kitt (1950) wrote on anomie and RD separately but did not combine them. Walker and Smith (1984) have called for the integration of RD with other theories towards a single focus on "social evaluation." Others (Passas, 1997; Young, 2001) have called for the combination of the two theories but no comparative analyses of the two were reported. In their study of anomie with other theories of crime, Morris and Higgins (2009) have called for the testing of multiple theories concurrently.

Some suggest that RD is caused by anomie. Kawachi, Kennedy, and Wilkinson (1999) suggested that anomic conditions can lead to RD, and subsequently crime such as homicide. Similarly, Lopes (2008) framed RD as a subset of Merton's anomie theory, however her measurements focused on individual feelings of financial satisfaction, and not on characteristics of anomie, as Konty (2005) had done.

Amongst the many theories of crime, no single theory has been proven to be the best one, and comparative analysis may help to accomplish this. This study attempts to answer these calls for more research and to show how these theories can provide an understanding of everyday crime.

CHAPTER 2

REVIEW OF THE LITERATURE AND THEORETICAL EXPLANATIONS OF

EVERYDAY CRIME

Research has largely viewed small crime as a gateway to larger crime. Rather than focusing on the significance of small crime in itself, minor crime has largely been seen as an antecedent to major crime, and much of the research has investigated the punishment of these crimes rather than its causes. Durkheim (1964) held that crime was an inevitable and a normal aspect of society. Crime is functionally necessary and inevitable as not everyone can be equally committed to all of the values and beliefs of a society. If there were no major crime, minor crimes would be recognized as relatively serious offenses, according to Durkheim (1982, p. 124).

Many behaviors have been characterized as everyday crime: "jumping red lights, not paying TV license fees, making false insurance claims, claiming refunds one is not entitled to, paying 'cash in hand' to avoid taxes, claiming benefits one is not entitled to" (Karstedt & Farrell, 2006); being paid off the books (Ganon & Donegan, 2010); digital piracy (Morris & Higgins, 2009); making inflated insurance claims, driving drunk, abusing prescription drugs, failing to inform of a financial error, dishonesty, not making declarations at border crossings, illegally copying software, polluting, cruelty to animals (Gabor, 1998); cheating, vandalism, larceny, assault, intoxication, smoke pot (Konty, 2005); expense padding, doping in sports, plagiarism, cable TV theft, and cheating in golf (Callahan, 2004). While some of these examples are formally illegal, some are not.

At the very least, everyday crime can be considered a violation of "folkways," a term used by Sumner (1911), who wrote "The folkways are habits of the individual and customs of the society which arise from efforts to satisfy needs" (1911, p. iv). These group habits, according to Sumner, reflected immediate or subconscious individual needs which were not necessarily constructed by society. They eventually become legitimized and formally sanctioned, which Sumner calls "final and unchangeable" (1911, p. 79) mores, firmly establishing what is right and wrong in a society. Given this logic, there may be deviance which is not perceived as "final and unchangeable." The violation of folkways could perhaps be seen as "not wrong," but perhaps as morally-dubious behavior.

Folkways generally are not written into law, but are enforced through social pressure. These tend to be sanctioned by informal controls rather than by formal legal controls (Matsueda, 1989). As folkways and minor crimes are seen as less of a threat to society, they are not met with formal rules but rather with informal mechanisms of control.

It is thought that minor crime leads to major crime and in order to deter major crime, it must be made known that minor crime will not be tolerated (Dur, 2006). According to one study, major crime did decline as behaviors such as disorderly conduct, disturbing the peace, and public drunkenness were targeted by police (Worrall, 2006).

Individuals may commit minor crimes if there is the perception that "everybody" commits them (Gabor, 1998). Welch, Xu, Bjarnason, O'Donnell, & Magro (2005) found

that there was a greater inclination to commit minor crime if there was a perception that everybody did so. Thus, deviance becomes the norm when it is prevalent.

The idea that "small crimes lead to larger ones" emerged in the eighteenth century (Fisher, 1995). Beccaria (1764) noted that the swift punishment of minor crimes can deter others from crime, and deter the offender from further crimes. In 1788, the *Manchester Mercury* published that the failure to punish early offenses was the biggest source of major crimes (Fisher, 1995, p. 1242).

The "broken windows" theory claims that if small crimes go unchecked, as signaled by broken windows or trash in a neighborhood, more serious crimes will follow (Kelling & Coles, 1996; Worrall, 2006). The neighborhood which tolerates small crimes gives a message of permissiveness to crime. Conversely, an orderly neighborhood signals that it is a place where norms are followed and that conformity and monitoring take place.

With this scenario, the enforcement of small crimes or folkways can prevent mores. This is called the zero-tolerance approach: "As zero-tolerance keeps relatively 'gutless' people from committing a minor offense, the signaling value of that action increases, which makes it attractive for some people who would otherwise commit more severe crime" (Dur, 2006).

Two Promising Theoretical Explanations of Everyday Crime

Anomie and RD theories provide unique perspectives which examine norms and values as factors in everyday crime. These theories focus on "structural" causes which are part of the culture of society. Young (1997) comments, "Crime is not a product of

abnormality but of the normal workings of the social order." Core institutions and central values such as competitive individualism promote processes which lead to crime. Anomie theory can be traced far back in history, while RD theory has been more recently formulated, and remains a promising approach (Crosby, 1982, p. 6). What follows is a discussion of each theory.

Theory 1: Anomie and Everyday Crime

Anomie theory has evolved since its conception; however, its fundamental concept has remained—insufficient influence of the group over the individual. According to Durkheim (1964), for society to function, its members must follow certain behaviors. Norms must be conveyed and adhered to—they help guide individual actions in the best interests of the collective. Social bonds between members connect everyone together and transmit these messages of how to act.

Anomie exists when society does not sufficiently socialize the individual to follow its norms. Some norms are intended to prevent the individual from unfairly taking advantage of others, such as stealing, cheating, or lying in order to unfairly gain resources. If society's influence on the individual is weakened, the person's values may be oriented more to the self than the collective, and crime may result.

The term "anomie" was used long before its often-attributed use by Durkheim (1984). Orrù (1983) suggested that the term was found in Biblical and ancient Greek texts including those of Plato and Plutarch, referring to lawlessness or religion's weakened ability to control individuals.

Early theories defined anomie as "normlessness," a negative condition experienced by individuals, disconnected from society as if suffering from an illness. But Guyau (2009), a contemporary of Durkheim, had a different idea. He viewed anomie as a positive condition, allowing individuals to be more creative and less constrained by social norms. Durkheim learned of this anomie concept from Guyau and discussed anomie in a book review of Guyau's *L'Irrelzglon de l'avenir*: "Durkheim expressed satisfaction with the new sociological approach by Guyau in his analysis of religious phenomena." (Orrù, 1983, p. 507).

Within a given society, individuals are socialized in the norms of the dominant culture. Certain values are be held by the collective and passed on to the individual. If the individual does not "get the message," deviant behavior can result. Individuals must fulfill roles and duties for society to function: "A well-functioning society depends on the solidarity of its members, all indoctrinated to the same set of social rules" (Durkheim, 1984, p. 21). When society is composed of specialized parts, the indoctrination of these rules is necessary to govern the behavior of its diverse individuals. These rules are communicated through both formal and informal ways, and those who violate these rules are subject to sanctions. Durkheim noted, "Moral or legal rules essentially express social needs which society alone can identify" (1984, p. xxxv), and a well-functioning society depends on the solidarity of its members, all indoctrinated to the same set of rules.

Later theories defined anomie as a miscommunication of norms, when the individual is socialized with conflicting or competing norms. Instead of those who "felt"

anomie, as Durkheim characterized it, individuals would manifest whatever values they were effectively socialized with.

Merton (1938) expanded this concept in his strain theory. Society is thought to socialize its pro-social goals to all members and all are expected to aspire to these goals. It is *society* who creates these goals that all individuals are expected to aspire to. In addition, all members are expected to use socially-approved means to reach these goals. But in a class-stratified society, there will be some who cannot attain society's goals using these approved means and will seek alternative means. Merton (1938, p. 676) labels this process as "innovation"—the use of deviant means to reach normal goals. Society holds all members of society responsible for both goals and means, but for some, socially approved means may be out of reach. Merton (1938, p. 680) noted, "Frustration and thwarted aspiration lead to the search for avenues of escape from a culturally induced intolerable situation; or unrelieved ambition may eventuate in illicit attempts to acquire the dominant values."

Near the end of the 20th century, anomie theory diverged into two camps: strain and institutional anomie (Featherstone & Deflem, 2003). Strain theory was advanced by Agnew (1992), who examined emotional or affective responses to strain, resulting when an individual perceives a lack of support in attaining desired goals. Crime is one way in which these emotional responses such as anger or frustration can be ameliorated.

Conversely, institutional theories look at how a competing set of values, originating from institutions, can socialize individuals into certain attitudes and behavior. Crimes typically committed to gain material advantage are often called "instrumental" or

property crime (Baumer & Gustafson, 2007), and are typically those which anomie is responsible for.

On one hand, a functioning society requires pro-social norms that motivate individuals to support the collective, for example, actions which encourage getting along with each other. On the other hand, pro-self norms which encourage self-enhancement, creativity, and leadership also contribute to society. These pro-self traits become a factor in crime only if not balanced by pro-social traits. These internalized values are cognitively called on to make behavioral choices (Hechter, 1992). If pro-social values such as "help your neighbor" become weak, pro-self values such as "achievement" dominates. As behavior is cognitively driven by internalized norms and values, criminal behavior may not be consciously deviant but rather a result of rational decision making.

One theorized source of anomie comes from institutional forces. These help to accomplish social goals, such as to allocate scarce resources, attain moral order, provide education or protection, to name a few. Social constraints or "the rules of the game" (North, 1990, p. 3) help guide individuals towards these goals. Institutions are not necessarily all linked together but they each may evolve differently from each other. As the rules of society change with evolving institutions, individual norms and values must change with them. However, these new values may conflict with other institutions' goals, resulting in conflicting means to reach these goals.

Roland (2004) noted the emergence of "fast-moving" and "slow-moving" institutions and the result of their interactions. Institutions such as culture, religion, or the family are considered slow moving—social functions rooted in culture and tradition.

Other institutions such as economic and political ones can be fast moving—quickly affected by technology or political power. The norms and values espoused by institutions support their respective purposes.

Institutional changes of a society may be caused by random or exogenous events, shifting the balance power among competing groups (Roland, 2004, p. 11). These changes can create a situation of anomie, according to Messner and Rosenfeld (1994) who argue that economic institutions have become predominant above other institutions. Noneconomic institutions, such as family, religious, educational, or the polity, have become subservient to economic institutions (Messner & Rosenfeld, 1994).

Economic institutions may be changing faster than non-economic and moral institutions and subsequently dominate them. These moral institutions have provided pro-social values such as "playing by the rules" but when they become trivial, individuals "have no moral qualms" about "a willingness to pursue goals by any means necessary" (Messner & Rosenfeld, 1994, p. 214).

It should be noted that "cognitive" rather than "affective" factors are at play in this process of institutional anomie. A cognitive thought process produces the deviant behavior. "Anomie is simply the freedom to behave 'naturally,' to seek rationally calculated self-interest," noted Konty (2005). As an individual calls on his or her socialized values, "rational" decisions are made.

Values are thought to inform individuals of these types of choices. Schwartz (1994) defines values as "desirable transsituational goals, varying in importance, which serve as guiding principles in the life of a person or other social entity" (1994, p. 21).

Values guide behavior because they (a) are beliefs or truths; (b) aim towards desirable goals; (c) are general and transcend specific situations; (d) are normative criteria for making choices; and (e) are ordered in importance relative to other values (1994, p. 20). Values inform cognitive thought, which motivates crime differently from affective or emotional causes, as Agnew (1992) suggested.

Individuals learn a set of diverse values, some of which may prevent crime in addition to those which promote crime. A balance of both may hold useful, but with institutional changes that emphasize economic values, pro-social values become less salient, leading to rational self-interest and ultimately to crime (Konty, 2005, p. 110). Konty (2005) was the first to operationalize institutional anomie from individual-level traits, using Schwartz's value typology. Konty proposed that individuals who hold relatively higher levels of pro-self values than pro-social values would be more predisposed towards committing crime.

Power, achievement, and hedonism are characterized as pro-self or self-enhancing (SE) values, emphasizing "the pursuit of one's own relative success and dominance over others" (Schwartz, 1994, p. 25). Universalism, tradition, and benevolence are characterized as pro-social or self-transcending (ST) values, which emphasize "the acceptance of others as equals and concern for their welfare" (Schwartz, 1994, p. 25).

Konty (2005, p. 117) operationalized anomie as a net difference of SE over ST traits. Deviant attitudes and behavior were found to be more likely when there was a predominance of SE over ST traits (2005, p. 123). Students at a university were surveyed on both their attitudes and actual acts of minor crime. They were asked to estimate the

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number of times in the last year they performed certain acts of deviance such as cheating, vandalism, intoxication, smoking marijuana, larceny and assault. Students were also asked to answer on a 5-point scale if they agreed or disagreed with statements of "It is sometimes acceptable for someone my age to get into fights"; "to steal something"; and "to use marijuana." In addition, students' personal values, using the pro-self and pro-social typology in which Schwartz (1994) developed, were collected. It was found that deviant attitudes and behavior were more likely among students who exhibited greater SE to ST ratios than those who did not.

Carter (2006) used anomie theory to explain deviance among football players. Their deviant behavior for the most part consisted of morally-dubious acts regarding sex, drugs, alcohol, and abuse. Anomie was operationalized by responses measuring their competitive, individualist, and hedonistic values. It was thought that these players existed in a world in which pro-self values were emphasized—winning by individual accomplishment. The need for pro-social values and behavior was minimized by the type of social system they existed in, and SE traits dominated ST ones. Those with stronger ties to various social groups, such as family, school, and religion, exhibited less deviance. This is likely from the ST values which are associated with these type of institutions.

Anomie theory was compared to other theories by Morris and Higgins (2009) with its application on the minor crime of digital piracy, which included illicit copying and downloading of software, movies, and music. Students at a university were surveyed to assess the balance of SE over ST traits they held in addition to minor crimes they justified or committed. Issues of forgiveness, honesty, helpfulness for the welfare of

others, peace, equality, and social justice were included in ST questions. Authority, social power, personal wealth, ambition, self-capability, successfulness, aggressiveness, beating the system, competitiveness, and materialism measured SE questions. Multiple theories were tested and anomie moderately accounted for actual music piracy and the willingness to engage in video piracy. This study is noteworthy in that several constructs, including anomie, were simultaneously examined in a regression model.

Ganon and Donegan (2010) followed Konty's approach in explaining tax fraud, again using Schwartz's (1994) value typology. Business students from a university were surveyed on their behavior of "ever being paid off-the-books," in addition to questions regarding SE and ST traits. Being paid off the books can be considered a minor crime, because of its purpose of avoiding taxes. In general, SE values were positively associated with deviance. Those who had a predominance of SE over ST traits were more likely to have been paid off the books.

"Since crime and deviant behavior almost always enhances self without advancing social interests, microanomie produces deviant behaviors" (Konty, 2005). Anomie theory holds that individual values are transmitted by society. It may be puzzling that selfish values are seen as originating from the collective. Why would society deliver messages which promote crime? Pro-self values are not always negative towards the collective. However, when SE traits are not balanced by ST traits, crime can be fostered (Ganon & Donegan, 2010, p. 15).

Theory 2: Relative Deprivation Theory and Everyday Crime

As with anomie, the theory of relative deprivation (RD) has also evolved with its continued study (Walker & Smith, 1984). It initially helped to explain paradoxes, for instance, why soldiers in areas which promoted more soldiers were more frustrated than those in areas where soldiers were promoted less (Stouffer et al., 1949), or why working women were relatively satisfied despite being paid less than men (Crosby, 1982). Early research then applied RD to explain individual frustration, social movements, and racism, and later to dissatisfaction, social violence, crime, and other problems (Crosby, 1976). It is the perceived injustice which pressures an individual to adapt to, change, or escape the situation, perhaps through crime.

RD is created by social comparison, a perception of inequality of access to resources between the self and certain others. When an individual believes this discrepancy is illegitimate, a response, perhaps deviant, can reduce this discrepancy. Crime may be justified if the discrepant situation appears unjust (Pearson & Weiner, 1985). Seeing one's neighbor who has more resources may create this perception and there may be no legal way to relieve the resulting feeling of injustice. Attempts to ameliorate this feeling may lead to criminal behavior (Chester, 1976).

The RD process should not be thought of in terms of being relatively rich or poor. Those who have more may not be any more satisfied than those who have less. Amidst much conflicting research, there is much empirical support that neither income (Doyle, Ahmed, & Horn, 1999) or social class (Tittle, Villemez, & Smith, 1978) alone have a direct effect on crime. It should not be assumed that those who have a relatively low

income or social standing will automatically experience RD and commit crime (Young, 1997).

While one may feel relatively deprived of something they think they should have, absolute deprivation exists when a physical need truly exists. Individuals may not feel absolutely deprived but become dissatisfied with their lot when they learn that others have more. Karl Marx (1902) referred to RD in his own work. He gives an example of which a homeowner may be initially satisfied with owning a little house, but then evaluates it in comparison to neighboring houses. Finding that neighbors have larger houses, the homeowner becomes aware of his relatively lower social position which accompanies his relatively smaller house. This makes him uncomfortable and dissatisfied. Marx likely suggests that the capitalist, having relatively more than the worker, produces dissatisfaction among the working class because of these comparative situations.

With anomie, it is thought that institutions affect individual values. As economic and other institutions change, the norms and values of individuals adapt to them. But how does the process of RD change? Stack (1984, p. 233) pointed out that "the subjective reaction to a given level of inequality will vary according to cultural conditions." Conditions which affect social comparison vary across time and place. Reactions towards inequality are affected by seeing the social mobility of others, as Stouffer, et al (1949) first observed. A situation where others appear socially mobile will have a different effect on RD than one where everyone appears to remain equal or fixed in their status.

Crosby (1979, p. 105) argued that there are four "standard" models of RD, those of Davis, Runciman, Gurr, and herself. All originate from Davis' model which specifies that (1) Person A is aware that similar others have X; (2) wants X; and (3) feels entitled to have X (1959). According to these models, emotional reaction is a key element; that an individual is merely situated next to others who have more desired resources is not enough to produce an effect of RD.

Stouffer et al. (1949) unintentionally discovered the concept of RD in *The American Soldier*. Attitudes on career satisfaction were examined among soldiers. From individual-level surveys, it was found that those who worked in various departments had different levels of career satisfaction, on average. Those in the military police were more satisfied with their rank than those in the air corps. Promotions were more frequent for air corpsmen than for policemen. It was thought that being around others who were promoted more frequently would cause envy rather than being around those who were not, in which those who did not perceive as much upward mobility of others would be more satisfied with their lot, but this was not so.

Stouffer et al. (1949) coined the term "relative deprivation" to label this unexpected finding, but made no specific analysis of it. However, Davis (1959) did publish "A Formal Interpretation of the Theory of Relative Deprivation" from Stouffer's research. Davis (1959) outlined preconditions that defined RD: (1) Person A is aware that similar others have X; (2) wants X; and (3) feels entitled to have X. These preconditions enabled RD to be operationalized.

In his groundbreaking book, *Relative Deprivation and Social Justice,* Runciman characterized RD as "The more people a man sees promoted when he is not promoted himself, the more people he may compare himself with in a situation where the comparison will make him feel relatively deprived"(1972, p. 21). Subjective judgments are based on social comparison and can compel one to act on those judgments. Runciman discerned two types of RD, "egoistical" RD which affects the individual and "fraternal" RD which affects groups. Those who endure RD egoistically as isolated individuals, are likely to engage in individually-oriented strategies, perhaps everyday crime, to change the situation, while fraternally-affected groups might engage in social movements to affect change (Walker & Pettigrew, 1984).

Runciman also added a fourth precondition of feasibility to these theories of RD (1972, p. 11). Using a survey given in 1962 of manual and non-manual workers, he found that those who identified with the (higher) middle class experienced more frustration with their status. The four preconditions of RD then became (1) Person A is aware that similar others have X; (2) wants X; (3) feels entitled to have X; and (4) sees it as feasible to have X.

In a study of social violence, Gurr (1970) reversed Runciman's fifth precondition to state that someone who experiences RD sees it as not feasible to have X. Because it is not feasible to have something, frustration develops, causing a motivation to ameliorate the conflict. Economic discontent is one variable that is difficult to assess, admits Gurr (1970, p. 129), but perhaps inferred by certain conditions. He conducted a study of 21 nations using macro-level data to test this new precondition, however Gurr did not

measure the other three preconditions. Gurr (1970, p. 27) labels as "value expectations" what Merton (1938, p. 673) would label as societal goals—valued goals that society socializes its members to aspire to. "Value capabilities" (Gurr, 1970, p. 27) are what Merton (1938, p. 673) would call the means which individuals are allowed to use to achieve those goals. RD exists when capabilities fall short of reaching those expectations and a sense of frustration results.

Crosby (1976, p. 90) added a fifth precondition to Runciman's four, adding that Person A lacks a sense of personal responsibility about not having X. If Person A feels he or she is to blame for his or her plight, then the situation does not seem unjust. It is important that a sense of injustice is present for RD to exist. Determinants of how an individual would particularly react to social comparison come from several sources, according to Crosby (1976). Personality traits, personal past, immediate environment, societal dictates, and biological needs may individually influence each precondition, and subsequently affect whether the individual experiences RD (Crosby, 1976, p. 89). Other mediating factors, such as propensities toward being extra-punitive, high/low self-control, and blocked opportunities, may influence each precondition.

In a study of RD and working conditions, Alain (1985) analyzed and compared these "top five" RD theories to each other. Attitudes corresponding to each of the preconditions described above were directly measured, and Crosby's model (1976) was shown to have the best fit. Alain (1985, p. 747) also noted that Crosby (1982) later suggested a revised model of RD, in which "want" and "deservedness" were the two main components of RD.

Chester (1976) associated perceived class inequality and blocked upward mobility with property crime. Emphasizing perceptions of injustice, he noted that in the American capitalist system, better lifestyles are widely depicted to all, including to those stratified at the bottom of the class system. Unable to legitimately gain mobility, illegitimate attempts are made and frustration from perceived inequality becomes a cause of property crime. In Marxist fashion, Chester recommended a structural change in the economic system by controlling intergenerational wealth transfers.

Stack (1984) explored how egalitarianism affects RD. Egalitarianism is the concept which stipulates that everyone should be equal in a society. Countries having more egalitarian sentiments in addition to *real* inequality should experience *more* criminal effects. Other cultures may differ in their reactions to inequality and possibly deal with perceived injustices in non-criminal ways. In addition, Stack (1984) focused on cultural characteristics of the reaction to inequality. As RD depends on *perceived* injustices, these reactions may differ among cultures.

Crime is not the only outcome of RD. Stack (1984, p. 235) wrote that there is "no compelling theoretical reason to expect that relatively deprived people necessarily will turn to criminal behavior." There may be other non-criminal outcomes of RD other than innovation, such as retreatism or rebellion, to use Merton's structural strain outcomes (Merton, 1938). RD may compel an individual to change a perceived injustice, but does not specify how.

Webber (2007) compared Merton's anomie theory to Runciman's model of relative deprivation. The structural strain theory of Merton (1938), in which individuals

are socialized into pursuing societal goals, is similar to the RD concept in which

individuals feel deprived by seeing that others have more. One way to ameliorate either

situation would be "innovation" or crime (Merton, 1938). Webber (2007) suggested that

crime is only one outcome of relative deprivation preconditions, as Stack (1984) also

pointed out.

Other theories may have to add to this process and find what makes someone

"cross the line," such as social-categorization or social-identity theory (Tajfel & Turner,

1979). The trajectory of RD research has led largely to refinements to operational

definitions (Crosby, 1976, p. 87). Some arguments against RD theory springs from

disagreements from assumptions and conditions of the process (Crosby, 1982). There is

still disagreement and unanswered questions in RD research (Smith & Ortiz, 2002) and

its conclusions are not as solid as anomie.

Other Factors

There are other factors which could be associated with everyday crime. The

literature suggests that age, gender, marital status, and religiosity are particularly

important (Cullen, Parboteeah, & Hoegl, 2004).

Age

Crime tends to decline with age (Greenberg, 1985; Agnew, 1980) with offenders

peaking in adolescence and then declining in later years. While the association between

age and crime is nearly universal there is little consensus on why (Sampson & Laub,

1992, p. 65). Life-course theory suggests that the experience and ordering of life events

determine a trajectory of individual behavior, including if and what type of crimes may

be committed (Hirschi and Gottfredson, 1983). While some (Hirschi and Gottfredson, 1983) argue for a "universal" pattern of how age affects crime; others have found that it differs contextually with regards to the environment (Greenberg, 1985). Nevertheless, it is expected that age will have some effect on the dependent variable in this study.

Gender

The type of crime that *both* women and men commit the most is minor property crime (U.S. Department of Justice, 1960–1993), however research indicates that women commit less crime than men (Steffensmeier & Allan, 1996). Gender norms, roles, power relations, risk-taking, access to opportunity, and contextual factors are some explanations; but "no satisfactorily unified theoretical framework has yet been developed for explaining female criminality and gender differences in crime" (Steffensmeier & Allan, 1996, p. 473). Most crimes women commit appear to be for survival, status offenses, or in conjunction with men (Steffensmeier & Allan, 1996, p. 478). Ganon and Donegan (2010, p. 138), in their study of anomie, found gender to be a significant factor in the incidence of everyday crime.

Marital Status

Marriage appears to increase social stability (Gibbens 1984, p. 61; Sampson & Laub, 1992), as those who are married may have more connection to society than others. Similar to age, marital status can be part of a life-course perspective suggesting that different goals and opportunities for crime arrive at different stages of life (Hirschi & Gottfredson, 1983). Anomie was detected less in married individuals than non-married

(Agnew, 1980; Lee, 1974; Ryan, 1981). Thus, the research suggests that marital status has a direct effect on everyday crime and it was included in this study.

Religiosity

With its influence on conformity and morality, it would be logical to examine religion's effect on crime. Most studies support the inverse relationship between religiosity and crime (Cooley, 1927; Ellis, 1985), however not all do (Tittle & Welch, 1983; Heaton, 2006; Brammer, Williams, & Zinkin, 2007). Also found in the literature are studies linking social control and religion. Ideas of group solidarity (Durkheim, 1951), punishment (Hirschi & Stark, 1969; Miner, 1931b), threat of shame (Grasmick, Bursik, & Cochran, 1991), and obedience to authority (Miner, 1931a) have been theorized to be transmitted by religion.

Religiosity, measured by religious participation, has been shown to have an inverse association with crime (Kerley, Copes, Tewksbury, & Dabney, 2010), and also has been shown to have a strong effect on anomie and everyday crime. Adriaenssens and Maes (2008) found an inverse pattern between religious attendance and an anomie-based crime index composed of items such as "Occasionally, it is alright (sic) to ignore the law and do what you want to do;" "If you want to make money, you can't always act honestly;" "How wrong is someone making an exaggerated or false insurance claim?" and " Citizens should not cheat on their taxes" (2008, p. 8).

Given that some denominations expect more or less commitment than others, their effect on crime may vary (Ellis, 1985). There is support for hypotheses such as "Protestants are associated with lower crime rates than Catholics" however the research

has been inconsistent (Ellis, 1985; Rhodes & Reiss, 1970; Lim & MacGregor, 2010). Religious identity may not provide a clear explanation of behavior simply as a control variable. As other studies on anomie or RD (Shihadeh & Ousey, 1998; Stiles, Liu, Kaplan, 2000; Konty, 2005; Adriaenssens & Maes, 2008; Ganon & Donegan, 2010) have not included denomination, neither has this study.

Social Class and Income

The lower class has long had a "bad reputation" with regard to crime (Tittle, 1983) but research does not always support this reputation (Tittle, Vilemez, & Smith, 1978). Some have suggested that lower classes commit crime at a higher rate than upper classes (Chambliss & Seidman, 1971; Quinney, 1975; Braithwaite, 1981), but others have suggested the opposite (Kohn, 1977; Grasmick, Jacobs, & McCollom, 1983). Homans (1961) suggested that both the lower and upper classes commit crime at higher rates than the middle class. There may be types of crimes associated with certain classes, such as with white-collar crime (Shapiro, 1990). Finally, social class may have little effect on criminality (Dunaway, et al, 2000; Brush, 2007). Despite this lack of consensus, social class and income will be included in this study.

Conclusion

The prevalence of everyday crime warrants more research into the process of why these acts occur. As the term "everyday crime" suggests, crime is not necessarily the occupation of "bad guys" or the outliers of society—it may be committed by the average person. Deviant behavior which becomes part of everyday life and even encouraged is a

contradiction in social values. This paper follows the limited research that has been

conducted into everyday crime, using the explanatory theories of anomie and RD.

A review of past research suggests that anomie and RD have direct and separate

effects on everyday crime (see Figure 1). Other factors of importance include age,

gender, marital status, and religiosity. These findings lead to the follow two hypotheses:

Hypothesis 1

Anomie has a direct effect on a person's tendency towards everyday crime.

Hypothesis 2

RD has a direct effect on a person's tendency towards everyday crime.

Both of these processes are thought to be factors of the tendency towards

everyday crime. What follows is a discussion of the methods intended to test these
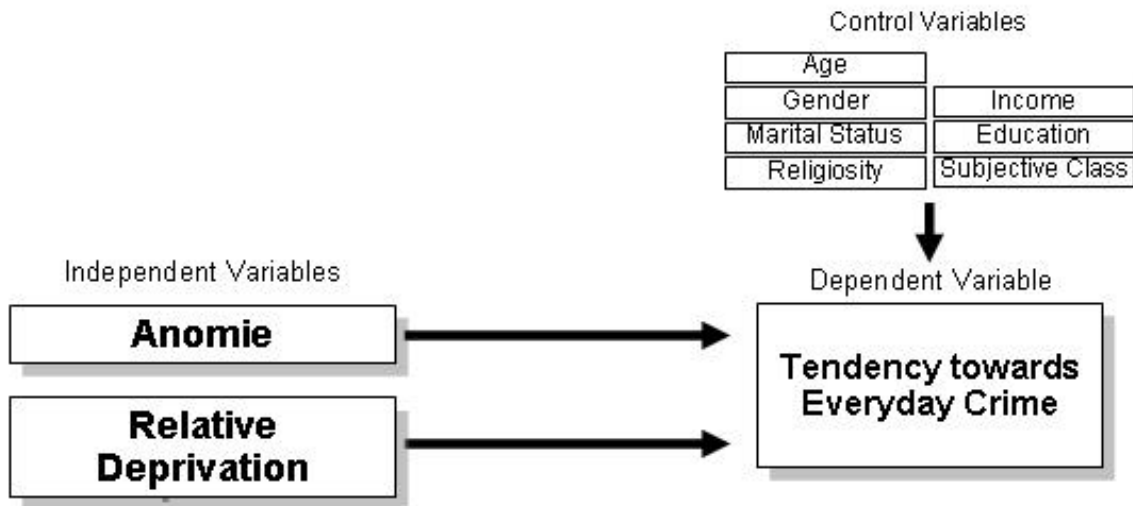
hypotheses.

Figure 1. Model of anomie, RD, and control variables affecting the tendency

towards everyday crime.

CHAPTER 3

METHODOLOGY

The purpose of this study is to test whether the theories of anomie and relative deprivation (RD) can explain the tendency towards everyday crime. Provided below are the methods that were used for the empirical assessments. To test these theories, data were used from the 2006 *World Values Survey* (WVS) which provide indicators of an individual's tendency towards everyday crime, as well as measures of anomie and RD. It is theorized that individuals who experience anomie and/or RD will be more likely to justify everyday crime than those who do not exhibit these conditions. Logistic regression in SPSS® was used to examine these relationships.

Data

The data examined came from 2006 WVS for the United States, the most recently available WVS survey during this study. It was also the first WVS to include the Schwartz (1994) value items necessary to create anomie indicators. The WVS was administered in 48 countries between 2005 and 2007, and in the United States during 2006. Because cultural differences can result in different attitudes towards crime (Haithem, Jean-Charles, & Narjess, 2011), only data from the United States were included in this study.

The WVS (Inglehart, 2006) was created in conjunction with an international social science consortium, the Inter-University Consortium for Political and Social Research, to measure the values of individuals. Participants that were 18 years and older

were invited to participate using face-to-face and WebTV interviews, and given a $10

incentive. This nationally-representative survey was commissioned by the University of

Michigan and conducted by Knowledge Networks. Random Digit Dialing (RDD) was

used to select panel respondents for the WVS. Stratified quota sampling was used, with

over-sampling of minority groups (Black and Hispanic) and groups with PC and internet

access, for the purpose of cost reduction. A weighting variable was included in the data to

maintain basic demographic counts such as age, gender, race, region, and education,

using the U.S. Census population as a reference. There were 1,249 total U.S. cases in the

data set, obtained from the WVS website. After listwise deletion of 150 cases due to

missing data, 1,099 cases remained.[1]

Dependent Variable

The likelihood of the tendency towards everyday crime forms the basis of this

study. As everyday crime can include many different types of deviant behavior, only one

type of deviant action such as "claiming false government benefits" may not be

representative of everyday crime in general. According to Gliem and Gliem (2003),

single-item measures used to represent a construct are not reliable and should not be used

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[1] To determine if there was any bias was present, critical variables were compared between between non-missing cases and missing cases. No significant differences between groups were found with age, education, income, social class, anomie, or RD. However there was a difference in Religiosity between those missing cases and the complete ones $t(1247) = -5.30$, $p < .001$, 2-tailed. The correlation between anomie and EC decreased ($r = .2678$ to $r = .2056$) and lost significance at the $p = .05$ level. The correlation between relative deprivation (RD) and EC increased ($r = .1234$ to $r = .1444$) and also lost significance at the $p = .05$ level. Overlooking the non-significance of the values, it suggests that among the more religious, the correlation between anomie and EC is greater; among the less religious, the correlation between RD and EC is greater. While the missing data could have an effect on this study's results, it does not appear as if it would substantively change its general conclusions. Future studies should investigate how religiosity interacts with anomie and RD.

in drawing conclusions, therefore several items which could be combined to measure

everyday crime were sought.

When the WVS was administered, respondents were presented with 11 morally-

dubious behaviors and asked if these were *never justifiable, always justifiable*, or

somewhere in between, answered on a 10-point scale. These items included 1) claiming

false government benefits; 2) avoiding transport fare; 3) cheating on taxes; 4) accepting

bribes; 5) homosexuality; 6) prostitution; 7) abortion; 8) divorce; 9) euthanasia; 10)

suicide; and 11) for a man to beat his wife. While "justification" of these deviant

behaviors is not actual behavior, it may show an intent which can lead to behavior

(Ajzen, 1988, 1991).

Not all of these eleven deviance items present everyday crime as characterized by

Gabor (1998), Karstedt (2006) or this study, therefore exploratory factor analysis (EFA)

was used to identify those items which share a common factor, the tendency towards

everyday crime, and at the same time reducing the number of variables.

Factor Analysis of Everyday Crime Items

Exploratory factor analysis (EFA) can identify latent constructs from variance

among observed items and can help select items to be included in indices. A

measurement procedure can have high construct validity when its measures correspond

with the construct it is supposed to measure (Peter, 1981).

All eleven deviance items included in the WVS were first examined to see if the

assumptions were met for use with EFA. A sample size of over 1,000 is considered

"excellent" for use with factor analysis (Comrey & Lee, 1992; MacCallum & Widaman,

1999), and the sample met that requirement with 1,099 cases. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) examines variables for common variance, indicative of a shared underlying construct. KMO for the eleven deviance items produced a "meritorious" (Kaiser, 1974) value of .86, which exceeded the recommended value of .6 out of a possible range from 0 to 1, therefore these items were suitable for further analysis.

EFA proceeded and the items retained were identified based on Kaiser's rule (Kaiser, 1960), which states that Eigenvalues greater than "1" be retained. Also, Hair, et al (1998) suggested that items with factor loadings greater than .50 should be considered significant.

Two factors with Eigenvalues above "1" emerged. Out of the eleven items, five appeared to share a common factor: 1) claiming false government benefits; 2) avoiding transport fare; 3) cheating on taxes; 4) accepting bribes; and 5) for a man to beat his wife, shown in Table 1[2]. Only the first four items were included in the everyday crime index.

The remaining six: homosexuality, prostitution, abortion, divorce, euthanasia, and suicide, had significant loadings on a second factor, however this second factor did not appear to reflect EC and therefore, those items were discarded. The retained items were examined with Pearson's correlation coefficients and Cronbach's alpha reliability test.

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[2] While the item "for a man to beat his wife" correlated highly with the four other everyday crimes, it was ultimately omitted from this analysis because of its different nature—the concept of wife beating relates more to gender and power, rather than ecomomic or instrumental crime. Results did not substantially differ when this item was included in this study's analyses.

Table 1

EFA Factor Loadings of 11 Deviance Items

Item	Factor 1	Factor 2
Bribes	0.83	0.09
Cheat on Taxes	0.82	0.17
False Benefits	0.81	0.01
Avoid Fare	0.74	0.16
Beat Wife	0.64	0.20
Suicide	0.36	0.60
Prostitution	0.31	0.67
Homosexuality	0.19	0.67
Euthanasia	0.11	0.71
Abortion	0.05	0.79
Divorce	–0.07	0.56
% of Variance	37.9	17.3
Eigenvalue	4.17	1.9

Source: World Values Survey 2006 ($N = 1,099$)
Note. Varimax rotation

Correlations Between Everyday Crime Items

Table 2 presents correlation coefficients between these selected items, which range from .34 to .64 ($p < .001$); Cronbach's alpha was .84. Both of these tests suggest that a single concept such as everyday crime was present in these data. The combination of correlation coefficients, factor scores, and reliability measures of these everyday crime

items lend convergent and construct validity to these items as representing the constructs expected.

The components of everyday crime exhibited a moderate internal consistency— the degree of interrelatedness among variables. Cronbach's alpha reliability coefficient ranges from 0 to 1, with 1 representing a greater consistency of items. These items produced a Cronbach's alpha of .85, considered "good" by George and Mallery (2003, p. 231) therefore, suitable for creating an index of everyday crime.

Table 2

Correlations between Everyday Crime Items

	False benefits	Avoid fare	Cheat on taxes	Bribes
False Benefits	1.00			
Avoid Fare	.58	1.00		
Cheat on Taxes	.57	.60	1.00	
Bribes	.59	.50	.64	1.00

Source: World Values Survey 2006 ($N = 1,099$)
Note. All correlations are significant at $p < .001$ level. Cronbach's alpha = .85

Level of Measurement of the Dependent Variable

The four variables which shared the construct of everyday crime were averaged together to produce an index. All items could be answered on a scale from "1" to "10," whereby "10" represented the greatest justification of the particular behavior. Since a large number of respondents (43.9%) responded to the all of the items with "never justifiable," cell sizes were small in other response categories and the distribution of responses were highly skewed. For this reason, the responses were collapsed into just two categories: "never justifiable" (response of "1") and "any level of justification"

(responses between "2" and 10," inclusively). The category of "any level of justification" was assigned as the dependent variable, of which the probability of occurring was sought.

In addition to the prevalence of "never justifiable" responses, there may be significance about those who respond that they would *never* justify any of these everyday crimes ("1"), in contrast to those who respond with at least *some* level of justification ("2" or greater). This difference between individuals who answer between "1" and "2" might have greater implications than the difference of those who answer between "2" and "3," but testing of the various degrees of justification can be left for future research.

<div align="center">Independent Variables</div>

Anomie and RD were hypothesized to both affect the tendency towards everyday crime (Figure 1). These constructs were operationalized from survey data which asked respondents about their personal values, attitudes, and demographics.

Operationalizing Anomie

Anomie is thought to be one cause of everyday crime. In order to study the effect of anomie on crime, anomie was operationalized with a method similar to one used by Konty (2005), and later by Morris (2009) and Ganon & Donegan (2010). This method examines and compares personal values of self enhancement (SE) against self-transcendence (ST), as previously described.

Schwartz (1994) argued that there were a number of "universal" types of values which individuals hold: "A value is a (1) belief, (2) pertaining to desirable end states or modes of conduct, that (3) transcends specific situations, (4) guides selection or evaluation of behavior, people, and events, and (5) is ordered by importance relative to

other values to form a system of value priorities" (Schwartz, 1994, p. 20). Schwartz created a typology of 10 value types, which Konty (2005) used to represent SE and ST categories. A respondent who exhibits greater difference between SE and ST tendencies would be more likely to engage in crime than those who exhibited less difference, Konty (2005) hypothesized.

SE values are those which benefit the individual, such as being rich, successful, creative, risk-taking, and adventurous. ST values are those which are pro-social, such as helping others, being traditional and secure, looking after the environment, and behaving well. Schwartz (1994) argued that individuals with greater net ST tendencies will cooperate more with the collective and tend to follow the rules than those with greater net SE tendencies.

To measure the SE construct, respondents were asked how much someone with the following values was like themselves: (a) It is important to this person to think up new ideas and be creative, (b) It is important to this person to be rich, (c) It is important to this person to have a good time, (d) It is important to this person to be very successful, and (e) It is important to this person to have adventure and take risks. Each item was to be answered on a scale from 1 to 6.

Similarly, ST was measured using these items: (a) It is important to this person to be living in secure surroundings, (b) It is important to this person to help the people nearby, (c) It is important to this person to always behave properly, (d) It is important to this person to look after the environment, (e) It is important to this person to observe tradition. The difference between these two indices was used to represent the level of

anomie, as shown in Figure 2. Average scores on SE and ST were calculated for each

case. The ST score was subtracted from the SE score to obtain the anomie score.

Figure 2. The operationalization of anomie.

To ensure that the items used to measure anomie represent SE and ST constructs,

common factors from exploratory factor analysis (EFA), correlation coefficients, and

internal consistency using Cronbach's alpha were analyzed.

Factor Analysis of Anomie Items

EFA was also used to examine the self-enhancing and self-transcending traits

used to select items for the anomie index. WVS included ten items corresponding to

some of Schwartz's typology (1994) which categorizes personal values into either self-

enhancing (SE) and self-transcending (ST) traits. ST traits reflect socially responsible

values and take the form of being helpful, following tradition, respecting the

environment, and living in a secure environment. SE traits reflect individualist values

such as wanting to be rich and creative, taking risks, and spoiling one's self

The method used in this study to create the anomie index followed those of Konty

(2005) and Ganon and Donegan (2010), lending some criterion validity to this study. One

difference is that they used factor scores to create the anomie index, while this study used

actual response scores, as a more direct method.

Table 3 presents factor loadings for the items that follow Schwartz's value typology (1994). Five had loadings of over .50 on Factor 1, theorized as representing self-enhancing (SE) traits. Two more factors produced Eigenvalues of over 1. Factor 2 can be viewed as representing self-transcending (ST) traits. A third factor also emerged but was unidentifiable.

Table 3

EFA Factor Loadings of Anomie Items with Eigenvalues over "1"

Item	Factor 1	Factor 2	Factor 3
Important to be rich	.771	−.186	.168
Important to be successful	.716	.174	.119
Important to spoil one's self	.716	−.097	.194
Important to have adventure and take risks	.683	.252	−.340
Important to be creative	.545	.395	−.160
Important to help environment	.113	.731	.187
Important to be helpful	.019	.728	.030
Important to observe tradition	−.038	.507	.387
Important to live in secure surroundings	.113		.818
Important to behave	.055	.204	.720
% of Variance	26.8%	17.7%	12.2%
Eigenvalue	2.68	1.77	1.22

Source: World Values Survey 2006 ($N = 1,099$)
Note. Varimax rotation. KMO = .706, Bartlett's Test = 1975.72, $p < .001$

EFA was rerun with the procedure constrained to extract only two factors, shown in Table 4. This resulted in the items previously associated with the third factor being subsumed into Factor 2, which was associated with ST traits. Each SE and ST group

exhibited internal consistency, producing a Cronbach's alpha of .73 for SE traits and .61

for ST traits, exceeding a recommended threshold of .60. The set of correlation

coefficients, factor scores, and reliability measures lend convergent validity to these

items as representing the constructs expected in constructing an anomie index.

Table 4

EFA Factor Loadings of Anomie Items, Constrained to 2 Factors

Item	Factor 1	Factor 2
Important to be rich	.728	–.009
Important to be successful	.716	.202
Important to spoil one's self	.680	.071
Important to have adventure and take risks	.734	–.078
Important to be creative	.596	.151
Important to help environment	.093	.522
Important to be helpful	.172	.637
Important to observe tradition	–.020	.630
Important to live in secure surroundings	.044	.647
Important to behave	.009	.664
% of Variance	26.8%	17.7%
Eigenvalue	2.68	1.77

Source: World Values Survey 2006 ($N = 1,099$)
Note. Varimax rotation. KMO = .706, Bartlett's Test = 1975.72, p < .001

Operationalizing Relative Deprivation

Relative deprivation is another hypothesized cause of everyday crime. The difficulty in measuring RD is exemplified by Eibner and Evan's (2004, p. 560) statement, "There are no established guidelines for measuring relative deprivation," and with Pedersen's statement (2004, p. 33), "it is not immediately obvious how (relative deprivation) should be defined." This lack of consensus is seen in the evolution of the theory throughout the literature. Since there is no one model or definition of RD, various methods of measurement were investigated. There appears to be two levels of measurement found in the literature: individual-level measures of personal feelings and aggregate-level measures of income inequality.

Certain conditions must exist for the processes of RD to operate, the most important condition being social comparison (Crosby, 1976). In her meta-study of 95 different investigations, Crosby (1976) found that measurement methods varied and concluded that few truly operationalize "felt" deprivation—that is, the emotional characteristics which can drive the effects of RD.

In the "original" study of RD by Stouffer, et al (1949), over 500,000 soldiers were surveyed on their personal attitudes. The questions asked became known as "the standard Stouffer questions" because of the method of inquiry, using consistent scales, e.g. "Would you allow X to do Y? (allow a communist to give a speech, allow an atheist to teach in a college..." (Stouffer, 1992, p. 5). They did not operationalize RD however—it was Davis (1959) who used Stouffer's data to operationalize RD with respect to military

status. Similarly, Runciman (1962) surveyed 1,415 manual and non-manual workers about their attitudes on income and the status of other workers.

Income or social class by themselves are not indicators of RD. Individuals with more income may be happier than those with less, all things equal, but the effect may decrease over time (Easterlin, 2003). Finding out what individuals think about their own situation is what is sought in order to determine RD. "Financial satisfaction" can approximate RD, assert Liang and Fairchild (s1979, p. 746) and Crosby (1979, p. 109). Others have used subjective well-being and individual feelings of deprivation to indicate levels of RD (Hsieh, 2001; D'Ambrosio & Frick, 2006).

Sweeney, McFarlin, and Inderrieden (1990) examined four different studies to test Crosby's model of RD (1976) on financial satisfaction. Using individual-level survey data, they asked about personal feelings of satisfaction, social comparison, want, entitlement, personal responsibility, and expectations. In general, all four studies supported Crosby's RD model on financial satisfaction (Sweeney, et al, 1990, p. 430). Further, the variables representing the preconditions of Crosby's model (1976) appear to be significant factors in predicting satisfaction.

Chakravarti and Mukherjee (1999) suggest that both relative and absolute measures of deprivation be used in measures of social satisfaction. Satisfaction was thought to be affected by absolute inequality. Methods to capture these data were not proposed, but Chakravarti and Mukherjee appear to follow Crosby's focus of emotional reaction by noting that "A person's feelings of deprivation in a society arises out of the

comparison of his situation with those of better off persons" (Chakravarti and Mukherjee, 1999, p. 89).

There is much support linking financial satisfaction with RD, using individual-level data (Liang & Fairchild, 1979; Crosby, 1979; Sweeney, McFarlin, & Inderrieden, 1990). For the current research, RD was operationalized by the individual's level of financial satisfaction using this question, "How satisfied are you with the financial situation of your household?" Answers ranged from 1 to 10, from financially dissatisfied to financially satisfied. While not addressing all of Davis' (1959) or Crosby's (1979) preconditions, the question does ask for an individual evaluation of well-being rather than only identifying where a situation of inequality exists.

The Case against Aggregate Measures of Relative Deprivation

The unit of analysis chosen has varied across RD studies. Some have taken a macro approach to measuring RD, using aggregate-level income, wealth, and educational measures (Kawachi, Kennedy, Wilkinson, 1999). Calculations, such as the GINI coefficient, measure mean income differences between individuals of a population (Gini, 1913). The rationale for these aggregate measures is that RD occurs among those who are in proximity to others who have more resources such as income.

Income inequality within a geographic area, such as measured using the GINI index (Stack, 1984; D'Ambrosio & Frick, 2007; Kakwani, 1984; Kawachi, Kennedy, & Wilkinson, 1999), has been hypothesized to cause RD and its outcomes. Yitzhaki (1979) was the first to suggest that RD is linked to the GINI coefficient, proposing that individuals not having X will experience RD when others have X. The assumption is that

a person's deprivation can be measured by his or her income compared to the highest income in the society.

Hey and Lambert (1980) followed Yitzhaki's method but added Runciman's hypothesis that "the magnitude of relative deprivation is the extent of the difference between the desired situation and that of the person desiring it" (Runciman, 1972, p. 10). Using macro-level data, they argue that the greater the number of people perceived as having more, the greater the magnitude of RD.

Eibner and Evans (2005, p. 545) noted, "Income inequality can be seen as a proxy for deprivation, in that as inequality increases, the gap between the 'haves' and the 'have-nots' grows, and the overall deprivation in society increases." Macro-level measures analyze the disparities of wealth within communities and populations; however they may not directly measure individuals' feelings of injustice. Mere economic disparity does not necessarily provide preconditions of RD as some have required (Stouffer, et al, 1949). Crosby (1979, p. 109) noted that RD must be *felt*, as emotional reaction caused by social comparison is important to RD.

Pedersen noted that the GINI index is not ideal for measuring individual feelings of deprivation, as they are "incompatible with the individualistic and atomistic conception of (social) welfare" (2004, p. 32). It relies on the *assumption* that individuals will feel relatively deprived, given certain economic conditions. This study will attempt to gauge the subjective feeling of deprivation from individual-level data, asking the question "How satisfied are you with the financial situation of your household?"

Control Variables

Other variables can have an effect on the tendency towards everyday crime. The following is a description of how control variables were recorded in the WVS (Inglehart, 2006) which were used in this study.

Age

Respondent's age in years was calculated, by WVS, from year of birth.

Gender

The respondent's gender was recorded as male or female.

Marital Status

Marital status of the respondent was recorded in six nominal categories, of single, married, divorced, separated, and widowed. For this study divorced or separated were combined into one category.

Religiosity

Frequency of attending religious services was recorded in seven ordinal categories, as more than once a week, once a week, once a month, only on special holy days, once a year, less often, or never/practically never.

Education

Respondent's highest education level was recorded in nine ordinal categories, 1) less than high school; 2) some high school; 3) high school graduate; 4) some college; 5) Associate's degree; 6) Bachelor's degree; 7) Master's degree; 8) Professional degree; and 9) Doctorate degree. Because there may not be a clear distinction between Professional and Doctorate degree categories (Gill & Hoppe, 2009), they were combined.

A mistake in the coding of education was found in the WVS. Levels of high school were labeled as college levels. Another variable used for education appeared to use correct labels and were used in this study. These data were compared against U.S. population figures (U.S. Census Bureau, 2006b), shown in Table 5.

Table 5

Comparative Statistics of Educational Level

Item	U.S. Census		WVS	
	N (000)	%	N	%
Less than High School	12,496	6%	38	3%
Did not complete High School	21,331	10%	104	10%
Completed High School	69,401	32%	365	33%
Some College	42,412	19%	225	21%
Associate's degree	18,146	8%	82	7%
Bachelor's degree	37,332	17%	163	15%
Master's degree	13,184	6%	101	9%
Professional or Doctorate	5,549	3%	21	2%
Totals	219,851	100%	1,099	100%

Source: World Values Survey 2006 and U.S. Census Bureau, (2006b)

Logistic Regression Analysis

This study tested the hypotheses that 1) anomie has a direct effect on the tendency towards everyday crime, and 2) that RD has a direct effect on the tendency towards everyday crime. Binary logistic regression was used to test these hypotheses. Binary logistic regression is appropriate to use when a dichotomous dependent variable is used, giving a probability of its outcome based on each of the predictor variables (Hosmer & Lemeshow, 2001). Similar to ordinary least-squares (OLS), logistic regression measures the effect of independent variables in predicting the likelihood of the dependent variable occurring at all, rather than determining its variance (DeMaris, 1995). It fits data to an "S" curve, where the ends are bounded by 0 and 1, in order to portray a probability. Logistic regression models the relationship among variables as an additive equation (see Equation 1):

$$\text{Natural Log of odds of event occurring } = \ln\left[\frac{P}{1-P}\right] = \alpha + \beta_1 x_1 + \ldots + \beta_K x_K \quad (1)$$

P = probability that the event occurs, α = constant, ß = coefficient of each independent variable, K = number of independent variables

$$\text{Transforming the probability to an odds } \left[\frac{P}{1-P}\right] \text{ removes the upper bound; taking}$$

the natural logarithm (ln) of these odds removes the lower bound. Log-odds, the left side of the equation, can be converted to an odds ratio by (see Equation 2):

$$\text{Odds} = \frac{P}{1-P} = e^{(\alpha + \beta_1 x_1 + \ldots + \beta_K x_K)} \quad (2)$$

e = Euler's number, 2.718... (Russell, 1991)

For example, a "4-to-1" odds means that an event occurs 4 times to every 1 time it does not occur. The probability may be further calculated by (see Equation 3):

$$\text{Probability} ? \ P \ ? \ \frac{e^{(? ? ?_1 ? _1 ? ... ? ?_K ? _K)}}{1 ? \ e^{(? ? ?_1 ? _1 ? ... ? ?_K ? _K)}} \ ? \ \frac{1}{1 ? \ e^{?(? ? ?_1 ? _1 ? ... ? ?_K ? _K)}} \tag{3}$$

Understanding the natural logarithm of an odds (log-odds) may not be intuitive, but a rule-of-thumb is that positive log-odds means a *greater* likelihood that the event will occur than without the independent variable(s); a negative log-odds means *less* of a likelihood. For example, if the log-odds coefficient for anomie in this study was "0," then the odds that crime would be justifiable at all is 1:1, that anomie does not affect the likelihood of criminal justification, and its probability would be .50 (controlling for effects of other predictors). If the log-odds for anomie is "1" then the odds that crime is justifiable at all increases by a factor of 2.71, with odds increased by an additional 171%, with a probability of .73.

Goodness-of-Fit and Significance Tests

In logistic regression, there is no analogous R^2 value as found in OLS regression. Goodness-of-fit of the model is represented by pseudo-R^2, which approximates how much of the dependent variable is explained. Two methods are common: Cox & Snell (see Equation 4) and Nagelkerke (see Equation 5), both providing a value between "0" and "1," where "1' represents 100% probability that the dependent variable will occur (Cox & Snell never reaches "1" which Nagelkerke adjusts in order to make "1" a possible value). Only the Nagelkerke value will be reported.

$$R^2{}_{Cox\&Snell} \ ? \ 1 ? \ e^{?}_{?} ? \ \frac{2}{n} ? LL ? ? ? ? \ LL ? 0 ? ?^{?}_{?} \tag{4}$$

$$R^2_{Nagelkerke} \; ? \; \frac{1 \; ? \; e_?^? \; \frac{2}{n} \; ?LL?? \; ?? \; LL?0?\!\!?}{1 \; ? \; e\,?2\,?n\,^{?1} \; ?LL?0?\!}$$ (5)

LL = log-likelihood, n = sample size, coefficient, e = Euler's number, 2.718…

Significance of the overall model or "predictive efficacy" (DeMaris, 1995) is measured by the "likelihood ratio" (see Equation 6)—the likelihood value of the full model over the likelihood value of the model with just the constant, providing a Chi-square ($?^2$) value (degrees of freedom = number of predictors + constant) in which to determine significance.

$$?^2 \; ? \; 2?LL(?) \; ? \; LL(0)?$$ (6)

"Beta" coefficients show each independent variable's per-unit contribution to the log-odds. Their significance is measured by the "Wald statistic (see Equation 7)—the square of the coefficient value divided by its standard error. These were treated as z-scores and $p < .05$ assigned as a two-tailed significance threshold.

$$W_j = \left? \frac{?_j}{SE_{?_j}} \right?^2$$ (7)

Multicollinearity

A multicollinearity test of the independent variables was run using OLS regression. If two or more variables are highly correlated, it can become difficult to determine which variable is contributing an effect. Variance inflation factors presented in Table 6 ranged from 1.072 to 1.866—all well under recommended thresholds (O'Brien, 2007) which suggest no multicollinearity problems.

Table 6

Variance Inflation Factor Results

Item	VIF
Age	1.444
Male	1.120
Single	1.312
Widowed	1.181
Div/Separated	1.146
Religiosity	1.075
Income	1.875
Education	1.226
Social Class	1.864
Anomie	1.259
Relative Deprivation	1.401

Source: World Values Survey 2006 ($N = 1,099$)
Note. VIF calculated using OLS

Statistical Assumptions

With many predictive models such as OLS, a dichotomous dependent variable can

be problematic if it has a non-normal distribution, resulting in residual errors between

expected and observed data which are not homoscedastic. Assumptions of data for

logistic regression are more relaxed—the dependent variable does not have to have a

normal distribution nor have homoscedastic residuals. Independent variables should have

continuous, dummy, or ordinal data with five or more categories. In addition, logistic

regression is sensitive to high correlations among independent variables—it may be

impossible to parse out an effect from two different sources and can result in a poor fit

(Tabachnick & Fidell, 2007, p. 443).

Finally, data must be representative of a population, random, and have an

adequate sample size. Cases-to-predictor ratios have been suggested, such as 10-to-1,

with a minimum sample size of 100. Rules of thumb such as "50 + 8k" or "104 + k"

(where k = number of independent variables) have also been suggested (Peng, Lee,

Ingersoll, 2002, p. 10). If there is a problem with inadequate sample size, Tabachnick and

Fidell (2007, p. 442) recommend removing predictors in order to increase the ratio of

cases-to-predictors. The data used in this study do not appear to have these problems.

Logistic Regression Models of Individual Types of Crime

The logistic regression models in this study used measures of anomie, RD, and

control variables in order to predict the tendency towards everyday crime. In addition,

models were created to individually examine each of the five components of everyday

crime. It is possible that anomie and/or RD have effects on only certain types of these

crimes. This analysis, in addition to EFA, helped to confirm that one or more particular

types of criminal tendency is not dominating nor absent from the index.

Univariate Analysis of Control and Independent Variables

Descriptive statistics of control and independent variables are shown in Table 7.

Frequencies and percentage distributions were calculated where appropriate; means,

standard deviations, kurtosis, and skewness were calculated for ordinal, interval, and ratio

data.

The median age of respondents was 44 years ($M = 45.8$, $SD = 16.8$), higher than the national median of 36.4 years (U.S. Census Bureau, 2006a). Its distribution appeared normal, with –.81 kurtosis and .29 skew.

The sample consisted of 532 (48.4%) males and 567 (51.6%) females. Most respondents (599) were married (54.5%). Additionally, 262 (24%) were single, 59 (5.3%) were widowed, 33 (3.0%) were separated, and 147 (13.4%) were divorced.

Educational levels of the respondents approximated the national average. As shown in Table 7, approximately 4% did not attend high school; 9% attended some high school; 33% completed high school; 21% attended some college; 7% held an associate's degree; 15% held a bachelor's degree; 9% held a master's degree; and 2% held a professional or doctorate degree. These percentages for the data in this study differ at most 3 percentage points from the national average (U.S. Census Bureau, 2006b).

Table 7

Descriptive Statistics of Control and Independent Variables

Item	Freq.	Mean or %	SD	Kurtosis	Skew
Age (18–91 years)		45.75	16.79	–.81	.29
Male	532	48.4%			
Female (reference)	567	51.6%			
Marital Status, Single	262	23.8%			
Widowed	59	5.3%			
Divorced/Separated	180	16.4%			
Married (reference)	599	54.5%			
Religiosity (attendance, 1–7)		3.912	2.24	–1.57	.13
More than once a week	127	11.6%			
Once a week	271	24.6%			
Once a month	140	12.7%			
Only holy days	102	9.3%			
Once a year	46	4.2%			
Less often	127	11.6%			
Never	286	26.0%			
Income decile (1–10)		4.95	1.88	–.21	–.10
Education (1–8)		4.10	1.68	–.67	.45
Professional/Doctorate	122	1.9%			
Master's degree	101	9.2%			
Bachelor's degree	163	14.8%			
Associate's degree	82	7.4%			
Some college	225	20.5%			
High School diploma	365	33.2%			
Some High School	104	9.%			
Less than High School	38	3.5%			
Subjective Social Class (1–5)		2.82	.95	–.79	–.09
Upper	14	1.2%			
Upper–middle	284	25.8%			
Lower-middle	375	34.1%			
Working	341	31.0%			
Lower	85	7.8%			
Anomie		–.92	1.09	1.38	.33
Relative Deprivation		5.12	2.31	–.52	.44

Source: World Values Survey 2006 ($N = 1,099$)

Income was recorded on a decile scale from 1 to 10 with "10" indicating the

highest level ($M = 4.95$, $SD = 1.88$). Its distribution appeared normal, having –.21

kurtosis and –.10 skew. Subjective social class was recorded on a scale from 1 to 5, with "5" indicating "high class" ($M = 2.82$, $SD = .95$) and exhibited a normal distribution with –.79 kurtosis and –.09 skew. Church attendance was recorded on a scale from 1 to 7, which was reversed, with "7" indicating attendance of "more than once a week" ($M = 3.91$, $SD = 2.24$).

The indicator of RD, financial dissatisfaction, was recorded on a scale from 1 to 10, with "10" indicating "completely dissatisfied," representing the highest level of RD ($M = 5.12$, $SD = 2.31$). It exhibited a normal distribution with –.52 kurtosis and –.44 skew.

The anomie index was calculated from the difference between self-enhancing (SE) and self-transcending (ST) traits. Table 8 presents descriptive statistics for items used to calculate this index. These items follow the values typology (Schwartz, 1994) used to categorize self-enhancing (SE) and self-transcending (ST) traits. All items were recorded on a comparable ordinal scale from 1 to 6. Their distributions appear normal, having kurtosis values of less than "2" and skewness values of less than "1." The mean of the five SE scores were subtracted from the mean of the five ST scores. Of possible values ranging from –5 to 5, mean of this anomie index was –.92 (SD = 1.09) and exhibited a normal distribution with 1.38 kurtosis and .33 skew.

Table 8

Descriptive Statistics of Anomie Components

Item	Mean	SD	Kurtosis	Skewness
Important to be Creative	4.18	1.24	–.24	–.44
Important to be Rich	2.41	1.18	.17	.80
Important to spoil one's self	3.22	1.30	–.67	.20
Important to be Successful	3.36	1.38	–.80	.12
Important to have adventure and take risks	2.96	1.35	–.74	.33
Self-Enhancing traits (Index of 5 above)	3.23	.90	.06	.27
Important to be secure	4.21	1.35	–.53	–.50
Important to be helpful	4.53	1.05	–.03	–.49
Important to behave	3.86	1.36	–.70	–.31
Important to help environment	4.04	1.22	–.50	–.31
Important to observe tradition	4.11	1.38	–.58	–.45
Self-Transcending traits (index of 5 above)	4.15	.80	.72	–.45

Source: World Values Survey 2006 ($N = 1,099$)

The items used to construct the everyday crime index were selected as a result of a factor analysis of the deviance items from the WVS. The dependent variable, the tendency towards everyday crime, was calculated from the mean of these four items. Table 9 presents frequencies and percentages of those items. Responses were recorded from "1" *never justifiable* to "10" *always justifiable* in response to these issues: 1) Claiming government benefits to which you are not entitled, 2) Avoiding a fare on public

transport, 3) Cheating on taxes if you have a chance, and 4) Someone accepting a bribe in the course of their duties.

Table 9

Descriptive Statistics of Deviance Items

Item	Never justifiable		Justifiable at any level	
	N	%	N	%
False Benefits (1–10)	725	66%	374	34%
Avoid fare (1–10)	556	51%	543	49%
Cheat on taxes (1–10)	709	65%	390	35%
Accepting a bribe (1–10)	851	77%	248	23%

Source: World Values Survey 2006 ($N = 1,099$)

A large proportion of respondents (44%) indicated that they would *never* justify any of the deviance behaviors presented and this produced a skewed non-normal distribution (skewness of 1.97). Skewness values for four individual items ranged from 1.31 to 3.90. Ideally skewness and kurtosis would both be equal to "0," reflecting a normal distribution, and it is suggested that kurtosis and skewness be less than an absolute value of "2" (Huck, 2008). Because of this highly skewed distribution, the dependent variable was dichotomously categorized into a "never justifiable" group and a group that chose any higher level of justification and analyzed with binary logistic regression.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

Quantitative analyses were conducted using SPSS$^©$. The minimum alpha level for this study was .05, as a two-tailed test— the probability of a result of a calculation due to random chance was less than .05. Bivariate correlations were calculated between all variables used in the analyses. Finally, logistic regression was conducted to determine the likelihood of the justification of everyday crime.

Bivariate Analyses

Table 10 presents Pearson correlation coefficients of independent and control variables that had ratio or ordinal scales. Age had a weak and negative relationship with education ($r = -.15$, $p < .001$) and anomie ($r = -.28$, $p < .001$). Income had a strong relationship with self-assessed social class ($r = .62$, $p < .001$) and a weak relationship with education ($r = .28$, $p < .001$). RD had strong negative relationships with income ($r = -.47$, $p < .001$) and social class ($r = -.42$, $p < .001$). In addition, anomie and RD were only slightly correlated with each other ($r = .09$, $p < .01$).

Results from Logistic Regression

Logistic regression requires fewer assumptions than OLS regression and the data used were checked for these assumptions. Independent variable data must be continuous, dummy, or ordinal data with five or more categories (Lottes, 1996). In this study, age was the only ratio-level variable. Variables for religiosity, income, social class, Schwartz

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value traits, and financial satisfaction had ordinal data of five or more categories, and fell

within acceptable skewness and kurtosis ranges.

Table 10

Correlation Coefficients between Independent and Control Variables

	Age	Religiosity	Income	Education	Social Class	Anomie	RD
Age	1.00						
Religiosity	.03	1.00					
Income	−.05	.09**	1.00				
Education	−.15***	.09**	.28***	1.00			
Social Class	−.005	.12***	.62***	.39***	1.00		
Anomie	−.28***	.18***	.13***	.06*	.05	1.00	
Relative Deprivation	−.13***	.14***	−.47***	−.15***	−.41***	.09**	1.00

Source: World Values Survey 2006
Note. $* p = .05, ** p = .01, *** p = .001$

Data for gender were nominal-level. Male was coded as "1" with female assigned

as a reference category of "0". Similarly, data for marital status were recoded into three

dummy variables of 1) single, 2) widowed, and 3) divorced/separated. Married was

assigned the reference category for each variable.

Two logistic regression models, predicting the tendency towards everyday crime,

are shown in Table 11. Model 1 included only control variables of age, gender, marital

status, religiosity, income, and social class. As previously discussed, these alone were

expected to have an influence on everyday crime. This model is statistically significant

(Model $?^2 = 71.81$, $df = 9$, $p < .001$), indicating that at least one of the variables has an

effect on the dependent variable.

The Full model (Model 2) added anomie and RD to the control variables which increased the fit of the model (Nagelkerke Pseudo-R^2 increased from .08 to .14). This full model is also statistically significant (Model $?^2 = 125.65$, $df = 11$, $p < .001$).

Model 1 shows that, among the control variables, age, and religiosity were the only significant factors in justifying everyday crime (Table 11). For every year increase in age, an individual is .97 times less likely to justify everyday crime (ß = −.03, $p < .001$, $e^ß = .97$), controlling for other variables. For every unit increase in religiosity, an individual is .92 times less likely to justify everyday crime (ß = −.09, $p = .0025$, $e^ß = .92$), controlling for other variables. The units referred to in religiosity and education represent ordinal increments which originated from the questionnaire and do not necessarily represent equally spaced units.

Model 2 (full model) shows that both anomie and RD, in addition to age, are significant in predicting EC. For every unit increase in anomie, an individual is more likely to justify everyday crime than those who do not exhibit anomie, approximately one and a half times more likely (ß = .43, $p < .001$, $e^ß = 1.55$), controlling for other variables. For every unit increase in RD, measured by financial dissatisfaction, an individual is 1.10 times more likely to justify everyday crime (ß = .09, $p = .005$, $e^ß = 1.11$), controlling for other variables.

Table 11

Logistic Regression Results Predicting the Tendency of Everyday Crime

Item	Model 1		Model 2 (Full)	
	β	e^{β}	β	e^{β}
Age	–.0261***	.9742	–.0194***	.9808
Male	.2051	1.2276	–.0142	.9859
Single	.0161	1.0163	–.0924	.9117
Widowed	–.1787	.8364	–.1321	.8762
Divorced/Separated	.2660	1.3048	.2303	1.2590
Religiosity	–.0868**	.9168	–.0492	.9520
Income	.0274	1.0278	.0380	1.0388
Education	.0515	1.0528	.0499	1.0512
Social Class	–.0396	.9612	.0052	1.0052
Anomie	-	-	.4392***	1.5515
Relative Deprivation	-	-	.0940**	1.0986
Constant	1.4200	-	.8674	-
–2 log likelihood	1434.894		1381.058	
Model χ^2	71.812***		125.648***	
Degrees of freedom	9		11	
Hosmer & Lemeshow χ^2 (8)	13.088[†]		8.377[†]	
Nagelkerke Pseudo-R^2	.085		.145	

Source: World Values Survey 2006 ($N = 1,099$)
Note. *p = .05, **p = .01, ***p = .001 (one-tailed tests);* [†] *p > .05 (good model fit)*

Overall Model Evaluation

A logistic model is considered to have a better fit to the data if the full model

shows an improvement over a constant-only model (Peng, Lee, & Ingersoll, 2002, p. 5;

Tabachnick, 2007, p. 448). A chi-square statistic can provide this comparison. Model 1, which included only control variables, produced a χ^2 (9) of 71.81 ($p < .001$), which suggested that its fit is significantly improved with the addition of those variables, over a constant-only model. Model 2 produced a χ^2 (11) of 125.648 ($p < .001$), suggesting a significantly improved fit over Model 1.

Overall Goodness-of-Fit

The Hosmer-Lemeshow (2001) test also uses a χ^2 method, but compares observed with expected values. A good model would ideally predict values identical to observed values. It tests the hypothesis that these two values are the same and a "no-reject" outcome suggests a good model fit. Applying this test to Model 1 produced a χ^2 (9) of 7.617 and was insignificant ($p > .05$), suggesting a good overall model fit; and similarly for Model 2, with a χ^2 (8) of 5.427, also insignificant. Both of these tests suggest a good model fit to the data.

Another goodness-of-fit test is pseudo-R^2. The coefficient of determination R^2, found in OLS, measures the proportion of variance explained by predictors, however there is no exact equivalent in logistic regression. A pseudo-R^2 emulates this effect—a better prediction is implied as R^2 can take on a value from 0 to 1, with "1" representing that all of the variance in the dependent variable is accounted for. Some goodness-of-fit tests are based on model likelihoods—the Nagelkerke (1991) method was used because its range of R^2 extends completely up to "1," unlike the Cox-Snell (1989) method which does not reach "1" (Mittlboeck & Schemper, 1996, p. 1991). Model 1 produced a pseudo-R^2 of .085 and Model 2 produced a pseudo-R^2 of .145. If these values are interpreted in

the same way that OLS R^2 is, then there is a weak fit, accounting for 14.5% of the change in EC.

Statistical Tests of Individual Factors

While all of the variables produced a log-odds coefficient, they were not necessarily significant. The Wald statistic, the square of the coefficient value divided by its standard error, was used to assess the significance of each coefficient. In Model 1, only age ($p < .001$) and religiosity ($p = .001$) were significant in predicting EC. In Model 2, which included all variables, age ($p < .001$), anomie ($p < .001$), and RD ($p = .005$) were significant.

Logistic Regression Results for Individual Components of Everyday Crime

Table 12 presents logistic regression results for specific everyday crimes that makeup the everyday crime index, individually presented as dependent variables. Only odds ratios are reported in these five analyses, a format found in some studies (Peng, Lee, & Ingersoll, 2002). It appears that age and anomie significantly affected all five types of EC ($p < .05$). As age increased, the likelihood of justifying any of the items decreased, controlling for other variables. As anomie increased, the likelihood of justifying any of the items increased, controlling for other variables.

Relative deprivation (RD, measured as financial dissatisfaction) increased the likelihood of justification to claim false benefits ($e^{\beta} = 1.09$, $p = .008$), avoiding fare ($e^{\beta} = 1.07$, $p = .04$), and cheating on taxes ($e^{\beta} = 1.10$, $p = .005$), but not for bribes. Higher religiosity reduced the justification for avoiding fare ($e^{\beta} = .94$, $p = .04$), cheating on taxes ($e^{\beta} = .93$, $p = .02$).

Table 12

Logistic Regression Results for Individual Factors

Item	Model 3 False benefits $e^{ß}$	Model 4 Avoid fare $e^{ß}$	Model 5 Cheat on taxes $e^{ß}$	Model 6 Bribes $e^{ß}$
Age	.98***	.98***	.99*	.96***
Male	1.23	1.00	1.16	1.04
Single	.92	.89	1.22	1.03
Widowed	.71	1.00	.70	1.14
Divorced/Separated	1.03	1.19	1.37	1.46
Religiosity	.98	.94	.93*	.95
Income	1.09	1.02	1.13*	1.14*
Education	.93	1.05	1.02	.84**
Social Class	.95	.96	.96	.95
Anomie	1.40***	1.56***	1.60***	1.65***
Relative Deprivation	1.09**	1.07*	1.10**	1.01
–2 log likelihood	1323.21	1384.47	1297.92	1022.08
Model $?^2$ (10)	85.77***	138.57***	131.43***	151.73***
Goodness-of-fit test	1091.52	1095.03	1086.83	1066.74
Hosmer-Lemeshow $?^2$ (8)	14.384	10.684	6.079	15.086
Pseudo-R^2 Nagelkerke	.104	.158	.155	.196

Source: World Values Survey 2006 ($N = 1,099$)
Note. * $p = .05$, ** $p = .01$, *** $p = .001$ (one-tailed tests)

CHAPTER 5

DISCUSSION AND CONCLUSIONS

The purpose of this study was to determine if anomie and/or relative deprivation (RD) have a direct effect on the tendency towards everyday crime. The following two hypotheses were tested using data obtained from the 2006 World Values Survey (Inglehart, 2006):

H_1. Anomie has a direct effect on the tendency towards everyday crime

H_2. RD has a direct effect on the tendency towards everyday crime

The findings of this study support both hypotheses. Both anomie and RD had direct effects on the tendency towards everyday crime. The correlation between anomie and RD shown in Table 10 was a low .09 ($p < .01$), suggesting that they represent different constructs. Additionally, their variance inflation factors were less than "2" suggesting low multicollinearity. It is not a single construct which influences the justification of crime, but two measurably different ones.

A discussion on the causes of crime should first acknowledge numerous factors at play. Many theories have been proposed, including biological, theological, psychological, and social causes (Gottfredson & Hirschi, 1990). Many of these theories are unsupported and there still is no consensus as to which theory best explains crime (Akers & Sellers, 2008). "Single-stimuli" studies of crime are rare, as Birkbeck and LaFree (1993) noted, because crime is thought to be a response to many simultaneous stimuli. There may be factors which also interact with each other. In addition, the definition of crime and

deviance may be situational, and subject to the context surrounding it (Birkbeck &

LaFree, 1993).

This being said, there can be triggers which influence individuals to "cross the

line" and commit crime—triggers which can appear as normal factors in day-to-day life,

such as envy or a predominance of selfish traits. The two theories tested in this study

attribute forces stemming from these socially-constructed attitudes as causes of the

tendency towards everyday crime.

Anomie

This study shows that an individual is over one and a half times ($e^{\beta} = 1.55$, $p <$

.001) more likely to justify everyday crime for every unit increase in anomie, controlling

for other variables. Again, the anomie value was calculated by the difference in self-

enhancing (SE) traits from self-transcending (ST) traits. Each of these individual traits,

such as success, creativity, behaving, and security, represent widely held human values

(Schwartz, 1999). If SE traits dominate ST traits, deviant behavior was predicted to result

(Konty 2005; Ganon and Donegan, 2010).

What can be attributed to this imbalance of traits? According to Messner and

Rosenfeld (1994), the changing balance-of-power of institutions affects what individuals

value. When individual life chances depend on how one interacts with society, certain

attitudes and behavior become important. In other times and places, more self-

transcending norms were perceived as more important for achieving cultural goals.

Increasingly, individualist (self-enhancing) behavior in the U.S. has been

encouraged to achieve cultural goals (Bobo, 1991; Fischer, 2008). The message is that

individuals should pull themselves up by their own bootstraps and pursue their own self-interests with minimal regulation. Not to be mistaken as disorganization, it is rather a free-market organization of self-enhancing actions which contribute to the stability of society. However, self-enhancing values which facilitate this process become dominant and subsequently (and unintentionally) contribute to crime.

Relative Deprivation

This study shows that an individual is slightly more likely ($e^{\text{ß}} = 1.10$, $p = .005$), to justify everyday crime for every unit increase in relative deprivation, measured as financial dissatisfaction, controlling for other variables. The more an individual feels relatively deprived via financial dissatisfaction, the more he or she will justify everyday crime.

The possibility that lower income by itself would cause this feeling is countered by the variable which controls for income. While income had a slight effect on cheating on taxes ($e^{\text{ß}} = 1.13$, $p = .01$) and bribes ($e^{\text{ß}} = 1.14$, $p = .02$), it was not significant in Model 2, which examined the combined everyday crime index of five items.

Given that the U.S. is a very class-mobile society (Gilbert, 1998) the presence of RD was expected. Whether this translates into *more* than an attitude about everyday crime has not been tested—criminal behavior is not necessarily the only outcome in RD theory (Stiles, Liu, & Kaplan, 2000). Conversely, because of their limited social mobility, one would expect to find less RD in communist economic systems or caste societies. But the effect of RD in those situations may be significant if individuals in those societies subsequently learn about those more privileged elsewhere.

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The fact that RD did not have a particularly large effect ($e^{\beta} = 1.10$, $p = .005$) on everyday crime does not mean that it is negligible in other ways. As Stack (1984, p. 251) pointed out, other responses are possible such as social movements, political participation, or inward aggression such as suicide or alcoholism. Perhaps a particular type of culture may cause individuals who experience RD to self-improve, endure stress, or try to peacefully change society (Crosby, 1976).

The frustration caused by RD can even be harnessed by marketers and redirected in legitimate economic ways. Instead of using crime to change a situation of RD, consumption and debt may be an alternative solution. Outstanding consumer credit was $2.4 trillion in 2006 (United States Federal Reserve Board, 2011). Presenting consumers "easy access to information about 'better' lifestyles" (Chester, 1976, p. 17) may compel them to change their situation with morally-dubious yet legal alternatives, such as high-interest credit. Advertisements and mass media portray upper-class lifestyles as normal, raising people's aspirations and leading them to buy more (Schor, 1998). Conspicuous consumption (Veblen, 1899) can be a response to RD, in which wasteful spending can be a way to "keep up with the Jones's" (Chippa, Kleyna, & Manzia, 2011).

Patchen (1961) argued that a perception of inequality alone is not enough to cause frustration. If the perceived inequality appears justified, the individual may feel no need to change the situation. The process of RD may be manipulated by persuading an individual to feel personally responsible for his or her deprivation. If an individual *does* feel personally responsible for not having X, then blame may instead be directed towards

one's self. Cultural conditions which emphasize individualism and personal responsibility

may counter this precondition of RD, and prevent deviant outcomes.

Comparison of Anomie and Relative Deprivation

Model 2 (full model) simultaneously tested the effects of both anomie and RD on

the tendency towards everyday crime. On one hand, anomie is a result of competing

cultural or institutional forces, which is thought to promote more self-enhancing traits

(SE) than self-transcending (ST) ones. These traits direct cognitive decisions in behavior,

such as following or not following the rules. Individuals exhibiting anomie might be seen

as cognitively "programmed" to follow or break the rules—this cognitive justification of

everyday crime can preclude any guilt or mental conflict. If SE goals become dominant

over ST goals, one would expect the pursuit of SE goals, such as material possessions or

prestige, through legitimate or illegitimate means (Messner & Rosenfeld, 1994). Crime is

not emphasized by itself; it is the reduced constraint previously imposed by the sanctions

against it which allows crime to occur.

The rich may benefit more from cheating on taxes than the poor, and individuals

may justify bribes if they came from areas where bribes are the norm. Avoiding transport

fare may be more relevant to those in cities *with* public transportation than to those in

cities *without*. These are examples in which ecological or "situational" factors may play a

greater role in producing deviance than "dispositional" factors, where deviance is

predicted based on individual and demographic characteristics (Birkbeck & LaFree,

1993).

RD, on the other hand, is a result of unfavorable social comparisons, which creates an emotional sense of injustice and the desire to change the situation. The relatively deprived individual is "brought" to a point of frustration—and it is up to him or her to deal with it in some fashion. The perceived inequality may lead to emotional distress but may not give moral justification in using crime to ameliorate it. Other outcomes are possible, including stress, self-improvement, and constructive change of society (Crosby, 1976; Stack, 1984; Webber, 2007).

Despite the concurrent testing of these two theories, it is difficult to compare them to each other quantitatively, as they each used different methods of operationalization. Anomie was operationalized into a 5-category ordinal variable from the difference between SE and ST traits; RD was operationalized from one question with 10 ordinal categories on financial satisfaction. Therefore is it not possible to compare the odds-ratios based on non-equivalent units of the independent variables.

However, as both variables were significant and positive in their effect on the dependent variable, it suggests that both anomie and RD have an effect on the tendency towards everyday crime. Because of the larger cultural forces which can promote both anomie and RD, they could be mistaken for the same thing. Because of ubiquitous and diffuse norms and values which may reinforce both processes, it may not be clear if anomie and RD are actually two constructs. However both were controlled for in the regression procedure and exhibited low correlation ($r = .09$, $p = .004$) with each other, suggesting two separate constructs.

Effects from Control Variables

Despite the theorized effects on crime from age, gender, marital status, and religiosity, only age was significant in its effect on everyday crime. Models 3 through 7 (Table 12) separately examined the effects on each of the five items which made up everyday crime. Religiosity, income, and education were significant factors on some deviance items, suggesting that different crimes are influenced by these factors.

Implications of the Findings for Theory and Practice

In the search for "best" theories in which to explain everyday crime, a simultaneous and comparative testing of more than one theory may help identify those with relatively stronger explanations. This study gives support to research which simultaneously compared multiple theories of crime in their primary research. Alain (1985) tested various models which specified different preconditions of RD. It was found that Crosby's model, which specified five pre-conditions, was stronger in explaining feelings of RD than models by Runciman, Davis, Gurr, or Williams.

In addition, Kawachi, Kennedy, & Wilkinson (1999) found that both RD and social capital were significant factors in explaining property crime. Morris & Higgins (2009) tested anomie, differential association, neutralization, and self-control theories to explain digital piracy. It was found that neutralization theory had the strongest explanation, followed by anomie and differential association.

Researchers who test more than one theory in a study may encounter additional complexity and problems due to variable specification and levels of analysis. Also, the

probability of a Type I error, rejecting the null hypothesis when it is true, increases

(Schaefer, 1995). Each theory tested may have to be simplified to allow for comparison.

Implications for Anomie Theory

The findings in this study support other anomie research. Both Konty (2005) and

Ganon and Donegan (2010) found that anomie, had an effect on criminal attitudes and

behavior. The methods and variables of this study differed slightly from theirs but in

general, found that anomie had an effect on the tendency towards everyday crime.

Using a separate OLS regression predicting attitude, Konty (2005, p. 121) found

that anomie accounted for 9% (ß = .199, $p < .001$, $R^2 = .093$) of the change in deviant

attitude. Similarly, Ganon and Donegan (2010) found that anomie had an effect on actual

crime, with individuals being 1.5 times more likely to have committed actual crime ($e^ß$ =

1.506, $p < .001$, ß = .410), controlling for other variables.

In this study, for each unit increase in anomie, an individual is 1.55 times more

likely to justify everyday crime ($e^ß$ = 1.5515, $p < .001$, ß = .4392), controlling for other

variables. For each unit increase in RD, an individual is 1.10 times more likely to justify

everyday crime ($e^ß$ = 1.0986, $p = .005$, ß = .0940), controlling for other variables. Since

the dependent variable in this study is measured as an *attitude*, it is not directly

comparable to behavior variables of other studies.

Notwithstanding the differences in measurement methods between studies, the

goodness-of-fit of this study's model, measured by pseudo-R^2 (Nagelkerke pseudo-R^2 =

.144) was slightly below the findings of Ganon and Donegan (Nagelkerke pseudo-R^2 =

.189), and about half of the effect found by Konty (Cox & Snell pseudo-R^2 = .272). The

stronger effect sizes seen in their studies could be magnified because of the student

populations they examined, which may have been younger than the nationally

representative sample of the WVS.

Implications for Relative Deprivation Theory

In addition to supporting anomie research, this study supports some of the

research on RD and crime. Given the difficulty in measuring RD (Eibner and Evans,

2004), there was no study found which closely matched the variables or measures in this

study. However, this study does affirm a general hypothesis many theorists have held,

that RD has an effect on crime (Chester, 1976; Jacobs, 1981; Stiles, Liu, & Kaplan, 2000;

Webber, 2007).

Conversely, those studies which did not support the RD hypothesis remain at odds

by this study's findings. Studies, such as those by Miller, Bolce, & Halligan (1977),

Stack (1984), and Patterson (1991), did *not* find that RD was a cause of crime. Crosby

noted that these studies which do not support RD are typically "representative of one

major weakness in the relative deprivation research: looseness of operational definitions.

Even when analyzing individual-level data, research have often been quite liberal in their

translations from theoretical variables into operational measures." (1979, p. 104).

Because of a lack of consensus in handling the potentially numerous combinations of

variables, preconditions, and populations, studies do not always find support for RD

theory.

Implications of the Findings for Practice

As previously discussed, the costs of everyday crime in the U.S. add up to billions of dollars. Because the processes of anomie and RD are rooted in cultural values, they are not easy to mitigate. The social forces maintaining these conditions are integral to the American economic system (Messner & Rosenfeld, 1994). The "permanent encouragement of entrepreneurial comportment and pursuit of self-interest has its price," noted Karstedt (2006, p. 1030). Characteristics of the economic system are partly to blame and it would be futile to merely promote messages of helping one's neighbor, much less change the competitive capitalistic system, as Chester (1976) suggested.

Closed social systems, or at least those partially isolated from the larger economic system, may better accommodate pro-social messages and mitigate the effects of anomie and RD. Campaigns could be developed for organizations such as corporations, communities, military, churches, or schools. Easterlin wrote, "Once it is recognized that individuals are unaware of some of the forces shaping their choices, it can no longer be argued that they will successfully maximize their well-being. It is, perhaps, time to recognize that serious attention is needed to devising measures that may contribute to more informed preferences" (2003, p. 11182). Devising measures to mitigate anomie or RD can be difficult, given a highly individualistic and socially-mobile society.

Anomie or RD in a society following social disruptions such as natural disasters, recessions, or war may have a more pronounced effect on crime. Looting, rioting, and other lawlessness may accompany these events, however their prevalence may vary according to the culture. For example, news organizations reported that Japan, following

the 2011 earthquake/tsunami, had experienced less looting than other countries might have had (BBC, 2011; Lah, 2011). While Japan has become a free-market economy and has experienced a great increase in social mobility since WWII, there has remained a strong commitment to a national and corporate culture of conformity (Rohlen, 1979). In addition, there is more racial homogeneity, economic equality and traditional values (Rake, 1987). Societies with less individualism, competitiveness, and mobility should experience less RD than the U.S. (Kawachi, Kennedy, & Wilkinson, 1999)

In contrast, many post-Katrina residents of the 9th Ward in New Orleans have experienced great inequality, illustrated by reports that they could not even afford transportation out of the city during the hurricane. Heck and Wech (2003) wrote "the poor of New Orleans were also relatively deprived, as it became clear when they were transported to Houston and other cities and, in some cases, ended up staying with affluent white families. (Not surprisingly, conflict ensued. In Houston's public high schools, Katrina evacuees have been involved in brawls.)."

Finally, with a goal of reduced everyday crime, these concepts could be applied to nations forming new governments. The Iraq/Afghanistan war and events stemming from "Arab Spring" (Chesterman, 2011; Ramadan, 2011) have created opportunities for new social contracts. As these countries reorganize, their constitutions and messages could promote those values which reduce anomie; and reduce situations which promote RD. But with the powerful influence of Western capitalist nations, it is unlikely that this can be achieved.

These examples can guide policy making. Knowing the potential consequences that exist in conditions of anomie or RD may help predict or avoid conflicts and everyday crime.

Limitations and Future Research

One limitation or concern of this study is the truthfulness of answers of the respondents. Sensitive questions asked in the WVS may not have been answered truthfully. The questions used to assess the tendency towards everyday crime may have elicited biased responses resulting in a "halo effect" (Thorndike, 1920). Terms used in the survey such as "cheating," "bribes," and " beat" may elicit a defensive moral reaction when in fact those acts, in some contexts, may seem normal. This can introduce measurement error of the everyday crime variable.

A second concern is the reduced sample size, which was reduced from 1,249 cases to 1,099 because of case-wise missing data—150 respondents did not provide usable data for every item. This reduction in sample size could affect significance thresholds in determining if a variable indeed has an effect. While it is possible that respondents who do not answer certain items have traits which could bias statistical results, t-tests were run to compare the non-missing cases to the survey's original 1,249 cases. Tests on age, gender, marital status, education, income, social class, anomie, and RD were insignificant, however a significant difference was found with religiosity. Cases with missing data were found to have a lower mean for religiosity ($t(1247) = -5.30$, $p < .001$, 2-tailed), as measured by religious service attendance. The omission of these cases could have an effect on the results, perhaps by masking the significance of religiosity..

A third concern is the method of measuring relative deprivation. As Eibner and Evans (2004) remarked, "There are no established guidelines for measuring relative deprivation," this makes it more difficult to compare the findings to that of other studies. While the question on financial satisfaction may capture an evaluative aspect of RD, it may not operationalize all of Davis or Crosby's preconditions. However there is much support for using "financial satisfaction" to measure RD (Crosby, 1979; Liang, 1979; Sweeney, McFarlin, Inderrieden, 1990; Chakravarty & Mukherjee, 1999; and D'Ambrosio & Frick, 2007).

A fourth concern is how attitude is interpreted and if it translates into behavior. The idea that behavior is connected with attitude has not been firmly established in this study. The dependent variable represents a "tendency" towards everyday crime, measuring to what extent an individual would find certain morally-dubious behaviors justifiable. This is a measure of attitude, not behavior. Some theorists have concluded that attitude is an indicator of future behavior. According to Ajzen's theory of planned behavior (1988, 1991), behavioral attitude is an immediate antecedent to behavior. An individual's attitude on a behavior reflects an evaluative judgment on that behavior. As that evaluation becomes more desirable to that individual, the likelihood of the intention to perform that behavior increases (Ajzen, 1991, p. 181). Other theorists (Jackson, Tittle, & Burke, 1986; Lopes, 2008) have utilized this link to show an ultimate connection between attitude and crime. Future studies should accommodate the *behavior* of everyday crime with methods used in this study.

Contrary to Ajzen, Deutscher (1966) held that an individual's attitude is *not* necessarily an indicator of future behavior. Because of the demand for "practical" knowledge by policy makers, such as predictions of behavior, some sociologists face the pressure to prematurely link attitude to behavior. "This inferential jump from verbal behavior to overt behavior appears to be tenuous under some conditions" (1966, p. 235)

Gurney and Tierney add to this proposition in the context of RD with the "notion that behavior is explained only tenuously, if at all, by underlying individual dispositions is potentially devastating to the RD formulation, which rests partially on an assumption of correspondence between individual frustration or cognitive discomfort and participation in collective action" (1982, p. 37). This suggests that more evidence of the link between attitude and behavior is needed.

Other studies which have applied anomie and RD to crime have used *attitude* as a dependent variable, using items such as "willingness to engage in piracy" (Morris & Higgins, 2008, p. 180), "alienation...it can explain crime" (Smith & Bohm, 2008, p. 13), and "intentions to commit crime" (Capowich, Mazerolle, & Piquero, 2001, p. 449). However, a survey instrument which measured actual acts of everyday crime would be valuable in generalizing behavior rather than attitude.

A final concern is this study's external validity, which is of great concern to any research. Can the findings be generalized to external situations and populations? It is difficult to test this directly, however care was taken with each procedure in order to maintain validity of the overall research. Further research and replication of studies may provide additional support for the application of both of these theories to everyday crime.

More recent data with greater sample sizes which include actual acts of everyday crime, Schwartz value items, and attitudes on social comparison would be of great help in filling in the gaps of this study.

A social goal might be to find the causes of everyday crime to ensure the stability and productivity of society. Individuals may be held responsible for the crimes they commit, however are they the "real" cause? The examination of structural factors using anomie and RD theory suggests that the individual is, in part, a vehicle for the social forces which guide behavior. Given the multitude of criminal theories, many individual and structural factors may be at work, including both anomie and RD. Not to examine those factors is to miss some significant and interesting causes of crime.

APPENDIX

Hello. We are carrying out a global study of what people value in life. This study will interview samples representing most of the world's people. Your name has been selected at random as part of a representative sample of the people in the United States. I'd like to ask your views on a number of different subjects. Your input will be treated strictly confidential but it will contribute to a better understanding of what people all over the world believe and want out of life.

V55.   Are you currently:
    1   Married
    2   Living together as married
    3   Divorced
    4   Separated
    5   Widowed
    6   Single

V68. How satisfied are you with the financial situation of your household?

Completely dissatisfied ....Completely satisfied

1	2	3	4	5	6	7	8	9	10

Now I will briefly describe some people. Using this card, would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, or not at all like you?

Very much like me	Like me	Somewhat like me	A little like me	Not like me	Not at all like me
1	2	3	4	5	6

V80.   It is important to this person to think up new ideas and be creative; to do things one's own way.

V81.   It is important to this person to be rich; to have a lot of money and expensive things.

V82.   Living in secure surroundings is important to this person; to avoid anything that might be dangerous.

V83.   It is important to this person to have a good time; to "spoil" oneself.

V84.   It is important to this person to help the people nearby; to care for their well-being.

V85.   Being very successful is important to this person; to have people recognize one's achievements.

V86.   Adventure and taking risks are important to this person; to have an exciting life.

V87.   It is important to this person to always behave properly; to avoid doing anything people would say is wrong.

V88.   Looking after the environment is important to this person; to care for nature.

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[3] Reproduced with permission from the World Values Survey Association.

V89.   Tradition is important to this person; to follow the customs handed down by one's religion or family.

V186. Apart from weddings and funerals, about how often do you attend religious services these days?
        1   More than once a week
        2   Once a week
        3   Once a month
        4   Only on special holy days
        5   Once a year
        6   Less often
        7   Never, practically never

Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. (Read out and code one answer for each statement):

	Never ....Always justifiable ...justifiable
V198. Claiming government benefits to which you are not entitled	1 2 3 4 5 6 7 8 9 10
V199. Avoiding a fare on public transport	1 2 3 4 5 6 7 8 9 10
V200. Cheating on taxes if you have a chance	1 2 3 4 5 6 7 8 9 10
V201. Someone accepting a bribe in the course of their duties	1 2 3 4 5 6 7 8 9 10
V202. Homosexuality	1 2 3 4 5 6 7 8 9 10
V203. Prostitution	1 2 3 4 5 6 7 8 9 10
V204. Abortion	1 2 3 4 5 6 7 8 9 10
V205. Divorce	1 2 3 4 5 6 7 8 9 10
V206. Euthanasia	1 2 3 4 5 6 7 8 9 10
V207. Suicide	1 2 3 4 5 6 7 8 9 10
V208. For a man to beat his wife	1 2 3 4 5 6 7 8 9 10

V238cs. What is the highest educational level that you have attained? If respondent indicates to be a student, code highest level s/he expects to complete:
        1   Less than high school
        2   Some high school, no diploma
        3   Graduated from high school
        4   Some college, no degree
        5   Associate degree
        6   Bachelor's degree
        7   Master's degree
        8   Professional degree
        9   Doctorate degree

V252. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the:
1 Upper class
2 Upper middle class
3 Lower middle class
4 Working class
5 Lower class

V253. On this card is a scale of incomes on which 1 indicates the "lowest income decile" and 10 the "highest income decile" in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in:

Lowest decile..Highest decile
   1   2   3   4   5   6   7   8   9   10

V235. Code respondent's sex by observation:*
1 Male
2 Female

V237. Can you tell me your year of birth, please? This means you are ____ years old (write in age in two digits).*

* Data already on file for panelist

REFERENCES

Adriaenssens, S., & Maes, A. (2008). *Between market anomie and distrust: How religion and class shape the economic ethic.* Hogeschool-Universiteit Brussels research. Retrieved 2/22/2011 from lirias.hubrussel.be/handle/123456789/2234.

Agnew, R. (1992). Foundation for a general strain theory. *Criminology, 30*(1), 47–87.

Agnew, R. S. (1980). Success and anomie: A study of the effect of goals on anomie. *Sociological Quarterly, 21*(1), 53–64.

Ajzen, I. (1988). From intentions to actions. In J. Kuhl & J. Beckman (Eds.), *Attitudes, personality, and behavior*. Chicago: The Dorsey Press.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179–211.

Akers, R. L., & Sellers, C. S. (2008). *Criminological theories: Introduction, evaluation, and application* (5th ed.). Los Angeles: Roxbury.

Alain, M. (1985). An empirical validation of relative deprivation. *Human Relations, 38,* 739–745.

Anderson, K. B. (2004). *Consumer fraud in the United States: An FTC survey.* Federal Trade Commission Staff report, August 2004. Retrieved 12/22/2010 from www.ftc.gov/reports/consumerfraud/ 040805confraudrpt.pdf.

Arnold, T. C. (2001). Rethinking moral economy. *American Political Science Review, 95*(1), 85–95.

Bartlett, M. S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of Royal Statistics Society, 16*, 296–298.

Baumer, E. P., & Gustafson, R. (2007). Social organization and instrumental crime: Assessing the empirical validity of classic and contemporary anomie theories. *Criminology, 45*(3), 617–663.

BBC (2011, March). Why is there no looting in Japan after the earthquake? *BBC News Magazine.* Retrieved 8/8/2011, bbc.co.uk/news/magazine-12785802.

Beccaria, C. (1764). *Of crimes and punishment.* Chap. 29. E. D. Ingraham (Trans.). Retrieved 9/30/2010 from www.crimetheory.com/Archive/Beccaria.

Birkbeck, C., & LaFree, G. (1993). The situational analysis of crime and deviance. *Annual Review of Sociology, 19*, 113–137.

Bobo, L. (1991). Social responsibility, individualism, and redistributive policies. *Sociological Forum, 6*(1), 71–92.

Braithwaite, J. (1981). The myth of social class and criminality reconsidered. *American Sociological Review, 46*(1), 36–57.

Braithwaite, J. (1985). White collar crime. *Annual Review of Sociology, 11*, 1–25.

Brammer, S., Williams, G., & Zinkin, J. (2007). Religion and attitudes to corporate social responsibility in a large cross-country sample. *Journal of Business Ethics, 71*(3), 229–243.

Brush, J. (2007). Does income inequality lead to more crime? A comparison of cross-sectional and time-series analyses of United States counties. *Economics Letters, 96*(2), 264–268.

Callahan, D. (2004). *The cheating culture: Why more americans are doing wrong to get ahead*. New York: Harcourt.

Capowich, G. E., Mazerolle, P., & Piquero, A. (2001). General strain theory, situational anger, and social networks: An assessment of conditioning influences. *Journal of Criminal Justice, 29*, 445–461.

Carter, M. E. (2006). *Failing at success: A Durkheimian analysis of anomie and deviant behavior among National Football League players*. Manhattan, Kan: Kansas State University.

Chakravarti, S. R., & Mukherjee, D. (1999). Measures of deprivation and their meaning in terms of social atisfaction. *Theory and Decision, 47*(1), 89–100.

Chambliss, W. J., & Seidman, R B. (1971). *Law, order, and power.* Reading: Addison-Wesley.

Chester, C. R. (1976). Perceived relative deprivation as a cause of property crime. *Crime & Delinquency, 22*, 17–30.

Chesterman, S. (2011). *State-building, the social contract, and the death of god*. New York University Public Law and Legal Theory Working Papers 11–02, 1–17.

Chippa, K., Kleyna, N., & Manzia, T. (2011). Relative deprivation and conspicuous consumption in an emerging market. *Journal of International Consumer Marketing, 23*(2), 117–134.

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis.* Hillsdale, NJ: Erlbaum.

Cox, D. R., & Snell, E. J. (1989) *Analysis of binary data.* London: Chapman and Hall.

Crosby, F. J. (1976). A model of egotistical relative deprivation. *Psychological Review, 83*, 85–113.

Crosby, F. J. (1979). Relative deprivation revisited: A response to Miller, Bolce, and

    Halligan. *American Political Science Review, 73*(1), 103–112.

Crosby, F. J. (1982). *Relative deprivation and working women*. New York: Oxford

    University Press.

Cullen, J. B., Parboteeah, K. P., & Hoegl, M. (2004). Cross-national differences in

    managers' willingness to justify ethically suspect behaviors: A test of institutional

    anomie theory. *Academy of Management Journal, 47*(3), 411– 421.

D'Ambrosio, C., & Frick, J. R. (2007). Income satisfaction and relative deprivation: An

    empirical link. *Social Indicators Research, 81*(3), 497–519.

Davis, J. A. (1959). A formal interpretation of the theory of relative deprivation.

    Sociometry, 22(4), 280–296.

Demaris, A. (1995). A tutorial in logistic regression. *Journal of Marriage and the Family,*

    57, 956–968.

Deutscher, I. (1966). Words and deeds: Social science and social policy. *Social*

    Problems, 13(3), 235–254.

Doyle, J. M., Ahmed, E., & Horn, R. N. (1999). The effects of labor markets and income

    inequality on crime: Evidence from panel data. *Southern Economic Journal,*

    65(4), 717–738.

Dunaway, R. G., Cullen, F. T., Burton, V. S., & Evans, T. D. (2000). The myth of social

    class and crime revisited: An examination of class and adult criminality.

    Criminology, 38(2), 589–632.

Dur, R. (2006). *Status-seeking in criminal subcultures and the double dividend of zero-tolerance.* CESIFO Working Paper No. 1762, Category 10: Empirical and theoretical methods. Retrieved 12/26/10 from papers.ssrn.com/sol3/papers.cfm?abstract_id=920350##.

Durkheim, É. (1951). *Suicide, a study in sociology*. (W.D. Halls, Trans.). New York: The Free Press. (Original work published 1897).

Durkheim, É. (1982). *The rules of sociological method*. (W.D. Halls, Trans.). New York: The Free Press. (Original work published 1895).

Durkheim, É. (1984). *The division of labor in society.* (W.D. Halls, Trans.). New York: The Free Press. (Original work published 1893).

Easterlin, R. A. (2003). Explaining happiness. *Proceedings of the National Academy of Sciences of the United States of America, 100*(19), 11176–11183.

Eibner, C. E., & Evans, W. N. (2005). Relative deprivation, poor health habits and mortality. *Journal of Human Resources, 40*(3), 591–620.

Ellis, L. (1985). Religiosity and criminality: Evidence and explanations of complex relationships. *Sociological Perspectives, 28*(4), 501–520.

Featherstone, R., & Deflem, M. (2003). Anomie and strain: Context and consequences of Merton's two theories. *Sociological Inquiry, 73*(4), 471–489.

Federal Bureau of Identification. (2009). Crime in the United States, 2008: Property crime. *Uniform Crime Report*. U.S. Department of Justice. Retrieved 10/1/09 from www.fbi.gov/ucr/cius2008/offenses/property_crime/index.html.

Fischer, C. S. (2008). Paradoxes of American individualism. *Sociological Forum, 23*(2), 363–372.

Fisher, G. (1995). The birth of the prison retold. *Yale Law Journal, 104*(6), 1235–1324.

Gabor, T. (1998). *Everybody does it! Crime by the public*. Toronto, Canada: University of Toronto Press.

Ganon, M. W., & Donegan, J. J. (2010), Microanomie as an explanation of tax fraud: A preliminary investigation. In T. Stock (Ed.), *Advances in taxation* (pp. 123–143). Emerald Group Publishing Limited.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 Update.* Boston, MA: Allyn & Bacon.

Gibbens, T. C. N. (1984). Borstal boys after 25 years. *British Journal of Criminology, 24*(1), 49–62.

Gilbert, D. (1998). *The American class structure, in an age of growing inequality* (5th ed.). Belmont, CA: Wadsworth.

Gill, T. G., & Hoppe, U. (2009). The business professional doctorate as an informing channel: A survey and analysis. *International Journal of Doctoral Studies, 4,* 27–58.

Gini. C. (1913). Correspondence: Variability and mutability. *Journal of the Royal Statistical Society, 76*(6), 619–622.

Gliem, J. A., & Gliem, R. R. (2003). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales.* Refereed paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, Ohio State University, Columbus, OH, October 8–10, 2003.

Gottfredson, M. & Hirschi, T. (1990). *A general theory of crime.* Stanford University Press.

Grasmick, H. G., Bursik, R. J., Jr., & Cochran, J. K. (1991). "Render unto Caesar what is Caesar's": Religiosity and taxpayers' inclinations to cheat. *Sociological Quarterly, 32*(2), 251–266.

Grasmick, H. G., Jacobs, D., & McCollom, C. B. (1983). Social class and social control: An application of deterrence theory. *Social Forces, 62*(2). 359–373.

Greenberg, D. F. (1985). Age, crime, and social explanation. *American Journal of Sociology, 91*(1), 1–21.

Gurney, J. N., & Tierney, K. J. (1982). Relative deprivation and social movements: A critical look at twenty years of theory and research. *Sociological Quarterly, 23*(1), 33–47.

Gurr, T. R. (1970). *Why men rebel.* Princeton, NJ: Princeton University Press.

Guyau, J. M. (2009). *The non-religion of the future: A sociological study;* Charleston, SC: BiblioBazaar. (Original work published 1897).

Hair, J.F. Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate data analysis* (5th ed.). New Jersey: Prentice Hall.

Haithem, Z., Jean-Charles, C., & Narjess, H. (2011). Cross-cultural values differences versus cross-country differences in the service failure's severity. *Proceedings of ASBBS, 18*(1), 40–57.

Hall, J. W. (2009). Statement to the U.S. House Judiciary Committee Subcommittee on Crime, Terrorism, and Homeland Security. *Indigent representation: A growing national crisis*. Hearing June 4, 2009 (Serial 111–29:45–59). Available at judiciary.house.gov/hearings/printers/111th/111–29_50068.PDF.

Heaton, P. (2006). Does religion really reduce crime? *Journal of Law and Economics, 49*(1), 147–172.

Hechter, M. (1992). Should values be written out of the social scientist's lexicon? *Sociological Theory, 10*(2), 214–230.

Heck, A. K., & Wech, B. A. (2003). Samuel A. Stouffer and "The American Soldier": The serendipitous discovery of relative deprivation and its contribution to management thought. *Journal of Applied Management and Entrepreneurship*, *8*(4), 52–67.

Henshel, R. L., & Silverman, R. A. (1975). Perception and criminal process. *Canadian Journal of Sociology, 1*(1), 33–47.

Hey, J. D., & Lambert, P. J. (1980). Relative deprivation and the Gini coefficient: Comment. *Quarterly Journal of Economics, 95*(3), 567–573.

Hirschi, T., & Gottfredson, M. (1983). Age and the explanation of crime. *American Journal of Sociology, 89*(3), 552–584.

Hirschi, T., & Stark, R. (1969). Hellfire and delinquency. *Social Problems 17,* 202–213.

Homans, G. C. (1961). *Social behavior: Its elementary forms.* New York: Harcourt, Brace, and World.

Hosmer, D. W., & Lemeshow, S., (2001). *Applied logistic regression* (2nd Ed.). New York: Wiley & Sons.

Hsieh, C. (2001). Correlates of financial satisfaction. *International Journal of Aging and Human Development, 52*(2), 135–153.

Huck, S. W. (2008). *Reading statistics and research* (5th ed.). New York: Addison Wesley Longman.

Inglehart, R. (2006). *Codebook for World Values Survey*. Ann Arbor, MI: Institute for Social Research. Retrieved May 7, 2009 from worldvaluessurvey.org.

Jack L. Hayes International (2010). Shoplifters and dishonest employees continue to steal profits from United States retailers. *Theft Surveys.* Retrieved 1/11/11 from hayesinternational.com/thft_srvys.html.

Jackson, E. F., Tittle, C. R., & Burke, M. J. (1986). Offense-specific models of the differential association process. *Social Problems, 33*(4), 335–356.

Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20*, 141–151.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39,* 31–36.

Kakwani, N. (1984). The relative deprivation curve and its applications. *Journal of Business and Economic Statistics*, *2*, 384–394.

Karstedt & Farrell, S., & Farrall, S. (2006). The moral economy of everyday crime: Markets, consumers and citizens. *British Journal of Criminology, 46*, 1011–1036.

Kawachi, I., Kennedy B. P., & Wilkinson, R. G. (1999). Crime: social disorganization and relative deprivation. *Social Science & Medicine, 48,* 719 – 731.

Kelling, G. L., & Coles, C. (1996). *Fixing broken windows: Restoring order and reducing crime in our communities*. New York: Touchstone.

Kerley, K. R., Copes, H., Tewksbury, R., & Dabney, D. A. (2010). Examining the relationship between religiosity and self-Control as predictors of prison deviance. *International Journal of Offender Therapy and Comparative Criminology*, *forthcoming.*

Kohn, M. L. (1977). *Class and conformity: A study in values*, 2nd ed. Homewood: Dorsey.

Konty, M. (2005). Microanomie: The cognitive foundations of the relationship between anomie and deviance. *Criminology, 43*(1), 107–132.

Lah, K. (2011, April). Amid disaster, Japan's societal mores remain strong. *CNN.* Retrieved 8/8/2011, from cnn.com/2011/WORLD/asiapcf/03/16/japan.cultural.order.

Lee, G. R. (1974). Marriage and anomie: A causal argument. *Journal of Marriage and Family, 36*(3), 523–532.

Liang, J., & Fairchild, T. J. (1979). Relative deprivation and perception of financial adequacy among the aged. *Journal of Gerontology, 34*(5), 746–759.

Lim, C., MacGregor, C. A. (2010). Secular and liminal: Discovering heterogeneity among religious nones. *Journal for the Scientific Study of Religion, 49*(4), 596–618.

Lopes, C.A. (2008). *Economic development and consumer morality.* Paper presented at

 International Conference on Survey Methods in Multinational, Multiregional, and

 Multicultural Contexts , Berlin, Germany.

Lottes, I. L., DeMaris, A., & Adler, M. A. (1996). Using and interpreting logistic

 regression: A guide for teachers and students. *Teaching Sociology, 24*(3), 284–

 298.

MacCallum, R. C., & Widaman, K F. (1999). Sample size in factor analysis.

 Psychological Methods, 4(1), 84–99.

MacLin, M. K., & Herrera, V. (2006). The criminal stereotype. *North American Journal*

 of Psychology, 8, 197–208.

Marx, K. (1902). Relation of wage-labour to capital. *Wage-Labour and Capital,* H. E.

 Lothrop (Trans.)*.* New York: New York Labor News Co.

Matsueda, R. L. (1989). The dynamics of moral beliefs and minor deviance. *Social*

 Forces, 68(2), 428–457.

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review, 3*,

 672–682.

Merton, R. K., & Kitt, A. S. (1950). Contributions to the theory of reference group

 behavior. In R. K. Merson & . F. Lazarsfeld, (Eds.), *Continuities in social*

 research (pp. 40–105). Glencoe IL: The Free Press.

Messner, S. F., & Rosenfeld, R. (1994). *Crime and the American Dream.* Belmont CA:

 Wadsworth.

Messner, S. F., & Rosenfeld, R. (2009). Institutional anomie theory: A macro-sociological explanation of crime. *Handbook on Crime and Deviance, Handbooks of Sociology and Social Research, 2*, 209–224.

Miller, A., Bolce, L., & Halligan, M. (1977). "The J-Curve theory and the black urban riots: An empirical test of progressive relative deprivation theory. *American Political Science Review, 71*, 964–982.

Miner, J. R. (1931a). Church membership and commitment to prisons. *Human Biology, 3*, 429–436.

Miner, J. R. (1931b). Do the churches prevent crime? *The American Journal of Police Science, 2*(6), 468–472.

Mittlboeck, M., & Schemper, M. (1996). Explained variation for logistic regression. *statistics in Medicine, 15,* 1987–1991.

Morris, R. G., & Higgins, G. E. (2009). Neutralizing potential and self-reported digital piracy: A multitheoretical exploration among college undergraduates. *Criminal Justice Review, 34*(2), 173–195.

Nagelkerke, N. J. D. (1991). A note on a general definition of the coefficient of determination, *Biometrika,* 78, 691–692.

North, D. (1990) *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.

O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity, 41*, 673–690.

Orrù, M. (1983). The ethics of anomie: Jean Marie Guyau and Émile Durkheim. *British Journal of Sociology, 34*(4), 499–518.

Passas, N. (1997). Anomie, reference groups, and relative deprivation. In N. Passas & R. Agnew (Eds.), *The future of anomie theory.* Boston: Northeastern University Press.

Patchen, M. (1961). *The choice of wage comparisons*. Englewood Cliffs NJ: Prentice Hall.

Patterson, E. B. (1991). Poverty, income inequality, and community crime rates. *Criminology, 29*(4), 755–776.

Pearson, F. S., & Weiner, N. A. (1985). Toward an integration of criminological theories. *Journal of Criminal Law & Criminology, 76*(1), 116–150.

Pedersen, A. W. (2004). Inequality as relative deprivation. *Acta Sociologica, 47*(1), 31–49.

Peng, C. J., Lee, K L., & Ingersoll, G. M. (2002). An introduction to logistic regression analysis and reporting. *Journal of Educational Research, 96*(1), 3–13

Peter, J. P. (1981). Construct validity: A review of basic issues and marketing practices. *Journal of Marketing Research, 18(*2), 133–145.

Priest , G. L. (1994). The ambiguous moral foundations of the underground economy. *Yale Law Journal, 103*(8), *Symposium: The Informal Economy*, 2259–2288.

Quinney, R. (1975). *Criminology*, Boston: Little, Brown.

Rake, D. E. (1987). Crime control and police-community elations: A cross-cultural

comparison of Tokyo, Japan, and Santa Ana, California. *Annals of the American Academy of Political and Social Science, 494*, 148–154.

Ramadan, T. (2011). The Arab Spring after Osama. *New Perspectives Quarterly, 28*(3), 23–24.

Reis, H. T. (1987). The nature of the justice motive: Some thoughts on operation,

internalization, and justification. In J. C. Masters & W. P. Smith (Eds.), *Social comparison, social justice, and relative deprivation: Theoretical, empirical, and policy perspectives* (pp. 131–150)*.* London: Taylor & Francis.

Rhodes, A. L., & Reiss, A. J. (1970). The "religious factor" and delinquent behavior.

Journal of Research in Crime and Delinquency, (71), 83–98.

Rohlen, T. P. (1979). *For harmony and strength: Japanese white-collar organization in

anthropological perspective.* University of California Press.

Roland, G. (2004). Understanding institutional change: Fast-moving and slow-moving

institutions. *Studies in Comparative International Development, 38*(4), 109–131.

Rossi, P. H., Waite, E., Bose, C. E., & Berk, R. E. (1974). The seriousness of crimes:

Normative structure and individual differences. *American Sociological Review, 39*(2), 224–237.

Runciman, W. G. (1972). *Relative deprivation and social justice*. Middlesex, England:

Pelican Books.

Russell, K. G. (1991) Estimating the value of e by simulation. *The American

Statistician,45*(1), 66–68.

Ryan, J. (1981). Marital status, happiness, and anomia. *Journal of Marriage and Family*, *43*(3), 643–649.

Sampson, R. J., & Laub, J. H. (1992). Crime and deviance in the life course. *Annual Review of Sociology, 18*, 63–84.

Schaefer, J. P. (1995). Multiple Hypothesis Testing. *American Review of Psychology, 46*, 561–584.

Schor, J. B. (1998). Keeping up with the Trumps: How the middle class identifies with the rich. *Washington Monthly, 30*(7/8), 34–37.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues, 50*(4), 19–45.

Schwartz, S. H. (1999). A theory of cultural alues and some implications for work. *Applied Psychology: An International Review, 48*(1), 23–47.

Senate Report No. 104–177, 104th Cong., 1st Sess. 1–2 (1995), ANTICOUNTERFEITING CONSUMER PROTECTION ACT OF 1995, 1.

Shapiro, S. P. (1990). Collaring the crime, not the criminal: reconsidering the concept of white-collar crime. *American Sociological Review, 55*(3), 346–365.

Shihadeh, E. S., & Ousey, G. C. (1998). Industrial restructuring and iolence: The link between entry-level jobs, economic deprivation, and black and white homicide. *Social Forces, 77*(1), 185–206.

Smith, H. P., & Bohm, R. M. (2008). Beyond anomie: Alienation and crime. *Critical Criminology, 16*(1), 1–15.

Smith, H.J., & Ortiz, D. (2002) Is it just me? The different consequences of personal and

    group relative deprivation. In I. Walker and H. Smith (Eds.) *Relative deprivation:*

    Specification, development, and integration (pp. 91–115). Cambridge University

    Press.

Smith, J., Moyer, T., & Trzcinski, E. (1982). *The measurement of selected income flows*

    in informal markets. Survey Research Center, Institute of Social Research,

    University of Michigan.

Snyder, K. A. (2003) Working off the books: Patterns of nformal market participation

    within New York's East Village. *Sociological Inquiry, 73*(2), 284–308.

Stack, S. (1984). Income inequality and property crime: A cross-national analysis of

    relative deprivation theory. *Criminology, 22*(2), 229–257.

Steffensmeier, D., & Allan, E. (1996). Gender and crime: Toward a gendered theory of

    female offending. *Annual Review of Sociology, 22*, 459–487.

Stiles, B. L., Liu, X., & Kaplan, H. B. (2000). Relative deprivation and deviant

    adaptations: The mediating effects of negative self-feelings. *Journal of Research*

    in Crime and Delinquency, *37*(1), 64–90.

Stores. (2002, January). Retail shrink losses reach $32 billion. *Stores, 84*(1), 16.

Stouffer, S. A. (1992). *Communism, conformity, and civil liberties: A cross-section of the*

    nation speaks its mind. New York: Transaction.

Stouffer, S. A., Lumsdaine, A. A., Lumsdaine, M. H., Williams, Jr., R., M., Smith, M. B.,

    Janis, I. L., et al. (1949). *The American soldier: Adjustment during army life* (vol.

    1–2). Princeton, NJ: Princeton University Press.

Sumner, W. G. (1911). *Folkways: A study of the social importance of usages, manners, customs, mores, and morals.* Boston: Ginn.

Sweeney, P. D., McFarlin, D. B., & Inderrieden, E. J. (1990). Using relative deprivation theory to explain satisfaction with income and pay level: A multistudy examination. *The Academy of Management Journal, 33*(2), 423–436.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*, 5th Ed. Boston: Pearson. 437–453.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worschel (Eds.), *The social psychology of intergroup relations* (pp. 33–47), Monterey, CA: Brooks/Cole.

Thorndike, E.L. (1920). A constant error on psychological rating. *Journal of Applied Psychology, IV*, 25–29.

Tittle, C. R. (1983). Social class and criminal behavior: A critique of the theoretical foundation. *Social Forces, 62*(2), 334–358.

Tittle, C. R., & Villemez, W. J. (1977). Social class and criminality. *Social Forces, 56*(2), 474–502.

Tittle, C. R., Villemez, W. J., & Smith, D. A. (1978). The myth of social class and criminality: An empirical assessment of the empirical evidence. *American Sociological Review, 43*(5), 643–656.

Tittle, C., & Welch, M. (1983) Religiosity and deviance: Toward a contingency theory of constraining effects. *Social Forces, 61*(3), 653–682.

U.S. Census Bureau, (2006a). Annual estimates of the population by five-year age groups and sex for the United States: April 1, 2000 to July 1, 2006. *National Population Estimates.* Retrieved 4/1/2011 from www.census.gov/popest/national/asrh/NC-EST2006/NC-EST2006-01.xls

U.S. Census Bureau, (2006b). Educational attainment in the United States: 2006. *Current Population Survey Data on Educational Attainment.* Retrieved 4/1/2011 from www.census.gov/hhes/socdemo/education/data/cps/2006/tab01-01.xls.

U.S. Census Bureau, (2006c). Marital status of people 15 years and over. *America's Families and Living Arrangements: 2006.* Retrieved 4/1/2011 from www.census.gov/population/socdemo/hh-fam/cps2006/tabA1-all.xls.

U.S. Department of Justice. (1960–1993). *Uniform crime reports.* Federal Bureau of Investigation. Washington, DC: U.S. Government Printing Office.

U.S. Department of Justice. (2011). Office of Justice Programs. Bureau of Justice Statistics. National Crime Victimization Survey, 2008. ICPSR26382-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research. Retrieved 3/3/2011 via crime-statistics.com.

U.S. Federal Reserve Board. (2011). *Federal Reserve Statistical Release, Consumer Credit – G.19. Economic Research & Data.* Retrieved 4/15/2011 from www.federalreserve.gov/releases/g19/Current.

Veblen, T. (1899). *The theory of the leisure class, an economic study of institutions*. New York: Macmillan. [Electronic Format] Retrieved 3/7/07 from de.geocities.com/veblenite/txt/tlc.txt.

Voas, D. (2010). Quantitative methods. In S. Collins-Mayo.& P. Dandelion (Eds.), *Religion and youth.* Surrey, England: Ashgate.

Walker, I., & Pettigrew, T. F. (1984). Relative deprivation theory: An overview and conceptual critique. *British Journal of Social Psychology*, *23*, 301–310.

Walker, I., & Smith, H. J. (1984). Fifty years of relative deprivation research. *British Journal of Social Psychology*, *23*, 1–9.

Webber, C. (2007). Re-evaluating relative deprivation theory. *Theoretical Criminology, 11*, 97–120.

Welch, M., Xu, Y., Bjarnason, T., Petee, T., O'Donnell, P., & Magro, P. (2005). "But everybody does it…": The effects of perceptions, moral pressures, and informal sanctions on tax cheating. *Sociological Spectrum, 25*(1), 21–52.

Wilson, J. Q., & Kelling, G. L. (2006). A quarter century of broken windows. *American Interest, 2*(1), 168–172.

Worrall, J. L. (2006). Does targeting minor offenses reduce serious crime? A provisional, affirmative answer based on an analysis of county-level data. *Police Quarterly, 9*(1), 47–72.

Yitzhaki, S. (1979). Relative deprivation and the Gini coefficient. *Quarterly Journal of Economics,* XCIII, 321–324.

Young, J. (1997). Left Realist Criminology: Radical in its Analysis, Realist in its Policy. In M. Maguire, R. Morgan, R. Reiner (Eds.), *Oxford Handbook of Criminology,* (2nd Ed.). Oxford: Oxford University Press.

Young, J. (2001). Relative deprivation. In E. McLaughlin & J. Muncie (Eds.), *The Sage*

Dictionary of Criminology. London, England: Sage.