

W&M ScholarWorks

Dissertations, Theses, and Masters Projects

Theses, Dissertations, & Master Projects

1991

# Toward a General Model of Social Control and School Related Violations

Robin E. Sowell College of William & Mary - Arts & Sciences

Follow this and additional works at: https://scholarworks.wm.edu/etd

Part of the Educational Administration and Supervision Commons, and the Educational Sociology Commons

### **Recommended Citation**

Sowell, Robin E., "Toward a General Model of Social Control and School Related Violations" (1991). *Dissertations, Theses, and Masters Projects.* Paper 1539625703. https://dx.doi.org/doi:10.21220/s2-7crq-6h68

This Thesis is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.

## TOWARD A GENERAL MODEL OF SOCIAL CONTROL AND SCHOOL RELATED VIOLATIONS

A Thesis

Presented to

The Faculty of the Department of Sociology The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of Master of Arts

.

by Robin E. Sowell

1991

### APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

Phin L. Sowell

Author

Approved, August 1991

David P. Aday, Jr.

Satoshi Ito

. Satoshi Ito

Jan A Rups Gary A Kreps

### TABLE OF CONTENTS

Pag	e
ACKNOWLEDGMENTSi	v
LIST OF TABLES	v
ABSTRACTv	i
INTRODUCTION	1
REVIEW OF LITERATURE	3
SURVEY AND DATA2	4
CURRENT STUDY2	5
DEFINITION OF VARIABLES2	7
FINDINGS2	8
DISCUSSION	1
APPENDIX A. MARGINAL DISTRIBUTIONS	5
BIBLIOGRAPHY	7

### ACKNOWLEDGEMENTS

I wish to express my appreciation to the members of my committee for their assistance and thoughtful critique. I would also like to thank Dr. Faia for providing, at considerable effort, the raw data for the study, and Fredi Jackson for unending moral support. I would like to express a special thanks to Dr. Aday for his constant guidance and near endless patience.

### LIST OF TABLES

Figu	res	Page	
1.	Gener	al Model24	
Tables			
1.	Phi	Coefficients of Commitment/School Attachment at Three Times	
2.	The	Association of Perceieved Sanction Threat and Commitment/School Attachment	
3.	The	Association Between Perceived Sanction Threat and Low Commitment/School Attachment	
4.	The	Association Between Perceived Sanction Threat and High Commitment/School Attachment31	

### ABSTRACT

Previous research on the effects of sanction threat suggests that perceptions of sanctions as consequential may be negatively related to norm and rule violations. In addition, one recent model examines the relationship between social control and integration. This study presents a general model of the relationship between commitment, as an indication of integration, perceptions of sanction threats, rule violations, and social control. The data suggest that the relationship between commitment, social control and violation may be more complicated than is commonly assumed. Data from the National Longitudinal Study of Youth is used to partially test the model as it applies to school related rule violations. The results of the study suggest that weakly committed individuals may perceive sanction threat to be greater than do strongly committed individuals. The weakly committed also may be more deterred by perceived sanction threat than are the highly It is suggested that the imposition of social committed. control may act to reduce the level of commitment for the respondents in this study, though there are measurement and data problems that temper such an interpretation.

# TOWARD A GENERAL MODEL OF SOCIAL CONTROL AND SCHOOL RELATED VIOLATIONS

### INTRODUCTION

The utilitarian model of behavior suggests that individuals act based on estimates of costs and benefits. The deterrence doctrine applies this conception to the question of deviance. The deterrence doctrine holds that penalties for deviant behaviors will deter people from committing such behaviors. Some have suggested that it is perceptions of sanctions as consequential that deter (Tittle, 1980). One factor that may mediate the effects of sanctions is commitment to a specific rule or law, or to the conventional order in general. Those who perceive law as moral and legitimate may react differently than those who do not to threatened sanctions. Some research suggests sanction threat is more likely to affect those who have a weak moral commitment to obeying the rules (cf. Tittle, 1980).

Commitment to the normative order may vary over time. Moreover, some research and theories suggest that the application of social control affects individual commitment and societal integration (cf. Durkheim, 1964). Social control may increase integration by legitimating conventional behavior and by censuring behaviors outside of the norm. On the other hand, social control also may reduce commitment and social

2

integration (cf. Aday, 1990, Aday and Anderson, 1991). Either or both of these may occur, and the relationship between commitment and social control would vary accordingly.

This study examines the interaction between commitment, sanction threat, rule violations, and social control using data from the National Longitudinal Study of Youth. I will examine the relationship between sanction threat and school related rule violations, specifically skipping school and fighting in school. Stinchcombe (1964, 1-2,7) notes that rule violations in primary and secondary schools occur in a specific structural setting in which the sources of authority are immediately present. He considers such deviance to be a flouting of rules and regulations more than an avoidance of the rules. He characterizes these violations as rebellion against the conventional role of youth in our society.

In this study I examine the relationship between perceptions of sanctions and rule violations taking into account commitment to the conventional order. More specifically, commitment is measured in terms of academic I expect that those who are more committed will plans. perceive sanctions as more important and constraining. This perception of sanctions as consequential should be related negatively to rates of violation. Perceptions of sanction threats as inconsequential should be related to higher levels of violation.

The research also examines the relationship between

social control and commitment. Social control and commitment should be positively related for those who are highly committed to the conventional order. Social control and commitment should be negatively related for those who are weakly committed to the conventional order. Some theory (Durkheim, 1964) and common sense suggest that the two are related in a simple and inverse fashion: those who are committed do not violate norms and laws and, thus, commitment and social control are negatively related. The concern in this thesis is that social control may reduce commitment for those who are weakly committed. I examine this relationship by comparing commitment measured at time one with commitment measured at a later time and following the imposition of social control.

### REVIEW OF LITERATURE

### Deterrence, Sanctions, and Violations

The deterrence doctrine is rooted in philosophical utilitarianism, and offers a view of people as profit maximizers. That is, humans are seen as calculating profits from estimates of gains and costs as they consider a course of action (Geerken and Grove, 1975: 497). Though there has been much sociological research on deterrence since the late 1960's, no accepted systematic theory has been produced. The concept itself is subject to different definitions, and varies according to the perspective of the researcher. For example, Gibbs (1975:2) defines it as the omission of an act in response to the perceived risk and fear of punishment for contrary behavior, with punishment conceptualized as "legal" in character. More recent definitions include extra-legal sanctions such as peer or parental reactions. The different conceptualizations of the variables involved in deterrence have produced conflicting results on the effectiveness of deterrence, and have resulted in opposing conclusions concerning the relationship between sanctions and violations.

The earliest sociological studies on the effects of sanctions in deterring crime focus on the statutory death penalty (Sellin, 1952; Schuessler, 1952; Savititz, 1958). Research on deterrence expanded to include the relationship between actual legal punishments, especially imprisonment, and aggregate rates of crime (Gibbs, 1968, Tittle, 1969). More recent studies using individual level self-report data examine the effects of extra-legal sanctions (Anderson, Chiricos, and Waldo, 1977; Tittle, 1980) and the interaction of deterrence variables with variables derived from other theoretical approaches to deviant behavior (Tittle and Rowe, 1974; Silberman, 1976; Tittle, 1980; Aday and Anderson, 1991).

Early Research at the Aggregate Level Early research focuses on the relationship between aggregate rates of crime and certainty and severity of sanctions. Research on the deterrent effect of statutory laws concerning capital punishment examine homicide rates in states with capital punishment and those without capital punishment (cf. Waldo and Chiricos, 1972, Schuessler, 1952). Few differences are found in these comparisons. The same is true when rates are compared before and after well-publicized executions (cf. Waldo and Chiricos, 1972; Savitz, 1958). Sellin (1967:124) finds homicide rates to be largely unaffected in states in which capital punishment has been temporarily abolished and then reinstated. The apparent failure of capital punishment in deterring homicide reduced interest in deterrence research for some time, but there was a renewed interest in the late 1960's (Gibbs, 1975).

Refinements in the measurement of certainty and severity have produced empirical evidence which supports, at least to a degree, the deterrence doctrine. Certainty is generally measured as the likelihood of receiving a sanction (see Tittle, 1980). Severity reflects the amount of punishment involved. It has been measured in numerous ways, ranging from the objective, prescribed legal punishments to perceptions of sanctions as consequential (see Grasmick and Bryjack, 1980). Gibbs (1968) looks at non-death penalty homicide cases, using the median number of months served as a measure of punishment severity. In a state to state comparison, the results show a moderate inverse relationship between homicide and both the certainty and severity of punishment. Tittle (1969), examining six different offenses, finds a negative association

between certainty of punishment and crime rates for all six crimes, but a negative association between severity and crime rates only for homicide.

Certainty and severity of sanctions are regarded as important variables in the empirical study of deterrence. The predictive strength of each, as well as their interacting effects, are a major focus of deterrence research. The research results concerning the effects of certainty versus severity are mixed, possibly as a result of the different measures of the concepts used in the research.

Early research found certainty, but not severity, negatively associated with violations (Gibbs, 1968; Tittle, 1969; Jensen, 1969; Chiricos and Waldo, 1970; Zimring and Hawkins, 1973). Tittle (1969) suggests that the absence of an inverse relationship between index crimes other than homicide and severity of punishment may be due to the lower certainty of being apprehended for crimes other than homicide. When it is unlikely that an individual will be caught in the first place, severity of punishment may produce little in the way of deterrence. In that case, sanction severity will deter only under circumstances of high certainty. Later research, using self-report data, suggests that the effect of sanction severity may have been underestimated (see, for example, Anderson, 1977; Grasmick and Bryjack, 1980; Tittle, 1980).

Research on Deterrence at the Individual Level More recent research has shifted the focus from aggregate rates of violation to the individual level. Anderson, Chiricos, and Waldo (1977) using self-report data on marijuana find a negative relationship between severity and use, violation under high levels of certainty. Meier and Johnson, however, report a positive relationship between (1977)marijuana use and severity. Like Anderson (1977), Grasmick and Bryjack (1980) find a negative relationship between severity and violation. They note that the lack of association between severity and deterrence is counter to the logic of the utilitarian principle on which the deterrence doctrine is based, and they fault previous studies for failing to properly conceptualize severity. Grasmick and Bryjack (1980) measure severity as respondents' beliefs about the consequences of the punishment that will be received if they are convicted of a specific crime. Their data suggest a relationship between the variables of certainty and severity. Severity is an effective deterrent under conditions of fairly high certainty, and certainty is effective under fairly high levels of severity.

Tittle (1980) also finds severity to be an important component in deterrence. Depending on the source of the sanction, severity is more strongly related to violation than certainty. When the source of sanction is either perceived community reaction or perceived interpersonal reaction, severity is the stronger variable. Certainty is a stronger deterrent than severity only for legal sanctions, and this is partly attributed to informal reactions to the formal sanction.

Aday and Anderson (1991) suggest that the different findings on perceived severity and violation may result from the use of two distinct conceptions of severity: severity as important consequence; and severity as illegitimacy. Noting differential association theory, and the related "techniques of neutralization" (cf. Aday and Anderson, 1991; Sykes and Matza, 1957), it is suggested that becoming delinquent involves learning behaviors and definitions that support law violation, including definitions of punishments as inconsequential. This will result in a negative correlation between perceived severity, measured as important consequence, and violation. Those who define the punishments as irrelevant will be more likely to violate the laws. The obverse also may Some may reject the legitimacy of certain laws. be true. These people will be more likely to violate such laws, and to regard any penalties as inappropriate. In this case, the evidence will support Meier and Johnson's (1977) finding of a positive correlation between perceived sanctions, as being illegitimate, and violation. A direct test of this relationship, and the use of longitudinal data, may make clear the relationship between perceptions and behavior.

Objective Sanctions versus Perceptions of Sanctions The above findings suggest that the results of deterrence research may vary based on the measurement of sanction. Similarly, differences between measures of objective and affect research findings perceived sanctions may on deterrence. Gibbs (1975) points to the importance of the public's perception that something is sanctioned, and the fact that certainty and severity are evaluative concepts. Ά sanction may be perceived as more or less certain or severe, and these perceptions may vary widely across individuals and groups. Despite recognition of the importance of perception, almost all early research, aggregate research in particular, used objective measures of certainty and severity (see Schuessler, 1952; Savitz, 1958; Gibbs, 1968; Tittle, 1969).

Erickson and Gibbs (1978) compare objective certainty of with perceived certainty of arrest and find a arrest moderately close direct relationship between objective and moderately close perceived severity, and а inverse relationship between perceived certainty and the aggregate However, their findings do not indicate that crime rate. objective certainty of punishment is related to crime rates through perceived certainty. Jensen, Erickson and Gibbs (1978: 58), stressing that the deterrence doctrine is "first and foremost a perceptual theory, " examine perceived certainty as a deterrent in their study of high school delinquency. Their findings support the relevance of measures of perceptions of sanctions in deterrence research.

Tittle (1980) finds that perceptions of sanction probabilities are not influenced very much by experience with

and knowledge of actual sanctions. Experiences with formal sanctions, and knowledge of others who have been formally sanctioned, are only weakly related to perceived certainty and severity. To the extent that they are related, actual experience with sanctions, or with others who have been sanctioned, are related to lowered perceptions of perceived certainty and severity of sanction. Overall, the research suggests that objective measures of certainty and severity are related differently to violations than are measures of perceived certainty and severity.

Formal versus Informal Sanctions Formal sanctions are applied through laws and special agencies, whereas informal control operates through interpersonal devices such as rumor and reputation (cf. Aday and Anderson, 1991:9; Durkheim, 1964). Anderson, Chiricos, and Waldo (1977: 107) note the necessity of a "complete" deterrence paradigm which includes both formal and informal sanctions and their interactions. Their study, using selfreport data on marijuana use, suggests that perceived informal sanctions are at least as consequential for behavior as perceived formal sanctions.

Tittle (1980) compares informal and formal sanctions, and the results indicate that informal sanctions are far more effective in inhibiting deviance. He also finds that informal sanctions, applied through personal relationships, have a stronger effect than do community-level informal sanctions. Across nine offenses, ranging from informal norms, such as lying and failing to stand during the national anthem, to violations of laws, such as assault and theft, the most potent deterrent is the perceived potential loss of respect among those one knows personally. Analysis of the interaction between formal and informal sanctions shows that anticipated informal sanction operates independently of formal sanction fear. Formal sanction fear is found to be attributable to the fear of informal sanction with only one exception.

Personal and Aggregate Risks

Differences between personal and aggregate risks also have been found to affect the strength of deterrence. Aggregate risk refers to the risk of sanction to the average person in the population, whereas personal risk refers to the risk of sanction to the specific individual respondent. Waldo and Chiricos (1972: 535-7) argue that "perceptions of the certainty of punishment appear most viable as a deterrent when they involve the potential criminal's estimate of his own chances for arrest and harsh penalties for a particular crimeindependent of the chances for a generalized other."

Jensen, Erickson and Gibbs' (1978) study of delinquency finds that perceived personal risk is a stronger deterrent variable than perceived aggregate risk. Perceived personal risk has a stronger inverse relationship with the offenses of burglary, vandalism, shoplifting, and truancy, whereas perceived aggregate risk has a weaker, but still significant deterrent effect. They suggest that the weaker relationship between aggregate measures of sanctions and violations might explain some findings that do not support the deterrence doctrine.

### General Deterrent Effects

Some studies of deterrence have found a "general" deterrence effect (Silberman, 1976; Jensen, Erickson and Gibbs, 1978; Tittle, 1980). Silberman (1976) argues for a form of general deterrence that can not be reduced to the perceived threat of punishment for specific offenses. The empirical finding is in relation to offenses that respondents saw as relatively unregulated (for example, shoplifting, premarital sex, marijuana use, and under-age drinking). Silberman suggests that the belief that criminal acts generally are punished may deter some individuals from committing deviant acts that otherwise are regarded as unregulated (1976, 446). Jensen, Erickson and Gibbs (1978) find a similar general deterrence effect in their study of self-reported delinquency, supporting Silberman's contention that the measure of combined perceived risk (ie. for several offenses) is as consistently related to a certain offense as is the measure of perceived risk for that specific offense.

Tittle (1980) finds similar results in his examination of diffuse and precise effects of sanctions. A precise effect is curtailment of a particular offense produced by the penalty threat attached to it. A diffuse effect refers to deterrence of a particular offense due to penalties attached to other offenses, or a general sense of possible but imprecise sanction, i.e., general deterrence. Tittle's results suggest that both precise and diffuse effects are involved in decisions about future deviance. However, precise processes seem to be most likely for informal sanctions, whereas diffuse effects are more characteristic of formal sanctions. Much conformity may be accounted for by the anticipation of reactions of acquaintances to particular deviant acts. Contemplation of legal consequences seems to have much less influence, and to be largely unfocused.

Sanctions and Status Characteristics Deterrence studies also have identified certain status characteristics that may influence deterrence. Tittle (1980) examines sex, age, race, social class, marital status, and labor force status. Only sex and age are related to deterrence under a variety of control conditions. Social class is not significantly related to deterrence effects, though where it is related, the relationship is slightly positive.

Silberman (1976) cites age, ethnicity, urbanism, social economic status, and sex as important control variables for examining deterrence, though his sample makes it impossible to examine all but the effects of gender. He finds that the deterrent effect of punishment is specific to males. None of the correlations between the probability of committing an offense and the certainty of punishment is significant for females.

Tittle (1980) finds no significant differences between males and females in deterrence at equal levels of perceived sanction. Where differences are observed, it appears that males are more susceptible to deterrence. However, women perceive sanction threats to be greater than do men, so their actual curtailment of deviance should be greater. This is consistent with an earlier finding (Tittle and Rowe, 1973) that shows females to be almost twice as likely as males to reduce classroom cheating after a direct sanction threat to the class.

Contrary to the findings of both Silberman and Tittle concerning the relationship between gender and deterrence, Anderson, Chiricos, and Waldo (1977) find the strength of deterrence relationships the same for men and women in actual curtailment of deviance. For each of five perceived sanctions, correlations with marijuana use are stronger among males than females, but the differences are so slight as to warrant the conclusion of "no difference" (109).

With regard to age, Tittle (1980) finds that at equal levels of perceived sanction there is no clear pattern of differential deterrence from one age group to the next. However, Tittle suggests that older respondents may be more deterred because they perceive the sanction threat to be greater than do younger respondents. He finds a steady increase from youngest to oldest age category in perceptions of informal sanctions for every offense. This should result in a higher actual degree of deterrence for older age categories, despite equal deterrability when perceived sanction threats are held constant.

Methodological Issues and Deterrence Research Sample design also may influence the results of deterrence research. Paternoster et al. (ed. Hagan, 1982: 56) note that the typical methodology in deterrence research involves reports of past criminal behavior collected at the same time as reports of respondents' perceptions of the certainty and severity of sanctions. As a result, researchers actually may be describing an "experiential" effect: the effect of previously committed behaviors on current perceptions. Α negative relationship between perceived sanction and violation could indicate that those who commit illegal acts and elude punishment tend to lower their perception of risk. By using a two-wave panel design, Paternoster et al. are able to distinguish between a deterrent effect and an experiential effect, as they examine the relationship between current perceptions and subsequent behavior.

The results of their longitudinal study suggest a weak and generally insignificant deterrent effect. The authors suggest that much prior research may have been picking up the experiential effect in addition to a weak deterrent effect. They infer from the data that the deterrent and experiential effects are independent, and that the perceptions-behavior relationship is a reciprocal one, though this relationship may be difficult to specify and even harder to measure.

### Deterrence and Theories of Deviance and Social Control

Researchers are beginning to explore the effects of sanctions within the context of general theories of deviance and social control. Hirschi's (1969) social control theory focuses on the reasons people do not violate social norms. People are constrained by "bonds" to society and its institutions. Hirschi cites four bonds which tie individuals to society: commitment to success through conventional terms; attachment to parents, peers and social institutions; involvement in conventional activities; and belief in conventional norms. When these social bonds are weak, the likelihood of rule violation increases. Social control theory does not examine the possible mediating effects of sanctions and definitional concepts.

In contrast to social control theory, Sutherland's (1978) differential association theory examines how relationships and interactions with deviant others may increase the likelihood of engaging in deviant activities. Through associations with deviant others, individuals may learn definitions and behavior patterns which are favorable to violation. Similarly, they may learn related "techniques of neutralization" in which sanction consequences come to be defined as inconsequential (cf. Aday and Anderson, 1991; Sykes and Matza, 1957).

Matsueda (1982) compared models of social control theory and differential association using data from the Richmond Youth Project (the original data for Hirschi's control theory). In the differential association model, the ratio of definitions favorable and unfavorable to delinquency mediates the effects of associations and background variable. Attachment to friends or parents affects delinquency "...only insofar as it affects the learning of definitions favorable and unfavorable to law violation" (Matsueda, 1982: 493). In the control theory model, attachments are related directly to indirectly delinguency, and to delinguency through definitions. In addition, background variables operate indirectly through both definitions and attachments.

Matsueda's findings suggest that the variable "definitions" mediates the effects of all background variables observed (age, social economic status, perceived amount of trouble in the neighborhood, and coming from a broken home). It also mediates the entire effect of variables which, in control theory, should be related directly to delinquency (peer and parental attachment).

Massey and Krohn (1986) incorporate constructs from both social control theory and differential association. They criticize social control theory for its failure to explain why a person would engage in deviant activities if freed from the social bond. On the other hand, they note that differential association theory fails to explain why individuals are likely to associate with deviant others in the first place. Their findings suggest that weakened social bonds increase the likelihood of associations with deviant others, and operate indirectly on deviance through peer associations. Both commitment and belief are related strongly to an individual's peer associations. The findings also indicate that bonding elements have a significant direct relationship with deviance, though commitment to school is the only variable that showed the hypothesized direct effect.

Tittle's (1980) comprehensive study of deterrence examines the effectiveness of deterrence controlling for variables from social control, differential association, and other major theories of deviance. examines He the relationship between deterrence, moral commitment, social integration, deprivation of means, alienation from culturally approved goals and means, differential association, legitimacy ascribed to the norm, and legal processing or labeling. He compares the effects of these eight variables on a variety of norm and law violations. Controlling for variables from the other major theories of deviance, a deterrent effect is still apparent. Sanction fear remains negatively correlated with deviance, with general sanction fear ranking third as the best violation, behind moral commitment predictor of and differential association. However, the most potent form of sanction threat, fear of interpersonal loss of respect, is the best overall predictor of violating behavior.

Silberman, (1976) incorporates a concept of moral attachment into his research on deterrence. As Matsueda (1982: 490) notes, in control theory's variable attachment "there is variation in the extent to which people believe in societies' norms, and the less their belief the more likely they are to engage in delinquency." The social bond "belief" also reflects commitment to conventional values and norms. Massey and Krohn (1986) argue that social control theory assumes that people who believe strongly in the moral validity of conventional standards of conduct are unlikely to become involved in deviant behavior.

Siberman's general theory examines the additive and interactive effects of moral commitment, perceived sanctions, and patterns of differential association. His findings show that the independent variables fit a causal chain model, where morality is associated with peer involvement, which is in turn associated with perceived severity of punishment, which is associated with perceived certainty of punishment (448-9).

In other words, those who are less morally committed are more likely to be associated with others who are involved in criminal activities. Those who are associated with others who are criminally involved are more likely to perceive that people who are convicted of crimes are severely punished, and those who perceive that criminal sanctions are severe are more likely to perceive that persons like themselves who commit crimes are more likely to be caught by the police (449).

Moral commitment explains most of the variance, with differential association coming second. Certainty of punishment has a weak independent effect, and its interaction with morality explains another portion of variance, though it is in turn partly a function of the degree of moral commitment. Thus when individuals are morally committed to a norm, they obey the related regulations regardless of the sanctions. However, when commitment to a rule is low, sanctions take on greater importance in deciding whether or not to violate the rule. Moral support for laws and association with those who support such laws critically condition the effects of legal sanctions.

In a similar vein, Waldo and Chiricos (1972) find a difference in deterrability between offenses that are "mala prohibita" and offenses that are "mala in se." Offenses that are "mala prohibita" are prohibited by legal sanctions (for example, marijuana use), but lack strong consensual condemnation. Offenses that are "mala in se" are against the moral code of the society (for example, stealing). "Mala prohibita" offenses are found to be more subject to deterrent effects than are "mala in se" offenses. Perceived, specific certainty of sanction is negatively related to both types of violations, but the relationship is stronger for the "mala prohibita" item. Likewise, Tittle (1980) finds a slight tendency for deterrence to be least where aggregate and personal judgements of immorality, seriousness, and legitimacy of the associated norm are greatest (though the evidence is not strong).

Meier and Johnson (1977) suggest that formal sanctions

are a weak source of threat, with most of the effect being indirect in nature. Social support and the belief that marijuana smoking is immoral have stronger and more direct effects than do legal sanctions, and, as noted above, they find a positive relationship between perceived severity and violation. They suggest that this relationship is a reflection of the moral outrage felt by users towards marijuana laws (see the above discussion of "severity as illegitimacy" versus "severity as important consequence").

Erickson and Gibbs (1978) report similar findings when they control for social condemnation of the violation by respondents. Under such conditions, they find no significant relationship between the perceived certainty of punishment and the crime rate (note, however, that this refers to aggregate crime rates). However, in Jensen, Erickson and Gibbs' (1978) study using individual level data to describe delinquency by high school students, the perceived risk of punishment is inversely related to self-reported delinquency, controlling for social condemnation of the specific violation.

The interplay between condemnation or source of moral judgement and sanction must be measured in any comprehensive deterrence research. Aday (1990) presents a theory of deviance and social control that draws from classical theories of social organization to propose a general explanation of rates and causes of deviance. Aday suggests that as social integration decreases both violations and social control

22

increase. As integration decreases, diversity increases and the proportion of interpersonal relationships which support the conventional order decreases. Opportunities for violating conduct increase. Concurrently, lower levels of integration increase the opportunity for associations with deviant others, who provide definitions and behaviors which are favorable to violations. Meanwhile, levels of social control in general, and formal social control in particular, increase as well.

Aday looks at integration in terms of three dimensions of societal organization: solidarity, equilibrium, and Equilibrium refers to the organization of commonality. society as a system of interdependent parts or institutions. Each institution supports the social order through its structure and consequences, and the social order has survival value as long as the institutions meet the system's needs. Solidarity refers to organization as a division of labor. Integration here may result from similarities among parts, including groups and other structural arrangements, as in mechanical solidarity. Integration also may be due to interdependence that results from differentiation, as in the case of organic solidarity. "Regardless, integration means that the system is composed of parts that fit together" (cf. Aday and Anderson, 1991: 5; Inverarity, Lauderdale, and Feld, 1983: 148-156).

"Commonality refers to the cultural dimension of integration" (Aday and Anderson, 1991: 5). Based on Weber's

discussion of social action and Durkheim's ideas of the collective conscience, the concept of commonality focuses on integration in terms of the shared system of beliefs which serve to organize and constrain human social activity.

Working from convergence theory, Aday and Anderson (1991) propose a general explanation of adolescent drug use. They combine variables from differential association theory, social control theory, and deterrence, and a general conception of social control and societal integration, and apply them to adolescent drug use. From control theory, they draw the variables of attachments, involvement, and belief. Aday and Anderson look at these bonds as elements of societal integration. Such bonds should be negatively correlated with violations, and the empirical evidence from the study supports the expectation.

These researchers examine differential association in terms of relationships with others who are violators of rules, and in terms of definitions favorable to violation. These two variables were predicted to be positively associated with violation, and again the data support the prediction.

Aday and Anderson measure deterrence in terms of perceptions of consequences of arrest and conviction. They find that the variable of perceptions reduces the predictive power of the model. They believe that this finding may result from their relatively weak measure of perception, and uncertainty both in theories and in results of empirical research as to the place of perceptions in the causal process.

Overall, the strongest positive relationship is the direct correlation between association and violations. There also are strong indirect relationships between association and violations. These indirect effects occur through the variables of learning violations and perceptions. The variable of learning violations also is related directly to both violations and perceptions, and indirectly to violations through perceptions.

The model of drug use predicts that social bonds (from control theory) will be correlated negatively with violation, while differential association will be related positively. measured defining Perception, as punishments as inconsequential, will be related positively to violations. Social bonds maintain conformity, keeping the individual integrated into conventional society. On the other hand, individuals may learn definitions and behaviors that are favorable to violation of the conventional order through differential associations. Some definitions favorable to definitions violation may include of sanctions as inconsequential. Perceptions of sanctions as being inconsequential should facilitate violating behavior.

The model also looks at the effects of social control and social integration. Aday and Anderson (1991) link their model of social control with Weber's typology of authority. Weber specified three types of authority: traditional, bureaucratic, and charismatic. These authority types differ according to the source of the control and the source of legitimacy among subordinates. According to Aday and Anderson (1991: 9-10), traditional authority is based in custom, and legitimized by shared beliefs about a common history. Bureaucratic, or rational, authority is legitimated by impersonal rules. The authority for making and enforcing the rules is attached to some position or arrangement within an organization. Agreement on the substance of rules among those subjected to the rules is not necessary as long as proper procedures are followed in the creation and enforcement of the rules. Aday and Anderson do not examine charismatic authority in their model, but it refers to authority based on the shared beliefs about the extraordinary qualities of a specific individual.

The source of authority is predicted to affect the consequences of social control, specifically integration. According to Aday and Anderson (1991), formal social control is predicted to enhance integration when there is a consensus, and when it involves building a consensus. It constrains those who are effectively attached to the social order. However, formal social control actually may increase the probability of violation for those not attached to the social order. Such a change would result from reactions to imposed social control as illegitimate and inappropriate (cf. Meier and Johnson, 1977). Informal social control is positively related to integration, and enhances attachment by promoting consensus. Using a measure of formal control, the researchers report a weak positive relationship between social control and violations, though the data did not allow specification of the nature or order of the relationship.

The relationship between integration and social control is expected to vary depending on respondents' participation in violating behavior. There is a weak positive relationship between social control and integration for non-violators. Among violators, the association is weak but negative. Aday and Anderson (1991) note that integration is a difficult concept to measure objectively. Their measure combines a general happiness scale and a measure of respondents' beliefs about their abilities to carry out life plans. Perhaps because of the weak measure, the results are not as strong as the theory predicts.

The results of research into the question of deterrence vary greatly. Some of the disparities are the results of different conceptualizations and measurements of key variables. Generally, the literature seems to indicate that perceptions of sanctions as consequential has some deterrent effect. This effect is much greater when the source of sanction is an informal, rather than formal, agent. The effect also appears to be stronger for those who are less committed to the normative order, men, and younger people. Highly committed individuals, women, and older individuals

seem to perceive sanction threat as being greater, but they are less deterred by their perceptions because they are already constrained by bonds to the normative order.

### SURVEY AND DATA

data for the current study are from the National The Longitudinal Study of Youth (NLSY), 1979-1982. The target population for the NLSY consists of non-institutionalized youth, who in 1979 were 14-21 and who were living within the United States or were on active duty for the military outside of the U.S. Three sub-samples were selected using standard area probability sampling. The three sub-samples include a cross-sectional sample of non-institutionalized civilians age 14-21 as of January 1, 1979, a supplemental over-sample of hispanic, black, and economically-disadvantaged non-hispanic and non-black youth, and a sample of youths 17-21 serving in the military. The participants in the base year (1979) survey formed the target samples for follow-up surveys in 1980, 1981, and 1982 using altered questionnaires. Attrition rates were low, ranging from 4% to 6% in the 1982 survey. The majority of the data were collected through personal face-to-face interviews, each lasting about an hour (Steel, Lauri, Eaton, and Carr, 1984). This study uses a sub-sample of the above population consisting of only those individuals who were enrolled in primary or secondary school at the time of the

initial 1979 interview.

#### CURRENT STUDY

The current study examines two separate but related issues. 1) the relationship between commitment, perceived sanction threats and rule violations, and 2) the more general relationship between commitment, rule violations, and social Deterrence research suggests that commitment to control. conventional norms and rules critically conditions the effects Those who are committed to the of sanction threats. conventional order perceive a higher threat of sanction than those who are less committed. However, those whose commitment is low appear to be more deterred by sanction threats. The highly committed are constrained from committing violations by their bonds to society, so sanction threat has little relation to violations. Those who are weakly committed are not constrained by social bonds, so the effects of sanction threats on violating behavior is greater. In general, then, the highly committed perceive greater sanction threat, but they do not commit violations because they believe in the normative order. The lowly committed are constrained to whatever extent mainly through the threat of sanctions.

According to the deterrence doctrine, perceived sanction threats should be negatively related to rule violations. When sanctions are perceived to be consequential, individuals should be deterred from committing violations. When sanction threat is deemed inconsequential, rates of violations should be higher. As suggested above, the effect of perceptions of sanction threats as consequential should have a greater impact on those who are lowly committed to the conventional order.

The relationship between commitment and social control should vary depending on the degree of commitment. Social control is defined generally as the application of negative sanctions for disapproved behavior. At high levels of commitment, social control should serve to reinforce commitment, while at low levels, social control may further separate the individual from the normative order. Theoretically, social control should reduce the incidence of violations for the highly committed, but not for those who are weakly committed. The data do not provide the time ordering of events that is necessary to examine the relationship between social control and violations. The general model is presented in figure 1.

FIGURE 1	F	Ι	G	U	R	E		1
----------	---	---	---	---	---	---	--	---

(+)Hi` (+) Sanction Social (-) ---->Violations Commitment---->Threat-Control (-) $\overline{\mathcal{V}}$ (+)Lo (-) Sanction Social (-)Commitment------>Violations Control -->Threat

The proposed model can be summarized as follows. At the most general level, commitment and perception of sanction threat will be related directly and positively. When commitment to conventional norms is high, perceptions of the consequences of sanctions should be high. Perception of punishment as consequential should be related to low rates of When violations do occur, the imposition of violation. sanctions should reduce violations and increase commitment to the conventional order, commitment being a reflection of one dimension of integration. However, when commitment is low, perceptions of sanctions as consequential should be low. If sanction threat is perceived to be low, rates of violation should be relatively high. Social control will have less effect on violations, and that effect will be to diminish commitment and consequently, increase rates of violation.

### DEFINITION OF VARIABLES

Perceived sanction threat is described through responses to the statement "students can get away with anything". This measure reflects a subjective sense of general threat which, according to some research (see Silberman, 1976; Jensen, Erickson and Gibbs, 1978; Tittle, 1980) is as consistently related to certain offenses as is a measure of perceived risk for the specific offense. It collapses issues of certainty and severity into a measure of perceived consequences in general. The measure refers to sanction as a consequence rather than to the perceived legitimacy of sanctioning. It measures perceived aggregate risk, which may somewhat reduce the strength of the measured relationships (see Waldo and Chiricos, 1972; Jenson, Erickson, and Gibbs, 1978). The reference is to high school and the prospects of formal sanction, though as Tittle (1980) suggests, much of the deterrent effect may be derived from associated informal sanctions (i.e., anticipated parents' or friends' reactions to the youth being suspended or expelled).

Violations refer to school related rule or law violations. This concept is operationalized as self-reported instances of truancy and fighting in school. An examination of the relationship between these self-reported behaviors reveals a moderate correlation (phi=.310, P< .000). The measure is not inclusive, and instances of social control may occur in response to violations not included in this measure. Social control is measured as self-reports of suspension or expulsion from school. Stinchcombe (1964) found that nonconforming students were less likely than conforming students answer questionnaires properly. As a result, the to relationship between commitment, violation and social control may be shown as weaker than it actually is for those with low commitment, though the use of face-to-face interviews may somewhat alleviate this problem.

Commitment to school is used as an indicator of

integration. Respondents were asked the grade level that they desire to complete, and their responses provide a measure of the level of commitment. Commitment is measured for three separate time periods. It is not a measure of moral commitment to education, but a reflection of subscription to conventional methods of success. For purposes of analysis, all of the variables are collapsed into dummy variables. Commitment is measured as either high or low, low being the desire to complete 12th grade or less (41.5 percent of respondents at time one), and high being the desire to go to some college (58.5 percent of respondents at time one). Perception of sanction threat was measured as either high or low, low being the perception of some degree of truth in the statement "kids at this school get away with anything" (63.4 percent of respondents), and high being the perception of no truth to that statement (36.6 percent of respondents). Violation (self-reports of fighting in school and truancy) was collapsed to indicate either no violations (37.6 percent of respondents) or one or more violations (62.4 percent of respondents). Social control was collapsed to indicate either no suspensions or expulsions (74.6 percent of respondents) or one or more suspensions or expulsions (25.4 percent of respondents). (The marginal distributions for these variables are reported in the Appendix.)

#### FINDINGS

It should be noted that the significance level of the correlations will be high simply as a result of the large sample. I will pay attention primarily to the size and sign of the correlation for reporting the results. The analyses indicate that the measure of commitment (or school attachment) is fairly stable over times one, two, and three (see Table 1 below). The relationship is positive, as expected. The moderate correlations between the same measures at different time periods may reflect a maturation process. Four years separate the measure of commitment at time one and commitment at time three, during which future plans regarding education may have become more concrete and realistic.

#### TABLE 1 PHI COEFFICIENTS OF COMMITMENT AT THREE TIMES SUBSAMPLE OF NLSY

Commitment at T1 r Commitment at T2 = 0.484; P < 0.000Commitment at T1 r Commitment at T3 = 0.454; P < 0.000Commitment at T2 r Commitment at T3 = 0.667; P < 0.000

The relationship between commitment at time one and perception of sanction threats was not in the direction predicted. There was a slight tendency for those with lower commitment to perceive a higher sanction threat, though the correlation was small (P< .01; see Table 2).

PERCEIVED SANCTION THREAT	COMMITMENT TO EDUCATION LO	HI	
LO	61.3	64.8	2923 63.4
НІ	38.7	35.2	1691 36.6
	11911 41.4	2703 58.6	4614 100.0
<u>STATISTICS</u> PHI	<u>VALUE</u> -0.035	P< 0.008	33

TABLE 2 THE ASSOCIATION OF PERCEPTION AND COMMITMENT T1 SUBSAMPLE OF THE NLSY

The relationship between perceived sanction threats and rule violations was negative for both high and low commitment, but was much stronger for low commitment. At high levels of commitment, the relationship was weak and not significant. At low levels of commitment, the relationship was slightly stronger and significant. At low commitment, those who perceived sanction threat as low were more likely to have one or more violations than those who perceived the sanction threat as high. For the highly committed, perception of sanction threat had little relationship to violation (see Tables 3 and 4).

### TABLE 3 THE ASSOCIATION BETWEEN PERCEPTIONS OF SANCTIONS AND LOW COMMITMENT SUBSAMPLE OF NLSY

LOW COMMITMENT TO EDUCATION				
	PERCEIVED SANCTION THREAT			
RULE VIOLATIONS	LO	HI		
NONE	29.2	35.4		464 31.7
1 OR MORE	70.8	64.6		1002 68.3
	893 60.9	573 39.1		1466 100.0
<u>STATISTICS</u> PHI	<u>VALUE</u> -0.065		P< (	.0064

TABLE 4 THE ASSOCIATION BETWEEN SANCTION THREAT AND HIGH COMMITMENT SUBSAMPLE OF NLSY

HIGH COMMITMENT TO	<u>EDUCATION</u>		
	PERCEIVED SANCTION THREAT		
RULE VIOLATIONS	LO	HI	
NONE	41.0	42.8	906 41.6
1 OR MORE	59.0	57.2	1271 58.4
	1404 64.5	773 35.5	2177 100.0
STATISTICS PHI	<u>VAI</u> -0.0		P< 0.1991

36

The zero-order correlation between commitment at time one and commitment at time two is .484 (phi coefficient; P< .0001). Note that social control as it is measured here occurred before the report of level of commitment at time two. For those who are subjected to social control, the correlation between commitment at time one and commitment at time two is .400 (phi coefficient; P< .0001). For those who were not subjected to social control, the correlation at time two is .488 (P< .0001). In addition, the relationship between commitment and social control is negative, and it is stronger at time two (-.195; P< .0001) than it was at time one (-.184; P< .0001).

#### DISCUSSION

The expected relationship between commitment and sanction threat as consequential was not supported by the data. This may be due to the relatively weak measure of perception. Though the correlations were weak, weakly committed individuals had a slightly higher perception of sanction threat than did highly committed individuals. Measures of general sanction fear and formal sanction threat continue to show only modest deterrence effects (Waldo and Chiricos, 1972; Jenson, Erickson and Gibbs, 1978; Tittle, 1980).

The measure of commitment also may have been a weak reflection of integration into the conventional order. As was

37

suggested earlier, integration is a difficult concept to operationalize. The distribution of responses to the commitment question required a collapsed measure that distinguishes only those who plan to complete 12th grade or less from those who wish to do some college study. This limited response range almost certainly affected the results. A conceptualization which includes some measure of time or effort involved in school would be a better indicator of commitment to education.

The relationship between perception of sanction threat and violation, though relatively weak, was consistent with the proposed model and the general body of deterrence research. For both high and low commitment, perceptions of sanctions as consequential was related to lower violations, though for high levels of commitment the relationship was not significant. As expected, this relationship is stronger for the weakly committed, presumably those who are not constrained by commitment to the rules. The data support previous findings that suggest that commitment to rules and laws reduces the effect of sanctions (see Silberman, 1976; Meier and Johnson, 1977; Waldo and Chiricos, 1972; Tittle, 1980).

The theoretical complexities of the social control/commitment relationship can not be examined with the current data. However, some of the findings suggest that social control may reduce commitment under certain circumstances. Theoretically, social control enhances

commitment for those who are already highly committed, and reduces commitment for those who are lowly committed. The data for this study indicate that social control weakened commitment. Overall, this sample was only moderately committed, as 41.4 percent were classified as low on The relationship between social control and commitment. commitment was negative, as would be expected, and more strongly negative at time two than at time one. The correlation between commitment at time one and commitment at time two is lower for those who have experienced social control than for those who have not experienced social control (phi=.400 and phi=.488 respectively, see p. 31). These interpretations must be qualified because of the weak measure of commitment and the possibility that the relationship between measures at times one and two are affected by the maturation of the respondents.

This research suggests that perceptions of sanction threats as consequential are related to lower violations. Consistent with previous research, perceptions of sanction threats seem to affect those who are weakly committed to the normative order more strongly than those who are strongly committed. However, the relationship between commitment and perception of sanctions is unclear. The data suggest that the weakly committed may actually perceive a greater sanction threat than those who are highly committed, though this conclusion is limited by weak measures of commitment and perception. The data do suggest that commitment is affected by social control, though this finding is tentative at best. This finding is consistent with Durkheim's (1964) discussion of the relationship between social control and commitment. Social control is integrative when it is restitutive in nature but it is not integrative when it is repressive.

The results of the time comparisons of commitment at times one and two can be taken only as suggestive. The imposition of social control was related to a slight decrease in commitment from time one to time two. This decrease is consistent with the proposed model considering the high percentage of respondents classified as "low commitment." As indicated by Table 2, 41.4 percent of the respondents were classified as weakly committed. Thus the imposition of social control might be expected to decrease the overall level of commitment at time two. However, the difference between the two times is small, the effect of maturation on commitment at time two is unspecified, and the measure of commitment itself is questionable.

## Appendix A

# Marginal distributions for dummied variables.

PERCEIVED SANCTION THREAT: STUDENTS GET AWAY WITH ANYTHING VARIABLE LABEL VALUE FREQUENCY VALID PERCENT

LO: NOT TOO TRUE THRU VERY TRUE	1	2930	63.4
HI: NOT TRUE AT ALL	2	1695	36.6
MISSING	-3	20	MISSING
TOTAL		4645	100.0

COMMITMENT AT TIME 1

VARIABLE LABEL	VALUE	FREQUENCY	VALID PERCENT
----------------	-------	-----------	------------------

LOW COMMITMENT	1	1923	41.5
HIGH COMMITMENT	2	2710	58.5
MISSING	-3	12	MISSING
TOTAL		4645	100.0

### COMMITMENT AT TIME 2

VARIABLE LABEL	VALUE	FREQUENCY	VALID
			PERCENT

LOW COMMITMENT	1	1924	42.6
HIGH COMMITMENT	2	2596	57.4
MISSING	-3	120	MISSING
TOTAL		4645	100.0

## COMMITMENT AT TIME 3

VARIABLE LABEL	VALUE	FREQUENCY	VALID PERCENT
LOW COMMITMENT	1	1821	40.5

TOTAL		4645	100.0
MISSING	-3	148	MISSING
HIGH COMMITMENT	2	2676	59.5
LOW COMMITMENT	<u>_</u>	1821	40.5

## AMOUNT OF SOCIAL CONTROL

		I	I	1
VARIAB	LE LABEL	VALU	E FREQUENCY	Y VALID PERCENT

NO SOCIAL CONTROL	1	3370	74.6
SOME SOCIAL CONTROL	2	1149	25.4
MISSING	-3	126	MISSING
TOTAL		4645	100.0

### VIOLATIONS

VARIABLE LABEL	VALUE	FREQUENCY	VALID PERCENT
NO VIOLATIONS	1	1377	37.6
1 OR MORE VIOLATIONS	2	2290	62.4
MISSING	-3	978	MISSING
TOTAL		4645	100.0

#### BIBLIOGRAPHY

- Aday, David P. Jr. 1990. <u>Social Control at the Margins.</u> Belmont, California: Wadsworth Publishing.
- Aday, David P, Jr. and Michael W. Anderson. 1991, under review. "Testing a Control/Association/Deterrence Theory of Adolescent Drug use.
- Anderson, L.S., T.G. Chiricos, and G.P. Waldo. 1977. Formal and Informal Sanctions: A Comparison of Deterrent Effects." <u>Social Problems.</u> 24(1): 103-114.
- Chiricos, T.G., and G.P. Waldo. 1970. "Punishment and Crime: An Examination of Some Empirical Evidence." <u>Social</u> <u>Problems</u> 18(Fall): 200-17.
- Durkheim, Emile. 1964. <u>The Division of Labor in Society.</u> New York: Free Press (first published 1893, trans. George Simpson).
- Erickson, Maynard L., and Jack P. Gibbs. 1978. "Objective and Perceptual Properties of Legal Punishment and the Deterrence Doctrine." <u>Social Problems.</u> 25(3): 253-264.
- Geerken, M. and W. Grove. 1975. "Deterrence: Some Theoretical Considerations." <u>Law and Society Review</u> 9 (Spring): 497-513.
- Gibbs, Jack P. a:1968. "On Crime, Punishment, and Deterrence." <u>Social Science Quarterly</u> 49(March): 157-162.
- ----b.:1975. <u>Crime, Punishment and Deterrence.</u> New York: Elsevier.
- Grasmick, Harold G. and George J. Bryjack. 1980. "The Deterrent Effect of Perceived Severity of Punishment." <u>Social Forces</u> 59(December): 471-491.
- Hagan, John, ed. 1982. <u>Deterrence Reconsidered:</u> <u>Methodological Innovations.</u> Beverly Hills/London/New Delhi: Sage Publications.
- Hirschi, Travis. 1969. <u>Causes of Delinquency.</u> Berkeley: U. Calif. Press.
- Jensen, G.F. 1969. "'Crime Doesn't Pay': Correlates of a Shared Misunderstanding." <u>Social Problems.</u> 17: 189-201.

- Jensen, G.F., M.L. Erickson and Jack P. Gibbs. 1978. "Perceived Risk of Punishment and Self-reported Delinquency." <u>SocialForces.</u> 57 (Sept.):57-78.
- Massey, J.L. and M.D. Krohn. 1986. "A Longitudinal Examination of an Integrated Social Process Model of Deviant Behavior." <u>Social Forces</u> 65: 106-134.
- Matsueda, Ross L. 1982. "Testing Control Theory and Differential Association: A Causal Model Approach." <u>American SociologicalReview.</u> 47: 489-504.
- Meier, R.F. and W.T. Johnson. 1977. "Deterrence as Social Control: The Legal and Extralegal Production of Conformity." <u>American Journal of Sociology</u> 42: 292-304.
- Savititz, Leonard D. 1958. "A Study in Capitol Punishment." Journal of Criminal Law, Criminology and Police Science. (Nov.-Dec.): 338-341.
- Schuessler, Karl. 1952. "The Deterrent Influence of the Death Penalty." <u>The Annals</u> 284 (Nov.): 54-62.
- Sellin Thorsten. 1967. "Homicides in Retentionist and Abolistionist States" in Thorsten Sellin (ed), <u>Capitol</u> <u>Punishment.</u> New York: Harper and Row: 135-138.
- Silberman, Mathew. 1976. "Toward a Theory of Criminal Deterrence." <u>American Sociological Review</u> 41: 442-461.
- Steel, Lauri, Marian S. Eaton, and Nancy M. Carr. 1984. <u>National Longitudinal Study of Youth, 1979-1982: Selected</u> <u>Variables. A User's Guide to the Machine-Readable Files</u> <u>and Documentation.</u> Center for Human Resources, Ohio St. U.
- Stinchcombe, Arthur, L. 1964. <u>Rebellion in a High School.</u> Chicago: Quadrangle Books.
- Sutherland, Edwin H. and Donald Cressey. 1978. <u>Criminology</u>, 10th edition. Philadelphia: J.B. Lippincott.
- Tittle, Charles R. a:1969. "Crime Rates and Legal Sanctions." <u>Social Problem</u> 16(Spring): 409-423.
- ----b:1980. <u>Sanctions and Social Deviance: The Question of</u> <u>Deterrence.</u> New York: Praeger.
- Tittle, Charles, and Alan R. Rowe. a:1973. "Moral Appeal, Sanction Threat and Deviance: An Experimental Test." <u>Social Problems.</u> 20:488-98.

- ----b:1974. "Certainty of Arrest and Crime Rates: a Further Test of the Deterrent Hypothesis." <u>Social</u> Forces. 52: 455-62.
- Waldo, Gordon P. and Theodore G. Chiricos. 1972. "Perceived Penal Sanction and Self-reported Criminality: A Neglected Approach to Deterrence Research." Social Problems. 19(spring): 522- 540.
- Zimring, Frank, and Gordon Hawkins. 1973. <u>Deterrence: The</u> <u>Legal Threat in Crime Control.</u> Chicago: U. of Chicago Press.

#### VITA

### Robin E. Sowell

Born in Jackson, Mississippi, March 23, 1967. Graduated from Salem High School in Salem, Virginia in 1985. B. A. Radford University, 1989. Entered College of William and Mary in September, 1990 as a graduate assistant in the Department of Sociology. In September 1991 entered Washington State University as a graduate assistant in the Department of Sociology.