

Empirical Status of Social Learning Theory of Crime and Deviance: The Past, Present, and Future

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Introduction

This paper has two goals. The first goal is to review the empirical research evidence on the validity of social learning theory as an explanation of criminal and deviant behavior. This is a topic about which we have written extensively, both separately and jointly, over a long period of time (see Akers, 1973; 1985; 1998; Jensen, 1972; Akers et al., 1979; Jensen and Rojek 1998; Akers and Jensen, 2003; Jensen, 2003; Akers and Sellers, 2004). That previous work establishes that the theory fares very well in terms of all of the major criteria for sound theory, including logical consistency, scope, usefulness, and most important, strength of empirical support. Indeed, it is reasonable to propose that the theory has been tested in relation to a wider range of forms of deviance, in a wider range of settings and samples, in more different languages, and by more different people, has survived more "crucial tests" against other theories, and is the most strongly and consistently supported by empirical data than any other social psychological explanation of crime and deviance. (See Akers 1998; Akers and Jensen 2003).

The second goal is to illuminate new directions for expanding, elaborating, and testing the theory in the future. We will propose ways to build on the Social Structure and Social Learning (SSSL) model (Akers, 1998) and our recent efforts in "taking social learning global" (Jensen and Akers, 2003) toward an integrated theory that addresses issues that we believe have been ignored for too long. At the risk of over-reaching, we will attempt to stimulate attention, discourse, and perhaps debate regarding extension of social learning theory by making a rather daring claim. We

will assert that social learning theory can be elaborated to account for criminological and sociological regularities, making sense of events not only at the micro-level but also at higher levels of temporal and ecological aggregation, providing a better explanation than has been so far provided by other theories.

Overview of Social Learning Theory

Social learning is a general theory that offers an explanation of the acquisition, maintenance, and change in criminal and deviant behavior that embraces social, nonsocial, and cultural factors operating both to motivate and control criminal behavior and both to promote and undermine conformity. The basic proposition is that the same learning process in a context of social structure, interaction, and situation, produces both conforming and deviant behavior. That is, the theory is not, contrary to the misconception sometimes found in the literature, simply a theory of the acquisition of novel behavior, a theory of bad companions, or a "cultural deviance" theory. It is not solely a "positivistic" theory of the causes of crime, addressing only "why they do it,"and incapable of explaining "why they do not" (Gottfredson and Hirschi, 1990; see Akers, 1996; 1998). Rather, the theory incorporates crime facilitating as well as protective and preventive factors. The probability of criminal or conforming behavior is a function of the balance of these influences on behavior not only those operative in one's learning history, but also on those operating at a given time in a given situation, and those predictive of future behavior (Akers, 1998:59)..

The concepts, propositions, and variables in social learning theory have been presented in published form in great detail over the past forty years, is well known in the classroom and widely cited in the literature (for example, Burgess and Akers, 1966; Akers, 1973; 1985; 1992;

1994;1998; Akers et al., 1979; Akers and Jensen, 2003; Akers and Sellers, 2004). Therefore, we make the assumption that the reader will be somewhat familiar with the theory, and since our focus here is on the empirical status and future directions of the theory, the theory will not be presented in detail. Rather, our overview will concentrate on the four major explanatory concepts or dimensions of the theory — **differential association, definitions** (and other discriminative stimuli), **differential reinforcement, and imitation.**

Differential association refers to direct association and interaction with others who engage in certain kinds of behavior or express norms, values, and attitudes supportive of such behavior, as well as the indirect association and identification with more distant reference groups. The groups with which one is in differential association provide the major immediate and intermediate social contexts in which all the mechanisms of social learning operate. The most important of these groups are the primary ones of family and friends, but the concept of differential association also includes both direct and indirect interaction and exposure to secondary and reference groups as well as mass media, internet, computer games, and other "virtual groups" (Warr, 2002). Those associations that occur earlier (priority), last longer and occupy more of one's time (duration), take place most often (frequency), and involve others with whom one has the more important or closer relationship (intensity) will have the greater effect on behavior. The theory hypothesizes that the more one's patterns of differential association are balanced in the direction of greater exposure to deviant behavior and attitudes, the greater the probability of that person engaging in deviant or criminal behavior.

Definitions are one's own orientations, rationalizations, justifications, excuses, and other attitudes that define the commission of an act as relatively more right or wrong, good or bad,

desirable or undesirable, justified or unjustified, appropriate or inappropriate. Definitions include those learned from socialization into general religious, moral, and other conventional values and norms that are favorable to conforming behavior and unfavorable to committing any deviant or criminal acts (or general beliefs or worldviews that support deviant acts). Specific definitions orient the person to particular acts or series of acts and to define given situations as providing opportunity or lack of opportunity for commission of crime. The greater the extent to which one has learned and endorses general or specific attitudes that either positively approve of or provide justification (neutralizations) for the commission of criminal or deviant behavior in situations discriminative for it the greater the chances are that one will engage in that behavior Cognitively, these definitions provide a mind-set that makes one more willing to commit the act when the opportunity is perceived. Behaviorally, they affect the commission of deviant or criminal behavior by acting as internal discriminative stimuli in conjunction with external discriminative stimuli (place, time, presence or absence of others, and so on) that provide cues or signals to the individual as to what kind of behavior he or she has the opportunity or expectation of exhibiting in that situation. Some of the definitions favorable to deviance are so intensely held as part of a learned belief system, for instance, the radical ideologies of militant groups implicated in terrorists acts, that they provide strong positive motivation for criminal acts (Akers and Silverman, 2004). As an another example, it appears that in Elijah Anderson's depiction, the "code of the street" (1999) may require that attacks on one's honor be responded to in ways that knowingly violate the law. For the most part, however, definitions favorable to crime and delinquency do not directly motivate action in this sense. Rather, they are conventional beliefs so weakly held that they fail to functions as definitions unfavorable to crime or they are learned approving, justifying,

or rationalizing attitudes that, however weakly or strongly endorsed, facilitate law violation in the right set of circumstances by providing approval, justification, or rationalization.

Differential Reinforcement. Differential reinforcement refers to the balance of anticipated or actual rewards and punishments that follow or are consequences of behavior. Whether individuals will refrain from or commit a crime at any given time (and whether they will continue or desist from doing so in the future) depends on the balance of past, present, and anticipated future rewards and punishments for their actions. The greater the value, frequency, and probability of reward for deviant behavior (balanced against the punishing consequences and rewards/punishment for alternative behavior), the greater the likelihood that it will occur and be repeated. Reinforcers and punishers can be nonsocial; for example, the direct physical effects of drugs and alcohol. However, the theory proposes that most of the learning in criminal and deviant behavior is the result of direct and indirect social interaction in which the words, responses, presence, and behavior of other persons directly reinforce behavior, provide the setting for reinforcement (discriminative stimuli), or serve as the conduit through which other social rewards and punishers are delivered or made available. The concept of social reinforcement (and punishment) includes the whole range of actual and anticipated, tangible and intangible, material and symbolic rewards valued in society or subgroups. Social rewards can be highly symbolic. In self-reinforcement the individual exercises self-control, reinforcing or punishing one's own behavior by taking the role of others, even when alone. The balance of reinforcement may motivate individuals to commit law violations or deviant acts even in the face of their own definitions unfavorable to those acts, but the acts are most probable when both the reinforcement balance and the balance of one's own definitions are in the same deviant direction.

Imitation refers to the engagement in behavior after the direct or indirect (e.g. in media depictions) observation of similar behavior by others. Whether or not the behavior modeled by others will be imitated is affected by the characteristics of the models, the behavior observed, and the observed consequences of the behavior (vicarious reinforcement) (Bandura, 1977). The observation of salient models in primary groups and in the media affects both pro-social and deviant behavior (Donnerstein and Linz, 1995). Imitation is more important in the initial acquisition and performance of novel behavior than in the maintenance or cessation of behavioral patterns once established, but it continues to have some effect in maintaining behavior.

These social learning concepts define sets of variables that are all part of the same underlying *process* that is operative in each individual's learning history (both learning from and influencing others), in the immediate situation in which an opportunity for a crime occurs, and in the larger *social structural* context (at both the meso-level and macro-level). The social learning process is dynamic and includes reciprocal and feedback effects. Reinforcement in operant conditioning is a response-stimulus-response process in which behavior produces consequences that in turn produce the probability of the behavior being repeated (Skinner, 1959). Therefore, contrary to the way some have characterized the theory (Thornberry, et al. 1994), reciprocal and sequential effects of social learning variables and deviant/conforming behavior are recognized, albeit, with an emphasis the effects of the learning variables on deviant behavior. The typical temporal sequence in the process by which persons come to the point of violating the law or engaging in other deviant acts is hypothesized to be one in which the balance of learned definitions, imitation of criminal or deviant models, and the anticipated balance of reinforcement produces the initial delinquent or deviant act. The facilitative effects of these variables continue in

the repetition of acts, although imitation becomes less important than it was in the first commission of the act. After onset or initiation, the actual social and non-social reinforcers and punishers affect whether or not the acts will be repeated and at what level of frequency. Both the behavior and the definitions favorable and unfavorable, are affected by the consequences of the initial acts. Whether a deviant act will be repeated in a situation that presents, or is perceived to present, the opportunity depends on the learning history of the individual and the set of definitions, discriminative stimuli and reinforcement contingencies in that situation.

The theory does not hypothesize that definitions favorable to law violation only precede and are unaffected by the initiation of criminal acts. As noted, acts in violation of the law can occur even when defined as undesirable and indeed can occur in the absence of any thought given to right and wrong at the moment. Furthermore, definitions may be applied by the individual retroactively to excuse or justify an act already committed. To the extent that such excuses successfully mitigate others' negative sanctions or one's self-punishment, however, they become cues for the repetition of deviant acts. At that point they precede the future commission of the acts. Differential association with conforming and non-conforming others typically precedes the individual's committing the acts. As noted above, families are the principal primary groups included in the differential association process, and it is obvious that association, reinforcement of conforming or deviant behavior, deviant or conforming modeling, and exposure to definitions favorable or unfavorable to deviance (socialization) takes place within the family (or family surrogate) prior to the onset of delinquency or law violations. While it is often the case that one has deviant acts or tendency (as a function of previously learned patterns in the family) that makes him attractive to and attracted to deviant peer groups, associations are more typically formed

initially around attractions, friendships, and circumstances, such as neighborhood proximity and family location and preferences, that have little to do directly with co-involvement in some deviant behavior. However, after the greater associations with those exhibiting deviant patterns have been established and the reinforcing or punishing consequences of the deviant behavior are experienced, both the continuation of old and the seeking of new associations (over which one has any choice) will themselves be affected. One may choose further interaction with others based, in part, on whether they too are involved in similar deviant or criminal behavior. But the theory proposes that the sequence of events, in which deviant associations and attractions precede the onset of delinquent behavior, will occur more frequently than the sequence of events in which the onset of delinquency precedes the beginning of deviant associations. Further, after the deviant peer associations are taken up they will continue to the extent that they are on balance more rewarding than alternatives and any deviant behavior or tendencies will increase after the peer associations have been formed (Conger, 1976). Whether the deviant patterns will be persistent and stable (or will desist) over time is a function of the continuity or discontinuity in the person's patterns of associations, definitions, and reinforcement.

Review of Research on Social Learning Variables

What Research Findings Are Relevant?

This review concentrates on research findings on social learning theory as developed by Ronald L. Akers. Akers' social learning theory was originally proposed as *differential* association-reinforcement theory in collaboration with Robert L. Burgess (Burgess and Akers, 1966) as a behavioristic reformulation integrating Edwin H. Sutherland's (1947) differential association theory and behavioral psychology as a general theory of crime and crime. It is well

known that the designation of "social learning" may refer to any compatible cognitive-behavioral or social behavioral approach in the social sciences, and empirical evidence related to them could be included as relevant to the empirical status of social learning theory in criminology (Patterson et al., 1975, 1992; Bandura, 1977; Jessor and Jessor, 1977; White et al., 1991 Patterson and Chamberlain, 1994; Patterson, 1995).

There is a broad range of rehabilitation, prevention, treatment, and behavior modification programs operating in correctional, treatment, and community facilities and programs for juveniles and adults that are explicitly or implicitly predicated on the cognitive/behavioral principles in social learning theory. These programs have had greater success in treating, preventing, or correcting criminal and delinquent behavior than alternative approaches (see Pearson et al., 2002; Andrews and Bonta, 2003; Cullen et al., 2003; Akers and Sellers, 2004). But we do not include a review of the evaluation research on applications of social learning in such programs here. The outcomes of applied programs are valuable for directly assessing the usefulness of a theory, but can be used only indirectly to assess the truthfulness of a theory. Also, the empirical status of a theory can be indirectly assessed by examining the extent to which the theory fits or makes sense of the known empirical correlates and variations in crime and delinquency. But the empirical status of a theory is best evaluated by primary research findings on models, propositions, and variables derivable from the theory. It is this body of research to which our review here refers.

As is true for the empirical data on all major criminological theories, a great deal of the quantitative research relevant to social learning theory involves linear models based on the analysis of survey data. Even when the analyses allow identification of nonrecursive relationships

using longitudinal data, such data cannot fully reproduce the behavioral process envisioned in social learning theory. For example, people may not recognize that their own behavior mimics the behavior of others, and survey methods may not capture subtle distinctions among types of learning mechanisms. A variety of distinct observational, quantitative, and qualitative methods may be necessary for empirically observing and isolating different learning mechanisms.

Nevertheless, quantitative models containing social learning variables are appropriate for assessing the empirical status of social learning theory (as well as other theories) because the principal independent variables in this process, and their operational measures, have been hypothesized as causally (in the probabilistic sense) linked to deviant behavior. If the theory is correct, then empirical findings on structural models or multiple regression analyses of sets of variables derived from or consistent with the theory that approximate or provide a snapshot of the underlying process, should be supported by the data when subjected to proper statistical analysis. It is reasonable to expect the theory to withstand empirical scrutiny with cross-sectional and longitudinal survey data even though such data do not fully reproduce the ongoing process. To the extent that such data do not conform to the expectations of the theory, then it reasonable to conclude that the theory, and the underlying social learning process it hypothesizes, is not confirmed. If the relationships are as predicted, then the theory is supported; if not, the theory is undermined. The greater the magnitude of the observed relationships, the stronger the support for the theory. Weak relationships raise questions about the power of the theory, and relationships in the direction opposite from theoretical expectation disconfirm the theory.

Using the same type of data and empirical models for testing other theories (whether or not those other theories posit some underlying social process), allows direct comparisons of the effects of social learning variables with the effects of variables taken from other theories. Neither social learning theory nor any other theory of crime and deviance has been able to explain all instances or variation in such behavior, and none can withstand an absolute standard of necessary and sufficient causation with 100% of the variance explained. By that standard all current and past (and one should say future) theories fail. Rather, the standard is whether the presence of the explanatory variables increase or decrease the probability of the behavior occurring, and assessment of the empirical status of any theory should be based not only on how well the theory, or variables from the theory, do when tested alone, but also how well they do when compared to different, alternative, or competing models.

A fair review of research on social learning variables and hypotheses derived from the theory, both on its own and in comparison with other theories, leads to the conclusion that social learning theory is supported by the preponderance of empirical evidence. There is a large body of research that includes one or more of the social learning concepts and variables of differential reinforcement, differential association, definitions, and modeling, mainly involving peer groups and the family, accounting for individual differences in criminal, delinquent, and deviant behavior. In empirical models, social learning variables (particularly differential association) nearly always have stronger net effects on criminal/deviant behavior than social psychological variables taken from other theories and remain controlling for a range of socio-demographic and structural variables. There are few findings in any of the research that are contradictory or inconsistent with the theory, and most of the research provides strong to moderate support for social learning hypotheses.

We view support for the theory, or lack of support for the theory, as coming from any

research in which one or more of the social learning variables, separately, in combination, or in an overall model with other variables, have been measured and related to dependent variables of criminal, delinquent, or deviant behavior. Most of the research findings we count as supportive of the theory is presented by the respective researchers as a direct or indirect test of social learning theory (by itself or in comparison or combination with other theories) or otherwise acknowledge that their research includes variables and hypotheses derived from or relevant to social learning (even when they make no claims to testing the theory). However, sometimes researchers include one or more empirical measures that have long been used as, or clearly can be seen to be, empirical operationalizations of social learning variables, but do not identify the variables as social learning as such, give other names to them, identify them with other theories, refer to social learning in crime or deviance without citation, or make no reference at all to social learning (for examples see Gwartney-Gibbs et al., 1987; Osgood et al., 1996; Bankston and Caldas, 1996; Costello and Vowell, 1999; Osgood and Anderson, 2004).

For example, the lead article in the most recent issue of <u>Criminology</u> (Osgood and Anderson 2004) apply "an individual-level routine activities perspective to explaining rates of delinquency" and concludes that "Time spent in unstructured socializing with peers has both individual and contextual effects that explain a large share of variation in rates of delinquency across groups of adolescents who attend different schools." Unstructured socializing was measured by responses to a single item: "In an average week, how many hours do you spend hanging around with your current friends, not doing anything in particular, where no adults are present (2004: 530)." Because parental monitoring was found to affect unstructured socializing, they propose that it supports an integration of routine activity with social disorganization theory.

When the paper was presented at the ASC meetings prior to its publication in the journal, we (Akers and Jensen) expressed concerns that social learning was misclassified under "cultural or normative interpretation of the role of peer groups" and that no mention was made of the fact that the findings reported in the paper obviously fit social learning theory. The published paper did not address these concerns. Osgood and Anderson claim that their theory is distinct from cultural interpretations because they emphasize "contextual and situational influences rather than positing a causal role for peer culture that values delinquency (2004: 525)." Their theory may be distinct from a theory that only posits a causal role for peer culture (whatever theory that may be), but it is not distinct from social learning. "Individual level routine activities" theory then appears to be a partial variant of individual level social learning theory (partial because it does not include a measure of the behavior and attitudes of the peers with whom one is spending unstructured time). This examples illustrate a tactic that is too often found in reporting research findings while ignoring or denying their relevance for social learning theory: mis-classify the theory and direct criticism at the category in which it is mis-classified. Anyone familiar with social learning theory knows that the theory is not in any way confined to the "causal role of peer culture." The theory clearly posits one normative learning mechanism and three non-normative mechanisms, including imitation, differential reinforcement, and differential association. What is involved in "unstructured socialization in peer groups" if not observation of peer behavioral models, exposure to peers' values, norms, and attitudes, and social interaction with peers in which behavior and attitudes are socially reinforced. The question measuring this unstructured socializing during time spent with peers free of adult surveillance is one type of measure of differential association and a setting in which imitation, social reinforcement, and sharing of attitudes and definitions take place

as predicated by social learning theory. How do these social learning variables differ from "contextual and situational influences"? Contrary to Osgood and Anderson's claim, they do not. Moreover, while this measure of unsupervised peer association is not the most common measure (in which respondents are asked to report proportions or number of peers engaged in particular behavior and/or holding particular attitudes), it is clearly closer to being an operationalization of the concept of differential peer association than any explanatory concept found in routine activities or social disorganization theory.

We believe it is reasonable to count empirical findings as supportive of the theory if the measures of the independent variables in the study are an operationalization of social learning variables such as peer associations, parental modeling, prosocial and deviant attitudes, media imitation, informal positive and negative social sanctions, whether or not the authors of the research specifically identify the variables as coming from social learning theory. For instance cross-sectional or longitudinal research in which some measure of number, frequency, or proportion of delinquent and non-delinquent peers or some other indicator of differences in association with delinquent and non-delinquent peers provides at least a partial test of social learning theory because it plainly includes measures of a key variable in the theory, namely, differential association. The same would be true of measures of differences in peer values, norms, or attitudes (definitions favorable and unfavorable)..

This standard of relevance holds whether the authors reporting the research specifically identify the research as testing social learning theory and whether the variable is labeled by them as differential association, peer association, peer influence, deviant peer bonding, peer networks, gangs, peer attitudes, deviant peer pressure, unstructured peer socializing, or some other label. If

the research finds a positive and significant relationship of that variable to a dependent variable of delinquency or deviance, then that can reasonably be seen as supportive of social learning theory.

If no relationship or a negative relationship is found, then the findings can reasonably be seen as not supportive of the theory.

The same holds for all of the other major social learning variables. Research testing the relationship of the respondents' own balance of definitions favorable and unfavorable to their delinquent or deviant behavior is relevant to social learning theory whether the researchers call them neutralizations, techniques of neutralizations, attitudes, beliefs, justifications, or something else. Research finding that the balance of rewards and punishments, benefits and costs, positive and negative consequences, whether labeled as informal social control, reactions of peers or family, sanction threat, rational choice, or something else, is related to deviant behavior is supportive of the hypotheses in social learning theory regarding differential reinforcement.

Research with measures of parental or peer modeling, media depictions, or other measures that can be seen as validly operationalizing imitation can be seen as at least partially testing social learning theory.

A Half-Century of Supportive Research Findings

Although the first empirical tests of full models with all of the major social learning concepts measured and entered into the models came in the late 1970s (see Akers, et al., 1979), published reports of research can be found for at least twenty years prior to that time in which one or more of the main variables incorporated into social learning theory are found to have the predicted relationship with delinquent and criminal behavior. Although Sutherland did not publish quantitative research specifically testing differential association theory, his viewed his classic

qualitative study of professional theft (1937) as empirically supportive of differential association theory both in the sense that one learned the techniques of professional theft from other thieves and in the sense that the criminal ideology of professional thieves constituted one form of "definitions favorable" to crime. Similarly, Cressey's (1953) classic study in the 1950's of apprehended embezzlers found that exposure to and acceptance of already existing definitions justifying or rationalizing violation of trust was the key part of the three step process of embezzlement.

In each decade since the 1950s and continuing into the first decade of the twenty-first century, a sizeable numbers of journal articles, chapters, and books have been published reporting research finding that definitions, differential association, differential reinforcement, imitation, and other learning-relevant variables singly or in some combination have the relationship with delinquent or criminal behavior expected in social learning theory. The empirical relationships are not only statistically significant but usually of sufficient magnitude to conclude that the effects of variables identified as part of the social learning process are not trivial, but substantially account for variation in the dependent variables of criminal, delinquent, and deviant behavior. There is an abundance of such studies and we make no attempt here to list or cite all of them or to discuss them individually. We would assert that the volume of studies and the positive findings, with few negative findings, provides greater empirical support for social learning theory than for any other major social psychological theory of crime and deviance.

As in true for most of the research testing social psychological theories of crime and deviance, a considerable amount of social learning research has been done with samples of adolescents, and the typical data collection technique is self-report surveys. The dependent

variables in this research range from minor forms of adolescent deviance, to teenage use or abuse of alcohol, drugs, and tobacco, to serious delinquent and criminal property and personal offenses. Some of the research has been conducted with adult samples with substance use and abuse or various types of criminal behavior as the dependent variable. The most commonly measured social learning variable is differential peer association (although it is sometimes given a different label such as "deviant peer bonding" or "delinquent opportunities"). This variable is typically measured by number or proportion of friends who are involved in delinquent or deviant behavior, but sometimes the modalities of associations (frequency, duration, intensity, and priority) are measured and sometimes the values, norms, or attitudes of the peers toward the behavior in question (the normative dimension) are measured.. Learned definitions favorable and unfavorable, most often measured by respondents' endorsement or agreement with statements of positive/negative attitudes and beliefs or neutralizing definitions toward given deviant behavior, are also often found in this research as independent variables (again often given variable labels other than "definitions"). Measures of differential reinforcement are less frequently found in the research, but measures such as reports of peer reactions, parental sanctions, legal sanctions, or other actual or anticipated rewarding and punishing consequences of one's deviant behavior are found in the literature. Modeling or imitation is least often included in this research. Not surprisingly, when imitative effects are tested, it is most likely to be with adolescent or younger samples. It is sometimes measured directly, but is also inferred from parental behavior or from exposure to media portrayals.

The magnitude of the empirical relationships between these social learning variables and delinquent, criminal, and deviant behavior reported in the literature is only sometimes weak. The

typical finding is strong to moderate effects, differing somewhat by which social learning variable is considered, by type of deviance under study, by how the variables are measured, or by sample. The relationships have generally been stronger and more consistently found than for any other set of social psychological or sociodemographic variables included in the research, and there has been very little negative or counter evidence reported in the literature.

Virtually all of the early self-report delinquency studies by Short (1957; 1958; 1960; Nye, 1958), Voss (1964), and others who included measures of differential association (almost always differential peer association) found clear effects on delinquency in the expected direction. Even in the classic work by Travis Hirschi (1969) in which he presented and found clear empirical support for his social bonding theory, self-reported delinquency was more strongly related to differential peer association than any of the social bonding variables even though the measure of peer association used in Hirschi's study was itself a relatively indirect and weak measure (respondents' report of any close friends picked up by the police rather than respondents' reports of numbers or proportions of friends committing delinquent behavior or holding delinquent attitudes). Studies in the 1970s include Jensen (1972), Krohn (1974), Kandel (1974), Burkett and Jensen (1975), Conger (1976), Jessor and Jessor (1977) and others. Supportive research reported in the 1980s, include Minor (1980), Kandel and Adler (1982), Andrews (1980), Matsueda (1982), Dull (1983), Winfree and Griffiths (1983), Meier et al. (1984), Patterson and Dishion (1985), LaGrange and White (1985), Elliott et al. (1985), Massey and Krohn (1986), Dembo et al. (1986), Lanza-Kaduce and Klug (1986), White et al. (1986; 1987), Marcos et al. (1986), Kandel and Andrews (1987), Matsueda and Heimer (1987), Johnson, et al., 1987, Orcutt (1987), Matsueda and Heimer (1987), Burkett and Warren (1987), White et al. (1987), and Lopez et al. (1989),

Findings from research that are supportive of social learning continued to be reported in the 1990s such as by Sellers and Winfree (1990), Loeber et al. (1991), Kandel and Davies (1991), Agnew (1991a; 1993; 1994), McGee (1992), Junger-Tas 1992, Warr and Stafford (1991), Rowe and Gulley (1992), McGee, 1992; Winfree et al., 1993; 1994a; 1994b; , Lauritsen (1993), Warr (1993a; 1993b; 1996), Inciardi, et al. (1993); Agnew (1994), Benda (1994), Burton, et al. (1994), Elliott (1994), Simons et al. (1994), Dabney (1995), Conger and Simons (1995), Patterson, (1995), Snyder and Patterson (1995), Wood et al. (1995), Zhang and Messner (1995), Mihalic and Elliott (1997); Skinner and Fream (1997), Capaldi et al. (1997), Rowe and Farrington (1997), Esbensen and Deschenes (1998) and Warr (1998),. This long line of research supportive of social learning theory has extended to the present time as shown by Kim and Goto, (2000), Rogers, (2001), Rebellon (2002), Ardelt and Day, (2002), Warr, (2002), Haynie, (2002), Batton and Ogle, (2003); Sellers, et al., (2003); Brezina and Piquero, (2003); Chappel and Piquero, (2004); Gordon, et al. (2004) and McGloin et al. (2004).

The great preponderance of research conducted on social learning theory has found strong to moderate relationships in the theoretically expected direction between social learning variables and criminal, delinquent, and deviant behavior. When social learning theory is tested against other theories using the same data collected from the same samples, it is usually (but not always, see Hepburn, 1977) found to account for more variance in the dependent variables or have greater support than the theories with which it is being compared (for instance, see Akers and Cochran, 1985; Matsueda and Heimer, 1987; White et al., 1986; Kandel and Davies, 1991; McGee, 1992; Benda, 1994; Burton et al., 1994; Hwang and Akers, 2003; Rebellon, 2002). A recent meta-analysis reported support for the impact of social learning variables (differential association and

definitions) but the effect of those variables were not stronger than effects of measures of Gottfredson and Hirschi's (1990) concept of self-control (Pratt and Cullen, 2000). However, when social learning variables are included in integrated or combined models that incorporate variables from different theories in the same sample with the same data, it is the measures of social learning concepts that have the strongest main and net effects (Elliott et al., 1985; Kaplan et al., 1987; Thornberry et al., 1994; Kaplan, 1996; Catalano et al., 1996, Huang et al., 2001; Jang, 2002). Cross-cultural studies have found that social learning theory is not society or culture bound but is well supported by research in other societies (Kandel and Adler, 1982; Lopez, et al., 1989; Junger-Tas, 1992; Bruinsma, 1992; Zhang and Messner, 1995; Kim and Koto 2000; Hwang and Akers, 2003; Wang and Jensen, 2003)

Research on Social Learning in the Family

Empirical findings on the impact of family variables (for instance, family relationships and parental disciplinary and supervisory practices) are rightly and fairly taken as evidence in support of versions of control theory because these measures were used by Hirschi (1969) as indicators of social bonds, and Gottfredson and Hirschi (1990) stress the importance of early family socialization in the formation of self-control. But they are just as rightly and validly seen as evidence in support of social learning theory. Although the research of Gerald Patterson and his associates on family variables and processes in deviant behavior is often interpreted as being in the tradition of and supportive of control theories (Sampson and Laub, 1993), it is worth remembering that all of this research has taken place under the aegis of the Oregon *Social Learning* Center (Patterson, 1975; Patterson and Dishion, 1985; Patterson et al., 1989; Patterson et al., 1991; Wiesner, et al., 2003).

What is socialization and informal social control in the family if it is not social learning? The family is a key primary group with which one is differentially associated. The process of acquiring, persisting, or modifying behavior in the family or family surrogate is a process of exposure to normative values and behavioral models and differential reinforcement. The typical empirical measures of control theory variables such as family parental control, discipline, and management (parental sanctions) are transparently measures of differential social reinforcement (rewards and punishment) for conforming and nonconforming or disobedient behavior. Informal social control in the family has long been conceptualized as part of the social learning process (learning of values and sanctioning of behavior) in producing conformity or deviance (Akers, 1973; 1985). As Jacson Toby says, "Rewards and punishments are central to social control and are administered in all groups that attempt to influence the behavior of members," (Toby, 1974:95).

The role of the family is usually as a conventional socializer. It provides conventional, anti-criminal definitions, conforming role models, and the reinforcement of conformity through parental discipline; it promotes the development of conformity and self-control. In the family, the balance of interactive and normative dimensions of differential association, behavioral models, and reinforcement of attitudes and behavior is typically in the pro-social, non-deviant direction. But delinquent and deviant behavior also has family origins (Fagan and Wexler, 1987) and may be the outcome of internal family interaction (McCord, 1991b). The acquisition and maintenance of deviant patterns may be directly affected by deviant parental models, ineffective and erratic parental supervision and discipline in the use of positive and negative sanctions, and the endorsement of values and attitudes favorable to deviance. Patterson and his associates have

shown that the operation of social learning mechanisms in parent-child interaction is a strong predictor of conforming/deviant behavior (Patterson, 1975; 1995; Snyder and Patterson, 1995; Wiesner et al., 2003). Ineffective disciplinary strategies by parents increase the chances that a child will learn behavior in the early years that is a precursor to his or her later delinquency. Children learn conforming responses when parents consistently make use of positive rewards for proper behavior and impose moderately negative consequences for misbehavior (Capaldi et al., 1997; Wells and Rankin, 1988; Ardelt and Day, 2002). In some cases, parents directly train their children to commit deviant behavior (Adler and Adler, 1978), and in general, parental deviance and criminality are predictive of the children's future delinquency and crime (McCord, 1991a). Youngsters with delinquent siblings (especially same-sex older siblings) in the family are more likely to be delinquent, even when parental and other family characteristics are taken into account, a combination of family and peer effects (Rowe and Gulley, 1992; Lauritsen, 1993; Rowe and Farrington, 1997; Ardelt and Day, 2002).

Research on Peers and Group Contexts

The family is the foundational primary group and plainly included in the concept of differential association, but beyond the family, the balance of associations, reinforcement, models, and definitions is affected by participation and identification with other primary and secondary groups. The most important of these (especially in the teenage years) is the peer group (especially same-sex and but also opposite-sex peers). Pro-social tendencies learned in the family may be counteracted by, and any delinquent tendencies learned in the family may be exacerbated by, differential peer association (Simons et al., 1994; Lauritsen, 1993). Too often social learning theory is mistakenly taken as only a theory of peer influence. It is not. However, there is no

question that the mutual influences of peer behavior, associations, values, behavior, and reinforcement are central to social learning theory's explanation of acquisition, maintenance, and change in deviant behavior. No other general criminological theory has put as much focus on these peer factors, and no other theory is as strongly supported by the findings on peer variables. Other than one's own prior deviant behavior, the best single predictor of the onset, continuance, or desistance of crime and delinquency is differential association with conforming and law-violating peers (Loeber and Dishion, 1987; Loeber and Stouthamer-Loeber, 1986; Loeber et al., 1991; Huizinga et al., 1991; Warr, 2002). More frequent, longer-term, and closer association with peers who do not support deviant behavior is strongly correlated with conformity, while greater association with peers who commit and approve of delinquency is predictive of one's own delinquent behavior. Virtually every study that includes a peer association variable finds it to be related to a range of delinquent behavior, alcohol and drug use and abuse, property and violent crime, and other forms of deviant behavior. This comes from research:

"[u]sing alternative kinds of criminological data (self-reports, official records, perceptual data) on subjects and friends, alternative research designs, and data on a wide variety of criminal offenses. Few, if any, empirical regularities in criminology have been documented as often or over as long a period as the association between delinquency and delinquent friends" (Warr, 2002:40).

It has long been known that one special context for the impact of differential peer association is delinquent gangs, and research continues to find the strong influence of gang affiliation, membership, and participation on serious delinquency. Of course, learning delinquent behavior takes place before and in the absence of gang membership. Indeed, peer associations

typically do not involve identifiable, specific, groups that can be defined as "gangs." And it is most likely those who are already headed in a delinquent direction or have participated in delinquent activity are most attracted to and become involved with delinquent gangs. However, whatever the frequency and seriousness of one's previous delinquency, the research evidence is clear that the person joining a gang is very likely to develop an even higher level of delinquent involvement. While any level of association with delinquent peers increases the risk of delinquent conduct, gang membership produces more frequent, intense, and enduring association with delinquent friends, exposure to delinquent models and definitions, and reinforcement for delinquent behavior. (See Winfree et al., 1994a, 1994b, Battin et al., 1998, Curry et al., 2002 and Liu, 2003.) Both gang membership itself and gang-related, as well as non-gang, delinquency are explained by the same set of social learning variables (attitudes, social reinforcers/punishers, and differential association) (Winfree et al., 1994a; Esbensen and Deschenes, 1998). The processes specified in social learning theory are "nearly identical to those provided by qualitative gang research. Gang members reward certain behavior in their peers and punish others, employing goals and processes that are indistinguishable from those described by Akers" (Winfree et al., 1994a:149).

Research on Sequence and Feedback Effects in the Social Learning Process

The sequence and reciprocal effects hypothesized in social learning theory have generally been supported (Kandel, 1978; Andrews and Kandel, 1979; Krohn et al., 1985; Sellers and Winfree, 1990; Empey and Stafford, 1991; Warr, 1993b; Esbensen and Huizinga, 1993; Thornberry et al., 1994; Menard and Elliott, 1994; Winfree et al., 1994b; Akers and Lee, 1996; Elliott and Menard, 1996; Esbensen and Deschenes, 1998; Battin et al, 1998).

[T]he findings from several studies favor the process proposed by social learning theory . . . [that] a youngster associates differentially with peers who are deviant or tolerant of deviance, learns definitions favorable to delinquent behavior, is exposed to deviant models that reinforce delinquency, then initiates or increases involvement in that behavior, which then is expected to influence further associations and definitions (Akers and Sellers, 2004:99).

Research Testing Social Learning Theory by Akers and Associates:

Although occasional reference is made above to our own research, virtually all of the citations so far has been to that done by others. That research has consistently produced findings that are positive and supportive of the theory. Most of it includes only one or two social learning variables (most often peer association but also definitions), but some researchers have tested more or less full social learning models (for good examples see Winfree et al., 1994a; 1994b; Sellers et al., 2003). The research that is most likely to include all of the key social learning variables testing essentially full models of the theory has been done by Akers and associates. These studies using primary data to test the empirical validity of social learning theory by itself and in comparison with other theories have been reported in the literature in some detail (see Akers, 1998; Akers and Sellers, 2004) and are fairly well known. The dependent variables in this research have mostly been adolescent deviance and delinquency; adolescent alcohol and drug use and abuse (Akers et al., 1979; Krohn et al., 1982; Krohn et al., 1984; Lanza-Kaduce et al., 1984; Akers and Cochran, 1985; Akers and Lee, 1999; Hwang, 2000; Hwang and Akers, 2003) teenage smoking (Lauer et al., 1982; Krohn et al., 1985; Spear and Akers, 1988; Akers, 1992; Akers and Lee, 1996), elderly drinking and problem drinking (Akers et al., 1989; Akers and

La Greca, 1991; Akers, 1992). rape and sexual coercion among samples of college males (Boeringer et al., 1991; Boeringer, 1992), serious delinquency (Jensen, 2003) and cross-national homicide rates (Jensen and Akers, 2003), and terrorist violence (Silverman, 2002; Akers and Silverman, 2004). (See also additional studies by other researchers on homicide, suicide, and violence in Batton and Ogle, 2003; Sellers et al., 2003; Bellair et al., 2003.)

The social learning models tested in this research produce high levels of explained variance, much more than other theoretical models with which it is compared. The combined effects of the social learning variables produce explained variance of 31 to 68 percent of adolescent alcohol and drug use and abuse. Alternative social bonding and strain models explain much less (5 to 10 percent) of the variance. Similarly, the social learning model explained 54% of the variance cross-sectionally and 41% of the variance longitudinally in teenage cigarette smoking. The social learning model did not do well in predicting which of the initially abstinent youngsters in the study would begin smoking within the next two years (with only 3% explained variance). The model did a better, but still not a strong, job of predicting the onset of sustained smoking over a five-year period (15% explained variance). The findings on the sequencing and reciprocal effects of social learning variables and smoking behavior over the five-year period were as predicted by the theory. The onset, frequency, and quantity of elderly drinking is highly correlated with social learning variables (with empirical models accounting for 51-59% of the variance in drinking), and the theory also successfully accounts for problem drinking among the elderly (predicted probability of .683). The social learning variables explain the self-perceived likelihood of rape (54% explained variance) non-physical coercion of sex (22% explained variance), use of drugs or alcohol to induce unwanted sex (22%), and physically coerced rape

(21%) by college men. Alternative theoretical models (social bonding, self-control, and relative deprivation) models account for 2% to 9% of the variance in these dependent variables.

Social Structure and Social Learning

Akers has proposed a Social Structure and Social Learning (SSSL) model that identifies four major dimensions of social structure (differential social organization, differential location in the social structure, differential social location, and social disorganization/conflict) and hypothesizes that social learning is the principal mediating process by which social structure has an effect on criminal and delinquent behavior. Thus, the SSSL model is a cross-level elaboration or integration that proposes that social structure has an indirect effect on criminal and conforming behavior through the social learning variables of differential association, differential reinforcement, definitions, and imitation. Social structural variables and factors are the primary macro-level and meso-level causes of crime, while the social learning variables reflect the primary or proximate causes of criminal behavior that mediate the relationship between social structure and the behavior of individuals that make up group, community, and societal crime rates (Akers, 1998). This assertion is supported by much of the research already cited in which age, race, ethnicity, gender, social class, community, and region socio-demographic and community variables are inserted in empirical models. The findings typically are that the net effects of social learning variables remain in these models while the net effects of socio-demographic variables are reduced, typically to statistical non-significance. For instance, several studies have found that variations by age and life course are largely accounted for by family socialization, peer associations, and other social learning variables (Krohn et al., 1989; LaGrange and White, 1985; Sampson and Laub, 1993; Conger and Simons, 1995; Bartusch et al., 1997; Junger-Tas, 1992; Tittle and Ward, 1993; Warr,

1993b)

Tests of the SSSL model have produced positive findings for delinquency and substance use, elderly alcohol abuse, rape, violence, and binge drinking by college students (Lee, 1998; Page, 1998; Jensen, 2003; Bellair et al., 2003; Lanza-Kaduce and Capece, 2003; Lee et al., 2004). Also, Jensen and Akers (2003) found that social structural factors derivable from social learning principles accounted for 65 percent of the variance in homicide rates among 82 nations. These and other findings are consistent with what the SSSL model would predict (Warr, 1998; Mears et al., 1998; Akers and Lee, 1996; Rebellon, 2002). Although research thus far is supportive, there has not yet been enough research conducted to confirm that social learning is the principal process mediating the relationship of social structure and crime as expected by SSSL. However, we would contend that social learning is the most applicable theory, and the most likely to be supported empirically, for specifying the variables and process mediating the effects of social structural factors on criminal and delinquent behavior. Moreover, we will argue that in the future, properly measured macro-level elaborations of social learning theory (building on the SSSL model) will prove empirically superior to alternatives.

The Future of Social Learning Theory: A Challenge to Criminology

As the review above shows, there is a long history of research on variables relevant to and derived from social learning theory of crime and deviance. That previous research and the research done since the first full-model test was conducted twenty-five years ago (Akers et al. 1979), makes the case, at least arguably, that social learning theory has been subjected to more supportive empirical inquiry than virtually any other criminological theory in history. Articles on social learning theory are widely cited in the literature and included in reprinted and edited

collections of readings in criminology. Also, it is among the list of leading criminological theories that are nearly always covered in the major textbooks for undergraduate and graduate courses in criminology, theories of crime, delinquency, and deviant behavior. There is little doubt of the place of the theory in criminology, and it will continue to be among the leading theories receiving prominent attention in the field, to be among the most tested theories, and to provide the basis for sound policy and practice. Yet, one still finds many times when the theory is ignored, misstated, or misapplied in the criminological literature, and on at least one occasion, social learning theory was initially left off the fairly long list of theories identified by the ASC Program Committee (in its call for papers) as the theories around which papers and sessions should be organized for the upcoming annual meetings.

It might be argued that the theory has fared so well that many criminologists now more or less taken it for granted or are not interested in yet another test of its empirical validity. Of course, there is a premium placed on original theoretical contributions, and it is easier to get excited about testing a "new" or iconoclastic theory than one that has generated such a large number of tests and applications. But the tendency to overlook the theory by some criminologists is probably more complicated than saturation and boredom, and there are other issues in the way the theory is sometimes treated in the literature. In the process of "Taking Social Learning Global" in our chapter in Social Learning and the Explanation of Crime (Jensen and Akers, 2003), we identified key parts of these other issues in cases where the relevance of the social learning theory being is overlooked, downplayed, or misunderstood: 1) the continuing mistaken equating of social learning with "cultural deviance" theory (Messner and Rosenfeld, 2001), 2) misleading crucial tests where social bonding theory is declared a victor over other theories even when the best

model includes a direct effect of differential peer association, a key social learning variable (Costello and Vowell, 1999), 3) studies that add peer group relationships to routine activities theory with no mention or even a single citation to social learning theory (Osgood et al. 1996), 4) critiques that misinterpret social learning theory as ignoring the importance of opportunity, fear of punishment, and conventional peers (Tittle and Paternoster 2000), and 5) the fact that the best fitting models of international variations in homicide are more compatible with the logic of social learning theory than existing alternatives (Gartner 1990).

It was this last point about the underappreciated relevance of the logic of social learning theory and the SSSL model for accounting for macro, cross-cultural variations in crime that we addressed in the paper on taking social learning global. We believe that the next phase in the development of the theory will be to build upon themes introduced in earlier and more recent presentations of the theory regarding explanation of meso and macro level variations in crime and deviance. An outline of features of a macro version of social learning theory is embodied in the original Burgess and Akers (1966) article, in Akers' first statement and later elaborations of social learning theory (1973; 1977; 1985).

The general culture and structure of society and the particular groups, subcultures, and social situations in which the individual participates provide learning environments in which the norms define what is approved and disapproved and the reactions of others (for example, in applying social sanctions) attach different reinforcing or punishing consequences to this behavior. In a sense, then, social structure is an arrangement of sets and schedules of reinforcement contingencies. (1977:64)

This simple, straight-froward statement incorporates several distinctions that will prove to be important in specifying any macro-level version of the theory. General culture, social structure, subcultures, groups, and social situations are all mentioned as factors affecting learning environments, including "sets and schedules of reinforcement." Neither this short statement nor the later more elaborate formulation of the SSSL model (Akers, 1998) was intended to exhaust the relevance of meso or macro level characteristics that affect learning environments, but clearly embodies fundamental considerations for making the transition from the micro to higher levels of sociological analysis.

One way to begin building a macro learning theory is to examine its fit with important distinctions in sociology and to consider regularities that can be explained by social learning theory at an aggregate level that are not explained or perhaps not explained as well by existing macro theories. Because prominent macro-level theorists pay so little attention to social learning theory, a central feature of its development is ignored.. It is safe to say that few criminologists know that the foundational principles, and indeed the first time the social learning label was featured in a prominent publication, for current social learning theory in criminology originally emerged, not only out of Sutherland's efforts, but also out of effort to integrate micro and macro ideas from psychology and sociology by Neal E. Miller and John Dollard at Yale University. In Social Learning and Imitation (1941: Preface) they proposed to "apply training in two different fields—psychology and social science—to the solution of social problems." They dedicated the book to a psychologist, Clark Leonard Hall, who was interested in imitation, and a sociologist, William Fielding Ogburn, who was a pioneer in the study of diffusion, contagion, and the transmission of cultural innovations.

Imitation, Contagion, and Auto-Correlation

The first regularity that can be addressed by social learning theory which has not, and likely cannot be, encompassed by existing sociological theory is *imitation* at any level of aggregation from micro to macro. For example, at the "macro" level there is considerable evidence that "crime causes crime" in that sudden upward movements (i.e. "surges," "epidemics," "waves," "outbreaks," etc.) involve a variety of imitative and/or reactive mechanisms. Moreover, to be considered a surge or a wave there has to be a downturn which means that self-limiting or countervailing processes have to be proposed to account for a return to the "normal" rate of crime. Of the major criminological theories that have been invoked to explain macro patterns of crime (anomie, social disorganization, routine opportunity) only SSSL theory can readily accommodate mechanisms (such as imitation, vengeance, retaliation, and preparation for selfdefense) that may account for escalating upward surges and mechanisms (such as satiation, exhaustion, and institutional response) that may limit surges. Theories designed to explain gradual shifts in level, variations among ecological units, and/or variations among individuals do not incorporate explanatory mechanisms that can be applied to such short-term waves. All sociological theories are potentially relevant to identifying the underlying conditions that might start a surge, or might help explain why a population or sub-population was receptive to a surge, but we contend that only social learning directly incorporates mechanisms that can explain escalation and exhaustion.

Imitation and other learning processes are clearly involved in escalation and reductions are likely involved in what Jones and Jones (2000) explicate as "the contagious nature of antisocial behavior" operating both through *primary group interaction* and similarity in socio-demographic

location in the social structure:

One network (*cohesion*) consists of people who communicate with one another directly. The other network (*structural equivalence*) consists of people who occupy the same niche in society. . . . [T]eenagers identify with one another in specific contrast to adults and especially with teenagers who are demographically, socially, or in their 'proclivities' like themselves. Because the members of a teenage group also communicate directly with one another, a teenage group *exemplifies both kinds of network* and can function in both ways as a conduit of antisocial socialization (Jones and Jones, 2000:33, emphasis added).

It should be noted that criminologists' use of statistical tools to model and eliminate .the effects of "outliers" and temporal and spatial "auto-correlation" is often an attempt to eliminate the confounding effects of contagion and imitation. Although viewed as a statistical necessity for various forms of statistical analysis, the underlying "problem" often involves self-reproducing and self-limiting phenomena, imitation and contagion, across territorial units and time. Imitation and contagion in macro level analysis are treated as part of a statistical problem eliminated through statistical adjustments and filtering (see Jensen, 1997), or are introduced as an interesting issue with no specification of its more than fifty-year heritage in social learning theory (See Baller et al. 2001).

Conceptual Overlap with Organizational Theory

A second virtue of social learning theory is that its central principles or mechanisms are reproduced in contemporary literature in other areas of sociology. For example, any review of the

literature on what is called institutional or organizational "isomorphism" will reveal that the distinct mechanisms invoked to explain the standardization of features of organizations over time and space (DiMaggio, 1983; DiMaggio and Powell, 1983; Powell and DiMaggio, 1991) parallel the learning mechanisms emphasized in social learning theory. Organizations operating in similar environments develop similar features, "isomorphism," through imitation, the development of shared normative frameworks, and coercion (e.g. state regulation). Among the major sociological theories of crime, only social learning encompasses all three sources of organizational conformity. Social learning theory includes imitation, normative learning, and coercive regulation as one type of formal schedule of threatened sanctions. The significance of general learning mechanisms at the macro level have become increasingly recognized in political scientists' attention to "organizational and societal learning" in international relations and conflicts. (See for instance the contributions to the 2001 Conference on Organizational and Societal Learning organized by Dr. Leann Brown of the Department of Political Science at the University of Florida.)

Separable Effects of Structure and Culture

In addition to imitation, both contemporary organizational theory and social learning theory incorporate normative and, hence, cultural influences among the empirically separable determinants of patterned behavior whether in features of organizations or the behavior of groups and individuals. This feature reflects a central tenet of sociology. Structure and culture are interrelated but have separable effects on social order, disorder, stability, and change. This tenet has implications for criminological theory in that it does not propose only cultural values, norms, and beliefs as the sole set of mediating variables (Matsueda, 1982), but rather proposes both social and cultural mediating variables.

Messner and Rosenfeld (2001) raise this issue of positing only cultural variables in their criticism of cultural deviance theory. But they erroneously lump social learning theory together with cultural deviance theory. This point was brought up and institutional anomie theory was criticized for not being able to account for variation across societies as well as social learning principles, in the presentation of our paper at a 2004 ASC plenary session. Messner was in attendance and (in a statement from the floor) said that he was puzzled by, and disputed, this critique of institutional anomie theory And in a private conversation with the senior author following that session, Messner repeated his conviction that the critique was not really correct. On the contrary, he asserted that he and Rosenfeld just assumed that social learning theory is quite compatible with, and indeed provides the primary mediating process, for institutional anomie theory. We agree with this and appreciate Messner clarification. We may be missing something in our interpretation of Messner and Rosenfeld and stand ready to be corrected, but we do not find in their published works on institutional anomie a distinction between social learning theory and cultural deviance theory (of which they are very critical). They seem to view the two as the same theory. They make no statements about social learning as the underlying mediating micro process in the impact of institutional anomie on crime. Social learning theory includes both cultural and non-cultural learning mechanisms and, when that logic is extended to deal with macro-level issues, the theory would propose that both structural and cultural variables shape schedules of reinforcement and the strength and relative primacy of different institutional and group influences. Moreover, because social learning theory allows for imitation processes independently of differential reinforcement, differential association, definitions, and opportunity, it allows for "cultural" and other types of "lags" where forms of crime or rates of crime may be

sustained.

The Primacy of Primary Relationships

A central tenet of sociology is that human motivation and the expression of motivation are socially and culturally structured and learned primarily in interaction with other people. Of course, criminologists will recognize this statement as central to Sutherland's differential association theory and retained as a central part of social learning theory. When applied to criminological theory at the macro-level, we are directed to consider the relative primacy of different institutional and group influences. As just noted, among the main current sociological theories to address this issue topic is Messner and Rosenfield's (2001) "institutional-anomie" theory. This theory proposes that when primacy is accorded to a free market economy and the primacy of pecuniary values and goals for people in a society, other institutions such as the family are weakened. As a result of this weakening in the family institution, crime rates will be high in free market societies. In contrast, according to the theory, when state policies "decommodify" people and buffer them against market forces, other institutions such as the family will be strengthened and crime rates will be constrained.

We would ask, first, how such a pervasive and sustained learning of these widely shared pecuniary values can occur if the ultimate outcome is a weakening of those self-same institutions where such values are learned? Second, we are led to ask why those primary socializing institutions would emphasize goals that negate their primacy? Of course, such paradoxes disappear if we take the position that both the perspective on values and the arguments about decommodification are wrong. It can be proposed, from a structural-learning perspective, that decommodification policies that diminish the market economy and increase dependence on the

state actually weaken, rather than strengthen, dependence on primary socializing institutions such as the family. Third, , it can be proposed that the dominant values emphasized in institutional anomie theory, according primacy to pecuniary values and goals, is a mis-characterization of American society and the "American Dream.." It is when people are relatively free from primary socializing institutions that higher value is accorded to the pursuit of money and pecuniary goals for their own sake. This is probably why governmental investments in decommodification among nations is associated with weaker, rather than stronger, primary institutions. Consistent with the view of the family as the primary institution for conventional socialization in social learning theory (and one should add in control theory), the pursuit of some form of "family" life can be proposed as the dominant goal or "value" in American culture. Indeed, debates about "family values" dominate "culture wars" in American society, not because some groups view the family as unimportant or secondary to other institutions. Rather, cultures wars reflect the fact that the value placed on the family is widely shared. The culture conflict involves conceptions of what constitutes a "family" and the independence of the family from other religious and educational institutions. (same sex marriage, adoption by homosexuals, home schooling, etc.).

Multiple Cultural Processes and Forms

The fact that social learning theory has not included a specific commitment to one or another version of the role of culture in the explanation of crime might be considered a weakness of the theory (See Jensen and Rojek 1998). One of the features of Hirschi's (1969) social bonding theory that appealed to sociologists was the fact that he addressed some meso or macro issues involving the role of culture and took a specific and testable position on the issue. He proposed that there is one dominant conventional cultural system in the United States defining crime as

inappropriate conduct with no enduring subcultures or contra cultures positively defining crime as appropriate moral conduct. Because there is a single dominant culture, it was variable learning of the values, norms and beliefs of that one system that explained crime. Those who did not learn it or were not taught it had higher probabilities of committing crime than those who did. The presence of criminogenic subcultures and contra cultures where crime is a product of enduring or oppositional values, norms, or beliefs were rejected as misrepresentations of the way cultural variables affect criminal behavior.

Hirschi's theory allowed for variable learning of the dominant, conventional culture introduced under the concept of "belief." In contrast, social learning theory did not incorporate a specific image of the manner in which culture was relevant to crime, although cultural phenomena such as values, norms, and beliefs were clearly incorporated into the theory's concept of "definitions." In <u>Causes of Delinquency</u>, Hirschi (1969) argued that there were features of his theory that would emerge out of empirical investigation, and we might take that same approach in making the transition to a more macro learning theory.

Social learning theory does have stronger historical and theoretical links to some conceptions of culture than others, but could fit with a variety of conceptions. For one, a cultural system can be disorganized in the sense that there are conflicts among values, norms and beliefs within a widely shared, dominant culture (Sykes and Matza 1957; Matza and Sykes 1961). This type of cultural disorganization can take the form of shared "subterranean" cultural perspectives that encourage crime or through "techniques of neutralization" learned in quite conventional contexts and reflected in legal codes as "extenuating circumstances." Thus, the culture shared by people in a society or locale can be "disorganized" in the sense that conflicting moral messages

are built into the cultural system itself. Sykes and Matza (1957) recognized the clear connection of this view with differential association and explicitly portrayed them as types of "definitions favorable" to crime. A second way to introduce culture would be to advocate a view of society with a collection of socially differentiated groups with distinct subcultural perspectives that lead some of these groups into conflict with the law. This use of cultural concepts is another form of cultural disorganization, typically called cultural conflict or cultural deviance theory. There may be perfectly consistent messages conveyed within a given subculture, but they may conflict with the views of other subcultures.

A third use of cultural concepts involves the concept of contra cultures or oppositional subcultures that are constructed by people experiencing problems in the pursuit of success and respect (Cohen 1955; Jankowski 1991). Contra cultures do not begin as enduring subcultural traditions but are constructed by people sharing similar disadvantages. Their values, norms and beliefs reverse those of "conventional" society and status or respect is accorded based on criminal or deviant behavior. Sampson and Wilson (1995) reject the view that there are distinct subcultures of poverty where the norms espoused and internalized are in conflict with those embodied in law, but adopt a mild version of "contra cultures" in the form of "cultural adaptations to social isolation," a notion very similar to Kornhauser's concept of "structural values (1978)." Variations in values, norms and beliefs that are "adaptations to constraints and opportunities" are considered distinct from the enduring traditions emphasized in cultural deviance theory.

Of course, in none of these contexts, does social learning assume that socialization is complete or that knowledge of the culture or sub-culture is sufficient by itself to predict how each member of the group exposed to that culture will behave. Deviance can result from incomplete

socialization in conventional norms and values as well as (as noted earlier) countervailing processes of reinforcement, imitation, and exposure to deviant definitions.

Hirschi hitched social control theory to one conception of culture and supported it with data from white male youth in the San Francisco Bay area in the mid-1960s. There has been little or no systematic survey research on the issue since that study despite the fact that it was limited to white male students. Yet, it stands in major contrast to current theories about violence in the most disadvantaged, black neighborhoods. In Code of the Street (1999), Elijah Anderson reintroduces the notion of an oppositional subculture where self-respect requires a demonstration of toughness and maintenance of honor requires physical violence. Anderson's argument was based on ethnographic research among black males. There has been survey research on the strength of general conventional norms or values among adults (See Warner 2003), but there has been no thorough investigation using survey methods of the systematic distribution of such a "code" across neighborhoods or among youth or adults. Indeed, the most recent report of research based on Anderson's view of the code makes inferences from patterns of victimization, but acknowledges that there was no direct data in the study on such a set of normative orientations (Baumer et al., 2003).

Hence, at present, the concept of culture is introduced into theories of crime in quite diverse ways. At the micro-level, variable normative learning can take any of the forms discussed above-- limited learning of conventional values, norms, and beliefs, successful learning of conflicting values, norms, and beliefs characterizing the dominant culture, subcultural learning of enduring values, norms, and beliefs, and contracultural construction and learning of "oppositional" values, norms, and beliefs. Akers (1998:83) conceptualizes two continua of

beliefs/definitions, one conventional/conforming and the other deviant/non-conforming, along which "individual beliefs and definitions can lie at any point" which could increase "the odds that one will commit deviant acts, given opportunities or situations that fit the definitions and the anticipation of reward."

One direction for the "macrotization" of social learning theory would be to explore the possible relevance of the logic of the theory to generating hypotheses about the relative salience of different forms of cultural learning to the explanation of variation in crime and/or different forms of crime. For example, from a social learning perspective, the violent resolution of interpersonal conflicts could be argued to become "normative" in environments where institutional means of conflict resolution have been scarce, where relations with institutional authority have been strained, and/or where escape from violent situations is difficult. On the other hand, such behavior cannot become "too normative," or no viable social life could be sustained in such neighborhoods. Even the most "serious" gang members spend most of their time in quite normal activities and have a stake in maintaining some degree of stability in their territory. In fact, violent reactions to invasion or transgressions on territory are culturally acceptable among most groups in society and are not limited to subcultures. Moreover, because a perpetual and unlimited escalation of conflict would destroy a social system, the "code of the street" is likely to embody both cultural prescriptions and proscriptions on the situations and acceptable targets of violence. In short, the code of the street is likely to include rules that limit as well as mandate violence (definitions favorable and unfavorable to violence). For example, attacking an elderly woman for making a nasty comment is far less likely to be called for in the maintenance of respect and honor than being "dissed" by a peer. Similarly, attacking someone who is much smaller, younger, or

physically able is less likely to be acceptable in the maintenance of honor than a similar response to someone of equal or greater size, age, or ability. Thus, for forms of violence directed at the maintenance of honor to be socially reinforced for those offended or to develop into a subcultural or contracultural mandate within a subsystem, norms constraining such behavior must evolve. In short, the code of the street will be found to include normative rules of engagement that act as discriminative stimuli that regulate and moderate the escalation of violence in all social situations where some degree of normal social interaction is desired.

Another "macro" hypothesis that can be derived from the underlying logic of social learning is that the most common forms of criminal or delinquent activity will be those involving the most routine and ordinary learning processes. Indeed, Hirschi criticizes learning theory for assuming that people have to learn any specific technical knowledge or normative stance to engage in such activity as shoplifting. However, the relative prevalence of different types of offending does correlate highly with the relative normative "seriousness" accorded different forms of crime. Shoplifting violates fewer "normative" rules than purse snatching from an elderly lady. Robbing someone at gunpoint violates more normative rules than grabbing a bicycle from someone's driveway. Moreover, youth in racial or ethnic categories who feel they can shoplift and not be suspected by clerks and security personnel are more likely to do so than youth in racial or ethnic categories historically suspected by such employees. Shoplifting is most probable when youth have the opportunity to do so, can manage such activity without generating suspicion, and have either learned rationales or excuses for such activity or not learned to judge such activity as a violation of norms.

The more normative rules violated in the course of an offense, the lower the relative

frequency of an offense. Hence, stealing through the direct threat of violence against an elderly woman violates more rules than grabbing money from the till at a convenience store and running away with it. Moreover, such regularities tend to reflect potential offenders' assessment of risk and the normative properties of the offense, i.e. both moral evaluations and perceived risks or reinforcement balance, exert an independent influence on the relative prevalence of different types of crime.

Countervailing Mechanisms

Both social disorganization-control theory and social learning theory assume that strong adult institutions inhibit crime and are likely to encourage law-abiding conduct. However, social learning theory introduces the possibility of conflicts among learning mechanisms that can explain the perpetuation of crime even when parents are depicted as endorsing law-abiding decisions among their children. Parents may attempt to teach their children not to smoke, but their own smoking behavior affects their children through processes of imitation and perceived vicarious reinforcement. Strong ties to such parents do not have the same inhibiting effect as strong ties to non-smoking parents. The same contingent impacts can be detected for other forms of drug use. While, there is evidence that the presence of deviant parents is correlated with deviance of their children, there is little evidence that strong bonds to deviant parents is itself criminogenic. The impact of such inconsistencies is to undermine the inhibiting influence of attachments to others and conventional socialization. "A child reared in a . . . family that professes non-violent attitudes may nonetheless come to engage in and justify violence because he has witnessed abusive behavior in the home, has been the object of abuse himself, or has otherwise learned violent behavior in spite of the nonviolent cultural norms to which he has been exposed" (Akers,

1998:103). In short, the inhibiting impact of attempts to teach norms prohibiting youthful deviance is weakened by other learning processes such as imitation and differential reinforcement that work in a contrary direction.

Were we to extend that logic to macro-level issues we would propose that some historical events or policies can have countervailing consequences through mechanisms that shift the schedules and balances of reinforcement in unexpected ways. For example, prohibitionist alcohol policies should have some effect on its price, the sanctions risked, and the situations where use occurs. Hence, prohibitionist laws and their enforcement should decrease alcohol consumption. Because alcohol use is a positive correlate of interpersonal violence, we might expect that homicide rates would be lowered through prohibition. Yet, the murder rate went up during most of the prohibitionist years despite the fact that consumption appears to have declined (See Jensen 2000). When such anomalies are found, the logic of social learning theory implies a consideration of countervailing mechanisms at the macro level. Prohibition may have lowered consumption but, at the same time, it increased competition over the illicit supply of alcohol and decreased the odds that people could invoke formal control mechanisms to deal with conflict in drinking situations. Prohibitionists policies structured the relative costs and rewards of the supply and situational use of alcohol in ways that reduced overall use while increasing violence associated with use. This statement is more consistent with social learning at the macro-level than it is with social disorganization, anomie, cultural deviance, or self-control theory.

Structural Correlates: Modeling and Occupational Structure

Akers (1998) notes the common criticism that social learning theory applies better to common forms of routine deviance than to serious forms of violence. However, that view is a

product of the most common forms of survey research and not a limitation of the theory. In fact, Akers demonstrates that social learning theory applies better to the explanation of rape and sexual aggression than alternative theories. Jensen (2003) shows that social learning theory does the best job of explaining gender variations in delinquency regardless of seriousness or the use of official or self-report measures of offenses.

Bellair, et al. (2003: 199) deal with this same issue, but "extend the literature by testing a social learning model of subcultural formation and violence among adolescents that has its roots in local labor market conditions and opportunity." They use a SSSL model to explain the "spatial concentration of violence among adolescents." Not only do they show that structural effects are explained or "mediated" by social learning mechanisms, but at the macro-level it is the prevalence of professional sector employment that is most intimately tied with such mechanisms. They argue that the structural distribution of violence reflects the "absence in the community of professional role models and a decline in employment opportunities" rather than the traditional measures of the concentration of disadvantage. Thus, not only are social learning mechanisms key mediators, but the macro-level condition that is most important is the presence of professional role models. In short, opportunities for "modeling" at the structural level are central to the explanation of the spacial distribution of violent crime.

Concluding Comments on Elaborating Social Learning Theory at the Macro Level

In "Taking Social Learning Global" (2003: 33), Jensen and Akers took the position that "the order of theories in terms of their ability to explain ecological and global variations is actually the same as their order in terms of ability to explain the prevalence and incidence of crime and delinquency based on self-reports collected from individuals." In this assessment of the state of

social learning theory, we make what may strike many of our colleagues as an even more audacious claim: When the logic and concepts involved in social learning theory at lower levels of aggregation and analysis are extended to macro-level variations, they apply to a wider range of known patterns over time and space, fit with developments and arguments on other macro topics, and generate more complex and empirically valid models than any alternative sociological theory.

Such claims of consistency over micro-meso-macro levels may strike some criminologists as a contradiction of well-known warnings about the irrelevance of ecological correlations to claims about variations in prevalence and incidence using data from individuals. In an article in Homicide Studies, Chaimlin, et al. (2002: 55) cite Lieberson's critique (1985: 109) of mixed levels of analysis and reiterate the claim that "one cannot use theory designed to explain variations in outcomes at one level of analysis to explain variations in outcomes at another ." However, this warning does not apply if data collected from individuals are aggregated at different levels and consistency across levels is demonstrated empirically, and it certainly does not apply to attempts to transform the concepts and causal logic of a theory focusing on learning mechanisms into a theory applicable to macro-level variations over time and space. Were we to take that warning too seriously there would be no point in assessing the ability of a theory to survive transitions across levels of analysis, to address variations over both time and space at different fractal scales, nor to assess the implications of parallel theoretical developments in other sociological specialties. Social learning theory has worked so well at the level it was initially proposed that few will find it exciting to conduct yet another test finding again that the theory is supported. Such tests and extensions of the theory based on them should and will certainly continue, and the theory will continue to have an important place in the field. However, we believe that interest in the theory

in the future among sociologists and criminologists will also come to rest increasingly on the exploration of the macro and global issues raised, and claims for the theory asserted, here. We look forward to that interest even if it is garnered mainly to show that we are wrong in our claims for the applicability of the theory at all levels.

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