

THE ATTITUDES AND ACTIONS OF OTHERS:

Tutelage and Sutherland's Theory of Differential Association

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Contemporary studies of Sutherland's differential association theory argue that people learn about crime predominantly or exclusively through exposure to attitudes and motives that legitimize such behaviours. I suggest that Sutherland's writings demonstrate an equal concern with more direct exposure to crime; that is, with tutelage in criminal methods. I test this interpretation with models of drug selling and theft among a sample of homeless youths. In both cases, models that include deviant associations, attitudes, and desires improve with the addition of a measure of tutelage. Disregarding the role of tutelage may, therefore, mis-specify the differential association process and encourage mis-interpretations of findings that correspond with Sutherland's theory.

In recent years, tests of differential association have characteristically employed one of two interpretations of Sutherland's theory. One approach constructs Sutherland's theory as exclusively one of attitude transference; that is, people acquire definitions legitimizing crime through contact with offenders who communicate attitudes and motives that condone criminal or deviant activities (e.g. Warr and Stafford 1991; Warr 1993). Thus, over-exposure to these 'symbolic elements', particularly through associations with deviant peers, leads to a criminal outlook and subsequent involvement in crime. Using a less restrictive approach, a second interpretation affirms the primacy of symbolic elements while suggesting that Sutherland's theory also indicates an awareness of others' activities as a means for learning criminal techniques. However, proponents of this perspective argue that such exposure is of minimal importance and therefore can be omitted readily from models of differential association (e.g. Matsueda 1982; Tittle *et al.* 1986; Jackson *et al.* 1986; Matsueda and Heimer 1987).¹

Despite individual differences in these two approaches, both conclude that the acquisition of symbolic elements—be it attitudes, motives, or drives (or some combination thereof)—is the key intervening factor between deviant associations and crime in Sutherland's theory.² I suggest that the body of Sutherland's writings reveal a different approach. These works suggest that both *skills and symbolic elements* are central to the differential association process, and together intervene between deviant associations and crime. I test this interpretation of Sutherland's theory in models of drug selling and theft among homeless youths. Before describing this

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¹ Broader-based studies that test for effects specified by several theories also use these interpretations (e.g. Elliott *et al.* 1985; Thornberry *et al.* 1994).

² As Matsueda (1988: 280) notes, the theory also contains assumptions about normative conflict and differential social organization; however, these refer to societal processes that are beyond this paper's focus on processes that operate at the individual level (Cressey 1960).

analysis, I first summarize the prevailing approach to differential association and then outline the alternative interpretation that I then explore.³

Behaviour and Attitudes in Differential Association

In a recent test of differential association theory, Warr and Stafford (1991; see also Warr 1993) exemplify the first interpretation described above; that is, one that concentrates exclusively on attitudes. According to Warr and Stafford, Sutherland's theory is an attitude formation theory that focuses on the influence of peers' views but neglects their behaviour. Thus, they maintain that the distinguishing feature of Sutherland's theory is 'its insistence that attitude transference is the mechanism by which delinquency is socially transmitted' (1991: 853).

Warr and Stafford test this approach with data from a nationally representative, five-year panel study of youths in the United States (the National Youth Survey). In their analysis, they include measures of the respondent's and peers' attitudes toward three deviant activities (class-room cheating, petty theft (<\$5), and marijuana use), as well as reports of peers' involvement in these behaviours. For each activity, Warr and Stafford find that peers' 'deviant' attitudes and behaviour influence the respondent's delinquency indirectly through their encouragement of the respondent's deviant views. However, peers' deviant behaviour also has a strong direct effect on respondents' delinquent activities. According to Warr and Stafford this direct effect is inconsistent with Sutherland's theory, because, in their view, the theory of differential association focuses on 'what peers think' not 'what peers do'.

Jackson *et al.* (1986) and Tittle *et al.* (1986) present a second interpretation of differential association. They argue that associations with deviants foster attitudes, motives, and drives that support criminal acts and provide exposure to techniques suitable for criminal activities. However, they do not include a measure of access to criminal techniques in their analyses. Instead, they argue that omitting this variable is not a 'serious' deficiency (Tittle *et al.* 1986: 412) because 'Sutherland himself recognized that knowledge of criminal techniques is usually not an important variable ...' (Jackson *et al.* 1986: 342).

Tittle *et al.* and Jackson *et al.* test their model of differential association with data from people aged 15 and older living in the United States (i.e. in Iowa, New Jersey, and Oregon). They estimate models of predictions of future involvement in six activities: assault, tax cheating, minor and serious theft, gambling, and marijuana use. In testing their explication, Tittle *et al.* and Jackson *et al.* find that associating with criminals (i.e. having friends who have been arrested) fosters motives for several types of crime (e.g. minor theft and drug use) which in turn increases a willingness to consider offending at some future date. Thus, they conclude that effects of associations on crime are realized only through motives.

³ Although there are a number of revisions of Sutherland's theory (e.g. Cloward and Ohlin 1960; Glaser 1956; Burgess and Akers 1966), as well as theories that integrate Sutherland's ideas (e.g. Elliott *et al.* 1985; Thornberry *et al.* 1994), I concentrate exclusively on differential association. I prefer Sutherland's focus on teachers who provide criminal instruction to theories that place more emphasis on interested students who actively pursue knowledge through modelling and imitation (e.g. Akers 1985).

Matsueda (1982) and Matsueda and Heimer (1987) adopt a similar approach. Using data from the 1965 Richmond, California Youth Project (see Hirschi 1969), both studies estimate models of juvenile delinquency that include measures of the number of friends arrested and deviant attitudes;⁴ yet they exclude items that measure direct exposure to criminal behaviour. As anticipated, Matsueda finds that, in full models, only deviant attitudes have a direct effect on delinquency; Matsueda and Heimer obtain similar results. However, in models that control for race Matsueda and Heimer report that the number of delinquent friends has a significant effect on delinquency, independent of attitudes. They conclude that this direct effect of friends' behaviour provides 'negative evidence for differential association' (1987: 831).

The approach used in Matsueda's (1982) and Matsueda and Heimer's (1987) articles reflects a position later articulated by Matsueda (1988: 281). According to Matsueda, although the process of differential association involves learning both definitions and techniques for committing crimes, the former are decidedly more important and should account for any effect of the latter. Thus, Matsueda's approach suggests that deviant attitudes are sufficient for specifying the process by which exposure to criminal behaviour patterns encourages crime.

Notwithstanding their individual idiosyncrasies, the two approaches described above agree that the key variables in Sutherland's theory are exposure to, and acquisition of, symbolic elements that legitimize criminal acts. Both dismiss the role of more direct contact with crime and deny that tutelage in such behaviours is a fundamental part of differential association. Indeed, they argue that evidence of the direct effect of exposure to others' offending calls into question the differential association process. This interpretation reflects a dramatic separation of the key elements of Sutherland's theory.

Although differential association was originally seen as the pre-eminent sociological theory of its time, these contemporary approaches view it through a lens that narrowly focuses on the psychological experiences of attitude transference. At the same time this viewpoint obscures the more social elements of interactions with deviant others—instruction in techniques of offending in tutelage relationships. In essence, this lens elevates attitudes at the expense of actions.⁵

Alternatively, I argue that Sutherland's theory explicitly recognizes the direct exposure of others' criminal behaviour and testifies to the centrality of this contact as a source for learning the skills required by certain offences. This position is reflected not only in Sutherland's exposition of differential association, but appears in all of his major works. For example, in his discussion of the various propositions that comprise differential association (e.g. his discussion of propositions one through three and six) Sutherland repeatedly commented on the role of others as a source for acquiring knowledge of criminal techniques. He recognized that one learns definitions that support offending through a process that involves both verbal communication and the 'communication of gestures' (Sutherland 1947: 6). The fourth proposition of

⁴ In their studies Matsueda (1982) and Matsueda and Heimer (1987) refer to their measure as 'deviant definitions'; however, I argue that such measures may be better indicators of attitudes.

⁵ These researchers are not the first to neglect Sutherland's focus on learning methods of offending from other's criminal behaviour. In response to criticisms of differential association, Donald Cressey (1960) notes that the second most common oversight concerning Sutherland's theory is a disregard of Sutherland's emphasis that exposure to patterns of criminal behaviour is more important than an awareness of others' criminal attitudes.

differential association captures both of these sources of criminal definitions. According to this proposition:

When criminal behaviour is learned, the learning includes (a) techniques of committing the crime, which are sometimes complicated, sometimes very simple; (b) the specific direction of motives, drives, rationalizations, and attitudes. (1947: 6)

Sutherland's notes on the origins of differential association affirm the importance of criminal contact as a means for learning how to offend. According to Sutherland, his work on professional theft provided the key insights into differential association; he commented that: '(t)here I seemed to see in magnified form the process that occurs in all crime' (1942: 17). Sutherland (1937) concluded that professional theft requires personal training by those adept in this crime; thus, he noted that selection and tutelage are the most important elements in this process (Sutherland 1937: 211–13). As part of this tutelage, neophytes acquire knowledge of theft by 'apprenticeship methods' and receive 'verbal instructions' about how to commit thefts, as well as actual assistance in the commission of crimes (1937: 213).

Recognizing that tutelage was not unique to this type of crime, Sutherland described the importance of instruction in the genesis of several offences, including shoplifting. He stated that a person may become acquainted with, and attracted to a professional shoplifter, and 'learn from him the techniques, values, and codes of shoplifting, and under this tutelage become a professional shoplifter' (1939: 5). Similarly, in his classic study on white-collar crime, Sutherland (1983: 224) demonstrated that offenders frequently acquired their expertise from co-workers:

he learns from those who have the same rank as his own how they make a success. He learns specific techniques of violating the law, together with definitions of situations in which those techniques may be used.

Sutherland (1939: 213–14) also argued that other, less highly specialized crimes, such as juvenile shoplifting and auto theft, require specific skills. Thus, he concluded that although one does not necessarily need tutelage to commit all offences, '*[m]ost crimes, however, require training*' (1947: 213, emphasis added).

The above suggests that contemporary interpretations of differential association have erred in focusing exclusively on symbolic elements while ignoring the effects of exposure to, and acquisition of, criminal skills. This oversight is significant for several reasons. First, the neglect of criminal skills encourages interpretations of differential association inconsistent with Sutherland's thesis. Secondly, it promotes the use of models that mis-specify the differential association process. Third, it leads to the rejection of findings consistent with Sutherland's theory. For example, contrary to Sutherland's position as outlined above, Warr and Stafford (1991) claim that a direct effect of peers' behaviour on one's criminality is inconsistent with Sutherland's theory. Likewise, Matsueda and Heimer (1987: 831) conclude that their significant main effect of delinquent friends on respondents' delinquency conflicts with Sutherland's theory. However, failing to include exposure to, or acquisition of criminal skills, makes it impossible to determine if this variable intervenes in the relationship between associations and crime; if this is the case, including skills may transform an unsupportive main effect into a supportive indirect one.

To address the concerns I raise, subsequent research must use more theoretically compelling models of differential association. Although Sutherland noted that most crimes require some training, he did not distinguish offences that are most amenable to tutelage from those that do not require it. As a step in this direction, I explore two types of crime that may be enhanced by training: theft and drug selling among homeless youths. Data from homeless adolescents are particularly well suited to test Sutherland's thesis because of this group's extensive exposure to the crimes that often characterize street life. Moreover, the adversity of street life (e.g. hunger, lack of shelter, and unemployment) often places these youths in a 'crisis' situation; a condition that Sutherland (1937: 212) noted often encourages association with criminals and exposure to potential tutelage relationships.

Data, Measures, and Methods

The data used in this analysis were collected in Toronto in 1987–8. At that time, social service workers estimated that between 10,000 and 15,000 adolescents lived on the streets and shelters in Toronto. I used a purposive sampling strategy to contact these youths and over a one-year period collected data from 390 homeless adolescents. As part of my sampling strategy I approached adolescents in several social service agencies (six public shelters and three counselling agencies), as well as those I met in several 'street' locales (e.g. downtown parks, shopping malls, train stations, and other sites popular for pan-handling and sleeping). Potential respondents answered several screening questions (e.g. about age and familiarity with street topics) and a reading assessment test before completing an anonymous self-report survey.

Demographic data from the sample indicate that approximately two thirds of the sample were male and one third were female. At the time of the study, 20 per cent of respondents were 16 years of age or younger, 21 per cent were 17, 23 per cent were 18, and 36 per cent were 19 years old. Sixty-two per cent were sleeping in a shelter, 12 per cent were residing temporarily with friends or relatives, 23 per cent were 'living on the street' and 3 per cent were housed in public hotels or in an unspecified location. Overall, these youths report greater involvement in crime than is usually recorded in self-report studies; however, their participation and involvement in crime is significantly greater after they leave home (see McCarthy and Hagan 1991).

My analysis focuses on relationships between crime and three concepts central to differential association: deviant associations, symbolic elements that support offending, and tutelage in criminal activities. I explore the effects of these variables on two types of crime: drug selling and theft since leaving home. I use two items to measure drug trafficking: the frequency of selling marijuana (and other cannabis products) and the frequency of selling hallucinogenics, cocaine, and heroin. My measure of theft incorporates several activities: motor vehicle theft; stealing from a vehicle; break, enter, and theft; shoplifting something valued at \$50 or more; possession of stolen property; and theft of goods valued at \$50 or more. I use the natural-logs of all items to correct for skewness.

I use two variables to capture various dimensions of deviant associations. According to Sutherland, the differential association process is influenced by frequency, priority, duration, and intensity. However, most data do not allow for an easy demarcation of these dimensions. Thus, the two measures used in this study both involve the frequency

of exposure to deviant associations; however, the first variable also captures elements of priority, whereas the second measure may reflect intensity.

The first variable, deviant associations at home, reflects the proportion of the respondent's friends who were arrested and who sold drugs while the respondent lived at home. The second variable, deviant associations on the street, replicates these measures but is based on information on friendships started since leaving home. These relationships may be more 'intense' because street youths experience greater social isolation upon leaving home (e.g. separation from family and friends at home); moreover, they depend on street friends for several types of support.

Both variables use the proportion of deviant friends rather than the more commonly used absolute number; this approach resonates more strongly with Sutherland's emphasis on the ratio of associations. Ideally the variables would have also included a measure of the number of friends who participated in theft, but this information was not available.⁶

I measure symbolic elements that support law violations with two variables: deviant attitudes and deviant desires. The former uses Likert scale answers to three questions about the law and illegal acts. The first measure asks whether it should be legal to use drugs; the second item inquires about whether it is ever right to damage, destroy, or take others' property; and the third measure queries respondents' positions on breaking the law in general. Unfortunately, direct measures of deviant desires were not collected in this study; instead, I use two items as proxies. These Likert scale items asked respondents about their affinity for danger and taking chances, two characteristics often associated with criminal or deviant activities (see Hagan 1990).

I use six questions to measure tutelage; these are crime-specific and focus on criminal instruction offered by tutors. I measure tutelage in drug selling with respondents' accounts of offers to help sell, actual assistance in selling, and reported sources of information about drug trafficking as a way of making money. I use three parallel questions for tutelage in theft. In each case, I created an ordinal scale that reflects the amount of exposure to tutelage. For example, the question about offers to help sell drugs has the following five response categories: (1) not approached about selling drugs; (2) received offers from friends whom the respondent believed were not actively involved in trafficking; (3) approached by friends or adults assumed to be actively involved in selling; (4) received solicitations from both non-selling and selling friends; (5) propositioned by both friends and adults involved in drug trafficking (parallel codings are used for the remaining indicators; see Table 1).

In addition to these variables, I also control for the effects of four additional correlates of crime: age, gender, family relationships, and school experiences. The first two of these are self-explanatory; the third combines commonly used indicators of parental attachment (Hirschi 1969) or relational and instrumental control (Hagan 1990) in a scale measure of family relationships, and the fourth, school experiences, adds measures of involvement in school activities (homework), commitment (grades), and trouble with teachers (see Hirschi 1969).

⁶ A number of studies (see Agnew 1991) suggest that peer associations interact with other dimensions of peer relationships (e.g. attachment, time spent together, and peer pressure). I combined associations since leaving home with indicators of attachment (looking after friends or being looked after), and support (extent of help given to and received from friends); however, neither of the interaction terms had significant effects in the models discussed below so they were not included in the final analysis.

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TABLE 1 *Descriptive Statistics for All Indicators (n = 390)*

	X	sd	α^a
Age	17.597	1.457	
Gender ^b	0.667	0.472	
Family relationships			0.720
Did your mother know who you were with when you were out at night? ^c	1.133	0.877	
Did your father know who you were with when you were out at night? ^c	0.923	0.808	
Did your mother know where you were when you were out at night? ^c	1.279	0.888	
Did your father know where you were when you were out at night? ^c	1.018	0.868	
Would you like to be the kind of person your mother was? ^d	0.649	0.834	
Would you like to be the kind of person your father was? ^d	0.705	0.847	
Did you talk about your thoughts and feelings with your mother? ^c	0.915	0.873	
Did you talk about your thoughts and feelings with your father? ^c	0.659	0.785	
School experiences			0.546
How often did you do homework/projects after school? ^e	1.703	1.329	
How often did you have troubles with teachers? ^e	1.903	1.267	
What was your average grade in your last year of school? ^f	3.215	0.077	
Deviant associations at home			0.446
How many of your home friends had been arrested? ^g	3.633	3.284	
How many of your home friends sell drugs? ^g	2.031	2.672	
Deviant associations on the street			0.476
How many of your street friends have been arrested? ^g	5.138	3.723	
How many of your street friends sell drugs? ^g	2.431	2.907	
Deviant attitudes			0.594
It is right to break the law. ^h	2.054	1.031	
It is not always wrong to damage, destroy or take other's property. ⁱ	2.274	1.156	
People should have the legal right to take the drugs they want. ⁱ	3.105	1.371	
Deviant desires			0.609
The things I like to do best are dangerous. ⁱ	2.942	1.181	
I like to take chances. ⁱ	3.518	1.119	
Tutelage in theft			0.681
Has anyone offered to help you steal? ^j	0.841	1.061	
Did anyone help you steal? ^k	0.738	1.077	
How did you find out that you could make money stealing? ^l	0.787	1.358	
Tutelage in drug selling			0.753
Has anyone offered to help you sell drugs? ^j	0.854	1.164	
Did anyone help you sell drugs? ^k	0.505	0.995	
How did you find out that you could make money selling drugs? ^l	0.564	1.154	
Theft			0.774

TABLE 1 *Continued*

	X	sd	α^a
Age			
Theft over \$50 ^m	1.014	1.507	
Break and enter ^m	0.518	1.082	
Shoplifting over \$50 ^m	0.683	1.277	
Possession of stolen property ^m	0.610	1.173	
Theft from an automobile ^m	0.609	1.234	
Theft of an automobile ^m	0.291	0.758	
Drug selling			0.776
Selling marijuana ^m	1.342	1.757	
Selling other drugs ^m	0.884	1.529	

^a Cronbach's α and Pearson correlation coefficient for variables with only two indicators.

^b 0 = Female, 1 = Male.

^c 0 = Never, 1 = Sometimes, 2 = Usually, 3 = Always.

^d 0 = Not at, 1 = In some ways, 2 = In most ways, 3 = In every way.

^e 0 = Always, 1 = Often, 2 = Sometimes, 3 = Rarely, 4 = Never.

^f 0 = 0 to 40, 1 = 41 to 50, 2 = 51 to 60, 3 = 61 to 70, 4 = 71 to 80, 5 = Over 80.

^g 0 = 0, 1 = 1% to 10%...10 = 91% to 100%.

^h 0 = Never, 1 = In a few cases, 2 = Sometimes, 3 = Often, 4 = In most cases.

ⁱ 0 = Strongly disagree, 1 = Disagree, 2 = Undecided, 3 = Agree, 4 = Strongly agree.

^j 0 = No offers, 1 = Offers from friends not known to be involved, 2 = Offers from involved friends or adults, 3 = Offers from uninvolved and involved friends, 4 = Offers from involved friends and adults.

^k As above except with 'Help' replacing 'Offers' and non-offenders coded as zero.

^l As above except 'Talked with' replaces 'Offers from' and those who reported knowing from other experiences coded as zero.

^m 0 through 99, natural log used in analysis.

Although the independent variables used in this analysis are conceptually distinct, it is plausible that they are highly correlated. However, collinearity diagnostics suggest that associations among the independent variables do not appear to be a problem; only two correlations are greater than 0.350 (i.e. between deviant attitudes and desires at 0.435, and between deviant associations at home and since leaving home at 0.403). As well, variable tolerance scores are all above 0.7 and reciprocal variance inflation factors are all below 1.5.⁷

In this analysis I use two series of OLS equations (reduced form and full) to estimate models of drug selling and theft.⁸ The first equation in each series includes the effects of the four control variables. In subsequent equations I introduce deviant associations before leaving home (equation 2), associations on the street (equation 3), deviant attitudes and desires (equation 4), and lastly, tutelage (equation 5). Given the focus of this paper, I report only the direct effects of these variables on crime; however, regression analyses of the indirect relationships confirm that deviant associations at home and on the street are strongly related to all three intervening variables.

⁷ Bivariate correlations between the independent and dependent variables also suggest that they are not measuring the same phenomenon. The smallest coefficient is 0.291 (between associations and theft), the largest is 0.589 (desires and drug selling), and all but one are lower than 0.5.

⁸ The models used in this analysis are recursive. Although Thornberry *et al.*'s (1994) recent analysis of longitudinal data suggests that although many of these effects are probably non-recursive (e.g. beliefs at time one may encourage crime at time two, which entrenches beliefs at time three) the cross-sectional nature of these data do not allow for an adequate test of such effects. Although longitudinal data are preferred I was unable to locate any that collected measures of tutelage.

My discussion centres on those effects that are statistically significant and how the introduction of additional variables influences the size and significance of these effects. Some critics suggest that tests of statistical inference are inappropriate when data are collected from non-probability sampling designs such as purposive sampling. However, this assertion ignores the underlying assumption that in addition to random-sampling, such tests also assume that the probability of non-response is known and minimal. Yet, as noted by most sampling experts (e.g. Cochran 1963; Kish 1965; Sudman 1976) non-response error in probability sampling is often so serious as to make ordinary sampling error minor in comparison. According to Henkel (1976: 78–80), inferences from such samples are 'nonsensical' and 'cannot be made on any statistical ground'. Rather than rejecting techniques of statistical inference for all but randomly collected data with perfect response rates, I assume that these techniques can be used with less perfect data (data with non-response or from non-probability designs) but I acknowledge that caution must be used in generalizing from these studies. Thus, I follow Mohr (1990) and use these tests as indicators of the strength of a relationship and to assess the likelihood that an effect of a certain size occurred as the result of random forces alone. As Mohr notes, the tests help to assess 'whether or not a certain relationship or other quantity is worth further thought—whether it might repay additional research effort' (1990: 8).

Results

As anticipated, the results of equation 1 for drug selling (see Table 2) indicate that gender, family relationships, and school experiences significantly influence the frequency of this type of crime. Equations 2 and 3 reveal that drug selling also increases with deviant associations both before and since leaving home ($\beta = 0.310$, $p < 0.01$ and $\beta = 0.218$, $p < 0.01$); moreover, although controlling for street friendships reduces somewhat the direct effect of associations from home, the latter remains sizeable and significant ($\beta = 0.226$, $p < 0.01$).

According to equation 4, deviant attitudes and desires also have strong direct effects on drug trafficking ($\beta = 0.184$, $\beta = 0.246$, $p < 0.01$); as well, they reduce the direct effect of associations before and since leaving home (see equation 4). However, adding these variables does not eliminate the direct effect of home and street associations; instead, both variables retain their sizeable and significant effects ($\beta = 0.146$, $p < 0.01$ and $\beta = 0.144$, $p < 0.01$).

The effects of home and street associations change more dramatically with the introduction of tutelage in drug selling in equation 5; both are substantially reduced in size, the effect of street friendships becomes non-significant and the effect of associations at home moves close to non-significance ($\beta = 0.091$, $t = 2.03$).⁹ Moreover, the effect of tutelage surpasses those of all other independent variables ($\beta = 0.377$), $p < 0.01$ and improves the model's adjusted R^2 by almost 40 per cent (i.e. from 29 per cent to 41 per cent).

The equations for theft provide comparable results. The direct effects of associations (at home and on the street) on theft are sizeable and significant in equations 2, 3, and

⁹ The significance of this effect suggests that tutelage from friends from several sites (e.g. at home or in gangs) may be important for specific crimes.

TABLE 2 Regression Coefficients for OLS Models of Drug Selling and Theft (n = 390)

Variable name	Equation 1		Equation 2		Equation 3		Equation 4		Equation 5					
	b	se	b	se	b	se	b	se	b	se				
Drug selling														
Age	0.220	0.114	0.103	0.178	0.083	0.167	0.107	0.079	0.294**	0.101	0.138	0.275**	0.092	0.129
Gender	0.760*	0.355	0.116	0.718*	0.109	0.783*	0.331	0.119	0.220	0.318	0.033	0.372	0.291	0.057
Family Rel	-0.106**	0.039	-0.134	-0.090*	0.037	-0.080*	0.037	-0.102	-0.038	0.05	-0.048	-0.024	0.032	-0.030
School Exp	-0.139**	0.052	-0.134	-0.082	0.051	-0.079	0.050	-0.068	-0.046	0.047	-0.044	-0.045	0.043	-0.046
Home Assoc	—	—	—	0.190**	0.029	0.310	0.138**	0.031	0.089**	0.030	0.146	0.056*	0.028	0.091
Street Assoc	—	—	—	—	—	0.118**	0.027	0.218	0.078**	0.026	0.144	0.031	0.024	0.056
Dev Attitudes	—	—	—	—	—	—	—	—	0.215**	0.060	0.184	0.192**	0.055	0.165
Dev Desires	—	—	—	—	—	—	—	—	0.371**	0.073	0.246	0.299**	0.067	0.199
Tutelage	—	—	—	—	—	—	—	—	—	—	—	0.431**	0.049	0.377
Constant	-0.422	1.922	—	-1.243	1.831	-1.852	1.795	—	-7.606	1.846	—	-7.105	1.683	—
Adjusted R ²	0.063	—	0.154	—	—	0.191	—	0.292	—	—	0.412	—	—	—
Theft														
Age	0.286	0.194	0.078	0.229	0.187	0.216*	0.184	0.059	0.422*	0.176	0.115	0.405*	0.171	0.110
Gender	2.294**	0.604	0.202	2.233**	0.582	2.320**	0.573	0.203	1.325*	0.558	0.116	1.465**	0.543	0.129
Family Rel	-0.249**	0.066	-0.183	-0.225**	0.064	-0.165	-0.207**	0.063	-0.126*	0.061	-0.092	-0.112	0.059	-0.082
School Exp	-0.223*	0.089	-0.125	-0.142	0.087	-0.079	-0.124	-0.069	-0.073	0.082	-0.042	-0.076	0.079	-0.042
Home Assoc	—	—	—	0.271	0.050	0.256	0.193**	0.053	0.108*	0.052	0.102	0.073	0.051	0.069
Street Assoc	—	—	—	—	—	0.183**	0.047	0.193	0.120**	0.045	0.127	0.071	0.045	0.075
Dev Attitudes	—	—	—	—	—	—	—	—	0.495**	0.104	0.247	0.475**	0.101	0.236
Dev Desires	—	—	—	—	—	—	—	—	0.436**	0.127	0.167	0.360**	0.125	0.139
Tutelage	—	—	—	—	—	—	—	—	—	—	—	0.435**	0.090	0.221
Constant	0.501	3.252	—	-0.714	3.146	-1.735	3.101	—	-11.180	3.220	—	10.677	3.131	—
Adjusted R ²	0.105	—	0.166	—	—	0.196	—	0.289	—	—	0.326	—	—	—

*p. < 0.05, **p. < 0.01.

4; however, both are diminished substantially and reduced to non-significance with the introduction of tutelage in equation 5. Moreover, tutelage has a large effect on theft ($\beta = 0.221$, $p < 0.01$) and increases the model's adjusted R^2 by just over 10 per cent (i.e. from 29 per cent to 33 per cent).

Overall, these findings provide considerable support for introducing tutelage to improve models of differential association. Additional analyses reported elsewhere (McCarthy and Hagan 1995) demonstrate that the effects of tutelage are also apparent in covariance structural equation models of drug selling, theft, and prostitution, and that these effects remain when controls are introduced for past criminal activity, time at risk, and situational adversity (i.e. hunger and lack of shelter). As well, the effects of tutelage are not altered in models that introduce data on at-home youths to correct for any sample-selection bias that arises from using data on homeless adolescents. Together, these results provide considerable support for Sutherland's thesis.

Discussion

At one time, Edwin Sutherland was one of the most revered figures in the history of sociological criminology; yet the theory of differential association that Sutherland regarded as his central contribution (Cohen *et al.* 1956) is currently severely criticized and of uncertain influence (e.g. see Kornhauser 1978; Hirschi 1969; Hirschi and Gottfredson 1979). In a 1988 review of the 'current state of differential association theory' Matsueda (1988: 277) argues that although Sutherland's theory was instrumental in bringing sociology to the forefront of criminology, by the 1980s it had fallen from grace and was supplanted by social control or integrated theories. This conclusion is supported by Stitt and Giacomassi's (1992) finding that in 28 volumes of *Criminology* (1963–91), only 11 of 215 empirically-based articles (just over 5 per cent) focus on differential association theory.

Clearly, studies by Matsueda (1982), Matsueda and Heimer (1987), Tittle *et al.* (1986), and Jackson *et al.* (1986) have helped to rescue differential association theory from potential empirical oblivion. In the years preceding these studies, tests supporting differential association were notably absent from major sociological and criminological journals. None the less, recent studies' exclusive focus on deviant attitudes and motives has contributed to the current confusion about the educational importance of others' behaviours. This confusion is most evident in the limited interpretation of Sutherland's theory as one of attitudes, not actions, and in tests of differential association that ignore measures of tutelage.

Alternatively, I argue that the body of Sutherland's work underscores the centrality of others as a source for acquiring criminal skills. In his writings on professional thieves, white-collar offenders, juvenile theft, and other crimes, Sutherland consistently returned to the role of tutelage. The models estimated in this article affirm that, for homeless youths, tutelage is an integral part of the process of learning theft and drug selling.

Although the data used in this article are from a sub-group of the adolescent population, and one that is disproportionately involved in crime (McCarthy and Hagan 1991), other studies suggest that tutelage is not specific to any one group. Both classic and contemporary ethnographies (e.g. Thrasher 1927; Sullivan 1989; Padilla 1992)

describe the role of mentors and tutors in the transmission of criminal skills, as does a recent study on high-school students (Bruinsma 1992). These studies affirm that, regardless of the population studied, tutelage in criminal techniques is an important element of much offending. Thus, subsequent tests of differential association would be enhanced by including measures of tutelage. These investigations should improve our ability to specify the crimes most amenable to criminal training and locate where tutelage occurs with the greatest frequency and the most success. This approach would bring us closer to the sociological criminology originally envisioned by Sutherland.

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