# LIFE-COURSE TRANSITIONS AND DESISTANCE FROM CRIME\*

## MARK WARR

University of Texas at Austin

Sampson and Laub (1993) provided a major contribution to the study of criminal careers by linking criminal behavior to life-course transitions, such as marriage, employment, and entry into the military. To interpret their findings, these investigators relied exclusively on control theory. In a sharp departure from that position, this study offers evidence that life-course transitions affect criminal behavior by altering relations with delinquent peers. Focusing on marriage, the analysis shows that the transition to marriage is followed by a dramatic decline in time spent with friends as well as reduced exposure to delinquent peers, and that these factors largely explain the association between marital status and delinquent behavior. The findings suggest that changing patterns of peer relations over the life course are essential for understanding criminal life-course trajectories.

In one of the most influential studies of crime in recent years, Sampson and Laub (1993) embarked on a formidable task: to explain variation in criminal behavior—onset, maintenance, and desistance—over the life course. Arguing that criminologists had narrowly fixated on the teenage years, Sampson and Laub sought to bring "both childhood and adulthood back into the criminological picture of age and crime" (1993:7). To that end, they adopted the conceptual tools of the life-course perspective (Elder, 1985) and the etiological principles of control theory (Durkheim, 1897; Hirschi, 1969). Strong ties to age-linked institutions of social control—family, school, and peers in childhood and adolescence; higher education, marriage/parenthood, work and community in adulthood—inhibit deviant behavior, they argued, and changing ties to these institutions over the life course produce distinctly different criminal trajectories marked by turning points (a change in the life course) from conventional to criminal behavior or vice versa.

To test their thesis, Sampson and Laub revived data from the Gluecks' well-known longitudinal study of delinquents, data that were initially collected in 1939 and that had lain dormant since the 1950s. The Glueck data, as the authors rightly observed, were notable not only for their longitudinal character, but also for the rich variety of variables and sources

<sup>\*</sup> My thanks to Mark C. Stafford, Robert J. Sampson, Daniel S. Nagin, and Daniel A. Powers for their comments and criticisms.

(self-reports, parent and teacher reports, official data) they encompassed. Briefly stated, Sampson and Laub's reanalysis of the Gluecks' data led them to claim substantial support for their position. Of most immediate relevance, they found that marital attachment and job stability had significant effects in reducing deviant behavior during adulthood, even among those with a history of delinquency in childhood or adolescence.

Sampson and Laub's work is without doubt the most comprehensive and sociologically sophisticated analysis of criminal careers to date. Still, despite the care and skill they brought to the task, their analysis suffers from a serious flaw. The problem lies in their arguments surrounding desistance from crime in early adulthood. In advancing their control explanation of desistance, Sampson and Laub failed to acknowledge or test a rival explanation of desistance, one that is not only possible but highly plausible.

To illustrate the problem, consider the impact of marriage on desistance from crime. Sampson and Laub (1993:140) write that "the structural institution of marriage per se does not increase social control. However, strong attachment to a spouse (or cohabitant) combined with close emotional ties creates a social bond or interdependence between two individuals that, all else being equal, should lead to a reduction in deviant behavior." They further elaborate that "adults, regardless of delinquent background, will be inhibited from committing crime to the extent that they have social capital invested in their work and family lives . . . . By contrast, those subject to weak systems of interdependence and informal social control as an adult . . . are freer to engage in deviant behavior—even if nondelinquent as a youth" (p. 141).

These statements are a straightforward summary of control theory—strong ties to conventional institutions or persons create stakes in conformity and thereby inhibit deviance. But marriage may discourage deviance for an altogether different reason. For decades, criminologists have recognized that the number of delinquent friends an adolescent has is the strongest known predictor of delinquent behavior (e.g., Akers et al., 1979; Elliott et al., 1985; Erickson and Empey, 1965; Hepburn, 1977; Jensen, 1972; Johnson, 1979; Matsueda and Heimer, 1987; Reiss and Rhodes, 1964; Short, 1957; Tittle et al., 1986; Voss, 1964; Warr and Stafford, 1991). Moreover, most delinquent offenses are committed in groups (Erickson and Jensen, 1977; Gold, 1970; Reiss, 1986; Shaw and McKay, 1931; Warr, 1996).

To some criminologists (particularly control theorists), these facts are evidence of nothing more than homophily and the general gregariousness of adolescents (e.g., Gottfredson and Hirschi, 1990; Kornhauser, 1978). To others, however, they constitute strong evidence for Sutherland's (1947) classic theory of differential association, which holds that delinquency is

learned from significant others in intimate groups, or for a broader social learning theory of deviance (Akers, 1985). The debate has largely concentrated on the question of causal order: Do delinquents merely seek friends like themselves ("birds of a feather flock together," as the Gluecks put it), or do adolescents become delinquent because they associate with delinquent friends? In what is perhaps the most compelling research on the matter to date, Elliott and Menard (1996) found that the acquisition of delinquent peers commonly precedes the onset of delinquency, supporting the notion of peer influence as a causal factor in delinquency.<sup>1</sup>

If delinquency is indeed a consequence of peer influence, marriage takes on special significance as a potential cause of desistance from crime. Specifically, if delinquency stems from association with delinquent friends, and if marriage disrupts or dissolves relations with those friends and accomplices, marriage ought to encourage desistance from crime. The predicted outcome—marriage leads to desistance—is of course the same under control theory or differential association/social learning theory, but the social mechanism that produces that outcome is fundamentally different.

Evidence for a peer explanation of desistance comes from several sources. Knight and West (1975) divided a small group of British delinquents into two groups: those who had no further criminal convictions or self-reported offenses after age 16 (temporary delinquents) and those who continued to commit offenses after that age (continuing delinquents). Among those who had desisted from crime (temporary delinquents), more than half reported that "they had abandoned the male peer groups of their adolescent, delinquent phase" (1975:45). As one offender put it, "To keep out of trouble, that's why I don't go round them no more . . . I don't hang around with a lot of mates or anything like that." By contrast, those who had not desisted (continuing delinquents) showed no decline in their level of peer involvement as they grew older.

In a related study, Warr (1993a) found that measures of peer influence—the amount of time that adolescents spend with their friends, their exposure to delinquent friends, and their commitment to friends—peak in

<sup>1.</sup> Some investigators maintain that the relation between delinquent behavior and delinquent peers is bidirectional or sequential. As Thornberry et al. (1994:74) argue, "associating with delinquent peers leads to increases in delinquency via the reinforcing environment provided by the peer network. In turn, engaging in delinquency leads to increases in associations with delinquent peers." This position does not contradict the causal importance of peers, and there is in fact evidence for it (for a review of research, see Thornberry et al., 1994). Further, proponents of this position seem to agree that the *initial* step in this causal loop is exposure to delinquent peers, and some (though not all) studies find that the dominant causal path is from peers to delinquent behavior.

the middle-to-late teens, producing an age curve that is strikingly similar to the age curve of most delinquent offenses. Indeed, most age differences in delinquency, Warr found, disappeared once peer variables were controlled. However, Warr presented no evidence as to why peer relations decline in importance as adolescents enter adulthood.

Ironically, some of the strongest potential evidence of peer effects on criminal trajectories comes from Sampson and Laub's own study. In their initial analysis, these investigators found the correlation between the delinquency of subjects and friends' delinquency to be so strong that they dismissed it as a "tautology." Yet even their own modified measure of delinquent peer attachment had an extraordinarily strong effect on delinquency, one that overshadowed many of the control and structural variables on which they focused. Nevertheless, Sampson and Laub largely discounted these findings on the ground that peer influence ought to be but is not—most strongly evident among siblings. That position, however, is debatable. Siblings and friends are quite different social statuses, and it is not at all clear that the influence of one can be inferred from the other. Siblings, after all, are not necessarily age mates, and time spent with siblings is presumably more subject to parental supervision than time spent with friends. And contrary to Sampson and Laub's suggestion, there is no evidence that adolescents spend more time with siblings than with friends. In fact, the prolonged periods that adolescents commonly spend with friends during and after school (see Warr, 1993a) suggests the opposite.

The purpose of this study is to investigate whether links between major life-course transitions and desistance from crime are attributable to changing relations with peers. The analysis thus constitutes a counterpoint to the theoretical position of Sampson and Laub. Using data from a national longitudinal data set, the investigation concentrates on one major life transition—marriage—and its role in encouraging desistance from crime. The principal objective is to determine whether the effect of marriage on desistance can be attributed to any disruption or dissolution of peer relations that accompanies marriage. In accordance with that objective, the analysis also examines the links between peer relations and both parenthood and marital stress. If the evidence suggests that marriage does indeed encourage desistance by altering relations with peers, efforts to explain criminal trajectories will require greater attention to changing patterns of peer relations over the life course.

## MARRIAGE AND CRIMINAL BEHAVIOR

Before commencing the analysis, it is instructive to consider briefly the literature on marriage and crime. For a topic as potentially important as marriage, empirical evidence on the matter is surprisingly sparse. Aside

from Sampson and Laub's work, the best evidence on the issue comes from Farrington and West (1995).<sup>2</sup> Using data from the Cambridge Study in Delinquent Development (a prospective longitudinal survey of London males), these investigators concluded (1995:270) that "offenders were no more or less likely than nonoffenders to get married," but both inter- and intraindividual analyses of the London panel indicated that "getting married led to a decrease in offending compared with remaining single." To explain their findings, Farrington and West (1995:279) offered, but did not test, an explanation that parallels the thesis of this study:

From birth, children are under the influence of the parents, who generally discourage offending. However, during their teenage years, children gradually break away from the control of their parents and become influenced by their peers, who encourage offending in many cases. After age 20, offending declines as peer influence gives way to family influence again, but this time originating in spouses rather than parents.<sup>3</sup>

One of the primary findings of Farrington and West's investigation was that marriage discouraged offending only among men who actually resided with their spouse; married men who were separated from their wives had markedly higher rates of offending than those who lived with their spouse. This finding closely matches the results of a recent analysis of short-term (month-to-month) changes in criminal careers. Horney et al. (1995:665) report that married male offenders reduced their offending when they were actually living with their spouse and resumed it when they were not: "Moving in with one's wife doubles the odds of stopping offending (compared to moving away), and moving away from one's wife doubles the odds of starting to offend (compared to moving in)." And whereas Sampson and Laub (1993) stressed the importance of attachment to a spouse over marriage per se in their conceptualization and analysis, they (justifiably) employed separation, desertion, and divorce as indicators of spousal attachment.

There appears, then, to be a general convergence of findings indicating that *intact* marriages encourage desistance from crime. For that reason, all references to married persons in the analysis that follows pertain to persons who are married and residing with their spouse. Persons who are married but not residing with a spouse are treated as unmarried persons, who, in fact, they more closely resembled in these data.

<sup>2.</sup> For other discussions or evidence on the relation between marriage and crime, see Adams (1997); Osborne and West (1979); Rutter et al. (1990); West (1982).

<sup>3.</sup> Despite the similarity in arguments, it is not clear whether Farrington and West mean to say that marriage actually *suppresses* peer influence.

## **DATA**

Data for this study come from the National Youth Survey (NYS). The NYS is a continuing longitudinal study of delinquent behavior among a national probability sample of 1,725 persons aged 11 to 17 in 1976. The survey is currently in its ninth wave, forming one of the richest bodies of data on delinquency ever collected. The NYS sample was obtained through a multistage probability sampling of households in the continental United States, and the demographic characteristics of the sample generally match those of this age group in the nation as a whole (for detailed information on sample selection and characteristics, see Elliott et al., 1985, 1989). In each wave of the NYS, respondents are asked a large number of questions about events and behavior that occured during the preceding calendar year, including involvement in a variety of illegal acts.

Both the nature of the NYS data (indeed, any longitudinal data set) and the problem at hand impose certain constraints on the analysis. Early waves of the NYS are of little value for present purposes because so few individuals experience marriage at such young ages. By contrast, later waves of the NYS contain substantial proportions of married respondents, but (perhaps not coincidentally) most respondents in those waves have "aged out" of delinquency, meaning that there are relatively few instances of delinquent behavior in those waves. For these reasons, the analysis focuses primarily on wave 5 (when respondents were ages 15-21) and wave 6 (ages 18-24). These waves, especially the latter, exhibit sufficient variability in marital status and delinquent behavior to support the analysis. Although waves 1 through 5 of the NYS were consecutive annual surveys, the reference periods for waves 5 and 6 were separated by two years, which creates a gap in the chain of observations.<sup>4</sup> Steps were undertaken in wave 6 to minimize the problems raised by this gap, but it nonetheless places some limiting but not prohibitive conditions on certain of the analyses.

# **FINDINGS**

## MARRIAGE AND FRIENDS

A key element of the thesis concerning marriage and desistance from crime is that marriage acts to disrupt or dissolve friendships that existed prior to marriage, including relations with other offenders or accomplices.

<sup>4.</sup> Wave 5 interviews were conducted in early 1981 concerning events that occured in 1980. Wave 6 interviews occurred three years later in early 1984 and pertained to events in 1983. Because the NYS is retrospective and uses a one-year (calendar) reference period, the interval between the wave 5 and wave 6 reference periods was two years (end of 1980 to beginning of 1983).

Accordingly, the analysis turns first to the amount of time that individuals spend with their friends and how that time is affected by the transition to marriage.

The NYS data provide several ways to estimate this effect. First, respondents are routinely asked in the NYS to report the amount of time they spend with their friends on afternoons, evenings, and weekends, using the following questions:

- 1. On the average, how many weekday evenings, Monday through Friday, from dinnertime to bedtime, have you spent with your friends? (0-5)
- 2. On the average, how many weekday afternoons, Monday through Friday, from the end of school or work to dinner, have you spent with your friends? (0-5)
- 3. On the weekends, how much time have you generally spent with your friends? (5 = a great deal; 4 = quite a bit; 3 = some; 2 = not too much; 1 = very little)

Table 1 displays the response distribution to each question among married and unmarried respondents at wave 6.5 Divorced individuals are omitted from the analysis due to the rarity of divorce in a cohort this young.

The data in Table 1 reveal a marked contrast between married and unmarried respondents. More than half of married respondents (57%) report that they spend no more than one weekday evening each week with friends. By contrast, only a fifth (20%) of single respondents report such infrequent contact (chi-square = 164.45, 5 d.f., p < .0001). Indeed, more than a third (35%) of single respondents report that they spend *all* or nearly all (4 out of 5) weekday evenings with friends, compared to only 1 in 13 married respondents (8%).

Much the same pattern holds for afternoon and weekend time. Unmarried respondents are nearly four times as likely (38 versus 10%) to report that they spend four or five afternoons a week with friends (chi-square = 125.28, 5 d.f., p < .0001). And married respondents are 2.5 times more likely than single respondents to say that they spend "very little" or "not too much" time on the weekends with friends (chi-square = 93.57, 4 d.f., p < .0001).

Despite the obvious strength of the relationship, the correlation between marital status and time spent with friends could be entirely spurious if marital status is merely a proxy for age. The models in Table 2, however, indicate otherwise. When time spent with friends is regressed on marital status (1 = married; 0 = unmarried) and age (modeled as a set of

<sup>5.</sup> Wave 6 data are used for all cross-sectional analyses because in that wave respondents exhibit the greatest variability in both delinquency and marital status.

Table 1. Time Spent with Friends Each Week, by Marital Status

		We	ekday :	Evenings	(%)				
	0	1	_2_	3	4	5	Total	(N)	
Unmarried	6.4	13.5	21.6	23.1	17.1	18.3	100.0	(1,068)	
Married	15.6	41.2	23.5	11.9	4.5	3.3	100.0	(243)	
Weekday Afternoons (%)									
	0	1	2	3	4	5	Total	(N)	
Unmarried	11.3	12.2	18.0	20.7	13.3	24.6	100.0	(1,069)	
Married	25.9	30.5	19.8	14.0	4.1	5.8	100.0	(243)	
Weekend Time (%)									
	Very	Not Too		Quite A	A Great				
	Little	Much	Some	<u>Bit</u>	Deal		<u>Total</u>	(N)	
Unmarried	3.8	7.6	23.6	38.2	26.7		100.0	(1,070)	
Married	9.1	19.8	37.4	25.5	8.2		100.0	(243)	

dummy variables), the effect of marital status remains strong and highly significant  $(p \le .001)$  in each case.

Figure 1 elaborates on Table 1 by showing the relation between time spent with friends and the precise person(s) with whom respondents were living at wave 6 (i.e., parents/stepparents, spouse, roommate, opposite sex, alone). For space reasons, only evening time is shown, but the pattern is quite similar for afternoon and weekend time. Examination of Figure 1 reveals that persons who live with a spouse are distinctly different from those living in other household arrangements. Among those living with a spouse, time spent with friends peaks sharply at one night per week and drops rapidly thereafter. By contrast, the modal category for most of the remaining household types is two or three nights per week, and there are substantially more persons in those households who average four or five weekday nights each week with friends.

The data in Figure 1 demonstrate that it is not merely those who live at home with their parents who spend much of their time with friends. The same is true for those who have *left* home but remain unmarried (i.e., those who live alone, with one or more roommates, or are cohabiting). Consequently, it appears that there is something about marriage itself—not simply leaving home or even cohabitation—that affects relations with friends.

Another useful measure of time spent with friends from the NYS is this

OLS Regression of Time Spent with Friends on Marital Status and Age Table 2.

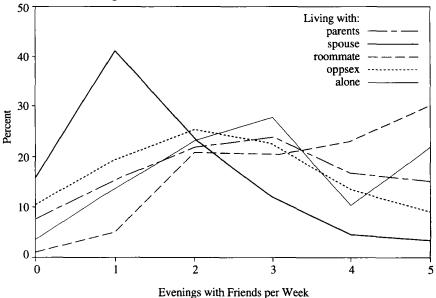
	N	1,310 1,311 1,312
	$R^2$	.12 .10 .08
	24	31* 58** 45***
	23	.08 40* 26*
Age	22	02 .42* 24*
!	21	.21 16 15
	20	.07
	19	.29* .12 .05
Marital	Status	-1.21*** -1.13*** 62***
	Intercept	2.79 3.02 3.89
Dependent	Variable	Evening Time Afternoon Time Weekend Time

NOTE: Unstandardized coefficients.

<sup>\*</sup>  $p \le .05$ .

<sup>\*\*</sup>  $p \le .01$ .

Figure 1. Evenings with Friends per Week, by Household Composition



self-report item: On the average, how many hours per week have you spent with your friends? Figure 2 displays the cumulative frequency distribution of these self-reported hours among married and unmarried respondents at wave 6. A look at the figure shows that the distribution for married respondents approaches its maximum much earlier (at about 15–20 hours) than it does among unmarried respondents. A more succinct estimate of the difference is given in Table 3, which shows the regression of hours spent with friends on marital status, controlling for age. The equation indicates that marriage cuts an average of about 10 hours (10.43) per week from time spent with friends. Put another way, married persons spend roughly half as much time with friends each week (12.30 hours) as do unmarried persons (22.73 hours).

# EXPOSURE TO DELINQUENT FRIENDS

The preceding analysis points to a strong association between marriage and time spent with friends. The latter variable is clearly a critical variable in differential association/social learning theory (see Sutherland's [1947] arguments about the duration and frequency of relations), but no less important is the *type* of friends with whom one associates. Specifically, it is exposure to *delinquent* friends, according to Sutherland, that is conducive to delinquency.

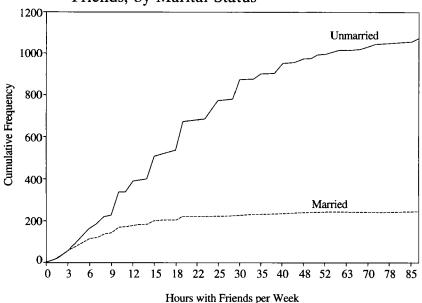


Figure 2. Cumulative Frequency of Hours Spent with Friends, by Marital Status

Data on the delinquent behavior of friends are available in the NYS through a series of questions of this form:

Think of your friends. During the last year, how many of them have [offense]? (1 = none of them; 2 = very few of them; 3 = some of them; 4 = most of them; 5 = all of them)

The friends to whom the question refers are specific persons respondents were asked to identify (by name or initials) earlier in the interview.

Using responses to this question, it is possible to determine whether the transition to marriage affects exposure to delinquent friends. Table 4 displays, for each offense, a logistic regression equation in which delinquent friends (scored as 1 if the respondent reported any such friends and 0 otherwise) is regressed on marital status, controlling once again for age. Examination of the table reveals that marital status has a statistically significant effect on the number of delinquent friends reported by respondents for nearly every offense. The only exceptions are offenses related to alcohol (alcohol use and getting drunk), acts that are not illegal or even contranormative among adults.

Taken in conjunction with the findings reported earlier, the evidence from Table 4 strongly suggests that marriage has two important consequences for criminal trajectories. First, marriage substantially reduces the

OLS Regression of Weekly Hours Spent with Friends on Marital Status and Age Table 3.

	2	1,309
	K2	.07
:	24	
	23	-2.17
Age		-1.97
	21	87
	19 20	
	16	2.14
Marital	Status	-10.43***
	Intercept	22.73

NOTE: Unstandardized coefficients. \*  $p \le .05$ . \*\*  $p \le .01$ . \*\*\*  $p \le .01$ .

Table 4. Logistic Regression of Delinquent Friends on Marital Status and Age

		1,468												
	<u>19 20 21 22 23 24</u>	72**	.28	39	***68'-	.30	91*	.17	40	26	.03	.41	22	.02
		51*	.24	52*	49*	19	*89	.16	34	19	8.	80:	21	Ŗ
Age	22	17	.25	28	40	23	50	.20	28	16	<b>2</b> .	*05:	.02	03
	21	26	.57**	26	52*	*98·	*08:-	.27	01	14	4	.31	30	40
	20	07	.18	33	33	16	35	.01	00	18	80:	11.	.10	08
	19	.02	9.	00	09	.01	34	.34	12	27	.43	.14	06	.01
		88***												
	Intercept	78	89.	36	73	2.38	-1.80	-1.85	-1.79	80	1.91	-1.21	50	-2.12
	Offense	Vandalism	Used Marijuana	Theft < \$5	Assault	Used Alcohol	Burglary	Sold Hard Drugs	Theft > \$50	Break the Law	Gotten Drunk	Used Prescription Drugs	Sold Alcohol to Minors	Pressured Someone Sexually

\*  $p \le .05$ .

\*\*  $p \le .01$ .

amount of time available for friends, marking a shift from a peer-oriented to a family-oriented life-style. At the same time, marriage alters the *kinds* of friends with whom individuals associate; it reduces exposure to deviant friends and increases exposure to conventional others.

## TIMING AND CAUSAL DIRECTION

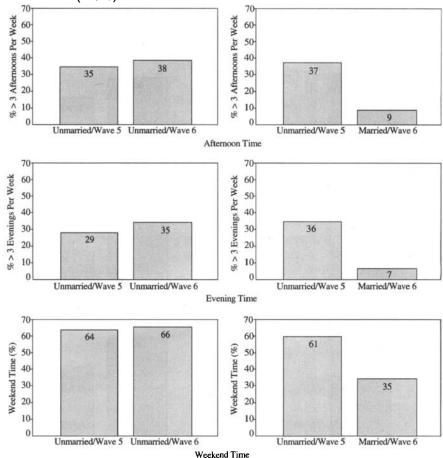
Consistent though they may be, all of the preceding findings are based on cross-sectional analyses. Consequently, critics may raise legitimate questions about the timing or causal order of events. Of greatest concern is this question: Do changes in peer relations precede or follow marriage, and are the two events proximate in time during the life course? Questions of timing and causal order are somewhat difficult to answer in the case of marriage, of course, because marriage is merely the declaration of a relationship that may have commenced well before the marriage itself (Ahammer, 1973). Nevertheless, the NYS data provide some clues toward answering these questions.

Figure 3 reports changes in the amount of time (afternoon, evening, or weekend) spent with friends among two groups of respondents: those who remained unmarried at both waves 5 and 6 (left plots) and those who were unmarried at wave 5 but had married by wave 6 (right plots). For afternoons and evenings, time spent with friends is expressed as the percentage of respondents who reported spending more than three afternoons or evenings per week with friends. Weekend time (which was measured using a different metric) is expressed as the percentage of respondents who said that they spent "a great deal" or "quite a bit" of their weekend time with friends.

If the argument proposed here is correct, respondents who were unmarried at both waves should exhibit little decline in time spent with friends across the two waves, whereas those who married between the waves should show a substantial drop. An inspection of Figure 3 shows that this is precisely the case. Regardless of the time in question (evening, afternoon, or weekend), respondents who remained unmarried at both waves experienced no decline (in fact, small increases) in time spent with friends. By contrast, those who had married by wave 6 display very large, statistically significant drops in time spent with friends, ranging from 43 to 80%. This pattern remains unaltered even after controlling for age at marriage (not shown).

The data in Figure 3 encompass a fairly long time lapse (recall that waves 5 and 6 were separated by two years), but an estimate of the short-term effect of marriage can be obtained by comparing earlier annual waves. Unfortunately, as noted earlier, there were very few marriages before wave 6, but Figure 4 nonetheless displays changes in time spent

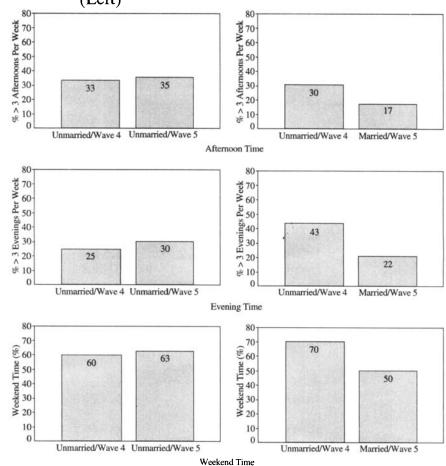
Figure 3. Changes in Time Spent with Friends Among
Those Who Married Between Waves 5 and 6
(Right) and Those Who Remained Unmarried
(Left)



with friends among those respondents (N=51) who married in the year between waves 4 and 5 (right plots) and those who were unmarried at both waves (left). A look at the figure reveals a pattern very similar to that in Figure 3. Respondents who remained unmarried show little change from one wave to the next, whereas those who married display substantial drops in time spent with friends. The declines (ranging from 29 to 49 percent), though large, are not as great as those in Figure 3, suggesting that withdrawal from friends is a gradual process that continues over several years.

Table 5 displays still another longitudinal comparison, but in this case

Figure 4. Changes in Time Spent with Friends Among
Those Who Married Between Waves 4 and 5
(Right) and Those Who Remained Unmarried
(Left)



the data pertain to the number of delinquent friends reported by respondents at waves 5 and 6. Specifically, the figures in each column indicate the percentage of respondents with delinquent friends at wave 5 who no longer had delinquent friends by wave 6. The first column reports this percentage (for each offense) among those who remained unmarried, and the second column applies to those who married between the waves. To illustrate the meaning of these numbers more clearly, consider the first row of figures. Among respondents who remained unmarried and who had friends at wave 5 who committed vandalism, 51% no longer had such

	Unn	narried	_Ma	rried	
Offense	%	<u>(N)</u>	<u>%</u>	<u>(N)</u>	Difference (p)
Vandalism	51	(369)	78	(41)	.001
Used Marijuana	14	(697)	30	(115)	.000
Theft < \$5	42	(460)	58	(62)	.020
Assault	56	(389)	67	(51)	.149
Used Alcohol	4	(919)	5	(151)	.558
Burglary	67	(150)	81	(21)	.206
Sold Hard Drugs	57	(155)	69	(26)	.233
Theft > \$50	55	(145)	89	(18)	.006
Break the Law	42	(334)	58	(40)	.066
Gotten Drunk	5	(887)	7	(Ì47)	.316
Used Prescription Drugs	40	(257)	54	`(54)	.074
Sold Alcohol to Minors	46	(399)	64	(70)	.005

Table 5. Change in Delinquent Friends, Waves 5-6

friends by wave 6. Among those who married, however, 78% of those with delinquent friends at wave 5 had lost those friends by wave 6.

A brief inspection of Table 5 reveals two clear patterns. Unlike time spent with peers, exposure to delinquent peers declines among those who did not marry as well as among those who did. The pattern for both groups thus mimics the general age distribution of exposure to delinquent peers (Warr, 1993a) and reflects what seems to be a general drift toward greater conventionality that occurs in young adulthood (Jessor et al., 1991). The most telling evidence in Table 5, however, is that the decreases in delinquent friends between the two waves were substantially larger among those who married compared to those who did not marry (compare columns 1 and 2), and in some cases the difference is enormous. The figures for some offenses are based on Ns too small to be statistically significant, but the general pattern is clear. The two offenses related to alcohol—"used alcohol" and "gotten drunk"—are, once again, exceptions to the rule, meaning there is virtually no change in the number of delinquent friends in either group (married or unmarried) from one wave to the next. These exceptions aside, however, the data in Table 5 suggest that marriage is ordinarily followed by an accelerated decline in exposure to delinquent peers.

## MARRIAGE AND DESISTANCE

Taken as a whole, the longitudinal and cross-sectional evidence strongly support the thesis that the transition to marriage tends to disrupt or dissolve relations with friends, including delinquent friends. Consequently,

the analysis now turns to the central questions of this study. Does marriage lead to desistance from crime and, if so, does this occur because marriage reduces exposure to delinquent peers? The logic of the analysis is straightforward. If the answer to both of the preceding questions is affirmative, then any observed association between marriage and delinquent behavior should disappear once exposure to delinquent associates is held constant.

The first portion of the analysis employs data from wave 6 and concentrates on those NYS offenses for which comparable data are available on both respondents and friends (a fairly small subset of the offenses) and for which there are sufficient cases to permit statistical analysis. Table 6 displays a series of logistic regression equations for each of the four offenses that meet these criteria. The dependent variable in each case is the self-reported frequency of the offense, scored as 1 if the respondent committed the offense at least once during the reference period and 0 otherwise. Logistic regression models were used in place of ordinary least squares (OLS) models in the analysis because of the skewness of the dependent variables.

The independent variables for each offense include a dummy variable distinguishing those who were married and residing with their spouse at wave 6 (a score of 1) from those who were not (a score of 0), as well as a set of control variables that represent possible alternative explanations for the effect of marriage on offending. College attendance was coded as 1 if the respondent was in college or an adult education/GED program during the reference period, and 0 if not. Employment status ("job" in Table 6) was scored as 1 if the respondent was employed at least 30 hours per week, and 0 otherwise. A dummy variable representing sex (1 = male, 0 =female) was included in the models because of sex differences in the average age of marriage in the United States (Sweet and Bumpass, 1990); age (coded as before) was included as well. Delinquent friends was scored as 1 if the respondent reported having any friends who had committed the offense (0 otherwise), and weekly time spent with friends ("hours" in Table 6) was coded as 1 if the respondent averaged more than 20 hours per week with friends (0 if fewer hours).

The first model for each offense includes marital status and all of the control variables, but no variables pertaining to peers. A close look at the model for each offense shows that, despite controls for other potentially confounding variables, the coefficient for marital status is statistically significant in each case. Though not immediately relevant, college attendance is positively associated with alcohol use but negatively associated with smoking marijuana. Having a job is positively associated with use of both drugs, evidently because jobs outside the home often expose young

Logistic Regression of Self-Reported Delinquency on Marital Status, Delinquent Friends, Hours with Friends, and Controls Table 6.

	2	1,496 1,464 1,304 1,304	1,496 1,455 1,295 1,295	1,493 1,466 1,304 1,304	1,496 1,467 1,307 1,307
İ	24	.01 .00 .00 .00	20 .09 .24 .23		.43 .35 .23
	23	.14 .14 .27	71 42 39 40	-1.54*** -1.39*** -1.33**	.76* 1.09** .97* 1.04*
Age	22	01 08 04	40 23 29	-1.81** -1.83*** -1.79**	.29 .40 .31
	21	28 .05 .16	49 33 38	-1.21** -1.13** -1.18**	*77. .62 .64
	20	22 22 20	45 32 42 43	36 42 41	36 56 70 77
	19	.13 .22 .24 .25	29 33 35	60 64 70 68	23 38 34 34
	FxH	1118	40	1118;	1.38*
	Hours	.58*** .28	- 12; 09:		.59*
	Del. Friends	3.45*** 3.49*** 3.38***	2.67*** 2.58*** 2.73***		 3.42*** 3.69*** 3.34***
	Job	.28 .20 .20	10 09 04	.26 .33 .34	.60*** .65** .52** .57*
	College	36** 29* 37*	60. 90. 90. 90.	02 .03 .04	.45* .20 06
	Sex	.28** .38** .35**	.84*** .45* .46* .46*	2.04*** 1.66*** 1.71*** 1.74***	.02 02 .02 .03
	Marital Status	61** 30 07 07	62* 35 14	-1.20* -1.00 57 60	45* 66** 52
	Intercept	-3.28 -3.45 -3.36	-2.38 -3.92 -3.99 -4.11	-3.62 -4.09 -4.38 -4.16	1.24 -1.52 -1.64 -1.37
	Offense	Used Marijuana	Theft < \$5	Vandalism	Used Alcohol

NOTE: For vandalism, ages 23 and 24 were combined because no one in the latter age group committed the offense.

 $p \le .05$ . \*\*  $p \le .01$ . \*\*\*  $p \le .01$ .

people to a large variety of peers in settings that are relatively unsupervised by adults (see Ploeger, 1997).

The second model reported for each offense adds only one additional variable, the proportion of delinquent friends reported by the respondent. When this variable is added to the equation, the coefficient for marital status drops below statistical significance in every case but one—alcohol use—which is the only offense in the table for which marriage and delinquent friends were not initially associated. In this instance, the coefficient for marriage actually increases somewhat (from -.45 to -.66) when delinquent peers is entered into the equation.

The third model for each offense adds another peer variable, weekly hours spent with friends. The coefficient for this variable is statistically significant for three of the four offenses, and in all four cases, the addition of this variable reduces the effect of marriage further still. In the case of marijuana use and petty theft, the coefficient for marriage falls to only a small fraction of its initial value, and for vandalism it is approximately one-half its original size. Even in the case of alcohol, the coefficient for marriage drops below statistical significance once time with friends is included.

The evidence from Table 6 supports the argument that marriage operates through its impact on friendships; when measures of peer influence are held constant, the effect of marriage is largely erased. Proponents of Sutherland's theory, however, might object that the models do not provide a proper test of his theory. Although some criminologists seem to regard time spent in the company of any adolescent peers as criminogenic (see Hagan, 1991; Osgood et al., 1996; Warr, 1993b), Sutherland clearly implied that it is time spent with delinquent peers that matters. The NYS provides no way to measure time spent with delinquent friends precisely, but an approximation can be obtained by computing the interaction between the proportion of delinquent friends reported by respondents and the amount of time they report spending with their friends. This interaction term is included in the final model for each offense in Table 6. The coefficient for the interaction is large and statistically significant for alcohol use, and large but only marginally significant (p = .09) for vandalism. For the remaining two offenses, the interaction term is not significant, but in the case of marijuana a substantial and statistically significant interaction (b =.63, p = .05) does appear if delinquent friends is recoded slightly to combine those who report "very few" delinquent friends with those who report "none." This same recoding has no appreciable effect for petty theft, but it remains the only exception to the general pattern. The analysis therefore does provide some support for Sutherland's theory, albeit with measures that are not ideal for the purpose.

## A LONGITUDINAL TEST

The preceding evidence supports the thesis of this study, but a more compelling test could be constructed by selecting and tracking a cohort of offenders over time, isolating those who marry from those who do not, and comparing the rates of desistance among the two groups. This strategy is easier to describe than to execute, however, because it requires a fairly large initial sample of offenders (large enough to permit statistical inference) and self-report surveys are not an efficient means of identifying offenders. Even with the comparatively large sample size found in the NYS, only a small number of respondents commit most of the offenses, especially the more serious ones. However, there is an offense in the NYS—smoking marijuana—that is sufficiently common (N = 654) at wave 5) to permit this more stringent approach. To implement the strategy, logistic regression models were estimated using change scores between waves 5 and 6 for the principal measures. To understand the coding of variables, it is important to bear in mind that all respondents in the analysis were offenders and unmarried at the initial wave of the analysis (i.e., wave 5). The dependent variable (desistance) was scored as a 1 if the respondent reported smoking marijuana during the year preceding wave 5 interviews but reported no such incidents in the year preceding wave 6. If the respondent smoked marijuana at both waves, desistance was coded as a 0. Similar logic was applied to delinquent friends; those who had significantly fewer friends who smoked at wave 6 compared to wave 5 (i.e., a drop of at least two categories on the friends scale) received a score of 1, and 0 otherwise.6 (Hours spent with friends each week was not included in the analysis because the measure was first introduced in wave 6). Marital status was coded as 1 if the respondent married between the two waves, and 0 if not. Employment status was scored as 1 if the respondent acquired and maintained a full-time job (at least 30 hours per week) between the two waves (0 otherwise) and college status was scored as 1 if the respondent entered college between the waves, and 0 otherwise. Two other control variables—age and sex—were included and coded as before.

The first model reported in Table 7 includes marital status and all of the control variables, but not delinquent peers. Despite controls for other major life-course transitions, marital status has a statistically significant effect on desistance, increasing the odds on desistance by a factor of about  $1.7 \ (e^{.51} = 1.67)$ . Gender also has a significant positive effect on desistance (females are more likely to desist than males), whereas entering college

<sup>6.</sup> Alternative codings of this variable were investigated, but all led to the same conclusion. The most pronounced effect occurred by contrasting those who lost *all* delinquent friends between the waves with those who did not, but that was true of only about 7% of offenders.

has a positive but only marginally significant (p = .11) effect on desistance. Obtaining a job does not have any significant effect, as one might surmise from the cross-sectional findings presented earlier.

When change in delinquent peers is added to the equation (second model), the coefficients for most variables remain largely unaffected, but marriage no longer has a statistically significant effect on desistance. Consequently, the longitudinal analysis points to the same conclusion as the cross-sectional findings. That is, changes in peer relations appear to account for the effect of marriage on desistance.

#### CHILDREN

Marriage is often said to have a "civilizing" effect (Popenoe, 1996), especially among men, and that civilizing effect is frequently attributed not merely to marriage, but to the presence of children in the home:

It is not uncommon to hear young men say that they gave up certain deviant or socially irresponsible patterns of life only when they married and had children. At that point, based on the necessity to be a good provider and a good father, they developed a real stake in the system and felt the need to set a good example for their children. . . . There is a civilizing effect for men in merely being in the company of women and children, an environment which typically promotes lifeenhancing values. Association with single men, in contrast, tends to generate risk taking, aggression, and violence. The members of single-male peer groups are constantly challenging one another, and the jousting for position, honor and esteem can become lethal (Popenoe, 1996:75).

Similarly, Farrington and West (1995:251) argue that,

Any apparent effect of marriage on the time course of offending may in fact be caused by having a child, an event which often occurs close in time to the date of the marriage. Having a child may have more effect than getting married on social habits associated with offending (e.g., going out drinking with male friends . . . ). Ideally, it is important to try to disentangle the effects of getting married from the effects of having a child.

Does marriage alone promote desistance from crime, or is it instead the presence of children that encourages desistance? Or do the two have independent but cumulative effects? To answer that question, NYS respondents were grouped into four mutually exclusive categories: (1) unmarried, no children (UMNC); (2) unmarried, with children (UMC); (3) married, no children (MNC); and (4) married, with children (MC). Dummy variables representing each group were created, with a 1 representing membership in the group and a 0 indicating otherwise.

Logistic Regression of Desistance on Changes in Marital Status, Delinquent Friends, and Controls Table 7.

	×	563	553
	24	.35	.27
	23	35	.21
Age	22	.34	.21
¥	21	40	16
	20	.17	.05
	19	24	41
	Del. Friends	1	1.17***
	of	.05	80.
	College	.41	*64.
	Sex	36*	38*
	Marital Status	.51**	.30
	Intercept	-1.00	-1.33

 $\begin{array}{l} * p \leq .10. \\ * * p \leq .05. \\ * * * p \leq .05. \end{array}$ 

The first equation in Table 8 reports the OLS regression of time spent with friends (self-reported hours per week) on these family composition variables using wave 6 data; UMNC was the omitted group and age once again was controlled through a series of dummy variables. The equation shows that respondents who are married and have children (MC) spend substantially less time (-10.93 hours per week) with friends than persons who are unmarried and have no children. However, the reduction in time among married persons with children is virtually identical (-10.96 hours) to that of persons who are married but have no children (MNC), and the difference between the two groups (married with children and married without children) is not itself statistically significant. Further, there is no significant time reduction at all among respondents who have children but are not married (UMC). Consequently, it appears that the presence of children adds little or nothing to the effect of marriage itself.

The second equation in Table 8 shows the effect of household composition on exposure to delinquent friends. In this instance, the dependent variable is the sum of 12 items measuring the proportion of respondent's friends who have engaged in each offense (see above for wording). The implications of the equation are very much the same as those above. Persons who are married with children have significantly fewer delinquent friends than unmarried persons without children, but they closely resemble those who are married but have no children (compare the standardized coefficients for MC and MNC). Further, persons with children show no significant diminution in delinquent friends if they are unmarried.

Once again, it appears that it is marriage—not the presence of children—that affects relations with friends. In retrospect, this is not a particularly surprising finding. Recall from the earlier analysis that marriage appears to have a substantial *immediate* effect on friendships, one that would consequently be difficult to ascribe to children. Hence, it seems that it is the presence of a spouse that is the key factor that leads to changes in social relations with friends.

#### FRIENDS AND MARITAL STRESS

The evidence examined thus far is consistent with the thesis that marriage encourages desistance by disrupting relations with peers, and it also suggests that it is the link to one's spouse—not children or a cohabitant—that is central to this process. In light of this evidence, one nagging question remains unanswered. How or why does marriage affect relations with peers?

Perhaps the most likely answer is that continuing relations with peers after marriage pose a potential threat to the special relation between husband and wife, or the marital bond emphasized by Sampson and Laub

OLS Regression of Weekly Hours Spent with Friends and Delinquent Friends on Household Composition and Age Table 8.

			i				,	Age				
Dependent Variable	Intercept	MC	ı	UMC	19	20	21	22	23	24	$R^2$	2
Hours with Friends	22.76	-10.93*** (19)	,	.49		86:	51	-1.48	-2.01	4.71*	80:	1,205
Delinquent Friends	21.46	-1.59** (09)		.19 (.01)	07	05	.01	.17	90	4.	.02	1,303

NOTE: Standardized coefficients in parentheses.

\*\*  $p \le .01$ . \*  $p \le .05$ .

(1993:140). That is certainly true in the case of delinquent peers, where the possibility of arrest, imprisonment, and social stigma presents a fundamental risk to the long-term viability of the marriage. It may also be true, however, that spending excessive time with *any* friends—delinquent or not—is regarded by the spouse as a threat or a lack of commitment to the marriage and family.

If this argument is correct, it follows that the quality of the marriage will be affected by peer relations. Specifically, those individuals who maintain strong relations with peers after marriage should report greater stress or difficulties in their marriage. As it happens, this proposition can be tested with the NYS, which contains a set of questions asking married respondents to report the degree of stress in their marriage and the amount of warmth and affection, support and encouragement, and loyalty they receive from their spouse.<sup>7</sup> To simplify the analysis, a summary measure of marriage quality was created by taking the mean of these items for each married respondent. In Table 9, this summary measure is regressed on the index of delinquent friends used earlier, as well as the weekly number of hours that respondents reported spending with their friends (all variables are measured at wave 6). As can be seen in the table, both measures have statistically significant effects in the expected direction, meaning that less contact is associated with higher perceived quality of the marriage. Of the two variables, association with delinquent friends has a somewhat stronger effect, as one might expect from the greater potential consequences it entails.

These findings suggest that marriage does in fact create pressure on spouses to limit or curtail relations with friends—not only delinquent friends, it seems, but friends in general. Failure to do so evidently produces strain in the marriage that can potentially threaten its very existence. One might argue, of course, that the causal direction runs in the opposite direction: individuals in stressful marriages are more likely to acquire delinquent friends or spend time with friends. When it comes to delinquent friends, however, that interpretation is at odds with research showing that delinquent friendships are commonly formed in middle-to-late adolescence, or well before marriage is likely (Warr, 1993a).

<sup>7.</sup> The items were worded as follows: Think of this relationship over the past year. How much stress or pressure has there been in this relationship? How much warmth and affection have you received from your spouse? How much support and encouragement have you received from your spouse? How much loyalty have you and your spouse had for one another? Responses to all four items were scored as 5 = a great deal, 4 = a quite a bit, a = a some, a = a not too much, a = a responses to the stress question were reflected to match the direction of the other three scales (i.e., higher scores indicate a more positive relationship with the spouse).

Table 9. OLS Regression of Perceived Marriage Quality on Delinquent Friends and Weekly Hours with Friends

Intercept	Delinquent Friends	Hours	R	_ <i>N</i> _
4.82	34*** (22)	01** (15)	.09	290

NOTE: Standardized coefficients in parentheses.

## CONCLUSION

The results of this study point to conclusions that differ from those reached by Sampson and Laub in their study of criminal life-course trajectories. Just as their investigation did, my findings suggest that marriage contributes to desistance from crime. But the reason for this process appears to be quite different from the one proposed by those investigators. For many individuals, it seems, marriage marks a transition from heavy peer involvement to a preoccupation with one's spouse and family of procreation. For those with a history of crime or delinquency, that transition is likely to reduce interaction with former friends and accomplices and thereby reduce the opportunities as well as the motivation to engage in crime. In words that Sutherland might have chosen, marriage appears to discourage crime by severing or weakening former criminal associations.

The purpose of this study, however, was not merely to explain the effect of marriage on criminal behavior or to argue that marriage is the most common reason for desistance. Rather, the larger objective was to identify and offer preliminary evidence for a general mechanism of desistance that may explain the links between life-course transitions and desistance from crime. Because the analysis was limited to a single major life transition—marriage—and a limited age range of individuals, it is difficult to say at this point whether the process identified here applies to other transitions and phases of life. However, there is no reason to suppose that it does not, and it may in fact obtain with even greater force. Consider, for example, entry into the military, a career path discussed by Sampson and Laub. Unlike marriage, joining the military ordinarily requires relocation to a new area, something that is likely to severely interrupt or hinder existing friendships, and perhaps sever them altogether. (Indeed, that seems to be part of the traditional rationale whereby judges sentenced delinquents to military duty). But unlike marriage, where established

<sup>\*</sup>  $p \le .05$ .

<sup>\*\*</sup>  $p \le .01$ .

<sup>\*\*\*</sup>  $p \le .001$ .

friends evidently fade in importance, old friends are likely to be replaced by *new* friends in the military—or at college or the first "real" job. These new friends, however, are not the comrades of adolescence, but typically members of the adult world who have either aged out of or have no history of crime. As such, they become models for conventional behavior and form a foundation for the transition out of crime. In subsequent research on military service among men raised in poor areas of Boston, Sampson and Laub (1996:364) themselves concluded that overseas military duty was, for these men, "a crucial life experience because it facilitated the knifing off of past social disadvantages (e.g., poverty, deviant peers) and stigmatization by the criminal justice system."

Notwithstanding the evidence presented here, the conclusions of this study with regard to marriage (and, by implication, other life-course transitions) are likely to be challenged under alternative causal scenarios. Marriage does not alter relations with friends, one might argue. Rather, the fracturing of peer relations frees individuals (or motivates them) to marry. Marriage does not lead to desistance from crime; instead, only those who have abandoned crime are attractive marriage partners. More broadly, marriage, friends, and crime could be linked through a process of social selection. Those who marry at any particular age are those who would have desisted from crime and relinquished delinquent friends anyway. This analysis cannot rule out these alternatives, and hence the conclusions of this study must remain tentative if only for that reason. In defense of the causal model advanced here, however, it should be noted that the analysis revealed pronounced changes in relations with friends following marriage, an observation that is at odds with the idea that changing peer relations lead to marriage. Nevertheless, it would be premature at this point to claim anything more than preliminary support for the thesis offered here.

At a broader level, the findings of this study bear on a current and truly fundamental debate in the field, that is, the clash between ontogenetic and sociogenetic explanations of crime (Cohen and Vila, 1996; Matsueda and Heimer, 1997; Sampson and Laub, 1993). Spurred largely by the arguments of Gottfredson and Hirschi (1990), proponents of the ontogenetic position assert that criminal behavior is the result of an individual trait (e.g., low self-control) that is present at an early age and persists through life. It therefore follows, they argue, that criminal behavior is largely unaffected by life-course events like marriage, employment, education, and so on. In contrast, advocates of sociogenesis assert that criminal propensity and behavior are not stable and immutable through life, but undergo transformation in response to changing life events or circumstances. In its broadest sense, Sampson and Laub's monograph provides a logical and

empirical defense of the sociogenetic school of thought. The present findings join theirs and those of other recent studies (see Bartusch, et al., 1997; Paternoster and Brame, 1997; Warr, 1993a) in support of that position.

Although this study has drawn on Sutherland's theory of differential association, some will question whether the findings can be properly construed as evidence for his theory. The reason is that Sutherland emphasized the importance of acquiring "definitions" or attitudes favorable to violation of the law in his theory of interpersonal influence, and no attitudinal measures were employed in this study. Research over several decades, however, has consistently indicated that attitude transference is not the primary mechanism of differential association, meaning that individuals seem much more sensitive to the behavior than the attitudes of their friends (see Warr and Stafford, 1991). This finding is consistent with a social learning explanation of peer influence that emphasizes imitation and direct and vicarious reinforcement (Akers, 1985), but there are as yet few direct tests of that theory as it applies to delinquent peers. Recently, Osgood et al. (1996:639) have suggested that time spent with peers can be incorporated under Cohen and Felson's (1979) routine activities theory because "being with peers can increase the situational potential for deviance." Their argument harks back to Briar and Piliavin's (1965) classic notion of "situational inducements" as well as explanations of peer influence that emphasize collective behavior or the "party culture" of adolescents (see Gold, 1970; Hagan, 1991; Warr, 1993b). Still, the evidence presented by Osgood et al. does not actually pinpoint or identify the nature of peer influence. The truth is that, despite strong and persistent evidence of peer influence in the etiology of delinquency, the precise mechanism by which peers "transmit" or encourage delinquent behavior among one another remains a mystery.

These matters aside, it seems to be no coincidence that many major life transitions—marriage, stable employment, military duty, college—occur at precisely those ages at which most offenders are leaving crime behind. For decades, criminologists have harbored suspicions that these transitions are somehow connected to desistance from crime. Sampson and Laub are among the first to offer systematic evidence on the matter, and for that they deserve high praise. Indeed, the quarrel is not with their findings, but rather with their interpretation of their findings. Further, the analysis presented here does not preclude the possibility that Sampson and Laub are at least partially correct. That is, life transitions like marriage may simultaneously reduce exposure to delinquent associates while increasing stakes in conformity and attachment to conventional others. Indeed, this seems to be particularly true for marriage, where males—who constitute the overwhelming majority of delinquents—form bonds with persons of

the opposite sex who, as a group, are far less prone to deviance (Steffensmeier and Allan, 1995). In addition, the apparent role of spouses in "monitoring" the peer relations of their mates is consistent with the general principles of control theory.

Still, the evidence of this study suggests that changing patterns of peer relations over the life course—what might be called "peer careers"—are essential to understanding criminal life-course trajectories. The transition from criminal to conventional behavior (or vise versa), it seems, is not merely an individual conversion, but rather a social transformation that entails the destruction of old relations or social networks and the creation of new ones. If delinquency is largely a group phenomenon, it should come as no surprise that desistance is also a group process.

## REFERENCES

## Adams, Kenneth

1997 Developmental aspects of adult crime. In Terence P. Thornberry (ed.),
Developmental Theories of Crime and Delinquency: Advances in
Criminological Theory. Vol. 7. New Brunswick, N.J.: Transaction
Publishers.

## Ahammer, Inge M.

1973 Social learning theory as a framework for the study of adult personality development. In Paul B. Baltes and K. Warner Schaie (eds.), Life-Span Developmental Psychology: Personality and Socialization. New York: Academic Press.

#### Akers, Ronald L.

1985 Deviant Behavior: A Social Learning Approach. Belmont, Calif.: Wadsworth.

Akers, Ronald L., Marvin D. Krohn, Lonn Lanza-Kaduce, and Marcia Radosevich
Social learning and deviant behavior: A specific test of a general theory.
American Sociological Review 44:636–655.

Bartusch, Dawn R. Jeglum, Donald R. Lynam, Terrie E. Moffitt, and Phil A. Silva
1997 Is age important? Testing a general versus a developmental theory of
antisocial behavior. Criminology 35:13-48.

# Briar, Scott and Irving Piliavin

Delinquency, situational inducements, and commitment to conformity. Social Problems 13:35–45.

#### Cohen, Lawrence E. and Marcus Felson

1979 Social change and crime rate trends: A routine activity approach. American Sociological Review 44:588–608.

### Cohen, Lawrence E. and Bryan J. Vila

1996 Self-control and social control: An exposition of the Gottfredson-Hirschi/ Sampson-Laub debate. Studies on Crime and Crime Prevention 5:125-150.

#### Durkheim, Emile

1897 Suicide. 1951. New York: Free Press.

Elder, Glenn H., Jr.

1985 Perspectives on the Life Course. In Glenn H. Elder, Jr. (ed.), Life Course Dynamics. Ithaca, N.Y.: Cornell University Press.

Elliott, Delbert S, and Scott Menard

Delinquent friends and delinquent behavior: Temporal and developmental patterns. In J. David Hawkins (ed.), Delinquency and Crime: Current Theories. Cambridge: Cambridge University Press.

Elliott, Delbert S., David Huizinga, and Suzanne S. Ageton

1985 Explaining Delinquency and Drug Use. Newbury Park, Calif.: Sage

Elliott, Delbert S., David Huizinga, and Scott Menard

1989 Multiple Problem Youth. New York: Springer-Verlag.

Erickson, Maynard L. and LaMar T. Empey

1965 Class position, peers, and delinquency. Sociology and Social Research 49:268–282.

Erickson, Maynard L. and Gary F. Jensen

1977 Delinquency is still group behavior!: Toward revitalizing the group premise in the sociology of deviance. Journal of Criminal Law and Criminology 68:262–273.

Farrington, David P. and Donald J. West

1995 Effects of marriage, separation, and children on offending by adult males. In Zena Blau Smith and John Hagan (eds.), Current Perspectives on Aging and the Life Cycle. Vol. 4: Delinquency and Disrepute in the Life Course. Greenwich, Conn.: JAI Press.

Gold, Martin

1970 Delinquent Behavior in an American City. Belmont, Calif.: Brooks/Cole.

Gottfredson, Michael R. and Travis Hirschi

1990 A General Theory of Crime. Stanford, Calif.: Stanford University Press.

Hagan, John

Destiny and drift: Subcultural preferences, status attainments, and the risks and rewards of youth. American Sociological Review 56:567-582.

Hepburn, John R.

1977 Testing alternative models of delinquency causation. Journal of Criminal Law and Criminology 67:450–460.

Hirschi, Travis

1969 Causes of Delinquency. Berkeley: University of California Press.

Horney, Julie, D. Wayne Osgood, and Ineke Haen Marshall

1995 Criminal careers in the short-term: Intra-individual variability in crime and its relation to local life circumstances. American Sociological Review 60:655-673.

Jensen, Gary F.

Parents, peers, and delinquent action: A test of the differential association perspective. American Journal of Sociology 78:562–575.

Jessor, Richard, John E. Donovan, and Frances M. Costa

1991 Beyond Adolescence: Problem Behavior and Young Adult Development. New York: Cambridge University Press.

Johnson, Richard

1979 Juvenile Delinquency and its Origins. New York: Cambridge University Press.

Knight, B.J. and Donald J. West

1975 Temporary and continuing delinquents. British Journal of Criminology 15:43-50.

Kornhauser, Ruth R.

1978 Social Sources of Delinquency: An Appraisal of Analytic Models. Chicago: University of Chicago Press.

Matsueda, Ross L. and Karen Heimer

1987 Race, family structure, and delinquency: A test of differential association and social control theories. American Sociological Review 52:826–840.

1997 A symbolic interactionist theory of role-transitions, role-commitments, and delinquency. In Terence P. Thornberry (ed.), Developmental Theories of Crime and Delinquency: Advances in Criminological Theory. Vol. 7. New Brunswick, N.J.: Transaction Publishers.

Osborne, S.G. and Donald J. West

1979 Marriage and delinquency: A postscript. British Journal of Criminology 18:254–256.

Osgood, D. Wayne, Janet K. Wilson, Patrick M. O'Malley, Jerald G. Bachman, and Lloyd D. Johnston

1996 Routine activities and individual deviant behavior. American Sociological Review 61:635–655.

Paternoster, Raymond and Robert Brame

1997 Multiple routes to delinquency? A test of developmental and general theories of crime. Criminology 35:49–80.

Ploeger, Matthew

1997 Youth employment and delinquency: Reconsidering a problematic relationship. Criminology 35:659–675.

Popenoe, David

1996 Life Without Father. New York: Free Press.

Reiss, Albert J., Jr.

1986 Co-offender influences on criminal careers. In Alfred Blumstein, Jacqueline Cohen, Jeffrey A. Roth, and Christy A. Visher (eds.), Criminal Careers and "Career Criminals." Vol. II. Washington, D.C.: National Academy Press.

Reiss, Albert J., Jr. and A. Lewis Rhodes

An empirical test of differential association theory. Journal of Research in Crime and Delinquency 1:5-18.

Rutter, Michael, David Quinton, and Jonathan Hill

1990 Adult outcome of institution-reared children: Males and females compared. In Lee N. Robins and Michael Rutter (eds.), Straight and Devious Pathways from Childhood to Adulthood. New York: Cambridge University Press.

Sampson, Robert J. and John H. Laub

1993 Crime in the Making: Pathways and Turning Points Through Life. Cambridge, Mass.: Harvard University Press.

1996 Socioeconomic achievement in the life course of disadvantaged men: Military service as a turning point, circa 1940–1965. American Sociological Review 61:344–367.

Shaw, Clifford T. and Henry D. McKay

Report on the Causes of Crime. Vol. II. Washington, D.C.: U.S. Government Printing Office.

Short, James F., Jr.

1957 Differential association and delinquency. Social Problems 4:233–239.

Steffensmeier, Darrell J. and Emilie Allan

1995 Criminal behavior: Gender and Age. In Joseph F. Sheley (ed.), Criminology: A Contemporary Handbook. 2nd Ed. Belmont, Calif.: Wadsworth.

Sutherland, Edwin H.

1947 Criminology 4th ed. Philadelphia: Lippincott.

Sweet, James A. and Larry L. Bumpass

1990 American Families and Households. New York: Russell Sage Foundation.

Thornberry, Terence P., Alan J. Lizotte, Marvin D. Krohn, Margaret Farnworth, and Sung Joon Jang

Delinquent peers, beliefs, and delinquent behavior: A longitudinal test of interactional theory. Criminology 32:47-84.

Tittle, Charles R., Mary Jean Burke, and Elton F. Jackson

1986 Modeling Sutherland's theory of differential association: Toward an empirical clarification. Social Forces 65:405-432.

Voss, Harwin L.

Differential association and reported delinquency behavior: A replication. Social Problems 12:78-85.

Warr, Mark

1993a Age, peers, and delinquency. Criminology 31:17-40.

1993b Parents, peers, and delinquency. Social Forces 72:247–264.

1996 Organization and instigation in delinquent groups. Criminology 34:11–37.

Warr, Mark and Mark C. Stafford

The influence of delinquent peers: What they think or what they do? Criminology 29:851–866.

West, Donald J.

1982 Delinquency: Its Roots, Careers, and Prospects. Cambridge, Mass.: Harvard University Press.

Mark Warr is Professor of Sociology at the University of Texas at Austin. He is currently engaged in research on group delinquency, opportunity and crime, life-course models of criminal behavior, and social reactions to crime.

Appendix. Means and Standard Deviations of Variables

	Mean	S.D.
Evenings with Friends	2.62	1.52
Afternoons with Friends	2.62	1.70
Weekend Time with Friends	3.63	1.09
Age	20.87	1.95
Marital Status	.20	.40
Weekly Hours with Friends	20.17	18.09
Friends' Delinquency		
Vandalism	1.32	.61
Used Marijuana	2.46	1.30
Theft < \$5	1.48	.80
Assault	1.32	.65
Used Alcohol	3.65	1.28
Burglary	1.11	.41
Sold Hard Drugs	1.21	.56
Theft $> $50$	1.15	.49
Break the Law	1.40	.80
Gotten Drunk	3.41	1.32
Used Prescription Drugs	1.40	.78
Sold Alcohol to Minors	1.46	.76
Pressured Someone Sexually	1.11	.38
Self-reported		
Marijuana use	.43	.50
Theft < \$5	.08	.28
Vandalism	.05	.22
Used Alcohol	.88	.32
Sex	.53	.50
College	.27	.44
Job	.58	.49
Marijuana Desistance, Wave 5-6	.29	.45
Del. Friends, Wave 5-6	.16	.36
Marital Status, Wave 5-6	.14	.35
College, Wave 5–6	.18	.38
Job, Wave 5–6	.15	.35
Delinquent Friend Index	21.09	6.01
Married, with Children (MC)	.14	.34
Married, no Children (MNC)	.08	.28
Unmarried, with Children (UMC)	.06	.23
Unmarried, no Children (UMNC)	.72	.45
Perceived Marriage Quality	4.16	.72

NOTE: All variables measured at wave 6 unless otherwise noted. See text for question wordings and variable codings.