

Life Events and Antisocial Behavior

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Introduction

Is there a causal relationship between recent life events and antisocial behavior? Life experiences have been described as playing a role in the etiology and course of many medical and surgical illnesses.¹⁻⁴ A number of investigators have examined the role of life events in the precipitation of psychiatric illness.⁵⁻⁷

Applying his General Systems Theory to human behavior, von Bertalanffy⁸ highlighted the individual's reliance on the external environment to provide resources which assist in maintaining the internal homeostasis. In addition, the individual is capable of behavior which may alter the external environment. One source of inducement to action is the unpleasant sensation perceived at the psychological level of organization when an individual's dynamic steady state is disturbed. Such actions may be active or passive and may range from effective to dysfunctional behavior. The action may be socially sanctioned or it may be antisocial.

If the individual assumes the sick role or if our culture defines the behavior as "sick," the individual may be hospitalized.⁹ If the individual rejects the sick role¹⁰ and acts in a way that is illegal, the individual may be arrested. Thus far, studies of the individual's response to life experiences have been directed toward measuring physiologic changes,¹¹⁻¹² intrapsychic events which may facilitate changes from health to disease,¹³ and psychiatric symptomatology.¹⁴

Recently Masuda, Cutler, Hein, and Holmes¹⁵ reported their study of the relationship between life events and prison incarceration. The subjects, inmates who had been in prison from two to five years, retrospectively reported significantly increased life change scores in the year prior to their incarceration. The results of Masuda's study are applicable to a circumscribed group of convicted felons who are in custody in a federal penitentiary and state prison. The purposes of this paper are the following: one, to explore the relationship of the accumulation of life events and incarceration in a county jail in a group of recently arrested individuals; and two, to raise the question whether antisocial behavior may occur as part of an individual's adaptation to the stress of an increase in life events.

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Methods

This study was carried out in the Monroe County Jail. Monroe County is located in upstate New York and had a 1970 census of 800,000. Rochester, the major city in the county, had a 1970 census of 350,000. The county ranges from urban to rural. The Monroe County Mental Health Clinic for Sociolegal Services, which has been described elsewhere,¹⁶ receives referrals to evaluate individuals who are involved with the criminal justice system. Many of the individuals referred to the Clinic are incarcerated in the Monroe County Jail.

Subjects and Assessment

Within seventy-two hours of their arrest, unsentenced male prisoners who were arrested for the first time and incarcerated in the Monroe County Jail were asked to complete Holmes and Rahe's Life Change Questionnaire (RLCQ).¹⁷⁻¹⁸ The RLCQ is a revision of the Schedule of Recent Experiences (SRE).¹⁸ Seventy-four inmates participated in the study and twelve declined. Each event an individual checked was given the standard Life Change Units (LCU). Since we are interested in the inmates' LCU scores prior to the antisocial acts, their recent arrest was excluded from the life events score. The design of this study is retrospective; the use of the standard LCU avoided the bias inherent in recently arrested individuals' scaling their own recent life events. An individual's RLCQ was then scored in terms of his total LCU score for 0-6 months, 7-12 months, 13-18 months, and 19-24 months prior to arrest and incarceration. The 0-6 month LCU score was used as a measure of recent life events. The individual's scores from the periods from 7-24 months prior to arrest were divided by three to arrive at a six-month baseline mean LCU. Each individual acted as his own control.

Results

The subject population is compared to the 1976 Monroe County Jail Population in Table 1. Socioeconomic level was determined by the census-tract method described by Babigian,¹⁹ with each area in Monroe County classified into one of five groups from 1 (highest) to 5 (lowest). Socioeconomic areas 1, 2, and 3 are under-represented. The predominance of younger individuals in the subject population may be explained by the selection criterion of first arrest and incarceration for participation in the study.

TABLE 1
COMPARISON OF STUDY POPULATION WITH MALES IN MONROE COUNTY JAIL

	Study Population Male Inmates N=74		Monroe County Jail Male Inmates N=6012	
Race				
White	51%	(38)	50%	(3010)
Non-White	49%	(36)	50%	(3002)
Age				
16-20	68%	(50)	37%	(2224)
21-29	18%	(13)	38%	(2309)
over 30	14%	(11)	35%	(1479)
Marital Status				
Married or common-law	11%	(11)	21%	(1295)
Single	80%	(59)	67%	(4055)
Separated, divorced, widowed	9%	(7)	11%	(662)

TABLE 1 (Continued)
COMPARISON OF STUDY POPULATION WITH MALES IN MONROE COUNTY JAIL

	Study Population Male Inmates N=74		Monroe County Jail Male Inmates N=6012	
Charges				
Felony	72%	(53)	50%	(3025)
Misdemeanor	29%	(21)	37%	(2233)
Miscellaneous	-	-	13%	(754)
Socioeconomic Level				
I - highest	11%	(8)	12%*	
II	16%	(12)	26%	
III	35%	(26)	43%	
IV	24%	(18)	14%	
V - lowest	14%	(10)	5%	

*Monroe County Census, 1970

A t-test was performed to determine if there was a significant increase in the LCU score from the baseline period to the six-month period prior to arrest. There was a sizeable increase in life events just prior to arrest, both for the sample as a whole and for each race-age segment (see Table 2).

TABLE 2
T-TEST OF EACH AGE-RACE SUBGROUP

	LCU		t	DF
	Mean Baseline	Recent		
Whole Group (N=74)	31	126	-7.42*	73
White, 20 or younger (N=24)	35	167	-5.23*	23
White, older than 20 (N=26)	45	135	-3.75*	25
Non-white, 20 or younger (N=14)	22	65	-4.04*	13
Non-white, older than 20 (N=10)	25	170	-2.93**	9

*p < .001

**p < .021

A difference score (Δ) was calculated for each individual by subtracting the mean baseline LCU from the recent LCU. Then an analysis of variance was carried out on these difference scores for age, race and socioeconomic status. The age-race interaction was significant. Socioeconomic status, either alone or in combination with the other variables, was not significant. In order to increase the precision of the analysis and increase the number of subjects in each cell, socioeconomic status was removed from the partition and a two-by-two analysis of variance carried out as presented in Table 3.

TABLE 3
ANALYSIS OF VARIANCE

Source of Variation	Sum of Squares	DF	Mean Square	F	P
Main effects	45767.9	2	22883.9	2.145	0.123
Race	33907.1	1	33907.1	3.178	0.075
Age	8203.8	1	8203.7	0.769	0.999
2-Way Interactions					
Race-Age	82698.6	1	82698.6	7.750	0.007

The effect of race alone approached significance; however, it can be disregarded, since it did not reach a significant level and is contradicted by

the marked significance of the age-race interaction.

To further examine the race-age effect, we arrayed a contingency table for the average difference scores by race and age. Each of the four groups showed a significant increase in their LCU scores. However, the differences or amount of increase in life events were greater for younger whites than older whites, whereas for non-whites, the differences were greatest for the older prisoner (Table 4).

TABLE 4
DIFFERENCE BETWEEN RECENT AND BASELINE LCU SCORES

	Younger (16-20)	Older than 20	
White	131.99* (n=24)	89.74* (n=14)	116.42 (n=32)
Non-White	43.01** (n=26)	145.00** (n=10)	71.34 (n=10)

*p < .001

**p < .02

Discussion

Prior to an antisocial act which led to their first arrest and incarceration, the subjects of this study showed a marked increase in their recent life experiences as measured by their LCU scores. This increase was found to be statistically significant not only for the entire sample but also for each subgroup in combination with the other subgroups. These results point to a strong relationship between the impact of a series of external situations upon an individual and the occurrence of antisocial behavior. It may be suggested that retrospective study is hindered in asserting an etiologic role for the life events variable because of the subjects' problems with recall. However, the Recent Life Change Questionnaire's reliability has been demonstrated in retrospective, prospective, and collaborative studies in groups who are similar to the subjects included in this study.¹⁷

The analysis of variance revealed an age-race interaction. Young whites (16-20) and older non-whites (21 and older) demonstrated the greatest increase in LCU scores prior to arrest. Older whites with the highest LCU values may have been excluded from our sample population because instead of resorting to antisocial acts, they developed difficulties requiring medical or psychiatric attention. It is also possible that they were spared going to jail by making bail at the time of their arraignment. The smallest increase in the LCU score from the baseline to the recent period occurred among young non-whites. While the RLCQ may not completely measure life change in this group, antisocial acts may be a more frequent peer group norm. In addition, antisocial behavior may more often lead to arrest and incarceration for this segment of the population. The group of older non-whites who did not turn to such behavior in their youth require the highest levels of LCU increase to react in a previously forbidden manner. The high increase in the LCU scores of young whites may point to this group's being quite upset and exhausting their sources of support prior to resorting to antisocial behavior. The finding that the highest difference scores and LCU values were held by younger whites and older non-whites points to these groups as having a particular need for preventative and therapeutic intervention: either prior to their resorting to antisocial acts or when they find themselves in jail.

A few individuals studied showed only minor increases and others decreases in their recent LCU scores. It would greatly further our understanding of antisocial behavior to compare these individuals with those who experienced a marked increase in life events prior to their antisocial behavior. This would involve understanding the interaction of life events with other determinants in human behavior.

The study of antisocial behavior, like the study of all behavior, proceeds most thoroughly when we consider the antecedents to the behavior. Schulsinger's adoption study²⁰ points to a genetic predisposition to antisocial behavior. Hare²¹ has reported EEG changes which indicate that cortical problems are more common among a group of individuals committing antisocial acts than among their normal controls. Aichorn²² and Schmideberg²³ used a psychoanalytic perspective to describe the intrapsychic functioning, including moods and value systems, of those committing antisocial acts. Bowlby²⁴ and others have described the effects of early life maternal deprivation on personality formation and the increased incidence of early maternal loss among delinquents. These factors, singly or in various combinations, may increase an individual's propensity to antisocial behavior. A relevant, missing component in the study of antisocial behavior has been the role of the recent life experiences in precipitating the individual's performing an antisocial act.

This study points to the need for further well-designed research which includes the variable of recent life events. A retrospective study using normal controls would be an important first step in re-examining the age-race interaction discussed above. A clinical study devoted to the investigation of the aforementioned individuals who showed little or no increase in their LCU scores might further define the effect of the life change variable. In addition, a prospective investigation would greatly enhance our understanding of the role of life-change in the occurrence of antisocial behavior.

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