Childhood Antecedents of Aggressive Behaviors In Male Psychiatric Patients†

ALAN R. FELTHOUS, M.D.*

Most studies which have investigated the relationship between childhood variables and aggressive behaviors at a later age, selected subjects who were already identified as murderous, violent or aggressive.[1-15] This is a useful and needed method of sample selection which has the advantage of few false positives in the aggressive sample. The disadvantage is that persons whose aggressive deeds went unnoticed are excluded from such samples. Studies which define a nonaggressive control group by absence of charges, convictions, or complaints of violent behaviors run the risk of containing subjects in the control group whose aggressive behaviors were simply not reported.

The present study tried to avoid these methodologic drawbacks by obtaining a careful history of aggressive behaviors before assignment to aggressive and nonaggressive samples. A weakness of this approach is that it is only as reliable as the subjects, but when history is obtained by clinical interview, the investigator can obtain an impression about the subject's reliability.

If comparison of aggressive and nonaggressive samples shows that certain childhood variables correlate with aggressive behaviors at a later age, it should be of interest to determine which of these factors are significant when the aggressive sample is compared with a nonpsychiatric sample. Childhood factors which are significantly associated with the aggressive psychiatric sample in both comparisons may be helpful in understanding the pathogenesis of aggressiveness in psychiatric patients.

Materials and Methods

Subjects consisted of successive admissions over an 11 month period to the Inpatient Psychiatric Service of Naval Regional Medical Center, Oakland, California. From a total of 823 admissions, 429 subjects were interviewed: 346 males and 83 females. The most common reasons for noninclusion were: (1) early discharge; (2) subject confusion or unreliability; and (3) subject refusal. Subjects were not prescreened on the

---

†This paper was presented at the Annual AAPL Meeting in Baltimore, Maryland, October, 1979.
From the Psychiatry Service, Naval Regional Medical Center, Oakland, California 94627.
This study was supported by funds provided by the Bureau of Medicine and Surgery, Navy Department, for CIP 7-48-932.
The opinions or assertions contained herein are those of the author and are not to be construed as official or as reflecting the views of the Navy Department or the Naval Service at large.

*Dr. Felthous is formerly of the Naval Regional Medical Center, Oakland, and is now Associate Psychiatrist, The Menninger Foundation, Topeka, Kansas 66601.

basis of diagnosis or presence or absence of known violent behavior. The most common diagnoses by admitting physicians were alcoholism, character disorder, situational adjustment reaction, depression, and schizophrenia. Twenty-six nonpsychiatric male subjects on the urology inpatient service were also studied for comparison with the Aggressive Psychiatric Sample. Fortuitously, none of these patients was hospitalized for enuresis or trauma. Informed consent was obtained from all subjects.

All subjects participated in a two-phase evaluation consisting of a clinical interview and questionnaire. The purpose of the interview was to obtain the subject's history of aggressive behaviors. Subjects were asked about past assaults, murders, threats of violence, and use of deadly weapons.

The Aggressive Psychiatric Sample (n=74) consisted of those subjects who gave a history of (1) assaultively injuring someone seriously enough to require medical treatment or dental restoration plus either (2) threatening serious harm against others or (3) carrying a knife or firearm for potential use against others (except for legitimate job requirements). As criteria for the Aggressive Psychiatric Sample, these items needed to be present since 15 years of age in order to exclude the less dangerous threats and assaults of children. Psychiatric subjects who denied a history of any aggressive behavior since 15 years were assigned to the Nonaggressive Psychiatric Sample (n=75). Subjects who gave histories of some aggressive behaviors but did not meet the criteria of the Aggressive Psychiatric Sample, were of intermediate levels of aggression and therefore excluded from this comparative study.

Items on the questionnaire asked about demographic information and childhood factors which were thought to relate to aggressive behaviors at a later age. Questions about childhood variables were multiple choice. Some items should be clarified: Killing dogs or cats denoted purposeless slaying; whereas cruelty referred to injuring and torturing these animals. Destructive firesetting referred to deliberate incineration of useful property or natural resources regardless whether a fire department was summoned. Uncontrolled fires eventuated in suppression by a fire department. Frequent temper tantrums referred to outbursts which occurred often. Violent outbursts, though not necessarily often, involved either assaults on people or destruction of property. Beatings more severe than bottom spankings with an open hand were termed corporal punishments. Meanings of other terms which appear in the tables and text should be evident.

Results

There were no significant demographic differences between the Aggressive Psychiatric Sample and the Nonaggressive Pychiatric Sample. Most were single, white, active duty enlisted men. Educational attainment varied from incompletion of elementary school to graduate degrees, and crested at the level of high school graduation. The 26 male

subjects from the Urology Inpatient Service ranged in age from 19 to 65, and, similar to the psychiatric patients, peaked in the 20-24 group. Unlike their psychiatric counterparts, most of the nonpsychiatric subjects were married. In comparison with both Psychiatric Samples, the Nonpsychiatric Sample had more subjects who were over 40 years and more with some college education.

Aggressive and Nonaggressive Psychiatric Patients

Historical items for which deviant responses were at least 5% greater in the Aggressive Psychiatric Sample (APS) than in the Nonaggressive Psychiatric Sample were tabulated. Symptomatic items were ranked in ascending order of the differential percentages in Table 1, environmental items in Table 2. The chi square test showed that most of the early symptomatic items tabulated were significantly associated with aggressive behaviors at a later age; violent outbursts, fights with injury to others, school suspensions, school truancy, frequent headaches, frequent temper tantrums, fights with or without injury to others, setting uncontrolled fire(s), animal cruelty, killing dogs or cats, and enuresis beyond nine years of age.

Environmental items in childhood which were significantly associated with later assaultive behaviors included corporal punishments by mother, head blows by father, alcoholic father, head injury with loss of consciousness, head blows by mother, and corporal punishments by father.

Aggressive Psychiatric Patients and Nonpsychiatric Patients

Symptomatic items for which deviant responses were at least 10% greater in the Aggressive Psychiatric Sample than in the Nonpsychiatric Sample were tabulated (Table 3). Comparison by application of the chi square test showed the APS had a significantly higher incidence of school suspensions, fights with injury to others, school truancy, frequent temper tantrums, violent outbursts, poor peer relationships, frequent headaches, killing dogs or cats, fights with or without injury, and destructive firesetting. Setting uncontrolled fire(s), animal cruelty, and turning in false fire alarms showed a trend toward association with aggressive behaviors ($p < 0.10$). Poor school work was not significant.

Environmental items which were significantly associated with the Aggressive Psychiatric Sample include unjust punishments by mother, alcoholic father, unjust punishments by father, head blows by father and head injury with loss of consciousness. Aggressive subjects revealed a trend toward a higher incidence of injurious punishments by father ($p < 0.10$). Corporal punishments (regardless whether injury was inflicted) did not show a significant association.

Discussion

A number of items were significantly associated with the Aggressive Psychiatric Sample in comparison with both the Nonaggressive Psychiatric Sample and the Nonpsychiatric Sample. Symptomatic items which were

significant in both statistical comparisons were violent outbursts, fights with injury, fights with or without injury, school suspensions, school truancy, frequent temper tantrums, killing dogs or cats, and frequent headaches. Four symptomatic items — fights with injury, frequent headaches, killing dogs or cats, and school suspensions — may be especially useful in assessing aggressive disorders. None of these items was reported by more than 20 percent of control subjects in either comparison. For each of these items, the percentage of APS subjects who gave a positive history was over two and one-half times that of both control samples.

Even though these items were significantly associated with APS in both comparisons, most were also reported by nonaggressive psychiatric subjects and nonpsychiatric subjects, so they should not be considered as

TABLE 1
SYMPTOMATIC ITEMS OF HIGHER INCIDENCE IN THE AGGRESSIVE PSYCHIATRIC SAMPLE THAN IN THE NONAGGRESSIVE PSYCHIATRIC SAMPLE*

Item	Percent of Deviant Responses: Aggressive Psychiatric Sample (N=74)	Nonaggressive Psychiatric Sample (N=75)	Differential Percentage	p
1. Violent outbursts	63%	21%	42%	0.0005
2. Fights with injury	52%	19%	33%	0.0005
3. School suspensions	43%	12%	31%	0.0005
4. School truancy	68%	39%	29%	0.0005
5. Frequent temper tantrums	82%	56%	26%	0.0005
6. Fights	93%	68%	25%	0.0005
7. Frequent headaches	27%	10%	17%	0.01
8. Uncontrolled fires	26%	10%	16%	0.01
9. Killed dogs or cats	23%	10%	13%	0.025
10. Animal cruelty	18%	5%	13%	0.025
11. Enuresis after 9 years	11%	3%	8%	0.01
12. Destructive fires	16%	10%	6%	n.s.
13. False fire alarms	12%	6%	6%	n.s.

*Items for which deviant responses were at least 5% greater in the Aggressive Psychiatric Sample are tabulated.

TABLE 2
ENVIRONMENTAL ITEMS OF HIGHER INCIDENCE IN THE AGGRESIVE PSYCHIATRIC SAMPLE THAN IN THE NONAGGRESSIVE PSYCHIATRIC SAMPLE*

Item	Percentage of Deviant Responses: Aggressive Psychiatric Sample (N=74)	Nonaggressive Psychiatric Sample (N=75)	Differential Percentage	p
1. Corporal punishment by mother	68%	37%	31%	0.0005
2. Head blows by father	31%	4%	27%	0.0005
3. Alcoholic father	42%	19%	23%	0.0005
4. Corporal punishment by father	76%	55%	21%	0.01
5. Head injury with loss of consciousness	32%	12%	20%	0.0005
6. Head blows by mother	26%	7%	19%	0.0005
7. Injurious punishments by father	12%	5%	7%	n.s.

*Items for which deviant responses were at least 5% greater in the Aggressive Psychiatric Sample are tabulated.

TABLE 3
SYMPTOMATIC ITEMS OF HIGHER INCIDENCE IN THE AGGRESSIVE PSYCHIATRIC SAMPLE THAN IN THE NONPSYCHIATRIC SAMPLE*

Item	Percentage of Deviant Responses: Aggressive Psychiatric Sample (N=74)	Nonpsychiatric Sample (N=26)	Differential Percentage	p
1. School suspensions	43%	4%	39%	0.0005
2. Fights with injury	52%	15%	37%	0.0005
3. School truancy	68%	42%	26%	0.025
4. Frequent temper tantrums	82%	58%	24%	0.025
5. Violent outbursts	63%	39%	24%	0.050
6. Poor peer relationships	30%	8%	22%	0.025
7. Frequent headaches	27%	8%	19%	0.050
8. Killed dogs or cats	23%	4%	19%	0.050
9. Uncontrolled fire(s)	26%	8%	18%	0.100
10. Destructive firesetting	16%	0%	16%	0.05
11. Fights	93%	77%	15%	0.0005
12. Animal cruelty	18%	4%	14%	0.100
13. False fire alarms	12%	0%	12%	0.100
14. Poor school work	15%	4%	11%	n.s.

*Items for which responses were at least 10% greater in the Aggressive Psychiatric Sample are tabulated.

TABLE 4
ENVIRONMENTAL ITEMS OF HIGHER INCIDENCE IN THE AGGRESSIVE PSYCHIATRIC SAMPLE THAN IN THE NONPSYCHIATRIC SAMPLE*

Item	Percentage of Deviant Responses: Aggressive Psychiatric Sample (N=74)	Nonpsychiatric Sample (N=26)	Differential Percentage	p
1. Unjust maternal punishments	40%	13%	27%	0.025
2. Alcoholic father	42%	15%	27%	0.025
3. Unjust paternal punishments	46%	20%	26%	0.025
4. Head blows by father	31%	8%	23%	0.025
5. Head injury with loss of consciousness	32%	12%	20%	0.050
6. Corporal punishments by father	76%	60%	16%	n.s.
7. Injurious punishments by father	12%	0%	12%	0.100

*Items for which deviant responses were at least 10% greater in the Aggressive Psychiatric Samples are tabulated.

pathognomonic correlates of aggression. One would expect, however, that a combination of several of these symptoms in a child indicates a burgeoning difficulty in controlling aggressive impulses which could worsen in his adolescent and adult years.

It should not be assumed if items were not significantly associated with APS in both comparisons, they are of no value in assessing disorders of aggression. There is evidence, for example, that the presence of two-thirds of the childhood triad of animal cruelty, destructive firesetting, and persistent enuresis is associated with an assaultive disposition at a later age.[15] Also, an item such as enuresis, which is not significant by itself, may be diagnostically useful when attended by other signs of an aggressive disorder.

Only three environmental items were significantly associated with APS

in both comparisons: alcoholic father, head blows by father, and head injury with loss of consciousness. None of these items was reported by more than 20 percent of either control group. All of these items showed at least a two-fold increase in the APS in both comparisons. Head blows by father, reported by only 4% of the nonaggressive psychiatric sample, demonstrated a near eight-fold increase in the APS.

Parental brutality, an etiologic factor in many cases of homicide,[1,2,10,16] and child abuse[17] may also predispose a child toward impulsive, assaultive behaviors in general at a later age. A more specific inference from this study is that the psychological impact (and possibly neurological trauma) from a father's blow to his son's head may predispose him to strike others.

Since psychiatric diagnoses were not investigated in this study, it is not known how much the association of childhood factors with aggressive behaviors varies with the psychopathological setting. Does a history of killing dogs or cats, for example, show a higher correlation with aggressive behavior in an Antisocial Personality Disorder compared with that attending Chronic Paranoid Schizophrenia? Studies of aggressive behaviors subtyped according to psychiatric diagnosis should further our understanding of this complex subject. Nonetheless, a relationship between the following three items will likely prevail regardless of individual psychopathology: (1) How the individual's parents dealt with their aggression, and his, during his formative years, (2) how he handled his aggression as a child, and (3) how he controlled and directed his aggression in adolescence and adulthood.

Acknowledgements

Appreciation is extended to Captain G. A. Conkey, MC, USN, Ret., former Chief of Psychiatry, NRMC, Oakland, California, and to Captain G. A. LeBlanc, MC, USN, Ret., former Chief of Urology Service for their suggestions.

Lolafaye Coyne, Ph.D., Staff Psychologist, The Menninger Foundation, Topeka, Kansas, provided help with statistical methods.

References

1. Duncan GM, Frazier SH, Litwin EM, *et al.*: Etiological factors in first degree murder. JAMA 168:1755-1758, 1958
2. Satten J, Menninger K, Rosen I, *et al.*: Murder without apparent motive: A study in personality disorganization. Am J Psychiatry 117:48-53, 1960
3. MacDonald JM: The threat to kill. Am J Psychiatry 120:125-130, 1963
4. Hellman DS and Blackman N: Enuresis, firesetting and cruelty to animals: A triad predictive of adult crime. Am J Psychiatry 122:1431-1435, 1966
5. Climent CE and Ervin FR: Historical data in the evaluation of violent subjects: A hypothesis generating study. Arch Gen Psychiatry 27:621-624, 1972
6. Climent CE, Rollins A, Ervin FR, *et al.*: Epidemiological studies of woman prisoners, I: Medical and psychiatric variables related to violent behavior. Am J Psychiatry 130:985-990, 1973
7. Justice B, Justice R, and Kraft IA: Early warning signs of violence: Is a triad enough? Am J Psychiatry 131:457-459, 1974
8. Wax DE and Haddox VG: Sexual aberrance in male adolescents manifesting a behavioral triad considered predictive of extreme violence. J Forensic Science 19:102-108, 1974

9. Wax DE and Haddox VG: Enuresis, firesetting, and animal cruelty: A useful danger signal in predicting vulnerability of adolescent males to assaultive behavior. Child Psychiatry Hum Dev 4:151-156, 1974
10. Frazier SH: Murder — single and multiple. Frazier SH (ed): Aggression: Research Publications, Association for Research in Nervous and Mental Disease, Vol. 52. Baltimore, The Williams and Wilkins Company, 1974, p. 304-312
11. Felthous AR and Yudowitz B: Approaching a comparative typology of assaultive female offenders. Psychiatry 40:270-276, 1977
12. Toch H: Violent Men. Chicago, Aldine Publishing Co. 1969
13. Yarvis RM: Psychiatric pathology and social deviance in 25 incarcerated offenders. Arch Gen Psychiatry 26:79-84, 1972
14. Bach-Y-Rita G and Veno A: Habitual violence: A profile of 62 men. Am J Psychiat 131:1015-1017, 1974
15. Felthous AR and Bernard H: Enuresis, firesetting and cruelty to animals: The significance of two-thirds of this triad. J Forensic Science 24:240-246, 1979
16. Miller D and Looney J: The prediction of adolescent homicide: Episodic dyscontrol and dehumanization. Am J Psychoanal 34:187-198, 1975
17. Silver LB, Dublin CC, and Lourie RS: Does violence breed violence? Contributions from a study of the child abuse syndrome. Am J Psychiat 126:404-407, 1969