This paper describes a portion of the Kennedy Youth Center program concerned with motivating previously intractable sociopathic youths in the academic and industrial arts schools. Male delinquents considered uneducable in traditional education programs, have been advanced two years in the one year they spent as participants in the differential operant treatment program in the Center. Students are assigned to cottages according to behavior categories measured by scales developed by Quay and others; these are inadequate and immature, neurotic, sociopath, or subcultural. Each cottage has a treatment program designed to meet the needs of the students assigned to the cottage. Motivation to complete program requirements is provided by the class level system, i.e., placing tangible rewards into a ranked, three-level system, with the fewest rewards for the lowest level, more for the middle level, and all that is available for the highest level. The basic program strategy is the application of behavior modification principles derived from operant theory. Critical to the program are: (1) clearly defined behavioral objectives; (2) arranged reinforcement contingencies; and, (3) positive reinforcement. (JM)
OPERANT STRATEGIES WITH DELINQUENTS AT THE KENNEDY YOUTH CENTER

Helen Wotkiewicz, Research Assistant
Human Resources Research Institute
West Virginia University

and

John A. Minor, Executive Assistant
Kennedy Youth Center

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.
Introduction

The Robert F. Kennedy Youth Center, a Federal Bureau of Prisons facility located at Morgantown, West Virginia, has as its mission the rehabilitation and re-education of delinquent youths sentenced for violation of federal laws. The Kennedy Center utilizes a differential treatment program wherein students are assigned to cottages according to behavior categories. These behavior categories are differentiated by the use of three scales developed by Quay and colleague. The four behavior categories are: (1) inadequate and immature; (2) neurotic; (3) sociopath; (4) subcultural. In addition to housing students within a behavioral category, each cottage has a treatment program designed to meet the needs of the students assigned to that cottage. This paper describes a portion of the Kennedy Center program concerned with motivating previously intractable sociopathic youths (BC - behavior category - 3) in the academic and industrial arts schools.

Sociopathic, or unsocialized, individuals are generally described as hyperactive, callous, self-centered, antagonistic, hostile, manipulative, etc. They often demonstrate anti-social aggression, a need for immediate satisfaction, appear unable to form meaningful social relationships and do not respond to traditional verbal counseling techniques. The sociopathic youth becomes hostile when confronted with his misbehavior, will blame others rather than accept responsibility for his own acts and in general views himself as always in the right.
Needless to say, sociopathic youths do poorly in school. Their hostile, assaultive and disruptive behaviors have caused them to be "kick-outs" rather than "drop-outs." Thus, these youths require a program that will: one, control their disruptive behavior without physically restraining them; and two, motivate them to work in academic and industrial arts programs. Research findings generally indicate this type youth functions best in a concretely defined, tangible social structure. Specifically, this means that clear, operationally defined limits and resulting consequences, both rewards and punishments, are placed on their behavior. Past failures in the public schools indicate the need for reinforcers other than those usually found in the traditional classrooms. Considering the behavioral defects of the sociopathic youth the program described in this paper was implemented. This program includes: (1) individual programs, (2) short-term (6-8 weeks maximum) performance goals, and (3) a generalized tangible reinforcement system.

**Program Description**

Motivation to complete program requirements is provided by the class level system. Basically, the class level system involves placing tangible rewards into a ranked, three-level system, with the fewest rewards for the lowest level, more rewards for the middle level, and all that is available for the highest level. The classes are trainee level, apprentice level, and honor level. The rewards and privileges assigned to each are explicitly defined and rigidly controlled. Under no circumstance is the trainee ever allowed privileges assigned to the higher levels. For example, trainees are not allowed to receive gifts from home. If a trainee should receive a radio from home it is held for
him by the cottage staff until he is promoted to apprentice level. Further, should he be demoted to trainee for misconduct, he must return the radio to the cottage staff until re-promoted. Table 1 describes the distribution of rewards among the three class levels.

Program Description

The student's initial two weeks at the Kennedy Youth Center are spent in the reception cottage. While in that cottage he receives extensive psychological, intelligence, vocational aptitude, academic achievement testing, and is classified into one of the four behavioral categories. Once classified the student moves to the cottage that houses the behavior category to which he has been assigned. From then on the student remains in that cottage.

The first week in the BC-3 cottage, the new student visits the school, talks with counselors, and is observed by cottage staff. The second week he meets with the cottage treatment team which includes a Cottage Supervisor - Caseworker, Assistant Cottage Supervisor, educational liaison teacher, and cottage counselors. The student is considered a full member of his treatment team and is expected to participate actively in designing his program. At this meeting the vocational aptitude and scholastic achievement tests scores are presented to the student. The tests, along with the student's strengths, weaknesses, and stated aspirations, are discussed in detail. The student with his treatment team outline his general program and define goals for promotion to the next higher class level. For example, general educational goals might be to pass the high school equivalency test and explore the general area of power technology. Requirements for promotion from trainee to apprentice level would be to raise his
California Achievement Test score from grade 6.5 to 7.5 in arithmetic and his reading grade from 7.9 to 9.0; complete the basic course in power technology (small engine repair) and related concepts to power technology -- all tests passed at 90 per cent or above.

Occasionally a student is reluctant to participate in designing his program. When this occurs, he is dismissed with instructions that his programming will continue when he is ready. Thus, in the case of reticent students, the first goal towards promotion is to set some goals. When the student completes his requirements he is promoted and reprogrammed with new goals for promotion to honor level. This time, however, performance required for promotion is considerably higher.

The basic program strategy underlying the BC-3 cottage program is the application of behavior modification principles derived from operant theory. Critical to the program are: (1) clearly defined behavioral objectives; (2) arranged reinforcement contingencies; and (3) positive reinforcement. The last principle, positive reinforcement, which pervades the BC-3 program emphasizes control of behavior via rewards, or positive reinforcement, as opposed to an emphasis on control of behavior via punishment, or escape from punishment which is called negative reinforcement.

The use of positive reinforcement, or "paying off" for desirable behavior, has many advantages. One relevant to this discussion is that it allows the cottage staff to place the responsibility for the student's behavior where it belongs -- directly on the student. As anyone who has taught knows, it is virtually impossible to coerce a reticent student to study using punishment, or threat of punishment. It is, for example,
difficult to force an unwilling student to read; if pressed, he may become disruptive, forcing his removal from the classroom in which case he is still not reading. (This is especially true of delinquent youths.) Under the positive reinforcement program we simply tell the student he may read or not read, as he chooses. Before he can have certain privileges and other rewards, however, he must pass a test based on the information contained in the book.

The remainder of this paper describes the behavior of fifteen delinquents who have been exposed to the BC-3 cottage program. To demonstrate the effect of this program on these youths their present behavior and academic achievement are compared with their behavior and academic achievement in public schools prior to their confinement. Also, their measured academic achievement level at arrival is compared with present measured academic achievement level.

Program Results

As indicated in Table 2, most of the fifteen youths studied here come from family situations that are at best adverse. Only six youths were raised by both parents; the others were reared by one parent or by relatives or were simply transient. Over half have been reared in living conditions of poverty. Of the parents who are known, occupations of eight are in labor and service jobs, two receive public assistance, one father has a criminal record, and one was described as a bum. In two cases the parents are unknown.

The data in Table 3, compiled from school reports, depict the boys' deportment in school prior to their exposure to the Robert F.
Kennedy program. The highest grade completed in community schools by the students in this sample range from the sixth to the twelfth grade. Mean grade completion was 8.7 years. Without exception, every boy exhibited problem behaviors while enrolled in school. The degree of seriousness ranged from truancy through what was termed as "pre-psychotic" behavior. Their teachers described them in terms such as, "aggressive and contentious," "constant problem," "con-artist," "one of the worst problems the school had ever experienced." Only three students were said to have done average academic work. The others were described as below average or poor.

Table 4 shows intake, discharge and progress data for the group while at Kennedy. At the time of their arrival to the Center the students' scores on the California Achievement Test ranged from illiterate to 11.9 years with a mean of 7.9 years. I.Q., measured by the Revised Beta, ranged from 78 to 116 with a mean of 96.

After one year's exposure (9.5 months) to the Youth Center's educational program, the mean C.A.T. score has increased by nearly two years. The range had shifted upward from illiterate and 11.9 to 5.6 and 14.8 during this time. The average rate of increase was more than one-fifth of a grade per month. This is 58 per cent greater than the one-tenth of a grade increase per month, which is the assumed rate of progression for public community schools.5

In the sample, only one boy had completed high school in the community. During the past year 57 per cent, or eight of the remaining
14, have passed the General Educational Development (GED) high school equivalency test. Of the six who have not passed the GED test, two are still working toward this goal. They began with C.A.T. scores of 5.5 and 6.0 and have raised these scores to 7.2 and 8.2, respectively. A third, with an I.Q. of 78, has raised his academic level from illiterate to the fifth grade level. This represents progress at 2.5 times the assumed public school rate. A fourth spent only five months in the Kennedy program, during which time he raised his C.A.T. score from 7.0 to 8.4. The remaining two non-recipients of the GED diploma exhibited behavior requiring considerable restraint and so were transferred to a more secure institution. Unfortunately, they were not given post C.A.T.'s before transfer.

In addition to the progress made by these 15 students in regular academic work, they have completed a total of 50 industrial arts courses. These courses are programmed for individual progress and average ten weeks in duration. This represents an average of three and one-half courses per student.

As indicated earlier in the description of the sociopath youth, a prerequisite to inducing them towards academic achievement is to control their assaultive, disruptive behavior. The following case studies demonstrate the results of using positive reinforcement to eliminate dysfunctional, disruptive behavior.

Student 1 is an inner-city Black from the Deep South. His record includes an arrest history of assault, a discharge from a Job Corps Center for fighting, strong-arming and extortion, and a current indictment
in his home state for "assault with intent to murder." During the first weeks at Kennedy he was involved in fights constantly. As a result, one of his promotional goals was to handle interpersonal conflicts without fighting. Observation one year later showed he had not been in a fight for the previous two months. His positive verbal behavior, which was initially at a low level, had increased considerably and he was discussing problems with staff. Lastly, his C.A.T. score had increased from the sixth to the eighth grade. He is currently preparing to take the GED test.

Student 2 was extremely hostile and his aggressive-assaultive behavior was so severe that the staff considered transferring him to another, more secure institution. In addition to outbursts of violence, he suffered severe depressions that lasted days at a time. His program goals included controlling assaultive behavior, passing the GED test and exploring various vocational fields. A year after entering the Center, his periods of depression were less frequent, shorter in duration, and less intense; physical and verbal assaultive behaviors were markedly reduced. Though of average intelligence (I.Q. 103), he had increased his C.A.T. score from the tenth grade to twelfth grade and passed the GED test. He had completed seven industrial arts courses, including basic and advanced electronics, basic and two advanced graphic arts, one basic computer logic and one slide rule course. Further, his general deportment had improved to an extent that he was appointed shop foreman, with responsibility for the class while the instructor was on vacation.
Summary

What achieved these results? Simply, the systematic use of principles of operant psychology as a program strategy. Following an operant strategy means observing the types of events that maintain anti-social behavior, and the types of events that maintain pro-social behavior. To these observations we ask the questions: How can we arrange the environment so that the students will behave the way we want them to? And, if they do not behave as desired, what is wrong with our program?

Speaking more specifically, operant strategy means: (1) individual programming starting with the student at his level and requiring progress in steps which the student is capable of taking; (2) positive reinforcement as the basic approach to changing behavior—that is, a program emphasis on rewarding acceptable behavior and ignoring unacceptable behavior; and (3) effective reinforcers including pay-offs for work with items and events that are valuable to the student as well as pay-offs only for work completed.

In conclusion, the boys in the program advanced two years in the one year they spent in the Center; an illiterate 18-year old has learned to read and has progressed halfway through the fifth grade; over half the students in the sample have received GED high school equivalency diplomas, and on and on. The point is that young people who have been considered uneducable in traditional education programs, including some programs supposedly designed to meet their needs, have been, and are being, educated using operant strategies.
Table 1

**DISTRIBUTION OF REWARDS ACCORDING TO CLASS LEVELS**

<table>
<thead>
<tr>
<th></th>
<th><strong>TRAINEE</strong></th>
<th><strong>APPRENTICE</strong></th>
<th><strong>HONOR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUARTERS</strong></td>
<td>Least desirable.</td>
<td>Medium desirable.</td>
<td>Most desirable.</td>
</tr>
<tr>
<td><strong>CLOTHING</strong></td>
<td>Issue Khakis only.</td>
<td>Issue khakis or issue pastel sport shirt during duty hours. May wear non-issue clothes during free time.</td>
<td>May wear non-issue clothes anytime.</td>
</tr>
<tr>
<td><strong>COTTAGE CLEANING</strong></td>
<td>Personal room. Last choice of public areas to clean.</td>
<td>Personal room. Second choice of public areas to clean.</td>
<td>Personal room. First choice of public area to clean. When there are more students than cleaning jobs, may choose not to clean a public area.</td>
</tr>
<tr>
<td><strong>BEDTIME</strong></td>
<td>11:00 P.M. in bed.</td>
<td>12:00 P.M. in room.</td>
<td>None.</td>
</tr>
<tr>
<td><strong>WAKE UP</strong></td>
<td>Officer call at 6:30 A.M.</td>
<td>Clock - Officer call at 7:00 A.M.</td>
<td>Clock only - Must be ready for inspection of person &amp; room at 7:50 A.M.</td>
</tr>
<tr>
<td><strong>TOWN TRIPS</strong></td>
<td>None.</td>
<td>With staff - with relatives.</td>
<td>With staff - with relatives. Unescorted.</td>
</tr>
<tr>
<td><strong>WORK-STUDY RELEASE</strong></td>
<td>None.</td>
<td>Study release only.</td>
<td>Work-study release.</td>
</tr>
<tr>
<td><strong>FURLough</strong></td>
<td>Emergency only.</td>
<td>Emergency only.</td>
<td>Emergency plus family visits and development of release plans.</td>
</tr>
<tr>
<td>Student</td>
<td>Parents' Marital Status</td>
<td>Parents' Occupations</td>
<td>Age at 1st. Arrest</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------</td>
<td>----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>1</td>
<td>Unmarried</td>
<td>Father Unknown, Mother, Public Assistant</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Together</td>
<td>Father, City Employee, Mother employed</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Divorced</td>
<td>Father, Mechanic, Filling Station Attendant</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Father deceased</td>
<td>Mother employed</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Together</td>
<td>Father, Truck Driver</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>Separated, whereabouts unknown</td>
<td>Father, criminal record</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Together</td>
<td>Father, Air Force.</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>Together</td>
<td>Father, disabled. Public assistance.</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>Together</td>
<td>Parents in labor &amp; service occupations</td>
<td>14</td>
</tr>
<tr>
<td>10</td>
<td>Father deserted, child placed in orphanage</td>
<td>Whereabouts unknown</td>
<td>14</td>
</tr>
<tr>
<td>11</td>
<td>Separated</td>
<td>Father, bum. Mother employed.</td>
<td>16</td>
</tr>
<tr>
<td>12</td>
<td>Together</td>
<td>Father, Postal Employee</td>
<td>17</td>
</tr>
<tr>
<td>13</td>
<td>Father deceased. &quot;Neglected child.&quot;</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>Divorced</td>
<td>Father unknown</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>Mother deserted. Father, Construction Laborer</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Student</td>
<td>School Deportment</td>
<td>Last Grade Completed</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Truant, transient.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Sixth grade drop-out.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>&quot;Aggressive, contentious.&quot; Expelled from high school.</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Above average intelligence, average academic behavior, good attendance, temper rages.</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Poor school record, petty offenses.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>&quot;Pre-psychotic behaviors.&quot; Transient.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Discipline problem; ran away from school.</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Expelled for misconduct</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Drop-out; poor grades. Attended night school and dropped out.</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Constant problem, &quot;con-artist,&quot; poor attendance; poor reputation.</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Average.</td>
<td>12 (Graduated)</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Expelled, Truancy, Misconduct.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Poor academic and social deportment.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Expelled for misconduct</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Serious attitude problem; one of the worst problem in school.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>I.Q.</td>
<td>Intake</td>
<td>Discharge</td>
</tr>
<tr>
<td>---------</td>
<td>-----</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>1</td>
<td>93</td>
<td>7.0</td>
<td>8.4</td>
</tr>
<tr>
<td>2</td>
<td>78</td>
<td>2.9</td>
<td>5.6</td>
</tr>
<tr>
<td>3</td>
<td>111</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>116</td>
<td>11.9</td>
<td>14.8</td>
</tr>
<tr>
<td>5</td>
<td>103</td>
<td>10.1</td>
<td>12.0</td>
</tr>
<tr>
<td>6</td>
<td>99</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>89</td>
<td>7.9</td>
<td>8.4</td>
</tr>
<tr>
<td>8</td>
<td>91</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>100</td>
<td>8.1</td>
<td>9.5</td>
</tr>
<tr>
<td>10</td>
<td>84</td>
<td>5.5</td>
<td>7.2</td>
</tr>
<tr>
<td>11</td>
<td>107</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>107</td>
<td>10.4</td>
<td>12.4</td>
</tr>
<tr>
<td>13</td>
<td>88</td>
<td>6.0</td>
<td>8.2</td>
</tr>
<tr>
<td>14</td>
<td>83</td>
<td>8.5</td>
<td>9.4</td>
</tr>
<tr>
<td>15</td>
<td>87</td>
<td>9.5</td>
<td>11.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>96</td>
<td>7.9</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Table 4

REVISED BETA I.Q., C.A.T. AND G.E.D. TEST RESULTS
FOOTNOTES

1Gerard, Roy, Director of the Robert F. Kennedy Youth Center, has described the use of Quay's behavior categories and the institution's treatment programs in Differential Treatment - A Way To Begin, Bureau of Prisons, 1969.


5The estimate of public school rate is based on an expected increase of one grade per school year. In our opinion this is a very conservative comparison.