The Effects of Life Space Interviewing on Academic and Social Performance of Behaviorally Disordered Children

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ABSTRACT
This study explores the effects of Redf's Life Space Interview on academic and social behavior of residentially placed adolescent behaviorally disordered students. Eight boys with diverse maladaptive target behaviors were selected as subjects for this study. Baseline data was collected for each subject's target behavior as well as his academic performance in reading and mathematics. Clinical exploitation of life events served as the experimental intervention for six of the eight adolescents, while two of the students were utilized as a control measure. The results of this study clearly supported the use of the interview technique with these behaviorally disordered adolescents. Also discussed are the limitations of this study as well as implications for the use of the Life Space Interview in a variety of classroom settings.

INTRODUCTION
With the implementation of the regulations mandated in the 1975 Federal Education for All Handicapped Children Act PL 94-142, the increased need for useful information and viable alternatives to work with problem behavior in the classroom has rapidly become of great concern to both special educators and regular class teachers. Morse (1968) notes,

"There is considerable disagreement about the role of a teacher, but no one will argue that the profession is sorely in need of new methods for assisting in the socialization process and for dealing with the increasingly complex and frustrating behavior that pupils bring to school. Whatever we do should be based on the generic nature of the educative process and the legitimate responsibility of the school." (p. 267)

There are three major strategies which have been utilized by teachers of emotionally disturbed children, according to Hewett (1968):

1. psychodynamic-interpersonal—focusing on the "meaning and origin" of the child's behavior;
2. sensory-neurological—concerned with potential "underlying organic causal factors" related to behavior; and;
3. behavior modification—viewing the child's behavior in the context of its "adaptive function."

The psychodynamic-interpersonal educational strategy is concerned with "the psychic origin and meaning of maladaptive behavior, as well as the child's interpersonal relationships with others, particularly the teacher," (p. 9) This orientation would appear to be consistent with the high priority of most psychotherapists "to understanding psychological causal factors and the development of a positive, trusting relationship between adult and child in formal educational training." (p. 9)

Within the past two decades, there has been a growing interest in applying psycho-
educational approaches to the education of disturbed children. Redl’s Life Space Interview (Redl, 1957; Morse and Small, 1959; and Morse, 1963); Reality Therapy (Glasser, 1955; 1969); Congruent Communication Techniques (Ginott, 1972); and Teacher Effectiveness Training (Gordon, 1974) are among several psychoeducational strategies designed to ameliorate childrens’ maladaptive behavior. However, these strategies rarely offer specific information relating to classroom adaptability or effectiveness (Marandola and Imber, 1979).

One of these methods, Redl’s Life Space Interview, has been utilized in the present study. The Life Space Interview came about as a result of “marginal interviewing” which Redl and his associates conducted in 1946 at Detroit’s Pioneer House—a residential treatment center for seriously disturbed boys. Redl later renamed the technique, Life Space Interview, and outlined it as follows:

The Life Space Interview is closely built around the child’s direct life experience in connection with the issues which become the interview focus . . . . It is held by a person who is perceived by the child to be part of his life . . . an influence in his daily living . . . (Redl, 1957)

The two major categories of goals and tasks for Life Space Interviewing are: (1) Clinical Exploitation of Life Events, and (2) Emotional First Aid on the Spot. The differentiation between these two categories is not defined in relation to the causative behavior precipitating the need for the interview, but in the decision of the interviewer as to what should be done and, of course, what the situation itself will allow.

Clinical Exploitation of Life Events involves a number of strategies to deal with a child’s perceptions when they significantly differ from reality, with the ultimate goal of promoting some personal change. Redl enumerates the following forms of this type of interview: (1) Reality Rub-In—helping the child to see the situation as others see it, with the goal of increasing acceptance of reality and the child’s own role in the sequence of events; (2) Symptom Estrangement—using life situations to reduce the child’s pathological symptoms, with the goal of creating discomfort about a present problem behavior; (3) Massaging Numb Value Areas—helping to find or reinforce existing value areas within the child for more appropriate behavior, with the goal of increasing commitment to positive behavior values; (4) New Tool Salesmanship—helping the child to identify and internalize alternative ways of behaving, with the goal of improving the possibilities for appropriate behaviors; and (5) Manipulation of Boundaries of Self-helping—to build up a defense and resistance to group contagion within the child, with the goal of increasing “constructive” independence from the negative influence of others. The features of the “personal change” Life Space Interview are that it: produces insight; probes and goes into the problem of what happened and why; promises long-term gains in interaction and a more healthy self-concept; aims toward some more appropriate behavior or attitudinal change; and, provides a plan for constructive future action (Redl, 1957).

Emotional First Aid on the Spot is designed to provide emotional and/or behavioral support as an “aid on the spot” in those stressful situations in which the child cannot manage independently. Features of Emotional First Aid on the Spot provide one or more of the following: (1) Drain-off Frustration Acidity—release of intense feelings under supervision; (2) Support for the Management of Panic, Fury, and Guilt—“staying with” and supporting the child during great stress; (3) Communication Maintenance in Moments of Relationship Decay—keeping in communication with the child seeking to shut the world out; (4) Regulation of Behavioral and Social Traffic—monitoring activities to create support during periods of upset; and (5) Umpire Services—regulating both internal and external disputes.

Redl emphasizes that at times both categories of goals can be combined in the same interview. Goals can also be switched during the course of a teacher-child interaction.

Though the Life Space Interview has been suggested for use in the school setting (Brenner, 1969), it would appear that systematic measurement and documentation of such a use has been undertaken only once before (Reilly, Imber, and Cremins, 1978).
The purpose of the study was to attempt to systematically evaluate the effectiveness and practicality of the Life Space Interview within a resource room setting. The results of the study support the idea that the Life Space Interview can help to reduce inappropriate behaviors, and that within certain limits, it is a practical method to use. Each subject’s target behavior was reduced during intervention, some quite significantly.

The purpose of the present study was to evaluate the appropriateness of utilizing the Life Space Interview technique with eight disturbed adolescent boys within a self-contained classroom setting. Specifically, an attempt was made to systematically measure the effectiveness of the Life Space Interview on improving students’ performance in the following areas: (1) decreasing inappropriate and aggressive behavior in the classroom; and, (2) increasing independent academic work performance in the areas of reading and math.

**METHOD**

**Setting**

This study was conducted in a self-contained classroom of a northeastern residential treatment center for emotionally handicapped adolescent boys. The educational program consists of five classrooms, each with an enrollment not exceeding eight students. The curriculum is composed of the basic skills of Reading, Language Arts, and Mathematics with the inclusion of Science and Social Studies. Students are grouped according to current academic achievement levels as well as social/emotional development. Two classrooms emphasize a career education orientation of instruction.

**Subjects**

Subjects were eight students between 12 and 15 years of age. As a group they were academically functioning between a third and seventh-grade level. Subjects exhibited behaviors which interfered with academic achievement and/or presented classroom management problems.

**Operational Definition of Target Behaviors**

**Subject 1: Peer-directed classroom instigation**

Peer-directed classroom instigation was defined as inappropriate behavior, the purpose of which was to emotionally upset another student to the point where he was either taken off task or retaliated in a verbal and/or physical manner. Example of Target Behavior: S1 wanders over to another student who is diligently working at his desk. S1 whispers to the student that the family therapy hour, which was to have taken place after school and involve the student himself, has been cancelled because either mother or father couldn’t attend. The student, believing S1 to be telling the truth, becomes very upset and remains so for some time even after realizing that S1 was only “kidding.” When confronted by the teacher, S1 becomes very defensive and complains that everyone is against him.

**Subject 2: Teacher-directed challenging behavior**

Teacher-directed challenging behavior was defined as a refusal or threatening ultimatum on the part of S2 in response to a teacher-assigned activity. An important consideration was that the activity assigned was well within S2’s level of academic functioning and that refusal to do such work was a decision not based on an inability to complete the work.

Example of Target Behavior: S2 is given his math assignment in the textbook. S2 doesn’t like to work in the textbook, but rather prefers to use the workbook instead. The teacher explains to S2 that the material presented in the textbook is important in order to more clearly understand the concept being taught. S2 refuses to do any schoolwork unless it is in the workbook.
Subject 3: Nonlanguage noise-making behavior
Noise-making behavior was defined as weird and annoying vocal sounds. These disruptive noises would occur at any time and were directed to no one student in particular. However, several students would often react by laughing out loud, thus reinforcing S3's inappropriate behavior. S3's noise-making behavior served as a disruptive influence on the rest of the class in general.
Example of Target Behavior: The class is in the middle of a spelling test when S3 elicits a strange sound. The spelling test is further interrupted by the resultant laughing on the part of several of the other students.

Subject 4: Teacher-directed confrontation-disagreement
Teacher-directed confrontation-disagreement was defined as a refusal on the part of S4 to accept responsibility for academic shortcomings or wrongdoings of any kind, no matter how blatantly obvious they appeared to the teacher. When confronted S4 often became loud, defiant, defensive, and often broke down into a state of tears and pouting which lasted for some time thereafter.
Example of Target Behavior: S4 is given a math worksheet to do which requires three place subtraction. S4 starts the assignment correctly. Subsequently, S4 begins to add the numbers rather than subtract them. When the worksheet is handed back to S4 with corrections to be made, he becomes upset and abusive towards the teacher for not initially clarifying the directions.

Subject 5: Teacher-directed verbal argumentative behavior
Verbal argumentative behavior was defined as continued and inappropriate "answering back" on the part of S5 in response to a directive by the teacher. On these occasions S5 would initially and impulsively respond to the teacher's directive by making a snide comment which was totally out of character for S5.
Example of Target Behavior: The teacher aide, who happens to be a female, has asked S5 to open his book to the reading assignment for the day. S5 responds, "Sure baby! Now how about letting me open something of yours!" The aide responds with surprised annoyance and confronts S5. S5 refuses to see any harm in what he has just said.

Subject 6: Verbal/nonverbal interruptive behavior
Verbal/nonverbal interruptive behavior was defined as inappropriate, disruptive, verbal and physical behaviors which served to interrupt ongoing classroom activity. S6 demonstrated a very short attention span and easily became fidgety, during both independent and small group instruction. It was most often during these instructional situations in which the target behavior became most apparent.
Examples of Target Behavior: The following are examples of S6 target behaviors—tapping with fingers, ruler, pencil; tipping desk and/or chair until one or both falls; and, talking out of turn or without permission.

Subject 7: Immature reaction to teacher/peer confrontation
Immature reaction to teacher/peer confrontation was defined as inappropriate crying, pouting, or mumbling under one's breath on the part of S7 in response to a teacher directive or teacher/peer confrontation. S7 also demonstrated a short attention span and inconsistent performance in his schoolwork. It was around these issues that the teacher frequently observed the occurrence of the target behavior.
Example of Target Behavior: The teacher would observe S7 to be off-task during independent work time. The teacher periodically reminds the subject that the work that was assigned must be completed before he leaves school for the day. S7 responds by mumbling something under his breath to the teacher and begins to cry. Not having completed his work by the end of the school day, S7 realizes the consequences and cries. It is several minutes before S7 regains his composure and finishes the assignment without further difficulty.

Subject 8: Teacher-directed verbal defiant behavior
Teacher-directed verbal defiant behavior was defined as a response on the part of S8 to a teacher directive which was in outright defiance with no apparent basis other than to be challenging in nature. The subject's defiant behavior was most often directed towards the teacher aide during one-to-one instructional periods.
Example of Target Behavior: The teacher aide would be working alone with S8. The subject would begin to make inappropriate comments to the aide which would interrupt the lesson. The aide would attempt to reason with the subject and ask for his cooperation. The subject would continue to make nonwork related comments whereupon the aide would ask for the classroom teacher’s assistance.

Procedure

The study was conducted during a period of nine weeks. Data was collected only during the morning sessions between the hours of nine and twelve o’clock. The classroom teacher was assisted in gathering data by a teacher aide. In order to increase the accuracy of data collection, target behaviors were recorded as they occurred during baseline and intervention phases.

Multiple baseline data was recorded on the frequency of one specific targeted behavior per subject occurring during the three hour morning sessions. During intervention the Life Space Interview was used with a random sampling of six of the eight students. Throughout the intervention phase, the teacher continued to chart the frequency of targeted behaviors occurring for each subject. The grouping procedure of subjects was achieved in the following manner:

Group 1 consisted of three students whose names were randomly selected; these subjects received Life Space Interview during an initial four week intervention phase followed by a two week reversal.

Group 2 consisted of three students whose names were drawn randomly from the remaining five subjects; these subjects received Life Space Interview during a four week intervention phase following an initial five week baseline phase.

Group 3 consisted of the remaining two students; these subjects were utilized as a control group throughout the study.

Interviews were conducted most often in the classroom or adjacent dining area, both during and after the school day, lasting anywhere between 10 and 30 minutes. All subjects in Groups 1 and 2 were involved in a minimum of one interview per week, but usually two to three during the intervention phase. When at all possible, if both the issue at hand and the existing conditions were conducive to holding the interview during class time, the teacher would conduct it in the dining room just outside the classroom and away from the other students. At these times the aide supervised all other students until the conclusion of the interview. If time was not a factor and the subject demonstrated a willingness to continue talking, the interview was usually extended. However, if the subject showed no desire to either enter into or proceed with the interview, it was terminated. Likewise, it was ended if, after repeated attempts, it became obvious that the goal of the interview would not be achieved and that to continue would be counterproductive.

Some clarification should be made relative to the uses of Clinical Exploitation of Life Events and Emotional First Aid on the Spot as applied in this study. Though various forms of Emotional First Aid on the Spot previously described were consistently in use in the classroom, the interventions being assessed were strategies for personal change effected by the exploitation of life events. Due to the nature of the class and the technique itself, it was impossible to use clinical exploitation interviews as the sole intervention. Other types of management techniques were being employed during baseline and intervention (e.g., time out; nightly restriction; detention).

Prior to the inception of intervention, discussions were frequently held with students who demonstrated disruptive behavior. However, various techniques of Redl’s Life Space Interview were not employed during baseline with any of the students.

An example utilizing the Life Space interview technique in an attempt to decrease Subject 1’s “peer-directed classroom instigation” target behavior is paraphrased as follows:
Situation

Subject 1 had been observed by the teacher to have made a derogatory comment to another student while passing by the student's desk after having sharpened his pencil. It was rather apparent to the teacher that whatever Subject 1 said was serious enough to have precipitated a physically violent response on the part of the student whereupon he (the student) rushed from his seat and lunged at Subject 1. After having separated the two boys and satisfactorily quelled the disruptive incident, the teacher permitted Subject 1 to go to the "cool-off" area. Having witnessed the entire incident, it was quite clear to the teacher that the episode was a blatant example of Subject 1's target behavior. Confident that the conditions were ideal for using a "reality rub-in" strategy, the teacher initiates a Life Space Interview with Subject 1 in the "cool-off" area located outside the school building.

Interview Process

**Teacher**  — Ricky, do you think you're calmed down enough to be able to talk about what happened between you and Gerry?
**Ricky**  — Yeah, I guess so.
**Teacher**  — Well, what happened?
**Ricky**  — Gerry's been bugging me all day! I'm fed up with him! He's always trying to get me into trouble!
**Teacher**  — What has Gerry been doing to make you so upset?
**Ricky**  — Lots of things!
**Teacher**  — Like what?
**Ricky**  — He says I don't belong in the Mustang Unit because I'm a baby! He says that none of the other guys want to be friends with me. Gerry's a liar!
**Teacher**  — I thought Gerry and you were good friends.
**Ricky**  — We are, most of the time!
**Teacher**  — It sounds to me like you might be competing against each other for some of the other Mustangs' attention.
**Ricky**  — Yeah, well maybe! But, he always wants to start trouble.
**Teacher**  — Did Gerry start the trouble just now?
**Ricky**  — Well, no! I guess I did. But, he does most of the time.
**Teacher**  — What did you do?
**Ricky**  — I said something to him that made him really mad.
**Teacher**  — Was that why you said it?
**Ricky**  — I guess so.
**Teacher**  — What did you say to him?
**Ricky**  — I told him that his sister was an ugly, fat slob!
**Teacher**  — How do you think that made Gerry feel?
**Ricky**  — Not so good—I guess.
**Teacher**  — How would you feel if Gerry said that about your sister?
**Ricky**  — I wouldn't like it too much. It wasn't a very nice thing to do. I guess I don't blame him for getting so mad at me.

At this stage of the interview, Ricky has begun to see the reality of the situation which allowed the interviewer to follow up with an effective "massaging numb value areas" strategy. By this time Ricky is able to see and admit to the negative effect that his instigating behavior has had on Gerry. The interviewer changes strategies and uses a "new tool salesmanship" strategy, feeling confident that Ricky has been able to focus in on the actual facts of the event and is ready to cooperatively suggest possible alternative behavior for the future:

**Teacher**  — Ricky, would you really like to be friends with Gerry?
**Ricky**  — Yeah, I like Gerry a lot! But I don't think he likes me.

*The names have been changed to protect the "guilty."*
Teacher — I think he does—as a matter of fact, I know he does because he told me so!
Ricky — He did?
Teacher — He sûré did!
Teacher — Maybe you’re trying too hard.
Ricky — Yeah, maybe I am. You know, Gerry has been in the Mustang Unit a lot longer than I have. I just want to be friends with those guys the way Gerry is.
Teacher — Can you think of any ways that might make it easier for you to get to be friends with the Mustangs?
Ricky — I think I’d like to talk with Gerry about it. Maybe he could give me some good advice that would help me to break the ice with those guys.
Teacher — I think that’s a great idea!
Ricky — Yeah, I do too! Do you think I could maybe straighten things out with him now—and, sort of apologize?
Teacher — Go right ahead!

Academic Performance
Throughout the course of the study, daily results of each subject’s independent work assignments in both reading and math were recorded. The purpose was to examine the effects of the intervention on academic progress. In reading, an item was defined as either correctly filling in the blank or providing the appropriate multiple choice answer on worksheets corresponding to reading assignments completed by the subject independently. In math, an item was defined as independent workbook and worksheet activities which were to be completed by each subject at his own pace. In essence, these assignments were a review of previously learned concepts.

RESULTS
For each subject the frequency of behaviors was divided by the days present during baseline intervention and reversal phases of the study. These figures were then used to compute the percent of change in the behaviors from baseline to intervention. A two-week reversal phase was employed at the end of intervention for Group 1.

In measuring academic change for each subject in the areas of reading and math, the number of items completed was divided by the days present for each phase. The percent of correctly completed items was computed by dividing correct items by the total number of items completed for that day. These figures were then used to find the percent of change in number of items completed from one phase to another. Table 1 summarizes changes in frequency of target behaviors during baseline intervention and reversal phases of the study.

Behavior Change

Group 1: Frequency of targeted behaviors significantly decreased for all subjects during the 20-day intervention phase. Undesirable behaviors continued to decrease during the 8 day reversal for Subjects 1 and 2. However, Subject 3’s nonverbal noisemaking behavior increased dramatically.

Subject 1: During baseline he was present 13 days and 33 instigating behaviors were counted, an average of 2.5; during intervention the behavior occurred an average of .78 times, 14 times in 18 days; representing a decrease of 69 percent; during reversal 2 behaviors were recorded in an 8-day return to baseline period demonstrating a 68 percent decrease.

Subject 2: During baseline, with no absences, challenging behavior occurred 18 times, an average of 1.2; during intervention, with no absences, the behavior occurred an average of .83 times, a decrease of 31 percent; 8 inappropriate behaviors were computed during the 8-day reversal, an 85 percent decrease.
### TABLE 1

Daily Average of Target Behaviors for Groups 1, 2, and 3 During Baseline, Intervention, Reversal and Percent of Change

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Reversal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Days</td>
<td>Average Number of Behaviors</td>
<td>Days</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject 1</td>
<td>13</td>
<td>2.5</td>
<td>18</td>
</tr>
<tr>
<td>Subject 2</td>
<td>15</td>
<td>1.2</td>
<td>18</td>
</tr>
<tr>
<td>Subject 3</td>
<td>15</td>
<td>.93</td>
<td>18</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject 4</td>
<td>23</td>
<td>1.09</td>
<td>16</td>
</tr>
<tr>
<td>Subject 5</td>
<td>25</td>
<td>1.44</td>
<td>14</td>
</tr>
<tr>
<td>Subject 6</td>
<td>25</td>
<td>8.08</td>
<td>16</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject 7</td>
<td>C (14)</td>
<td>1.7</td>
<td>C (26)</td>
</tr>
<tr>
<td>Subject 8</td>
<td>C (14)</td>
<td>.14</td>
<td>C (26)</td>
</tr>
</tbody>
</table>
Subject 3: With no absences during baseline or intervention, his noise-making behavior went from 14 (average .93) to 9 (average .5), a decrease of 46 percent; during reversal, with no absences, the target behavior sharply increased to 14 (average 1.75), a jump of 250 percent.

Group 2: Subjects 4, 5, and 6 showed a considerable decrease in the frequency of targeted behaviors during the 20-day intervention for all subjects.

Subject 4: With two absences during baseline, a frequency count of 25 confrontation-disagreement behaviors resulted in an average of 1.09 times; present during all 16 days of the intervention, his behavior count of 5 resulted in an overall decrease of 72 percent.

Subject 5: Present all 25 days of the baseline, verbal argumentative behavior occurred 36 times for a daily average of 1.44; present 14 days of the intervention, the count was 13 (average .92), a decrease of 36 percent.

Subject 6: With no absences during baseline or intervention, interrupting behavior went from 202 (average 8.08) to 48 (average 3.0), a decrease of 63 percent.

Group 3: Subjects 7 and 8 served as a control group during two phases of the study. The first frequency count was made at the end of the initial 15-day baseline period for Group 1. The second count was made at the conclusion of the intervention for Group 2.

Subject 7: Present 14 days of the baseline, internal, immature behavior count was 24 for an average of 1.7; during intervention, the behavior occurred an average of 1.21, 34 times in 26 days, representing a decrease of 29 percent.

Subject 8: Present 14 days of baseline, defiant behavior occurred 2 times (average .14); during intervention, with no absences, the behavior count was 8 (average .31), an increase of 121 percent.

Academic Change

Group 1: As shown in Table 2, Subjects demonstrated a general increase in the number of reading and math items completed during intervention with the exception of Subject 2 in the area of reading. In reversal, there were mixed results from one subject to another.

Subject 1: In both reading and math there was an increase in the percent of items completed during baseline through intervention (18 percent and 104 percent, respectively), while the percent of correctly completed items remained relatively constant; during reversal, number of items completed continued to increase in both academic areas (11 percent and 25 percent) with a high percentage of accuracy.

Subject 2: In reading, his percent of completed items showed a decrease during both intervention and reversal, from 41 percent to 23 percent, with percent accuracy remaining stable between 92 percent and 87 percent. Percentage of math items completed dramatically increased during intervention (267 percent) and continued during reversal (101 percent); percent of correctly completed items significantly increased 15 percent during intervention (98 percent) and dropped somewhat during reversal (87 percent).

Subject 3: Percentage of items completed in both reading and math increased during both intervention (26 and 79 percent) and reversal (10 percent and 31 percent); percent of correct items showed a gradual increase in reading during the three phases (74 percent to 87 percent to 89 percent), while fluctuating in the area of math (83 percent to 98 percent to 87 percent).

Group 2: Table 3 illustrates an increase in the percentage of completed reading items for all subjects during intervention accompanied by an increase in percent of items correct. Number of completed math items, however, showed a decrease for two of the three subjects. Percent of correct items nonetheless improved during the intervention, with the exception of Subject 1.

Subject 4: In reading, his number of completed items more than doubled (17 to 35) during intervention, demonstrating an increase of 107 percent; in math, however, number of completed items dropped 55 percent during intervention, from 31 to
**TABLE 2**

Daily Average Number and Percent of Correctly Completed Items for Group 1 Subjects in Reading and Math with Percent Change During Baseline, Intervention and Reversal

<table>
<thead>
<tr>
<th>Subject</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Reversal</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Days</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>Completed</td>
<td>Correct</td>
<td>Complete</td>
</tr>
<tr>
<td>READING</td>
<td>20</td>
<td>94%</td>
<td>25</td>
</tr>
<tr>
<td>Subject 1</td>
<td>13</td>
<td>16</td>
<td>93%</td>
</tr>
<tr>
<td>MATH</td>
<td>18</td>
<td>13</td>
<td>93%</td>
</tr>
<tr>
<td>READING</td>
<td>41</td>
<td>92%</td>
<td>24</td>
</tr>
<tr>
<td>Subject 2</td>
<td>15</td>
<td>16</td>
<td>83%</td>
</tr>
<tr>
<td>MATH</td>
<td>15</td>
<td>9</td>
<td>83%</td>
</tr>
<tr>
<td>READING</td>
<td>17</td>
<td>17</td>
<td>74%</td>
</tr>
<tr>
<td>Subject 3</td>
<td>15</td>
<td>17</td>
<td>82%</td>
</tr>
<tr>
<td>MATH</td>
<td>15</td>
<td>17</td>
<td>82%</td>
</tr>
</tbody>
</table>
TABLE 3
Daily Average Number and Percent of Correctly Completed Items for Group 2
Subjects in Reading and Math with Percent Change During Baseline and Intervention

| Subject | Baseline | | | Intervention | | | | |
|---------|---------|---|---|---------------|---|---|---|
|         | Days    | Number | Percent | Days    | Number | Percent | Percent |
|         | Completed | Correct | | Completed | Correct | Change |
| READING | 23      | 17     | 86%     | 16      | 35     | 92%     | +107%   |
| Subject 4 |         | | | | | | |
| MATH    | 31      | 86%     | | 14      | 81%     | -55%    | |
| READING | 25      | 16     | 90%     | 14      | 21     | 97%     | +29%    |
| Subject 5 |         | | | | | | |
| MATH    | 27      | 88%     | | 24      | 91%     | -11%    | |
| READING | 25      | 25     | 87%     | 16      | 35     | 92%     | +41%    |
| Subject 6 |         | | | | | | |
| MATH    | 23      | 84%     | | 38      | 93%     | +64%    | |

14: percent of items completed correctly during intervention rose from 86 percent to 98 percent in reading, while dropping 5 percent in math from 86 percent to 81 percent.

Subject 5: Frequency of reading items completed rose from 16 to 21 for a 29 percent gain from baseline to intervention; percent change in number of math items attempted dropped 11 percent from 28 to 24; percent of accuracy increased in both reading and math during the intervention (90 percent to 97 percent and 88 percent to 92 percent, respectively).

Subject 6: In reading, number of items completed during intervention increased 41 percent, from 25 to 35 with a 3 percent gain in accuracy (89 percent to 92 percent); frequency of completed math items showed an even more significant gain (64 percent) during the same period, from 23 to 39; a 9 percent increase in accuracy was also demonstrated (84 percent to 93 percent).

Group 3: Table 4 represents a comparison of academic performance for Subjects 7 and 8 during the first fifteen days of baseline to results computed at the end of Group 2’s intervention. Both subjects demonstrate mixed findings.

Subject 7: A 14 percent gain was evidenced in the number of reading items attempted (20 to 23) during intervention accompanied by a 16 percent increase in accuracy (77 percent to 93 percent); math items completed dropped 10 percent (20 to 25), with a resulting 8 percent decrease in accurately completed items (86 percent to 78 percent).

Subject 8: Number of completed reading items dropped from 35 to 26 for a 25 percent decrease during intervention; however, percent of correctly completed items remained stable (69 percent to 88 percent); number of math items completed rose 86 percent during intervention, from 18 to 34 with an additional 4 percent increase in accuracy of work (84 percent to 86 percent).

Other more general results included the following: the target behaviors appeared to undergo mild but observable changes—while they continued to occur, they were often shorter in duration, less intense, and more easily controlled. Understandably,
TABLE 4

Daily Average Number and Percent of Correctly Completed Items for Group 3 Subjects in Reading and Math with Percent Change During Baseline and Group 2 Intervention

| Subject | BASELINE | | | INTERVENTION | | |
| | Days | Number | Number | Days | Number | Percent | Percent |
| | | Completed | Correct | | Completed | Correct | Change |
| READING | 14 | 25 | 89% | | 26 | 88% | −26% |
| Subject 7 | | | | | | | |
| MATH | 18 | 84% | | | 34 | 88% | +86% |
| READING | 20 | 77% | | | 23 | 93% | +14% |
| Subject 8 | | | | | | | |
| MATH | 28 | 86% | | | 25 | 78% | −10% |

the overall classroom atmosphere seemed calmer and quieter during intervention. The relationships between the subjects and the classroom teacher and each other generally improved. Positive observations were made about some of the subjects by other school personnel (i.e., teacher, youth care workers, and therapists).

DISCUSSION

Interventions were highly effective in generating decreases in maladaptive behavior ranging from 31 percent to 72 percent. Although the specific rate of frequency for each subject differed considerably during baseline and intervention, and although each subject's target behavior was different, the interviews were judged to be highly successful in each case. Not only did subjects begin to accept the reality of the negative effects of their undesirable behaviors, but they also began to generate alternative solutions to problems. Clearly, the familiar "blame the other guy" syndrome was less evident as the intervention phase progressed.

Although the improvement of academic performance, per se, was not the primary focus of the interviews, there appeared to be an obvious and positive correlation with a decrease in subjects' maladaptive behavior. Understandably, some improvement in rate and accuracy of work completed might be expected since there was considerably less disruptive behavior during intervention than in baseline. The important consideration, however, in making such an assumption is that the degree of difficulty and interest level of the work assigned is appropriate. It can be seen from the baseline data that this was in fact the case since subjects were correctly completing approximately 85 percent of the items in reading and math. Considering the fact that the classroom setting is highly structured with individualized instruction based upon each subject's IEP, an 85 percent class success rate is by no means an unreasonable expectation. Rather, it lends credence to the appropriateness of the level of work being assigned to each student. A major function of this residential facility is to successfully integrate students into public school regular education programs. Therefore, the focus of treatment is not only on improving emotional and social functioning, but also on improving academic performance.

A multiple baseline procedure was used to evaluate the effects of intervention procedures on each of two groups. Group 1 began their instruction on the 16th day.
of the study, Group 2 did not participate in Life Space Interviews until the 26th day; thus, Group 2 was still in a baseline condition while subjects in Group 1 were involved in private interviews with the classroom teacher.

Theoretically, if the intervention was successful, subjects in Group 1 would show a considerable decrease in maladaptive behavior during the first ten days of Life Space Interviewing. Subjects in Group 2 would not be expected to show any decrease during this period since they were still in baseline condition. In actuality, subjects in Group 1 decreased their inappropriate behaviors by approximately 35 percent while subjects in Group 2 showed a net decrease of 25 percent. This finding would appear to indicate that the behaviors of subjects in Group 1 were disruptive to the class as a whole; therefore, although the interviews were private, their effects might certainly have had a positive effect on other students in the classroom. During the next eight days, which was the latter portion of intervention for Group 1, there was an even more substantial decrease in maladaptive behavior for the subjects (approximately 67 percent). Examining the same interval of time for Group 2, which was their first eight days of intervention, there was an approximate rate of decrease in inappropriate behaviors of 45 percent. Thus, the three subjects in this group substantially improved their behaviors from the first 15 days of baseline (3.9 disruptive behaviors per morning) as compared to the last 10 days of baseline (2.9). The rate of disruptive behaviors per subject per day increased to 1.6 during their first eight days of intervention and eventually dropped to 7.5 during their last eight days.

There appeared to be no clear trend evident during the reversal phase for Group 1. Subjects demonstrated both gains and losses. One possible explanation is that with a relatively long interval of 20 days which emphasized self-control skills, these subjects were able to internalize more appropriate behaviors even without the benefit of interventions which were omitted during the eight day reversal period.

It should be noted that merely having a “discussion” with a student about his inappropriate behavior is not likely to have the same positive effect as demonstrated in this study. During baseline, the students and their teacher had frequent discussions relative to inappropriate behavior, yet these interactions did not result either in significantly reducing or eliminating maladaptive behaviors. Several major distinctions between typical discussions and Life Space Interviews with the subjects are apparent: 1. In discussions students may be immediately criticized about their behavior and not given the opportunity to give their perception of a specific incident. 2. Discussions more frequently occurred within the context of the classroom where further confrontation might occur rather than in a more private setting with only those who were initially involved in a given incident. 3. In typical discussions the teacher did not help the student to perceive the effects of the group on that student’s maladaptive behavior. In the Life Space Interview the teacher consistently attempted to help the student become aware of the effects of “group suction” on that student’s transgressions. Thus, through the use of the Life Space Interview the students realized that he was being unfairly manipulated by the group to his own disadvantage. 4. Discussions often resulted in a “stand off” between teacher and student, or in negative consequences being immediately imposed for inappropriate behavior. In using the Life Space Interview, however, the teacher consistently placed the responsibility on the student for generating alternative acceptable behavior. When a student was unable to suggest alternative appropriate behavior for a given situation, the teacher provided assistance in identifying more positive responses.

One implication of the study is that similar type settings employing appropriate limits, structure and a number of other behavioral management techniques comparable to those utilized in this setting could greatly benefit from the procedures used in this study. Based upon the present design, therefore, one needs to be cautious in overgeneralizing the results.

Another implication is the potential usefulness of the technique in a public school setting. The results support the findings of Reilly, Imber and Cremins (1978) with respect to effectively decreasing inappropriate behaviors of adolescents. Therefore, the Life Space Interview may be useful with behaviorally disordered and learning
disabled children who will remain in regular classrooms, for all or part of their school day.

A third implication is that the beneficial effects may generalize to other areas of the child's life.

Some limitations of this study should be noted. The fact that this classroom teacher had instructed the subjects for one to three years prior to the initiation of this study increased the potential success of the technique. A teacher in a public school setting would not likely be as fortunate.

Another limitation is the factor of reliability. Though no independent observers were used, it should be noted that the effects of having them in the room might have influenced the behavior of these subjects. Experimenter bias is also a consideration. However, as stated earlier, the teacher did not review the daily frequency of academic and social behaviors until after the completion of the study.

Future studies might replicate this study in several different classroom settings to examine the generalizability of the findings of the Reilly, Imber and Cremins study as well as the present research. Also, an examination of the process of the interviews in more detail would be advised by systematically evaluating teacher and student behavior during the course of the Life Space Interview.

In summary, this study supports the use of the Life Space Interview as an effective intervention procedure for improving academic and social performance. That is, assuming one has clearly and operationally defined each target behavior, it is possible to use a behavioral assessment procedure with a psychodynamically oriented intervention to systematically evaluate the relative effectiveness of that intervention with a class of behaviorally disordered adolescents in a residential treatment facility. While the process of the intervention is also important to monitor, teachers need to have demonstrable evidence that such procedures will ultimately modify inappropriate behavior and lead their students toward a greater degree of self-control.

REFERENCES


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