Examined in the end of project year report were the effects of a developmental physical education program on the fitness and adapted game participation of 83 trainable mentally retarded children in a special school. Student knowledge of rules, safety procedures, and health habits for adapted activities exceeded anticipated levels; and data on six fitness skills (including situps, and standing broad jumps) demonstrated increased student performance. The program was included in the school's curriculum and supported by school staff (through classroom carryover), parents, and community members. (Examples of instruction cards, rating charts, and an introductory letter are included). (CL)
DEVELOPMENTAL PHYSICAL EDUCATION FOR THE TRAINABLE MENTALLY RETARDED

End of Project Year Report
PART I - STATISTICAL DATA
Elementary and Secondary Education Act, Title III, P. L. 89-10, As Amended

SECTION A - GENERAL PROJECT INFORMATION

1. PROJECT TITLE
DEVELOPMENTAL PHYSICAL EDUCATION FOR THE TRAINABLE MENTALLY RETARDED

2. APPLICANT (Local Education Agency)
WASHOE COUNTY SCHOOL DISTRICT

3. ADDRESS (Number, Street, City, Zip Code)
425 EAST NINTH STREET
RENO, NEVADA 89502

4. NAME OF COUNTY
WASHOE

5. NAME OF PROJECT DIRECTOR
ROY S. BERRY, DIRECTOR
SPECIAL EDUCATION SERVICES

6. ADDRESS (Number, Street, City, Zip Code)
425 EAST NINTH STREET
RENO, NEVADA 89502

Phone Number
322-7041
Area Code
702

I hereby certify that the information contained in this report is, to the best of my knowledge, correct and the local educational agency named above has authorized me as its representative to file this report.

PERSON COMPLETING REPORT (Name and Title)

DATE SUBMITTED
September 25, 1973

RECEIVED
SEP 27 1973
FEDERAL RELATIONS AND PROGRAMS -

EDN 89-10-17
(3/70)
## SECTION B - TOTAL SCHOOL ENROLLMENT AND PROJECT PARTICIPANTS

### 1. Enrollment of School District(s) Served

<table>
<thead>
<tr>
<th></th>
<th>Pre-Kindy</th>
<th>Kindergarten</th>
<th>Grades 1-6</th>
<th>Grades 7-12</th>
<th>Adults (Exclude teachers receiving inservice training)</th>
<th>Teachers Receiving Inservice Training</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Public Schools</td>
<td>1,934</td>
<td>14,718</td>
<td>13,120</td>
<td></td>
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<td>29,772</td>
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<tr>
<td>(2) Nonpublic Schools</td>
<td>600</td>
<td>400</td>
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<td>1,000</td>
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### 2. Number of Persons Directly Participating in Project

<table>
<thead>
<tr>
<th></th>
<th>Public Schools</th>
<th>Nonpublic Schools</th>
<th>AS RECOMMENDED</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>(1) Public Schools</td>
<td>85</td>
<td></td>
<td></td>
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<tr>
<td>(1) Nonpublic Schools</td>
<td></td>
<td></td>
<td></td>
<td>85</td>
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</tbody>
</table>

### 2. TOTAL NO. & PERCENT OF PARTICIPANTS BY ETHNIC GROUPS (applicable to figures given in Sec. B-I-b)

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>Total</th>
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<tbody>
<tr>
<td>White</td>
<td>73</td>
<td>94</td>
<td>3</td>
<td>1.5</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>Spanish Surname</td>
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<td></td>
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<td></td>
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<td>Other (Specify)</td>
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<td></td>
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<tr>
<td>Total</td>
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<td>100</td>
<td></td>
<td></td>
<td></td>
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### 3. RURAL/URBAN PERCENTAGE DISTRIBUTION OF PARTICIPANTS BEING SERVED BY PROJECTS*

<table>
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<tr>
<th>Participants</th>
<th>Remote Rural</th>
<th>Rural</th>
<th>Standard Metropolitan Area</th>
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<tbody>
<tr>
<td></td>
<td>Farm</td>
<td>Non-farm</td>
<td>Low-socio-economic Area</td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>3.5</td>
<td>60</td>
</tr>
</tbody>
</table>

*REMOTE RURAL means an outlying area of less than 5,000 inhabitants.
RURAL means an outlying area of more than 5,000 inhabitants but less than 15,000 inhabitants.
STANDARD METROPOLITAN AREA - LOW-SOCIO-ECONOMIC AREA means an area with low-socio-economic levels within a city of 50,000 inhabitants or more.
OTHER means areas in cities of 50,000 inhabitants or more other than those with low-socio-economic levels.
OTHER URBAN means areas with less than 50,000 inhabitants but more than 15,000 inhabitants.
The total percent distribution must total 100%.
PART II
NARRATIVE

A. Project Procedure Summary

1. Objective 1

   Each student shall develop to the fullest his individual physical fitness by engaging in the Developmental Education Program.

   **Procedure**

   Each student required individual program development. Activities were introduced and determination made as to capabilities of the students. From these determinations, class and individual programs were developed. The students participated in exercises designed to strengthen muscle groups, such as calisthenics, weight training, exercises of specialized equipment or apparatus, and posture exercises.

   **Evaluation**

   During the initial year, individual base lines were established for each student. These base lines were established using six items adapted from *Adaptive Physical Education for the Trainable Mentally Retarded* by Larry D. Davis. They are the flexed arm hang (in seconds), the shuttle run (in seconds), the 50 yard dash (in seconds), the standing broad jump (in feet), the softball throw (in feet), and sit-ups (in numbers).

   Monthly testing was conducted by the teacher and teacher aide. Progression or regression was recorded for each student. From this data, appropriate goals for individual students will be established for the 1973-74 school year.
Objective 2

Each student shall exhibit his knowledge of rules, safety procedures and health habits of teacher selected activities from ERCAPEP (Education Research Council of American Physical Education Program).

Procedures

The teacher selected ERCAPEP activities in which the trainable mentally retarded student could participate. Sample activities include Stop & Start, Red Light, Follow-the-Leader, I Spy, Bean Bag Change, and Back-to-Back.

Evaluation

Individual student information cards were kept by the teacher noting those activities learned and the students' knowledge of rules, safety procedures, and health habits.

Many ERCAPEP activities were rejected as being beyond the capability of the students. Other ERCAPEP activities were modified by the teacher in order to allow student participation.

The teacher also introduced activities not listed by ERCAPEP but were considered within the ability of the students.

Objective 3

Each student shall exhibit improved classroom behavior as measured by the Adaptive Behavior Scale Evaluation Form by engaging in the Developmental Physical Education Program.

Procedures

Classroom teachers were asked to evaluate individual students' classroom behavior by using the Adaptive Behavior Scale Evaluation Form.
Evaluation

As the Behavior Scale Evaluation form was received, the project teacher entered the form in individual student folders. A teacher comparison, made monthly, of evaluation forms determined the student's improved classroom behavior.

2. Summary of Evaluation

(A) Procedures Exceeding or Meeting Anticipated Results

The procedure exceeding anticipated results was the introduction of ERCAPEP activities by the project teacher. Recorded results of student knowledge of rules, safety procedures and health habits for those selected activities indicate marked progress. Student knowledge of Follow-the-Leader, for example, progressed to the point that little teacher supervision was necessary.

The procedure meeting anticipated results was the collection of individual student data on the Individual Skill Test. During the initial year, the data proved the trainable child could develop physical fitness. The subsequent years of the project and the establishment of student goals will further endorse this procedure.

One item eliminated from the project activities was the 300-yard walk/run. Students became disoriented as to direction, considerable time was lost at turn-around points, and the playground area was unsuited for this activity.

(B) Procedures Not Meeting Objectives

The Adaptive Behavior Scale Evaluation Form was found ambiguous and ineffective in measuring classroom behavior.
The form assumes no improvement where none may exist. As an example, one of the items is "Personal Appearance." The classroom teacher is asked to check either "Some Improvement, Considerable Improvement, or No Change." A student who had good personal appearance prior to participation in this project, would be checked as "No Change." An independent observer of this check mark would assume the program has no effect, when in fact, the effect could not be measured or may not exist.

The classroom teachers commented on the ambiguity of the Adaptive Behavior Scale. The return of the forms was meager to the point of uselessness. Another factor contributing to the uselessness of the form is the fact that approximately one-third of the students are residents of the Nevada Mental Health Institute, consequently, such items as selection of clothing, personal appearance, grooming, etc., are dictated by Institute personnel.

(C) Meeting Results

At the beginning of the project, information and data on the ability of each child to perform the six items on the Skill Test was non-existent. Also, a review of the literature failed to produce any example of standardized norms related to the ability of the trainable mentally retarded to perform the evaluation tasks.

Using the items listed in the evaluation procedure, the data gathered produced the following:
Significant Progress: Those students able to perform the task, establish an average, and exceed average performance at year-end testing.

No Progress: Those students unable to perform the task or those that failed to increase their performance.

Some Progress: Those students able to perform the task to the extent that an average performance could be established.

From this data, a starting point and realistic expectancy for each student will be established in September, 1973, for FY-74.

Exceeding Results

The introduction of ERCAPEP and teacher selected activities exceeded anticipated results prior to the establishment of an instruction card. This teacher-made card noted the method of instruction and the degree of activity introduction.

The following teacher-made chart shows the degree of attainment for those students able to perform the activities.

**KNOWLEDGE OF RULES, SAFETY PROCEDURES AND HEALTH HABITS**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statue</td>
<td>.16</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Musical Chair</td>
<td>26</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Dodge Ball</td>
<td>10</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Do As I Do</td>
<td>10</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Kick Ball</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

-5- (1)
Mr. Robert Gray, principal of McKinley Park School, advised available parents of their child's participation in the Title III Project and invited the parents to visit the school. Parents visiting the program expressed their pleasure with the procedures and praised the results.

Many classroom teachers have adopted some of the procedures for activities into their learning programs. For example, the Bean Bag Throw is used in the arithmetic program—keeping score, how many turns. The Follow-the-Leader game is an assist in staying in line from classroom to gym.

The Behavior Evaluation Scale was eliminated after classroom teachers expressed dissatisfaction with the form. After discussion with teachers and Mr. Gray, the project director decided to eliminate Objective 3 and the evaluation form.

The 300-yard walk/run was eliminated from the individual Skill Test because of the physical and mental limitations of the students and lack of adequate space.

(E) Recommendations

Due to inability to correlate classroom behavior to the Adaptive Physical Education Program, the objective relating to student behavior should be eliminated.

It is recommended that the 300-yard walk/run be eliminated for the trainable mentally retarded student population.

B. General Project Summary

1. As a result of this project during the past year, major changes have been noted in:
The School

Developmental Physical Education for the Trainable Mentally Retarded has become an integral part of the Special Education curriculum of McKinley Park School.

Project funding has enabled the school to purchase physical education equipment otherwise not available through district funds.

The Students

All but two students of the 85 students enrolled in McKinley Park participated in the program. They were instructed in specific exercises and ERCAPEP games designed to the project's objectives. Previous to the project, the students received no specifically designed program, instead they had "play" activities.

Classroom teachers' comments on observable student behavior changes include: "I can see better posture and walking." "Some of my students display improved self-confidence."

For some students, participation in any activity of the project was considered a major change in their behavior.

The Staff

The teaching staff at McKinley Park has been made aware of the importance of structured physical activity in the over-all curriculum for the trainable mentally retarded student. They have cooperated with scheduling problems, have encouraged the project's teacher, and have expressed their pleasure with the program.

The Community

The program generated community interest in Developmental Physical Education for the Trainable Mentally Retarded. Parents of enrolled students visited the program and telephoned Mr. Gray to comment on their child's activities at home that are a direct result of the program.
For example, a mother called and expressed her surprise when her child began doing toe touches at home.

Staff personnel from the College of Education, University of Nevada, Reno, visited the program. As a result, Special Education students in the College are required to observe the program as part of their instruction.

The Future Teachers of America Clubs of the Reno and Wooster High Schools also visited the program.

2. The following activities were stimulated as a spin-off of the original Title III activity in:

The School Program

The classroom teachers use some of the Adaptive Physical Education activities as learning situations in their curriculum. For example, one class made bean bags for the Adaptive Physical Education program. One teacher used the toe-touch to introduce counting. The program's activities are now incorporated into the entire school program as a basic part of instruction.

The Students

The program's activities have been carried to the students' home environment. Parents report their children are demonstrating the Adaptive Physical Education program activities.

During recess periods, activities learned in the Adaptive Physical Education class are seen on the playground. For example, students play catch, race one another, and jump rope.

The Staff

Some classroom teachers used the project's teacher as a resource person. Some teachers have expressed surprise at the accomplishments of their students, consequently, have revised their own classroom programs.
The Community

Parents observing the program have asked for instructions that they may use as family activities. Parents have expressed their desire for an expansion of the program to include such activities as swimming and skating, activities previously thought beyond the trainable mentally retarded capabilities.

3. The only significant factor that could have helped the program become more effective would have been the availability of pertinent information on similar programs for the trainable mentally retarded. Since the review of related literature revealed a scarcity of data concerning established norms for the trainable mentally retarded, the project's first year was necessarily devoted to this task.

4. There were no project activities that were related to other federally funded activities in the Washoe County School District.

5. This project was based on the identification of an educational need. The extent to which this need has been met together with supportive data is as follows:

The need as identified in the original Title III application was "a new and innovative" procedure to physical education for the trainable mentally retarded. By contrast to previous physical education programs that relied on initiative and diagnostic procedures, this Title III project implemented Adaptive Physical Education as its procedure. The project's objectives were established as a measure of the success or failure of Adaptive Physical Education as a new and innovative approach to physical education for the trainable mentally retarded.

Objective data supporting the approach is listed in previous pages.
Subjective data supporting the program's success is reflected in the following statements of classroom teachers:

Extremely helpful for coordination and depth perception. Peer group interaction has increased since the program started. Very pleased with the teacher and the program.

Wilma McCulloch, Teacher
Primary Group

Very useful with the cerebral palsy children in my classroom. Group activities became easier to conduct. Noticeable improvement in posture and gait. Particularly pleased with individual attention given students.

Carla Pendil', Teacher
Primary Group

Physical activities introduced in the program are being used in my classroom to reinforce learning. Pleased and surprised with the physical accomplishments of my students.

Marjorie Menke, Teacher
Primary Academic Group

The program has increased body awareness for my students and has contributed to my knowledge of physical education. I am amazed at the physical activities my students are capable of performing.

Patricia Stark, Teacher
Physically & Mentally Handicapped

Really very pleased with the program. The organized developmental procedures were introduced for the first time in the school. I see the program as an integral part of the entire school's curriculum as a coordinated effort.

Ruth Papke, Teacher
Intermediate Group

My students have enjoyed participating in structured physical education. We have 100 percent participation where previously only 60 to 70 percent. I see developing a desire to attempt new activities that were feared previously. The teacher has demonstrated a high level of creativity to maintain interest and motivation.

Frances Martin, Teacher
Upper Level Group
C. Dissemination

1. The Nevada State Title III Committee visited the Project during the school year. The members completed a visitation report, and comments and recommendations were reported back to the project staff.

The Committee members are representatives of Clark, Washoe, Nye, and White Pine Counties and varied occupations. Dissemination is assured to many state areas and several walks-of-life.

The project was publicized at the Annual Institute Day of the Washoe County School District Special Education Section. The Institute Day program served counties in Northern Nevada, thus assuring dissemination to a large geographical area.

Personnel of the Special Education Department, University of Nevada, Reno, visited the program and described the program's activities to Special Education classes. University students enrolled in Special Education were required to visit the project.

Available parents of students in the project were invited to visit McKinley Park School to observe their child's participation. Parents visiting the project expressed satisfaction with the program.

Staff Members of the Mental Retardation Center also visited the program. Some activities from the project were incorporated in the Center's recreational program.

2. The dissemination activity considered most effective was the parents' visitations. The parent-teacher-student relationship resulting from the visitations increased the effectiveness of the program. Greater understanding of the child's capabilities enabled the teacher to implement the Adaptive Physical Education procedure.
3. The Annual Institute Day was attended by 125 education personnel from the project area. The project's teacher explained the procedures, objectives, and evaluation of the program. Small group discussion periods were held and the project teacher was available for questions.

The Director of Special Education, University of Nevada, Reno, and staff visited the project.

4. Examples of disseminated materials are listed in E.#2a.

5. There were no dissemination activities charged to salaries, contracted services, travel, equipment, supplies or other expenses.

6. The first year of the project was necessarily exploratory in nature. This precluded any school districts in Nevada or elsewhere in the United States from adopting any new educational practices as a result of receiving information about this project.

D. Evaluation

1. There were no standarized or commercial instruments used in the evaluation.

2. An Adaptive Physical Education Individual Skill Test was developed to collect data for this project. It was effective to the extent that an individual average was established for each skill and an expectancy to be predicted for FY-74.

   A teacher-made chart was developed to show the knowledge of rules, safety procedures, and health habits of selected activities.

   The chart was effective to the extent it showed those students able to participate in the activity with poor, fair, or good understanding of rules, safety procedures, and health habits.

3. There were no evaluation expenditures charged to salaries, contracted services, travel, equipment, supplies or other expenses.

4. The Adaptive Physical Education Individual Skill Test, the teacher-made "Knowledge Chart," and the activity instruction cards were the instruments used for on-going program evaluation (See E. #2a).
5. Evaluation results for Objective 1 resulted in eliminating the 300-yard walk/run. During the first three months of the project, it was found that students became disoriented as to direction and there was considerable time loss at turn-around points.

The Adaptive Behavior Scale Evaluation Form was found to be inaccurate in measuring Objective 3. The form may indicate "No Change" where none may exist. For example, the form requests a check mark for Personal Appearance, either "Some Improvement," "Considerable Improvement," or "No Change." A student with good personal appearance prior to participation in the project would be marked "No Change." An independent observer of the mark would assume the project failed in this area (See E. #2a).

Further, the terms "Some Improvement" and "Considerable Improvement" are ambiguous and have specific meaning only to the teacher involved.

At mid-year the project supervisor, project teacher, and classroom teachers discussed the form and Objective 3. The objective was considered unmeasureable due to the many variables of classroom behavior and the Behavior Scale was considered inaccurate and ambiguous. Consequently, Objective 3 and the Behavior Scale were eliminated from the project.

6. During the initial year of the project, base lines were established on the six items of Objective 1's procedures. The establishment of the base lines for individual students was conducted by the teacher and teacher aide.

Evaluation procedures for the teacher selected activities of Objective 2 were conducted by the teacher and teacher aide.

7. Other than the ESEA Title III Application for Continuing the Project and the project's evaluation procedures, there was no evaluation report due to the initial year of the project.
8. The Washoe County School District shall continue the evaluation of the project through the project director. Evaluation procedures of the project, and objective and subjective data shall be monitored to determine the success or lack of success for the project.

E. 1. No consultants were employed during FY-73.

2. Materials

   a. Adaptive Physical Education Individual Skill Test. The test records student progress or lack of progress on the six items for testing. Teacher-made Knowledge of Rules, Health Habits, and Safety Procedures Charts record as "Good, Fair, Poor," and the number of students. Instruction Card. Records the method and degree of instruction for an activity.

   b. 1% curriculum materials were produced for the students.

3. There were no community agencies cooperating with the project during FY-73.
INSTRUCTION CARD

JUMPING JACKS

Develops body awareness, direction, muscular development, concentration, and learning of body parts.

1. Learn to place hands on hips (emphasis on hips)
2. Learn to place feet together and feet apart (emphasis on words together and apart)
3. Learn to raise arms up and to lower arms down (emphasis on up and down)
4. Learn feet together--arms down
5. Learn feet apart--arms up

Steps No. 4 and No. 5 are practiced together

Speed of counting jumping jacks depends on the level of each class. It takes the average exceptional child (TMR) up to six months to learn all five steps.

GAME: Do As I Do; Statue

RATING: Good - Fair - Poor

NAME: 

<table>
<thead>
<tr>
<th>Knows Rules</th>
<th>Knows Safety Procedures</th>
<th>Knows Health Habits</th>
</tr>
</thead>
</table>

Do As I Do
Statue
Dear Parent:

This year, McKinley Park School was selected for an ESEA Title III Federal Program of Developmental Physical Education. This program is designed to improve general physical fitness and improve motor skills. Each child is given individual as well as group instruction in general conditioning exercises, fundamental movements, and measurable and scoreable events.

I would like to extend an invitation to you to observe your child's participation in what we feel is a very successful program. Please call McKinley Park School, 322-3311, to determine the time your child is in the program.

I am looking forward to your visit.

Sincerely,

Robert L. Gray, Principal
McKinley Park School
<table>
<thead>
<tr>
<th>MONTH</th>
<th>ACTIVITY</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep</td>
<td>Flexed Arm Hang (Sec.)</td>
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<tr>
<td>Oct</td>
<td>Shuttle Run (Sec.)</td>
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</tr>
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<td>Nov</td>
<td>50 Yard Dash (Sec.)</td>
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</tr>
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<td>Dec</td>
<td>300 Yard Hurdles (Sec.)</td>
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</tr>
<tr>
<td>Jan</td>
<td>Softball Throw (Ft.)</td>
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</tr>
<tr>
<td>Feb</td>
<td>Standing Broad Jump (Ft.)</td>
<td></td>
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</tr>
<tr>
<td>Mar</td>
<td>Sit-Ups (No.)</td>
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<td>Apr</td>
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