The purpose of this study was to characterize the behavior of 2-, 3-, 4-, and 5-year-old children engaged in improvisational musical tasks. Ten subjects from each of the four age levels participated in the 4-year investigation, which lasted until the 2-year-olds reached 5 years of age. Children met individually with the investigator for 15 minutes at a time; each session involved three improvisational phases. During phase one, free exploration, each child was given a free opportunity to explore the xylophone. During phase two, guided exploration, the children's explorations were directed through two improvisational tasks: "let's pretend" (to evoke different emotions) and "conversations." During phase three, exploratory improvisation, the child was asked to improvise a melody while the investigator played a 24-measure bordun accompaniment. All sessions were recorded on cassette tape, and notes were written after each session. Results lent support to prior research indicating that characteristics of children's improvisations change in relation to chronological age. Improvisations were grouped into three stages. Stage one, motor energy, was characterized by plodding and accented durations. Stage two, experimentation, was characterized by the child's experimenting with many phrases and combinations. Stage three, formal properties, was characterized by repetition, larger formal structures, and decentered perception. Results were discussed in terms of implications for teaching practice. (CB)
YOUNG CHILDREN'S IMPROVISATIONS:
A LONGITUDINAL STUDY

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The purpose of the study was to characterize and describe the behavior of two-year-old, three-year-old, four-year-old, and five-year-old children engaged in improvisatory tasks. Forty subjects, ten from each of the four age levels, participated in the study. The study lasted four years until the two-year-old children became five years old.

The children met individually with the investigator for fifteen minutes; each session involved three improvisatory phases. During phase one, free exploration, each child was given the opportunity to explore the xylophone freely. During phase two, guided exploration, the children's explorations were guided through use of two improvisational tasks. During phase three, exploratory improvisation, the child was asked to improvise a melody while the investigator played a twenty-four measure bordun accompaniment. All sessions were recorded on cassette tape and notes were written after each session.

The results of the study lend support to the prior research finding that characteristics of children's improvisations change in relation to the child's chronological age. The improvisations were grouped into three stages. The stages are more dependent on the child's musical development than age. A young child begins with improvisations dominated by motor energy and moves toward improvisations with distinct formal properties.

Stage one, motor energy, is characterized by plodding and accented durations. Stage two, experimentation, is characterized by the child's experimenting with many phrases and combinations. Stage three, formal properties, is characterized by repetition, larger formal structures, and decentered perception.
The work of Pond and others at the Pillsbury Foundation is perhaps the earliest work in musical improvisation behavior of two to six-year-old children (Pillsbury Foundation, 1978). In general, Pond found that young children were not predisposed to make pretty, symmetrical tunes, but rather patterns, shapes, and structures whose elements are rhythmic figures and intervals. Gaudreau-Slater and Prével (1978, 1973) observed three to thirteen-year-old musically naive children in a room with simple instruments and drawing materials. He found a narrow correlation between the children's musical development and the main stages of their motor, emotional, and mental development.

In a recent study four, six, and eight-year-old children's improvisations were analyzed according to melodic, rhythmic, formal, timbral, and dynamic elements (Flohr, 1981). Characteristics of the children's improvisations changed in relation to their chronological age. In general, the four-year-old child's attention was focused on the sound itself. The older children improvised larger formal structures as their perception became decentered.

The final year of this study was funded by Texas Woman's University Research Associate Award.
METHOD

The purpose of the study was to characterize and describe the behavior of two-year-old, three-year-old, four-year-old, and five-year-old children engaged in improvisatory tasks.

Each child was given the opportunity to improvise on an Orff xylophone using a two octave pentatonic scale comprising the pitches c, d, f, g, and a. The children met individually with the investigator for fifteen minutes; each session involved three improvisatory phases. During phase one, free exploration, each child was given the opportunity to explore the xylophone freely. During phase two, guided exploration, the children's explorations were guided through the use of two improvisational tasks. Task one, Conversations, was explained to the child, "Let's pretend we are talking with the instruments. I'll say something with my xylophone and you can answer with your xylophone." In task two, Let's Pretend, the investigator said, "Let's pretend you are mad (sad, happy). Play as if you are mad (sad, happy)." During phase three, exploratory improvisation, the child was asked to improvise a melody while the investigator played a twenty-four measure bordun accompaniment. All sessions were recorded on cassette tape and notes were written after each session.

Ten children from each of the four age levels served as subjects. The investigator met with the children between the ages of two and five each year for four years. Four children participated for four years, eight children for three years, seven for two years, and ten for one year. All the children were enrolled in the Child Development Laboratory of the Texas Woman's University, Denton, Texas. The parents of the children were students, staff and faculty of the University.
RESULTS

The two-year-old's improvisations were dominated by motor energy (Figure 1). They typically struck the xylophone bars in a plodding even fashion. The average time of free exploration was 82 seconds. The improvisations during Conversations were usually like the free explorations.

During Let's Pretend only one two-year-old changed the improvisation in response to the verbal stimuli. No formal elements were clear. The two-year-old seems to be interested in the sound itself. It was as if the child asked, "If I hit this bar, what will it sound like?"

The three-year-old's improvisations differed from the two-year-old's in formal and rhythmic elements. They were able to control the mallets better than the two-year-olds. The average time of free exploration was 71 seconds. The improvisations during Conversations often contained imitation; the rhythm and occasionally the direction of the investigator's phrases were imitated. During Let's Pretend two children made small changes in response to the verbal stimuli.

The four-year-old's improvisations contained more repetition, similar phrases, and one instance of ostinato. The average time of free exploration was 95 seconds. During Conversations several children imitated the investigator's phrases exactly and often inverted his melodic movement. Two of the children changed their improvisation in response to the verbal stimuli during Let's Pretend.
### Figure 1. Summary of Children's Exploratory Improvisations

<table>
<thead>
<tr>
<th></th>
<th>Two-Year-Olds</th>
<th>Three-Year-Olds</th>
<th>Four-Year-Olds</th>
<th>Five-Year-Olds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pitch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stepwise motion</td>
<td>repeated pitches</td>
<td>repeated pitches</td>
<td>repeated pitches</td>
<td>repeated pitches</td>
</tr>
<tr>
<td></td>
<td>often entire range</td>
<td>usually entire range</td>
<td>explored entire range</td>
<td>explored entire range</td>
</tr>
<tr>
<td></td>
<td>not tonal</td>
<td>not tonal</td>
<td>not tonal</td>
<td>occasionally tonal</td>
</tr>
<tr>
<td><strong>Rhythm</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate, even</td>
<td>inaccurate--</td>
<td>moderate, even</td>
<td>moderate, even</td>
<td>moderate, even</td>
</tr>
<tr>
<td></td>
<td>motor energy</td>
<td>some triple</td>
<td>fairly accurate</td>
<td>some triple</td>
</tr>
<tr>
<td></td>
<td>matched bordun rhythm pattern</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not evident</td>
<td></td>
<td>some repetition</td>
<td>some repetition &amp; ostinato</td>
<td>rhythmic repetition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>common</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>also melodic repetition</td>
</tr>
<tr>
<td><strong>Timbre</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No experimentation</td>
<td></td>
<td>little experimentation</td>
<td>little experimentation</td>
<td>little experimentation</td>
</tr>
<tr>
<td><strong>Dynamics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interested in</td>
<td>no experimentation</td>
<td>no experimentation</td>
<td>no experimentation</td>
<td>no experimentation</td>
</tr>
<tr>
<td>Sound itself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Note:**
- "Stepwise motion" refers to moving from one pitch to another in a stepwise fashion.
- "Repeated pitches" indicates the repetition of a particular pitch.
- "Not tonal" suggests that the improvisations do not conform to a clear tonal structure.
- "Moderate, even" refers to a pace that is neither too fast nor too slow, maintaining a steady rhythm.
- "Rhythmic repetition" and "also melodic repetition" indicate patterns of rhythm and melody that are repeated throughout the improvisation.
The five-year-old's improvisations differed from the younger children in their preference for f' tonality and their use of rhythmic repetition. The average time of their free exploration was 100 seconds. During Conversations they often imitated the rhythm of the investigator's phrases. During Let's Pretend most of the five-year-olds changed their improvisations in response to the verbal stimuli.

DISCUSSION

The results of the study lend support to the prior research finding that characteristics of children's improvisations change in relation to the child's chronological age. First, a change from few clear formal elements to a large amount of repetition became evident when the four age groups' improvisations were examined. Second, the older children spent more time in free exploration than did the younger children. Perhaps the four and five-year-old child should be given longer opportunities to freely explore instruments. Third, some of the five-year-olds demonstrated a preference for f' tonality. Fourth, the two-year-old child's playing was dominated by motor energy while the older child's playing contained more durations and was more accurate. Although all the age groups improvised music which was rhythmically complex, the younger child's interest was evidently the sound itself. The older child's interest begins to be directed toward formal properties. Fifth, the four and five-year-old children are able to form musical images to verbal stimuli. For them games such as "Play as if you are mad, happy, sad" may be useful to initiate improvisation.
Two Years Old

Measures in which the child did not play exactly on the beat are indicated by broken bar lines.

Figure 2. Subject E's Improvisations
Figure 3. Four-year-old's improvisation - fourth session*

*Measures in which the child did not play exactly on the beat are indicated by broken bar lines.

Figure 4. Eight-year-old's improvisation - ninth session*

*Measures in which the child did not play exactly on the beat are indicated by broken bar lines.
The improvisations may be grouped into three stages. Stage one, motor energy, is characterized by plodding and accented durations. A child typically plays in an even fashion and often repeats pitches (Figure 2). Pond described a similar behavior that resulted in a pendulum-like regularity (Pillsbury Foundation, 1978).

Stage two, experimentation, is characterized by the child experimenting with his or her own capacity for sound. The improvisations may contain the bordun rhythm, quarter-note triplets, asymmetrical phrases, stepwise motion, related pitches, and occasionally sequence, inversion, variation, and repetition (Figure 3).

Stage three, formal properties, is characterized by repetition, larger formal structures, and decentered perception (Figure 4). Comparison of subject E's improvisations at two and five years illustrates changes over a four year period (Figure 2). Her first year improvisation is a typical example of Stage one, motor energy. Her improvisation at five years old indicates her development toward formal properties.

All of the children improvised music which was unique. Young children enjoy making their own music and may be encouraged to improvise music on many instruments and with their own voices. By incorporating improvisatory experiences into the preschool program the teacher will help develop the individuality of free expression.
REFERENCES

Flohr, John W.  *Musical Improvisation Behavior of Young Children.*

