Myth or Truth: The Mozart Effect

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Baby Einstein was founded in 1996 by a mother, Julie Aigner-Clark, who used to be an art and literature teacher. She could not find any available products that could enrich the play experience between her and her baby daughter. Julie started Baby Einstein in order to share her love of art, classical music, language, and poetry with her daughter.

Now, Baby Einstein products are available in CDs, tapes, toys, and videos in toy stores and baby stores. Baby Einstein has a wider market share than Baby Mozart because DVD series have been marketed by Walt Disney.

Baby Einstein was merged into Baby Mozart.

Quote: “Baby Einstein, founded in 1997, was one of the earliest players in what became a huge electronic media market for babies and toddlers. Acquired by Disney in 2001, the company expanded to a full line of books, toys, flashcards and apparel, along with DVDs including “Baby Mozart,” “Baby Shakespeare” and “Baby Galileo.” (Lewin, New York Times)

The Mozart Effect is the idea that listening to Mozart boosts a young child’s overall IQ.

The Mozart Effect was first introduced by Dr. Alfred Tomatis, a Parisian physician, psychologist, and educator.

Dr. Tomatis hypothesized that the lack of sound stimulation or abnormal stimulation in utero and/or in early childhood can cause delays in communication skills and promotes aberrant behaviors.

Dr. Alfred Tomatis was a French physician who specialized in otorhinolaryngology. He was born on January 1\textsuperscript{st}, 1920 and died on December 25\textsuperscript{th}, 2001.

His discoveries on the ear and the voice were made at La Sorbonne in a physiology laboratory. His discoveries were then presented to the Academy of the Sciences and the Academy of Medicine in Paris in 1957 and 1960.

Selling the Mozart Effect

Link for purchasing DVDs, CD, tapes of Baby Einstein with Baby Mozart: http://www.amazon.com
Mozart Music for Children-Classical Music Effects

- Click Here: https://www.youtube.com/watch?v=ebr-afDM1lo

Link out for Mozart music:
2004 Baby Mozart Festival

http://www.bing.com/videos/search?q=link+out+Mozart+music&view=detail&mid=005AC26F7FE3CC9E7356005AC26F7FE3CC9E7356&FORM=VIRE&adlt=strict
In 1998, Gov. Zell Miller (of Georgia), proposed $105,000 a year in the state budget to provide every child born in Georgia with a tape or CD of classical music.
This presentation will discuss studies on the Mozart effect conducted on children.
Study 1: Mozart Effect Actually Boosted Paper-Folding and Cutting skills

Method:
• 36 undergraduate students listened to a relaxation tape, a Mozart Sonata, or silence.
• Students were given three spatial reasoning tasks from the Stanford-Binet tests.

Results:
• Professor Gordon L. Shaw concluded that the students who listened to Mozart boosted their IQ scores by an average from eight to nine points.

I thought this was interesting to read that the Mozart Effect worked on paper-folding and cutting skills. However, I would be interested in finding out more if the Mozart Effect works for other specific activities.

Study 2: Again, Does Listening to Mozart Boost Spatial Abilities?

Method: In 1993, Professor Frances Rauscher conducted an experiment where his subjects listened to ten minutes of Mozart Sonata for ten minutes.

Results: Dr. Rauscher claimed that after subjects listened to two of Mozart’s Sonatas for ten minutes, they showed better spatial reasoning skills. However, this time, the enhancing effect only lasted 10-15 minutes.

In 1995, Rauscher, Shaw, and Ky reproduced their original Mozart Effect experiment. They divided 79 students into three groups.

This time a music by composer Phillip Glass was substituted for the relaxation tape. The group that listened to the Mozart music demonstrated an increase in spatial IQ scores.

Reflection for Studies 2 and 3:

My take on this is that testing the Mozart Effect on spatial abilities would need to be conducted more often. For this type of experiment, evidence would also need to show that the enhancing effect lasts a lot longer in regards to Mozart music and spatial abilities. For example, it would need to make a positive effect for several months in order to claim that Mozart music helps improve spatial reasoning skills.

Does the Mozart Effect work with first-grade students in regards to reading comprehension?

At the end of the first session of the three weeks of the Mozart Effect experiment, first graders completed a reading test consisting ten multiple-choice questions with a CARE test.

Another three-week session was conducted and the students were given another reading test of ten multiple-choice questions as well as a CARE test. At the end of the second three-week session, the researcher found that there was a significant difference at the 0.05 level of significance for reading and CARE.

This did not show much of a difference in the students reading levels. However, the researcher found that during CARE, music helped the students.

Reflection

Researchers found that no music helped the children during reading. In the article, it discusses about how researchers concluded that this was because the music used during the reading may have been too loud for the students while the teacher was talking. Apparently, during the treatments of music, the researchers noticed that the children’s behavior was better than when the traditional methods of teaching were used.

This suggests to me that listening to classical music calms children down but does not significantly help them read better.

Results of the Mozart Effect

<table>
<thead>
<tr>
<th>Condition</th>
<th>Pattern Analysis M</th>
<th>Pattern Analysis SD</th>
<th>Matrices M</th>
<th>Matrices SD</th>
<th>Paper Folding M</th>
<th>Paper Folding SD</th>
</tr>
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<tr>
<td>Music</td>
<td>56.08</td>
<td>2.27</td>
<td>53.25</td>
<td>7.35</td>
<td>63.33</td>
<td>2.19</td>
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<tr>
<td>Relaxation</td>
<td>55.17</td>
<td>2.44</td>
<td>52.17</td>
<td>4.67</td>
<td>56.50</td>
<td>5.76</td>
</tr>
<tr>
<td>Silence</td>
<td>54.25</td>
<td>3.44</td>
<td>52.60</td>
<td>5.96</td>
<td>55.17</td>
<td>5.97</td>
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Table 1: This is a table showing the ANOVA output for the effects of classical and dubstep music on reading comprehension performance. Important to note from this table is the mean test score for classical music is higher than the mean test score for dubstep music, and the p-value shows significance. In regards to the mean squared error values, the smaller value for within groups (MS=2.16959) indicates smaller variance within each group, while the larger number for between groups (MS=15.15789) indicates larger variance between the two music types.

Reference for graphs: Google Images
Does the Mozart Effect Work in Some Populations More than Others?

The Mozart Effect may work on any population. It specifically helps with performing spatial-ability tasks and paper-folding and cutting skills.

References:
Conclusion:

It is now established that the Mozart Effect boosts paper-folding and cutting skills. There is a possibility that Mozart music also improves spatial IQ. However, for this specific task, the Mozart Effect would need to be tested for a period of six or twelve months for example in order to see a bigger enhancing effect.

In the meantime, the Mozart Effect helps with relaxation and calming down when involved in more stressful situations, such as having an overwhelming schedule.
References


References:


