



Title Registration for a Systematic Review: Montessori Education for Improving Academic and Behavioral Outcomes Among Elementary Students

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Date Submitted: 30 December 2013

Date Revision Submitted: 21 January 2014

Approval Date: 27 January 2014

Publication Date: 03 March 2014

TITLE OF THE REVIEW

Montessori Education for Improving Academic and Behavioral Outcomes Among Elementary Students

BACKGROUND

Lillard and Else-Quest (2006) estimate that there are at least 5,000 Montessori programs in the United States. Of those, at least 300 are based in public schools. While there have been narrative reviews of Montessori research (Jones, 2005; Boehnlin, 2001), there has not been a high-quality meta-analytic review of the empirical research. The proposed meta-analysis will help the public and the research community make more informed decisions on Montessori education by collecting, collating, and synthesizing the empirical research on Montessori education.

OBJECTIVES

The objectives of this review will be to compare the effects of Montessori education versus traditional education on academic and behavioral outcomes for elementary students.

INTERVENTION

According to Lillard and Else-Quest (2006) “Montessori education is characterized by multi-age classrooms, a special set of educational materials, student-chosen work in long time blocks, collaboration, the absence of grades and tests, and individual and small group instruction in both academic and social skills” p. 1893. The comparison will be between elementary students in Montessori programs and students in traditional public schools.

What is given, by whom and for how long?

The Montessori intervention is given by teachers who are usually certified by one of the major Montessori instructor preparation programs (e.g., Association Montessori Internationale (AMI), American Montessori Society (AMS), and others).

Outline possible variations of the intervention

Because there are various Montessori teacher training and accreditation programs (e.g., AMI, AMS, and others), we expect that there will be slight variations in how these teachers implement Montessori education. Also, the settings for Montessori can vary. Most Montessori programs are private, but over 300 programs have been implemented within public schools.

POPULATION

The population for this study will be students in upper and lower elementary Montessori programs. The contrast group will be elementary students in traditional education programs. Those students will generally be aged from 5 to 12 years old. There will be no restriction on the geographical location, but we expect most studies will come from North America and Europe. The comparison condition is traditional schooling in public schools.

OUTCOMES

We predict that most Montessori research will measure academic achievement through standardized or teacher-made tests and will use quantitative scales or observations for behavioral outcomes.

The primary outcomes will be academic achievement in numeracy and literacy. Secondary outcomes will be academic achievement in other subjects and on behavioral outcomes such as social development, curiosity, and inventiveness, as have been included in narrative Montessori reviews. A possible moderating variable that we would like to include is students' socio-economic status. We will concretize the outcomes as we review more of the research.

STUDY DESIGNS

Research that uses experimental or quasi-experimental study designs to compare academic and behavioral outcomes of elementary students in Montessori programs compared to students in traditional public elementary programs will be included in the review. We intend for the measures of academic achievement to be standardized or teacher-made test results and various quantitative measures of behavioral outcomes.

Inclusion criteria

- The researchers must have used an experimental or quasi-experimental methodology.
- The study must report results of primary and or secondary outcomes in such a way that an effect size can be determined.
- The comparison must be between elementary students in traditional programs and elementary students in Montessori programs.

Exclusion criteria

- Correlational and qualitative studies will not be included in this meta-analysis.
- The study must be reported in English.

Method of synthesis

The meta-analytic method described in Lipsey and Wilson (2001) will be used. The decision

to use a fixed-effects or random-effects model for each outcome will be determined separately for each outcome.

REFERENCES

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ROLES AND RESPONSIBILITIES

- Content: deb leigh walls rosenstein
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FUNDING

Internal funding:

None

External funding:

None

POTENTIAL CONFLICTS OF INTEREST

The spouse of the lead reviewer is employed at a private Montessori school.

PRELIMINARY TIMEFRAME

The draft protocol will be submitted no longer than sixth months after title approval.

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