

## **Montreal Prevention Program**

This delinquency prevention program for disruptive elementary school boys was found in a well-conducted randomized controlled trial to produce a 42% increase in their likelihood of graduating high school and a 33% reduction in their likelihood of having a criminal record, 17 years after random assignment.

### **I. Description of the Intervention:**

The Montreal Prevention Program was a two-year delinquency prevention program for disruptive boys aged 7-9 and their families, which was developed specifically for the evaluation described below. The program had two components: (i) a social skills training program, administered at lunch time during school, which grouped disruptive children with non-disruptive classmates in small groups to teach behavior modification skills, and (ii) a home-based parent training program which taught parents effective behavior monitoring and disciplinary strategies.

The program's cost has not been reported.

### **II. Evidence of Effectiveness:**

#### **Evaluation Method: A single-site randomized controlled trial of the Montreal Prevention Program, with follow up 17 years after random assignment.**

This was a randomized controlled trial of 319 kindergarten boys who were rated by their teachers to be above the 70th percentile in disruptive behavior, and were randomized to one of three groups: (i) a group that received the Montreal Prevention Program; (ii) an attention-control group, in which families did not receive the program but were periodically observed in the university lab and their homes over a two-year period; and (iii) a no-treatment control group.

In the study follow-ups over the next 17 years, the study evaluated the program's impact on the subgroup of 259 boys whose parents had less than 15 years of education and were of French-Canadian descent. The researchers regarded this subgroup – disadvantaged boys from Montreal's largest ethnic group – as being of primary research and policy interest. Most study reports compared the Montreal Prevention Program group to the two control groups combined since the two control groups did not significantly differ in their outcomes at any follow-up.

The following are the effects on all main outcomes measured in the study, including any such outcomes for which no or adverse effects were found. All effects shown are statistically significant at the 0.05 level unless stated otherwise.

#### **Effects of the Montreal Prevention Program at the age 12-17 follow-ups – i.e., 5-10 years after random assignment:**

Over this period, the study found promising, but not entirely consistent, effects on classroom disruptiveness, placement in an age-appropriate regular classroom, conduct disorder diagnoses, and delinquency, compared to the control groups. However, during this time period a sizable number of sample members were lost to sample attrition, and attrition rates differed between the program and control groups, reducing confidence in the study findings. Thus, we do not summarize these interim

results in detail. The longer-term results did not suffer from this limitation, and are summarized immediately below.

**Effects of the Montreal Prevention Program at the age-24 follow-up – i.e., 17 years after random assignment:**

Compared to the control groups, Montreal Prevention Program group members were:

- 42% more likely to have graduated high school by age 24 (46% of the Montreal Prevention Program group had graduated versus 32% of the control group); and
- 33% less likely to have a criminal record (22% of the Montreal Prevention Program group had a criminal record versus 33% of the control group). *This effect was statistically significant at the 0.06 level, but not the 0.05 level.*

**Discussion of Study Quality:**

- The Montreal Prevention Program and control groups were highly similar in observable pre-program characteristics (e.g., family structure, classroom disruptiveness, parental education).
- The study had a long-term follow-up with very low sample attrition: At the age-24 follow-up, outcome data were collected for 96% of the eligible study sample that had been randomly assigned.
- At the age-24 follow-up, the study measured outcomes for all members of the Montreal Prevention Program group regardless of whether or how long they participated in the program (i.e., the study used an intention-to-treat analysis).
- Outcomes for the age-24 follow-up were measured using official high school graduation and criminal records reported by independent organizations (i.e., the Ministry of Education and the Ministry of Public Security). At earlier follow-ups, youths' behavioral and educational outcomes were measured through a combination of administrative records and surveys of youths, parents, and teachers.
- Study limitations:
  - The Montreal Prevention Program was developed for the purpose of this research study, with researchers closely involved in its implementation. We do not yet know if the above results can be replicated on a broader scale in more typical (less controlled) classroom settings.
  - Two additional program components were provided to some of the Montreal Prevention Program group members, but not all (due to funding constraints). Specifically, 50% received training on how to be less aggressive when playing, and 20% received training in viewing television more critically. In defining the program for replication purposes, it isn't clear whether these components should be included, as they may or may not have been active ingredients causing the observed effects.
  - The study reports vary somewhat in how many children they report were in the eligible study sample at the time of random assignment, with this number ranging from 243 to 259. The reason for this variation is unclear.

### **Thoughts on what more is needed to build strong evidence:**

A second well-conducted randomized controlled trial, preferably conducted in more typical school conditions (e.g., with less researcher involvement in the program's implementation), to (i) rule out the possibility that the above findings occurred by chance; and (ii) confirm that this program is effective in other settings and conditions where it might typically be implemented.

### **III. References**

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