

Collateral benefits: Unintended consequences of the Roots of Empathy program

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Objective

Roots of Empathy is a school-based mental health program with demonstrated effectiveness in reducing bullying and aggression, and raising children's social/emotional competence and empathy. This study examines the program's impact on several longer-term health and social outcomes that are related to the program's goals, but not specifically targeted by the program's design or objectives.

Approach

This study used linked, de-identified administrative records of health, education, social service use and justice system involvement for children and youth in Manitoba who participated in the ROE program, along with a carefully matched comparison group. Propensity scores were used along with hard matching on key variables to ensure comparability of groups. Outcome measures encompass a broad array of health, educational, and social indicators including hospitalization for injury, teen pregnancy, high school graduation, involvement with the criminal justice system, and suicide attempts. Analyses were performed at the Manitoba Centre for Health Policy (MCHP), using SAS 9.4.

Results

Findings from analyses of data from the pilot study (N=688) reveal several 'collateral benefits' that may be related to the program, though most differences did not reach statistical significance in this initial sample. (Results from the full sample will be available May 2016; N 8000.) Compared to matched counterparts who did not receive the program, ROE participants had lower rates of teen pregnancy (6.6% vs 9.6%; p=0.19), and school grade repetition (2.4% vs 3.8%, p=0.09), and higher rates of high school graduation (77.7% vs 73.5%, p=.36). However, they also had higher rates of injury-related hospitalization

(6.4% vs 5.0%, p=0.14). Even in this small pilot, sub-group analyses for some outcomes showed significant differences for some strata but not others. Analyses of the full study group (underway) will provide more robust results.

Conclusion

These findings provide intriguing evidence suggesting beneficial impacts in several longer-term health and social outcomes that could feasibly be related to participation in the Roots of Empathy program. The multi-variable propensity scores and hard-matching algorithms used on this large group provide considerable confidence in attributing group differences to program participation. Results from the full sample will provide more conclusive results, and allow sub-group analyses. The linkage of databases from health, education, social service and justice systems provides a unique opportunity to examine the truly multi-dimensional long-term impacts of a program already proven to provide dramatic improvements in short and medium-term outcomes.

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