

Positive Psychology in the Israeli School System

Evaluating the Effectiveness of the Maytiv Center's Intervention Programs in Schools – Research Report

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Abstract

This report summarizes the findings of two wide-ranging research assessments that accompanied the implementation of the Maytiv Center's intervention programs at schools from 2010 to 2012. The studies were designed to examine the impact of the Maytiv Center's intervention program on the pupils that participated in them in comparison to a control group that consisted of pupils of the same age and from the same background as those who participated in the program.

The first was a study for the duration of the program. It followed 1,038 seventh- to ninth-graders at middle schools in the center of Israel for two years and examined changes in psychological symptoms such as changes in the levels of depression or anxiety with indices of emotional welfare that indicate the degree of optimism and satisfaction with life and with indices of self-apprehension that include self-image and self-efficacy. In this study, 537 pupils who participated in the program and 501 students in the control group filled out questionnaires before the intervention program began, at the end of the program, and during the school year after the conveying of the intervention content in the classrooms was completed. The four times when evaluations were performed made it possible to examine the intervention program's long-term effects as much as a year after its completion.

The second was a comparative study that examined the impact of the Maytiv Center's intervention program on 2,517 pupils from six middle schools around the country (1,262 program participants and 1,255 pupils in the control group). This study examined the long-term impact of the intervention program at different schools by measuring emotional welfare alongside measuring academic functionality, such as: investing effort in studies; emotional commitment to school; and academic achievements. In addition, the study examined the intervention's influences on the level of violence in the school as well as pupils' and teachers' reports on the educational atmosphere in the Israeli Ministry of Education's tests of growth and efficiency in schools.

The research findings demonstrated a clear correlation between participation in the intervention program and lower levels of emotional distress, which were expressed in a significant decrease in symptoms of depression, anxiety, and general distress as compared to the control group, which displayed an increase in symptoms of depression and general distress over time. In addition, significant correlation was found between participation in the program and a rise in positive emotions and optimism, improved self-image, and improved sense of self-efficacy. Furthermore, pupils that participated in the intervention program demonstrated a significant rise in the degree they invested in their studies, their emotional connection to the school, and the level of their academic achievements, as expressed in a clear rise in their grade point averages. Finally, among those who participated in the program, there was a significant decrease in reports of violent incidents and a sense of not feeling protected at school. In addition, an increase was found in reports of a positive educational atmosphere in the school among both pupils and teachers. The significant impact of the intervention program on the lives of pupils and teachers demonstrates the advantages of integrating elements from the positive psychology approach into the educational system in a formal and informal manner.

The research was conducted by the research staff of the Maytiv Center at the School of Psychology at IDC Herzliya. International academic journals are evaluating the research of the intervention program and research findings on the intervention for publication to the international academic community.

Research Findings

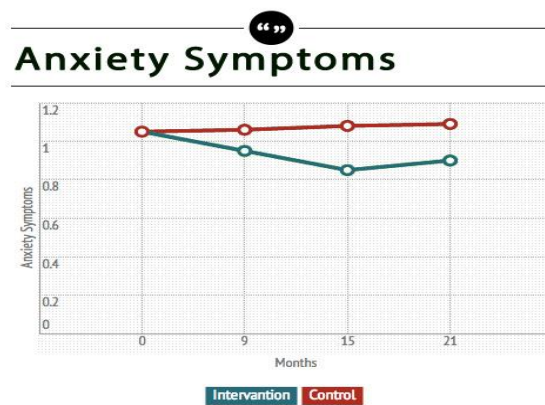
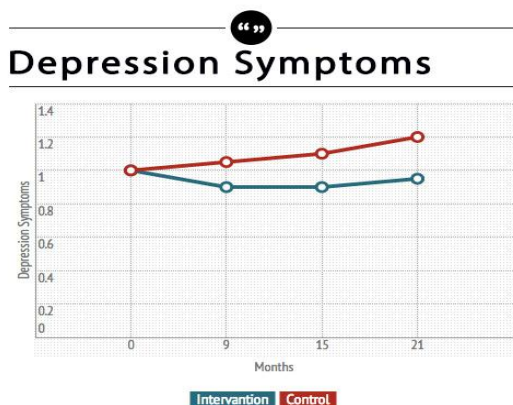
Study 1:

The study was conducted at a middle school in the center of the country and followed, for two years, 537 seventh- to ninth-graders who participated in positive psychology lessons for the duration of one school year in comparison to 501 pupils in the control group who participated in the standard lessons on society at another school that had a similar social and demographic profile. The pupils filled out a background questionnaire on demographics, a questionnaire on emotional symptoms (Brief Symptoms Inventory), a questionnaire on self-esteem (Rosenberg Self-Esteem Scale), a questionnaire on self-efficacy (General Self-Efficacy Scale), a questionnaire on satisfaction with life (Satisfaction with Life Scale), and a questionnaire that assessed their level of optimism (Life Orientation Test-Revised). These questionnaires were filled out at four times during 2010-2012 – the beginning of the academic year before the program began; at the end of the academic year when the formal intervention ended; and during and at the end of the following academic year – in order to assess the intervention’s long-term impact. The statistical analysis of the data is based on hierarchical, linear, long-term models (HLM longitudinal analyses) that made it possible to examine the change in variables during the two years that elapsed since the research began.

The Program’s Impact on Emotional Symptoms

The research findings indicate a significant decrease in psychological distress, symptoms of depression, symptoms of anxiety, and interpersonal sensitivity in the test group. In contrast, the control group demonstrated a pronounced rise over time in levels of depression and general distress and did not demonstrate a pronounced change in symptoms of anxiety or interpersonal sensitivity over time.

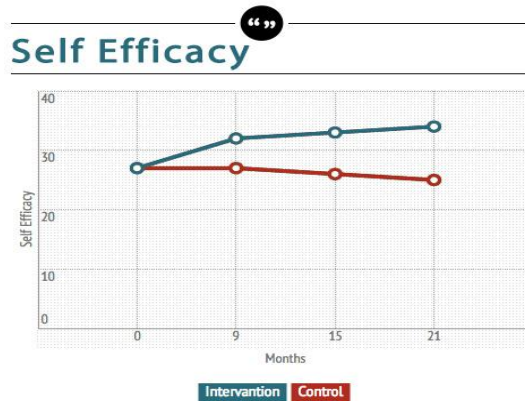
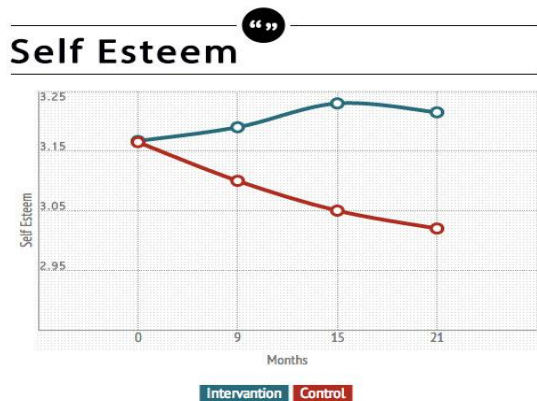
The change in levels of depression and anxiety in the test and control groups as a function of time appear below in charts 1 and 2:



Charts 1-2: Changes in Levels of Symptoms of Depression and Anxiety as a Function of Type of Intervention and Time

The Program’s Impact on Self-Perception

In addition to changes in the areas of emotional health, participants in the intervention program demonstrated a pronounced rise in self-esteem and their sense of self-efficacy over time, as compared to a decrease in these in the control group (charts 3-4). In addition, both groups showed a rise in optimism over time, but the rise was much more significant in the test group. Neither group demonstrated significant changes over time in satisfaction with life.



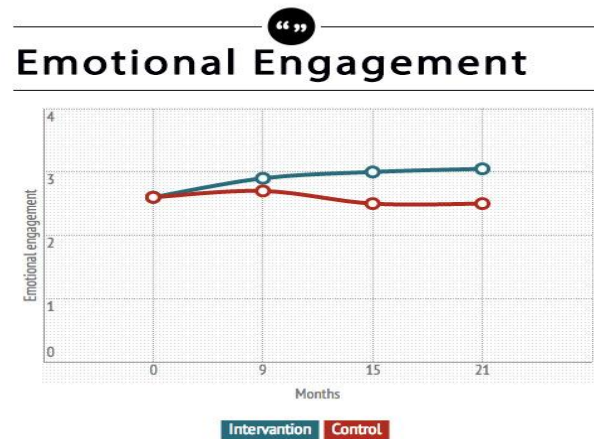
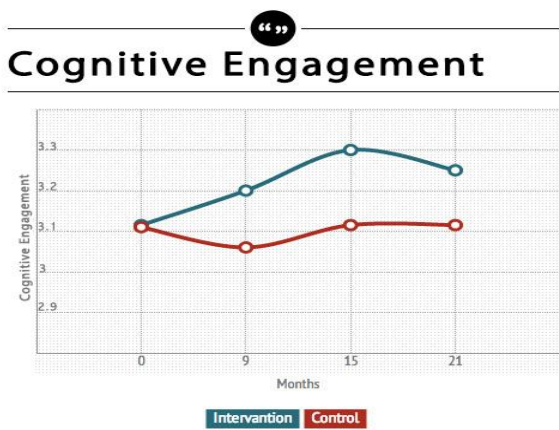
Charts 3-4: Changes in Self-Image and Sense of Self-Efficacy as a Function of Type of Intervention and Time

Study 2:

The study was conducted during the 2011-2012 academic year and examined the intervention program’s impact on 2,517 pupils in seventh to ninth grade at six middle schools around the country (1,262 program participants and 1,255 pupils in the control group). This research examined the program’s impact on emotional welfare alongside measuring academic functionality, such as: investing effort in studies; emotional commitment to school; and academic achievements. At each school, approximately two grades participated in the intervention program, while a similar number of grades participated in the standard lessons on society and served as the control group. The pupils filled out a questionnaire on demographic background, a questionnaire on satisfaction with life (Satisfaction with Life Scale), a questionnaire on positive and negative emotions (Positive Affect Negative Affect Scale), and a questionnaire that evaluated their level of commitment to school as demonstrated in the cognitive investment in learning, behavior at school, and sense of belonging at the school (National Center for School Engagement – NCSE, 2006). The pupils filled out the questionnaires before the intervention began and after it ended. Additional data was collected from a subsample consisting of 417 pupils from the test group and 403 pupils from the control group in two additional areas during the following academic year in order to examine the program’s long-term effects. This subsample filled out the questionnaires four times: at the beginning of the study; at the end of the intervention (nine months after the study began); 15 months after the study began; and 21 months after it began (end of the following academic year). In addition, an external assessment was conducted on behalf of the Israeli Ministry of Education on the educational atmosphere for the ministry’s tests of growth and efficiency in schools at the schools in which the intervention took place.

The research findings indicated a pronounced rise in satisfaction with life in both groups, but a larger rise in the test group. In addition, the test group demonstrated a pronounced rise in positive emotions over time as compared to an unclear change in the control group. Furthermore, a significant rise was found in program

participants' cognitive commitment to school (this index represents the degree of investment and sense of commitment to learning), as compared to an unclear change in the control group. In addition, the pupils that participated in the intervention program demonstrated a significant rise in emotional commitment and sense of belonging at school, compared to a significant decrease in the control group (chart 6). Furthermore, a pronounced rise of 7.34 points in participants' grade point averages was found from the start of the research until its completion in the test group as compared to an unclear change in that of the control group (chart 7). Neither group demonstrated significant changes over time in their level of negative emotions or general commitment to behavioral norms at their school. In addition, the test group reported on significantly higher levels of communications with and positive attitudes towards their homeroom teachers than the control group.



Charts 5-6: Changes in Level of Investment in Studies and Sense of Belonging at School as a Function of Type of Intervention and Time

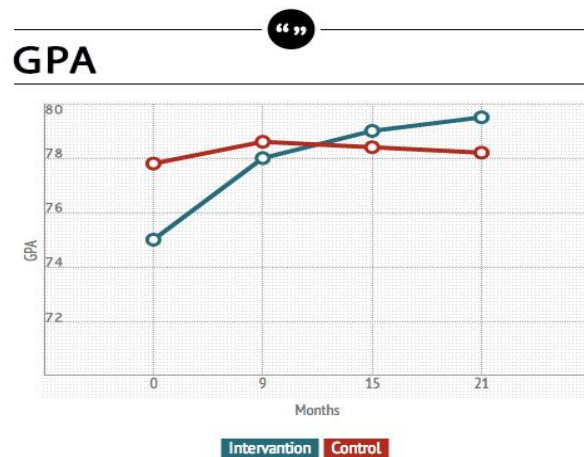


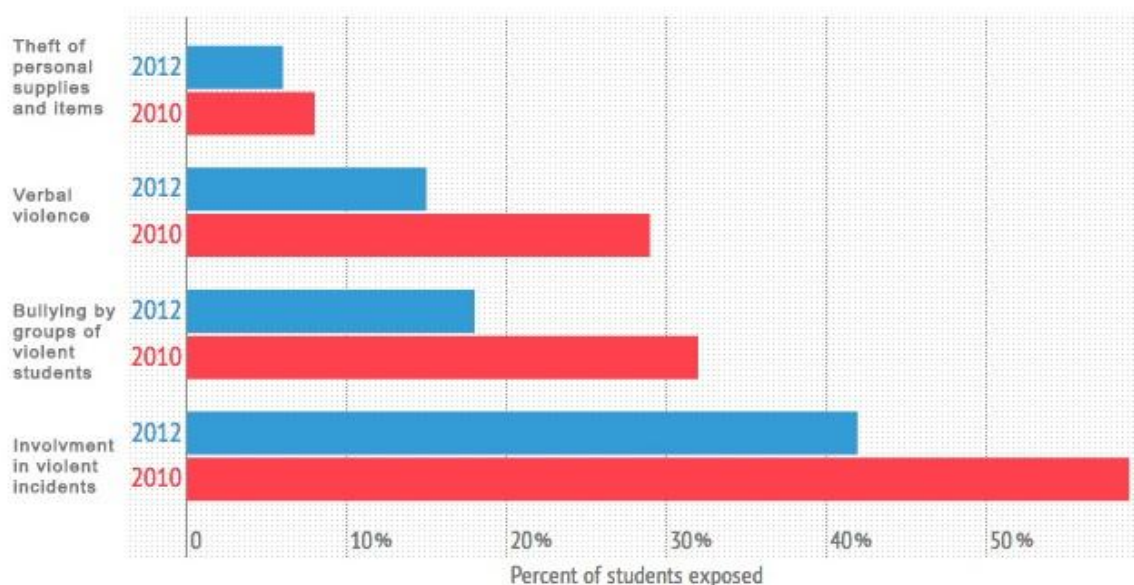
Chart 7: Changes in Grade Point Average in accordance with Type of Intervention and Time

The Program’s Impact on the Level of Violence in the School – Data on Educational Atmosphere from the Israeli Ministry of Education’s Tests of Growth and Efficiency in Schools

The Israeli Ministry of Education’s tests of growth and efficiency in schools are a set of tests and surveys that are conducted in elementary and middle schools throughout Israel by the National Authority for Measurement and Evaluation in Education (RAMA) in core subjects in order to provide school principals with objective pedagogical data on the school. In addition, surveys are conducted on the educational atmosphere and environment for all principals, students and pupils of fifth to ninth grades in elementary and middle schools that participate in these tests. The surveys include questionnaires of pupils’ opinions and interviews of teachers and principals. The questionnaires of pupils are anonymous and check a variety of topics, such as pupil’s level of motivation to learn; relations between teachers and pupils in the school; violent incidents in the school; and the sense of feeling protected among pupils. The atmosphere surveys are conducted once every two years by RAMA, which was appointed to do so by the Israeli Ministry of Education.

The findings of the educational atmosphere surveys in schools in which the Maytiv Center’s intervention program was conducted in the 2011-2012 academic year related to the reports in those same schools the last time the surveys were conducted (2009-2010) indicate a clear decrease in levels of violence in the schools. Specifically, a notable decrease was found in the rate of involvement in violent incidents, verbal violence, bullying by groups of violent pupils, and reports on the theft of personal supplies and items in the school (chart 8).

Violence Phenomena in Schools



Charts 8: Average Level of Reports Related to Violent Phenomena in Schools that Incorporated the Maytiv Center’s Intervention Program in the 2011-12 School Year Compared to the Level in the Same Schools in the 2009-2010 School Year

Conclusion

The research findings indicate that the intervention programs had a dual impact both on reducing emotional symptoms and violent incidents in the school and on increasing different indicators related to emotional welfare such as positive emotions, optimism, satisfaction with life, high self-esteem, and a sense of self-efficacy. In addition, the research findings correlate with previous research on emotional welfare and an increase in academic achievements. The pronounced improvement in grade point averages over time indicates that the combination of social and emotional elements in the curriculum provide an important foundation to recruit and cultivate resources and internal motivation during studies. The Maytiv Center's program is continuing to operate at many schools in Israel. Today the school operates at elementary school as well as at middle schools and is being offered for the first time at schools for other population sectors (such as the Arab and religious school systems).