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POSITIVE THINKING IS THE NAME OF THE GAME

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Abstract

This article presents the findings of a study examining the impact of a positive thinking program in school on the educational climate that is influenced by the subjective well-being of students. The Positive Thinking in School (PTS) program is an intervention on positive thinking developed by the author, designed to be implemented in an Israeli elementary school over the course of an academic year. The program aims to improve the positive thinking of students. This, in turn, may promote their subjective well-being and can influence the positive climate in class. Participants included 93 students from four sixth grade classes (11-12 years-old) and two teachers. The classes were randomly assigned to either the study group (two classes) or the control group (two classes), which did not participate in the program. The study used self-report questionnaires examining motivation for learning, self-esteem, efficacy, and teacher's attitudes. Results indicate significant differences between the intervention and control groups. Students who participated in the intervention program showed an increase in their motivation for learning, self-esteem, and self-efficacy, while the control group showed a decrease. These findings shed light on the influence of positive thinking on students in terms of subjective well-being. They reveal that an intervention program that develops positive thinking may have a positive effect on students' functioning and a positive educational climate. These findings are of universal importance since the intervention program can be adapted to other populations and cultures around the world.

Keywords: Positive emotions, subjective well-being (SWB), positive thinking, motivation for learning.
1. Introduction

Despite the growth in recent years in applications of positive psychology in education, there are few studies examining positive psychology with younger children. The current study examined the impact of positive thinking among elementary school students. Specifically, it evaluated the impact of a positive thinking intervention program on students’ subjective well-being and the educational climate. This paper presents the essence of the intervention program and the findings before and after the intervention.

Theoretical Rationale

The rise of a positive psychology that examines the strengths and virtues that allow individuals and communities to flourish, has also given rise to increasing interest in the study of character, virtues, happiness, and optimal functioning (Peterson & Seligman, 2004; Seligman, 2002; Seligman & Csikszentmihalyi, 2000). Personality strengths are personal characteristics that relate to internal psychological processes, which define the personality and the specific aspects of the personality that are morally valued (Park, 2004). This includes strengths along four factors: motivation, behavior, and emotion (e.g., authenticity, caution, self-regulation, and persistence); intellectual strengths (e.g., love for learning, creativity and curiosity); transcendence (e.g., modesty, kindness, social intelligence, and teamwork), as well as positive relationships with others (e.g., hope, religion, gratitude, and enthusiasm) (Park & Peterson, 2006). Studies have shown that interpersonal strengths have a direct connection to well-being (Park & Peterson, 2006). Similarly, interventions that increase people’s awareness of their characteristic strengths increase their happiness and satisfaction with life (Seligman, Steen, Park, & Peterson, 2005; Seligman, Rashid, & Parks, 2006). Seligman (2002) claimed that the transcendent strengths, such as purposefulness, hope, and appreciation of excellence, involves aspects of a meaningful life and a good life, and in this way, are derivatives of subjective well-being (SWB). SWB is comprised of two unique aspects: a cognitive aspect that relates to the evaluation of satisfaction from life, and an emotional aspect, that relates both to the presence of a positive influence and the absence of experiences of negative emotions (Diener, 2000). According to Fredrickson (2004), positive emotions promote the discovery of actions, ideas, and new, creative social connections that build a person’s personal resources, ranging from physical and intellectual resources to social and psychological resources. She argues that positive emotions not only demonstrate optimal functioning, they also create optimal functioning, and not only during pleasant and relaxing moments, but for the long-term. Consequently, people need to foster positive emotions in themselves and those who surround them, not only as an ends to themselves, but also as a means to achieving growth and improved long-term physical and psychological well-being. Fredrickson (1998, 2001) developed the “broaden and build theory of positive emotions,” an alternative model of positive emotions that best captures their unique effects. This theory describes the form of positive emotions as a repertoire of thought. That is, positive emotions cause us to “accumulate forces” that can be relied upon when there is a threat (negative emotion) in our lives. Further, positive emotions can increase our intellectual, physical, and social abilities, thereby building ongoing personal resources (Fredrickson, 2004). Isen (2000) argued for the “cancellation effect” of positive emotions, saying that they can “fix” or “cancel” the effect of negative emotions. People can improve their psychological well-being and perhaps their physical health, by promoting experiences of positive emotions at the appropriate times to contend with negative emotions.
Positive emotions not only cause people to feel better in the present, by broadening their thoughts and building resources, they also increase the likelihood that people will feel better in the future (Fredrickson & Joiner, 2002). In order to create a more positive future, appreciative inquiry developed, which identifies and develops the best in organizations (Cooperrider, Whitney, & Stavros, 2003). Appreciative inquiry deals with problems from a constructive point of view and focuses on strengths and successes. It claims that organizations improve more effectively through reflective research and assessment, dialogue, and a forward-looking view of the future. The strength of appreciative inquiry lies in how participants are involved in activities and inspired by focusing on their positive experiences (Coghlan, Preskill, & Catsambas, 2003).

A number of studies found relations between opportunities provided in classrooms to realize psychological needs and students’ emotional involvement in the learning (Skinner, Wellborn, & Connell, 1990). Few studies examined the relations between happiness and success in life, the level of happiness and the cause of happiness, or the impact of positive emotions on social-emotional and academic functioning in school (Lichtenfeld, Pekrun, Stupnisky, Reiss, & Murayama, 2012). However, it seems that research on the topic is gaining momentum, based on the understanding that these feelings have the ability to promote learning and thinking processes. From this starting point, the author opted to embark on a study to examine the relations between self-perceptions and positive thinking and the student’s social and emotional functioning in school. To do so, she created the Positive Thinking Program in School (PTS) intervention, which is based on positive psychology, humanistic, phenomenological, and self-directed theories. Based on the theories and research presented, the author chose to examine the impact of positive thinking on student’s self-esteem, self-efficacy, motivation for learning and perception of teacher’s attitude towards their abilities and successes.

Positive Thinking
Positive thoughts make people feel good and help them cope with different obstacles that may stand in their way. In various studies it was found that the creation of positive thinking also leads to a change in the emotional, physical, and behavioral dimensions (Seligman, 2002). Through thinking, people choose their point of view. Will they look at the glass half-full or half-empty? What do they focus on and what do they ignore? Will they treat things as fixed or subject to change? In the same way that people convince themselves that they cannot do anything, they can convince themselves that they can (Seligman, 2002).

There are two types of positive thinking. One is positive thinking that stems from a person’s belief and optimism, while the other is positive thinking that stems from a person’s awareness of abilities and qualities (Cohen, 2018).

The Intervention Program: Positive Thinking Program in School (PTS)
The PTS intervention program, designed by the author, focuses on positive thinking by learning interpersonal and intrapersonal skills such as: self-awareness and self-management, self-control, empathy, assertiveness, problem solving, decision-making, and coping with stress and change.

PTS focuses on the students’ mental well-being. The program considers the educational staff as significant change agents and key figures in their impact on children and adolescents in a constant process of personal, educational, social, and emotional development (Meytiv Center, 2018). The intervention
program integrates 3 areas: (1) Activities from the “Life Skills” program, developed by the Israeli Department of Education, which works from the assumption that the school is responsible for promoting students’ intellect and knowledge, as well as their social, emotional, and value development (Israel Ministry of Education, 2020). (2) Activities from the “Key to the Heart” program, developed by the Israeli Department of Education, which views the individual as a social, living being who interacts with others, with groups, and with society (The key to the heart, 2017). (3) Activities that were developed by the author to address student's needs.

The goal of the PTS program is to develop positive thinking, and promote self-image and self-efficacy, which will move the individual towards success, both socially and academically. The program was constructed in accordance with the children’s cognitive, social, and emotional abilities and skills. It focuses on learning both personal and interpersonal skills.

The implemented program included 18 meetings, 40 academic hours, which took place once per week in a class built-in to the class schedule called “positive psychology.” During the sessions, participants kept a personal journal. An atmosphere of trust was created where the participants could relate their personal or emotional experiences. A “class contract” was written that the students signed, so they could feel secure and able to speak freely. During the activities the participants learned more about themselves, their strengths, and what makes them feel good and contributes to being happier.

2. Problem Statement

This study is part of a broader research examining the impact of a positive thinking intervention program (PTS) on students, from a personal and social perspective. The current study specifically examines the contribution of the PTS program to the development of students’ motivation to learn, self-esteem, self-efficacy, and their teachers’ attitudes towards their capabilities.

3. Research Questions

1. What is the contribution of the positive thinking intervention program to the students on the following measures:
   a. motivation to learn
   b. self-esteem
   c. self-efficacy
   d. Students’ perceptions of teachers’ attitude and beliefs in their capabilities

2. What kind of change will be in the study measures in the research group after the intervention program?

3.1. Research Hypotheses

1. There will be differences between the research group and the control group on the study measures: motivation to learn, self-esteem, self-efficacy, and perceptions of teachers’ attitudes.
2. There will be an improvement in the measures in the research group after the intervention program compared to before.

4. Purpose of the Study

The purpose of this study is to find out if an intervention program focusing on the strengths of the learners intensifies these strengths and improves positive aspects such as self-efficacy, self-esteem, motivation for learning and perceptions of teachers’ attitude.

5. Research Methods

5.1. Participants

Participants in the study included 93 students from an elementary school in central Israel. The school has a high percentage of students from financially stable families, with highly educated parents who hold professional positions. The students (54 boys, 39 girls) were learning in four sixth grade classes. Two classes were randomly assigned to serve as the research group (31 boys, 20 girls) and two as the control group (23 boys, 19 girls). Chi-square tests showed no significant differences between the research and control groups in terms of gender ($\chi^2 = 1.07, \text{n.s.}$). The research group received the intervention program and the control group followed the regular yearly program constructed by the staff that teaches the values program. The two homeroom teachers of the research group classes underwent a training program by the author. The teachers were given an explanation of what activities should be done, their purpose, and how to teach them. In addition, they received the materials required for any activity such as playing cards, presentations, etc. A third teacher taught the regular curriculum in the control classes.

5.2. Tools

The study used a variety of self-report questionnaires: On each of the questionnaires, respondents were asked to note to what extent they agree with each item using a five-point Likert-type scale ranging from 1 (“do not agree at all”) to 5 (“completely agree”).

The four questionnaires are listed below

**Internal motivation to learn**

This questionnaire incorporates items from two existing motivation surveys (Guay, Vallerand, & Blanchard, 2000; Ryan & Connell, 1989). It examines how students’ positive thinking impacts their motivation to learn. The questionnaire includes seven items, for example, “I learn because I want to improve my knowledge”. For the use of the questionnaire, a Cronbach calculation of reliability was performed and internal reliability for the measure was Cronbach’s $\alpha = .76$.

**Self-esteem**

The study used the self-esteem scale developed by Chen and Gully (1997) and revalidated by Chen, Gully, and Eden (2001). This was translated to Hebrew by Flumin-Granat (1998) and titled New General Self-Esteem. This questionnaire examines the individual’s attitudes towards his/her belief in his/her ability to achieve goals in situations and overcome failures in his/her daily life. The questionnaire includes ten
items such as one for example "I feel that I have a number of positive characteristics". Internal reliability for the measure calculated for this study was Cronbach’s α = .84.

**Self-efficacy**

This questionnaire, based on that of Schwarzer and Jerusalem (1995), examines the individual’s attitudes towards their belief in their ability to contend with various social and educational situations and achieve success. The questionnaire includes ten items; for example, "Thanks to my resourcefulness, I know how to deal with unexpected situations." Internal reliability calculated for this study was Cronbach’s α = .88.

**Perception of teacher’s attitude**

Based on RAMA (2016), this questionnaire measures students’ evaluation of teachers’ attitudes towards their abilities, successes, etc. The questionnaire includes nine items; for example, "My teachers believes in my ability to learn." Internal reliability for the measure calculated for this study was Cronbach’s α = .91.

**Procedure**

Table 1 presents the 3 stages of the study:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Aim</th>
<th>Research Tools</th>
<th>Participants</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Developing the intervention program that promotes positive emotions and reinforces positive qualities, self-realization and success.</td>
<td>A questionnaire consisting of the following questionnaires: * Internal motivation to learn. (Guay, Vallerand, &amp; Blanchard, 2000; Ryan &amp; Connell, 1989 * Self-esteem. Based on Chen and Gully (1997). * Self-efficacy. Based on Schwarzer and Jerusalem (1995). * Perception of teachers’ attitude. Based on RAMA (2016).</td>
<td>93 students aged 11-12</td>
<td>MANOVA and Cronbach analyses were conducted to validate the questionnaires</td>
</tr>
<tr>
<td>2</td>
<td>Developing a questionnaire and completing it</td>
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</table>
Ben-Shachar and Yair (as cited in Aharonovitch, 2012) say that schools do not give children the tools to contend with difficulties and do not give them the tools to find what will cause them joy in life. The child’s emotional side is completely neglected. At the same time, it is possible for schools to increase the child’s strengths by enriching them, allowing them to advance in subjects or characteristics that they are good at, or allowing them to teach their friends a beloved subject, and thereby strengthen their self-image and confidence. In this light, this research focuses on the meaning of promoting positive thinking and examines the impact of a positive thinking program in school on subjective well-being and optimal educational climate.

6. Findings

The means and standard deviations for each variable in both groups are presented in Table 2. The groups were similar in terms of the number of students and gender. To examine differences between group prior to the intervention program, a 2x2 MANOVA (group x gender) was conducted. No significant differences were found between groups $F(5,85)=2.01$, $p<.05$, between genders $F(5,85)=.91$, $p<.05$, and no significant interaction was found for group x gender. At the same time, when analyzing the variability of each measure independently, a significant difference was found between the groups for motivation.

Table 02. Descriptive Results of Each Variable and MANOVA Between the Research and Control Groups Prior to the Intervention

<table>
<thead>
<tr>
<th>Variables</th>
<th>Research</th>
<th>Control</th>
<th>F(1,89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>3.94</td>
<td>4.05</td>
<td>3.53*</td>
</tr>
<tr>
<td>Esteem</td>
<td>4.20</td>
<td>4.02</td>
<td>2.34</td>
</tr>
<tr>
<td>Efficacy</td>
<td>4.01</td>
<td>4.00</td>
<td>1.87</td>
</tr>
<tr>
<td>Supteacher</td>
<td>4.27</td>
<td>4.31</td>
<td>1.66</td>
</tr>
</tbody>
</table>

*p<.05. Supteacher=Students’ perceptions of teachers’ attitudes
To examine differences between the groups prior to and following the intervention, a 2x2x2 (Time (pre/post) x Group x Gender) MANOVA was conducted with repeated measures based on time. Results showed a significant difference across the groups between pre- and post-intervention $F(5, 85) = 3.80$, $p<.01$, $\eta^2 = .18$. Similarly, a significant interaction was found across groups for Time x Group $F(5, 85) = 3.51$, $p<.01$, $\eta^2 = .17$. No significant differences were found across groups for Time x Gender $F(5, 85) = 1.27$, n.s. or Time x Gender x Group $F(5, 85) = 40$, n.s.

Table 03. Descriptives of the Study Indices Before and After the Intervention and MANOVA Examining Differences Between Time and Groups

<table>
<thead>
<tr>
<th>Variables</th>
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<tr>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>M</td>
<td>4.08</td>
<td>4.03</td>
<td>3.86</td>
<td>3.48</td>
<td>13.19***</td>
<td>.13</td>
<td>6.37*</td>
</tr>
<tr>
<td>SD</td>
<td>.44</td>
<td>.61</td>
<td>.65</td>
<td>.95</td>
<td>.95</td>
<td>.95</td>
<td>.95</td>
</tr>
<tr>
<td>Esteem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4.05</td>
<td>4.14</td>
<td>4.22</td>
<td>4.03</td>
<td>.62</td>
<td>.00</td>
<td>4.00*</td>
</tr>
<tr>
<td>SD</td>
<td>.62</td>
<td>.58</td>
<td>.67</td>
<td>.63</td>
<td>.63</td>
<td>.63</td>
<td>.63</td>
</tr>
<tr>
<td>Efficacy</td>
<td></td>
<td></td>
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<tr>
<td>M</td>
<td>3.96</td>
<td>4.08</td>
<td>4.07</td>
<td>3.95</td>
<td>.00</td>
<td>.00</td>
<td>3.97*</td>
</tr>
<tr>
<td>SD</td>
<td>.59</td>
<td>.53</td>
<td>.63</td>
<td>.80</td>
<td>.80</td>
<td>.80</td>
<td>.80</td>
</tr>
<tr>
<td>Supteacher</td>
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<td></td>
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</tr>
<tr>
<td>M</td>
<td>4.21</td>
<td>4.52</td>
<td>4.39</td>
<td>4.3</td>
<td>2.78</td>
<td>.30</td>
<td>7.03***</td>
</tr>
<tr>
<td>SD</td>
<td>.72</td>
<td>.47</td>
<td>.51</td>
<td>.71</td>
<td>.71</td>
<td>.71</td>
<td>.71</td>
</tr>
</tbody>
</table>

As can see in Table 3, there was only a significant difference for motivation in terms of time before and after the intervention, with both groups showing a decrease in their level of motivation. There was also a significant Time x Group interaction for motivation. Figure 1 depicts the changes in motivation for the two groups.

Figure 01. Levels of motivation for the research and control groups before and after the intervention program
It can be seen that although both groups showed a decrease in motivation, the research group had less of a decrease compared to the control group. In a simple effects analyses for the source of the interaction, a significant difference was found within the control group $F(1,89) = 17.58$, $\eta^2 = .17$ but not within the research group $F(1,89) = .69$, n.s..

A significant Time x Group interaction was also found for the self-esteem, self-efficacy, and supteacher measures (see Table 3).

Figure 02. Levels of self-esteem for the research and control group before and after the intervention program

Figure 2 depicts the interaction for the self-esteem measure, which shows that there was an increase in levels of self-esteem among the research group while the control group showed a decrease in self-esteem. A simple effects analysis revealed no significant increase in self-esteem before and after the intervention for the research group $F(1,89) = .80$, n.s. but a significant decrease in self-esteem for the control group $F(1,89) = 3.60$, $p<.05$, $\eta^2 = .04$.

Figure 3 reveals the significant interaction for the self-efficacy measure, which also showed an increase for the research group and a decrease for the control group. research group and a decrease for the control group.
However, simple effects analyses showed that the differences within each group were not significant [F (1.89)=2.07, n.s., research group; F(1.89)=1.92, n.s., control group].

A significant interaction was also found for the Supteacher measure (see Figure 4), with an increase in the research group and a decrease in the control group. Simple effects analyses revealed a significant difference before and after the intervention for the research group F(1.89) = 10.11, p<.01, $\eta^2=.10$ but no significant difference before and after the intervention in the control group F(1.89) = 45, n.s.

Figure 03. Levels of self-efficacy for the research and control groups before and after the intervention program

Figure 04. Level of Supteacher for the research and control groups before and after the intervention program
These results show the differences between the group that participated in the intervention program compared to the control group, which did not. Amongst the control group there was a significant decrease in motivation and self-esteem, while amongst the research group there was an increase in supteacher.

The positive thinking intervention program was successful in impacting the participants’ subjective well-being in terms of their motivation to learn, self-efficacy, self-esteem, and their views of their teachers’ attitudes. These findings strengthen those of previous studies conducted around the world, such as those of Park and Peterson (2006), which showed that personal strengths have a direct relationship with well-being, and those of Seligman et al. (2005, 2006), which demonstrated that interventions that strengthen people’s awareness of their personality strengths increase their happiness and their satisfaction from life. In the current study, there was an increase in the self-esteem and self-efficacy in the research group, while there was a decrease in these measures in the control group. Lyubomirsky, King, and Diener (2005) referred to a person’s deliberate activities as “creators of happiness,” which require deliberate involvement in the process, something that can lead to long-term positive effects in a person’s life. Fredrickson and Joiner (2002) and Sheldon and Houser-Marko (2001) hold a similar position. Fredrickson (2004) elaborated and claimed that positive emotions not only demonstrated optimal functioning, but also create it.

There was a significant difference between the two groups on the motivation measure. Although the research group did not show an increase their motivation to learn after the intervention, it did not decrease in the way that the control group did. This suggests that while the intervention program did not improve motivation in the research group, it did prevent a decrease.

The students’ perceptions of teachers’ attitudes (Supteacher measure) significantly increased amongst the research group while it decreased amongst the control group. This strengthens the claim of Bryson and Hand (2007) that the connection with teacher greatly influences students’ involvement in learning, and a teacher who invests time developing relations and trust can impact the level of students’ involvement. This finding is in line with Opatałka’s (2018) study conducted on students’ perceptions of two aspects of classroom climate - teacher support and feelings of belonging to the class, which found that the greater educators’ self-efficacy in the human perspective, the more students felt that their teachers support them and understand them from an emotional perspective and felt a greater sense of belonging to the class.

7. Conclusion

These findings shed light on the influence of a positive thinking program on students’ subjective well-being. They reveal that an intervention program that develops positive thinking may have a positive effect on students’ functioning and a positive educational climate.

There appears to be a link between self-perception and positive thinking to the student's social-emotional functioning in school, as well as the interrelations that exist between them. Nonetheless, no existing program has been found on this aspect. That is, a gap was found regarding the influence of positive thinking on promoting student subjective well-being and positive climate. Therefore, this research provides evidence-based knowledge.

Aiming to address this gap in knowledge, on the theoretical level, the development of a new intervention program in positive thinking for elementary school children aims to promote positive thinking
among students on the assumption that it will contribute to improving their subjective well-being and the social climate in the classroom. On the methodological level, the study develops a new research tool – a questionnaire that examines the contribution of the intervention on a range of personal measures. The questionnaire was found to be both valid and reliable. On the practical level, the current study presents a structured and organized intervention program that develops positive thinking by relating to personal strengths in such a way that the teachers can successfully implement it in schools, hence its importance.

At the same time, the study has limitations. The classes where the study was conducted were transitioning to junior high school at the end of the year. It is possible that the fear of this transition may have affected their responses. Therefore, it may be worthwhile to conduct the study in the fifth grade, where the students are not contending with an impending transition. Another factor that may have influenced the participants is their personal connection with the homeroom teachers. While the homeroom teachers implemented the intervention group in the research group, in the control group a subject teacher implemented the regular program. By definition, the students’ relationship with the teachers is different. Consequently, it may be that only a subject teacher should implement the program and not the homeroom teacher.

These findings are of universal importance since the intervention program can be adapted to other populations and cultures around the world. Although the program is designed for 11-12-year-old students, it is certainly possible to adapt the activities for older or younger ages, and thus broaden the age range of the participants who can benefit from it.

Additionally, while the intervention program led to an increase in a variety of measures, it did not have a radical impact. This may be because the study participants have been exposed to positive psychology and it is not a foreign subject to them. It is important to conduct similar studies in schools that are not familiar with positive psychology in the hopes of obtaining more significant results.

The aspiration is to make the results of this study an integral part of the educational programs in Israel and abroad, to improve students' subjective well-being and the educational climate through the PTS program.

References


