

Enhancing autonomy-supportive I–Thou dialogue in schools: conceptualization and socio-emotional effects of an intervention program

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Abstract We present a conceptualization and a 2 year program of autonomy-supportive I–Thou dialogue among teachers and students that is based on self-determination theory (Deci and Ryan in *Psychol Inq* 11(4):227–268, 2000) and Buber’s (1960) philosophy. The program was applied in 18 seventh grade classes (420 students). Findings showed: (a) increases in positive emotions and in perceptions of teachers as conducting more dialogue on the relevance of studies to students’ lives, and (b) decreases in negative emotions and in classroom violence. The findings highlight the importance of autonomy-supportive I–Thou dialogue and suggest that such dialogue might help adolescents to experience studying and school as more pleasant and secure.

Keywords Autonomy support · I–Thou dialogue · Intervention program · School violence · Students’ feelings · Choice · Relevance

The educational approach and intervention program described in this study originate from the recognition that student–teacher dialogue may be ubiquitous in schools but is often frustrating to either party. On the one hand, teachers question: How should we talk to students? About what? How can we establish the best atmosphere for such conversations? Students, on the other hand, claim that teachers do not listen. Although speech is one of teachers’ primary tools, they do not always succeed in using this tool to promote students’ interest and positive feelings while learning.

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In recent years, a shift has transpired regarding conceptualizations of learning. Concepts such as authenticity, meaningfulness, reflectivity, learning community, and so forth are commonly accepted among educators (Sfard 1998). Within such an approach, where knowledge is a product of both interpersonal and intrapersonal construction and where personal meaning is emphasized and knowledge is context dependent, dialogue becomes a central and important vehicle for learning and instruction (e.g., Cook-Sather 2002).

But what is it that converts mere “talking” between teacher and student into a meaningful dialogue? We posit that students experience conversations with teachers as meaningful dialogues if they feel that these conversations support their sense of autonomy and their ability to act and develop autonomously. This view is derived from two major theoretical perspectives: the psychological perspective of self-determination theory (SDT, Deci and Ryan 1985, 1991; Ryan and Deci 2000a,b), and Buber’s (1960) philosophy. Two additional sources of our approach to autonomy supporting dialogue are: (1) the ideas and research of Assor and his colleagues concerning the promotion of growth in schools (Assor 1995, 2001, 2003; Assor et al. 2000a,b, 2002, 2005, 2009; Assor and Kaplan 2001; Roth et al. 2007), and (2) the learning improvement educational counseling approach (SHATAL) developed by the Israeli Educational Counseling Services Agency of the Ministry of Education (Orenstein et al. 1996; Kaplan and Danino 2002; Kaplan et al. 2000).

The paper has two major aims: First, to present a conception of autonomy-supporting I–Thou dialogue (ASID) that is based on SDT (Ryan and Deci 2000a,b) and on Buber’s philosophy (1960); Second, to explain why ASID can lead to positive student feelings and reduced violence in the classroom, and then examine if a program promoting ASID can indeed have such effects.

1 Dialogue as viewed by Martin Buber

According to Buber (1959, 1960), humans are essentially dialogical entities and can only reach self-fulfillment through a “dialogical life” comprising situations where they interact with their world. Two instinctive needs are fulfilled by dialogue: the need for connection and the need to create or generate things (Buber 1959, pp. 239–244). When human beings are in dialogue with one another, each of them relates to the other as a unique individual, thus achieving genuine communication. Moreover, dialogue is actually a creation of a new meaning, a meaning that did not exist before and that is created within the domain of interpersonal human relations (Buber 1960; Kron 1994). Buber discusses two fundamental types of human dialogues: the “I–Thou dialogue” and the “I–it dialogue” (Buber 1955, 1959, 1960). According to Buber, a meaningful dialogue can occur only when two or more people converse in an “I–Thou” relationship. In contrast, both the “I–it” dialogue and the “monologue” involve two people directing words at each other but in fact are talking to themselves (Buber 1955, p. 19, 1959, p. 128).

The “I–Thou” relationship represents a deep person-to-person or subject-to-subject bond, where both participants in the dialogue act from inside themselves (“being man”), thus honestly and spontaneously revealing their own essence while perceiving

the unique aspects of the other. The “I” relates authentically to the “Thou” and does not take advantage of the other for personal gain. The “I–it” relationship expresses a person-to-“thing” or subject-to-object bond of instrumental relevance, where each of the participants acts out of concern with his or her own image (“seeing man”) and with the impression he or she is making on the other. The “I” sees the “it” within a narrow frame of reference, ignoring the other’s uniqueness, and creating a relationship that involves some form of utilization, exploitation, or domination (Kortzziel 1978).

2 Dialogue as viewed within self-determination theory

Although Self-determination theory (SDT; Deci and Ryan 1985, 2000, 2002, 2008; Ryan and Deci 2000a,b, 2002) did not explicitly focus on the issue of meaningful dialogues between teachers and students, the main tenets of this theory appear to be highly relevant to this issue. SDT employs an organismic perspective that sees humans as active agents who strive to develop and assimilate interesting and important aspects of the environment, while at the same time also accommodating to this environment (e.g., Ryan and Deci 2000a,b; Ryan 1993). According to SDT, people thrive, feel well and show consideration for others when the environment enables them to satisfy their basic needs for autonomy, relatedness and competence. While other theories have highlighted the importance of the relatedness and competence needs, SDT is unique in its emphasis on the need for autonomy. Consequently, the program examined in this paper focuses primarily on autonomy supportive dialogue between teachers and students.

The need for autonomy refers to the striving to feel that one can direct and organize one’s behavior, that one can choose and is not controlled and that one can develop and realize goals and values that feel authentic and give a sense of direction and meaning (Assor 2003; Reeve and Assor 2011; Ryan 1993). According to Grolnick et al. (1997), Reeve and Jung (2006), Ryan (1991) and Ryan et al. (1996), the cluster of autonomy-supportive actions includes behaviors such as (1) taking and acknowledging the other’s internal frame of reference (e.g., empathy and perspective taking), (2) providing choice, (3) encouraging self-initiation, and (4) minimizing the use of controls. Skinner and Belmont (1993) added a fifth component, (5) Clarifying the relevance of expected behaviors, and Assor et al. (2002) added (6) accepting and encouraging the expression of criticism and independent opinions, and (7) minimizing suppression of criticism and not encouraging overly compliant and ingratiating talk.

Based on the above conceptualization and findings, it appears that teachers who conduct autonomy supporting dialogues with their students would do well to address in their conversations with students all the autonomy support aspects mentioned above (of course only when the component is relevant). For example, conversations between teachers and students are likely to be experienced as meaningful autonomy supportive dialogues when teachers invite students to converse with them on how they feel and perceive issues that concern them (i.e., dialogue focusing on students’ internal frame of reference), the extent and type of choices they want to have in their studies, the extent to which they feel that their studies and assignments enable them to study things that they view as relevant to their life and interests, and their views and *critiques* on the

learning and instruction process, including aspects they want to improve or change. Accordingly, in the program examined in this study, the seven SDT-based aspects of autonomy support described above were explicitly focused on as part of the teacher workshops and teacher development process.

3 Integrating Buber's philosophy with SDT view on autonomy support: a brief exploration

A systematic attempt to compare Buber's and SDT approaches to autonomy is clearly beyond the scope of the present paper. Yet, as our program did refer to Buber's philosophy, it is important to indicate how the two approaches might be integrated. An examination of Buber's philosophical approach through the lens of SDT brings to light Buber's emphasis on basic psychological needs. Buber's (1959, p. 240) "instinctive need" to create or generate may be likened to the SDT needs for competence and perhaps also autonomy. Similarly, Buber's "instinctive need" for communication (Buber 1959, p. 243) may be likened to the SDT need for relatedness.

Furthermore, Ryan's writings (1989,1991,1993,1995) appear to create a bridge between SDT and Buber's approach. For example, similarly to Buber's description of the "I-it" relationship, Ryan (1991) claims that "Contemporary forms of relationships are often more impersonal than personal, more like exchanged glances in the looking glass" (Ryan 1991, p. 210). Ryan (1991, p. 210 and p. 231) also compares what might be described as "I-Thou" relationships with autonomy support, and the "I-it" relationships with autonomy suppression and a lack of mutuality. According to Ryan (1993, p. 39), autonomy in relationships refers to the authenticity of the relationship, which involves the self of each person and also mutuality of autonomy.

SDT's notion of autonomy-support and Buber's concept of I-Thou dialogue share several subtle but important parallels.

First, neither SDT (see Koestner et al. 1984) nor Buber (1955) assume that autonomy support or I-Thou relationships imply that educators should always accept their students' views or desires, ignore their own personal needs when interacting with students, or allow students to frustrate educators' own needs. For example, when students treat teachers in a way that is experienced by them as disrespectful, it is important that they clearly do not accept this lack of respect.

Second, both approaches assume that when appropriate and there is no ego-involvement, it is important that educators and parents share their feeling of being hurt, angry, or disappointed. Thus, it appears that for both Buber and for SDT, an authentic autonomy-supportive dialogue at times can involve the sharing of disagreements and negative feelings (see Koestner et al. 1984; Buber 1955).

A third parallel between the two approaches, which is related to the previous issue, is the importance of self-awareness and authenticity also in situations not involving conflict or disrespect from children (e.g., Buber 1955, 1960; Ryan 1991; Ryan and Deci 2004). Thus, both Buber and SDT assume that when teachers and parents attempt to carefully listen to children, but in the process fail to notice their own feelings and needs, then inevitably, the teachers' basic needs do enter the conversation and color it. In such cases, lack of awareness or even reference to teachers needs and feelings can

elicit alienation and reduce authenticity, thus turning a potentially “I–thou” dialogue into an “I–it” talk.

Fourth, both approaches assume that taking the position of a detached technical expert (Buber 1955) can undermine the quality of the autonomy support or I–Thou dialogue. For example, based on their knowledge of some SDT principles, teachers may offer choices and think that this supports students’ need for autonomy; yet, in the absence of a dialogue that truly seeks to understand the child perspective, they might fail to understand that the choices offered do not match students’ authentic interests (e.g., Katz and Assor 2007).

In sum, a meaningful dialogue that integrates SDT and Buber’s philosophy can be defined as an “I–Thou” dialogue in which each participant feels that the other respects him/her and is trying to understand and support his/her needs. In conflict situations, the I–Thou autonomy supportive dialogue is characterized by open yet respectful expression of disagreement and by an attempt to find an optimal solution.

4 The expected effects of autonomy-supportive I–Thou dialogue on students’ feelings and classroom violence

According to SDT, when people feel that their basic need for autonomy is supported, they are more inclined to feel happy and satisfied, whereas when support for autonomy is minimal or absent people experience frustration, anger and other negative feelings (Deci and Ryan 2000; Assor et al. 2004; Ryan and Grolnick 1986). The idea that frustration or threat to human needs and motivations reduces positive feelings and enhances negative feelings also appears in prominent theories of emotion (e.g., Buck 1988; Frijda 1999).

Based on these theoretical views, we posited that autonomy-supportive I–Thou Dialogue (ASID) between teacher and students would increase students’ positive feelings and reduce negative feelings when students are in the teacher’s classroom. In addition, we hypothesized that ASID between teachers and their students would reduce verbal and physical violence in the classroom because when students feel that their need for autonomy is supported they feel less frustrated and are less inclined to act in violent and inconsiderate ways. Thus, according to SDT, teacher–student autonomy-supportive dialogue should be viewed as an important aspect of teacher–student relations, which enhances positive student feelings, and is likely to reduce students’ negative feelings and class violence.

In line with this view, Soenens et al. (2009) reported that an autonomy-supportive style of setting limits in the domain of peer relationships was related negatively to anti-social behavior. Sher-Censor et al. (2011) found that autonomy support from parents when children were in the 5th grade predicted having fewer delinquent friends 2 years later. Importantly, this effect was detected also while controlling for the number of delinquent friends in 5th grade. Goldstein and Iso-Ahola (2008) found that parents who felt autonomous and self determined were less inclined to exhibit angry, aggressive spectator behavior in sports events involving their children. Similarly, Neighbors et al. (2002) found that feeling controlled and non-autonomous predicted driving anger and aggression. Finally, in the same direction, Weinstein et al. (2011) found that feeling controlled and non-autonomous increased enjoyment of hostile humor.

More directly in the educational domain, past research has shown that autonomy-supportive teacher behavior is positively associated with students' positive feelings and negatively associated with students' negative feelings and aggressive tendencies behavior. For example, Roth et al. (2011) showed that Autonomy supportive teaching was negatively associated with bullying in class.

Grolnick and Ryan (1989) found that parent autonomy support was associated with lower levels of teacher-rated acting-out student behavior in the classroom (i.e., aggressive and disruptive behaviors). Similarly, Ryan and Grolnick (1986) showed that an autonomy supportive classroom climate was associated with less aggression as indicated in projective stories. Assor et al. (2002) showed that autonomy supportive teaching was positively associated with positive student feelings when in classroom, whereas autonomy suppressing teaching was associated with negative student feelings. The latter finding concerning the negative emotional correlates of autonomy suppressing teaching was also observed in a study by Assor et al. (2005).

While these studies are clearly consistent with the notion that an autonomy-supportive I–Thou dialogue promotes positive students' feelings and reduces negative feelings and classroom violence, they do not test the idea that attempts to enhance teachers' capacity to support students' autonomy via dialogue can indeed promote these desirable outcomes. Thus, the present study is the first to test the hypothesis that a program aimed at enhancing teachers' capacity to support autonomy via I–Thou dialogue would result in increased positive students' feelings and decreased negative students' feelings and class violence. The next section describes the main features of the ASID program.

5 A program promoting autonomy-supportive I–Thou dialogue

Based on the above conceptualization of autonomy-supportive I–Thou dialogue, the two authors of this article formulated a learning and implementation program with teachers. The program is designed to be carried out with small groups of teachers, who meet twice monthly for at least one school year, so that there is an opportunity for teachers to form close, autonomy supportive relations, as well as have enough time to assimilate and try to implement the new ideas in ways that fit their own beliefs and style.

The program includes three components:

- a) *Theoretical Learning*: During the sessions, teachers learn the SDT view of autonomy support and the Buberian “I–Thou” dialogue approach. These concepts are taught in relation to education, learning-instruction processes, and student–teacher relationships. Following the view of autonomy-supportive I–Thou dialogue presented above, the importance of empathic listening and perspective taking are highlighted. In addition, we also emphasize the importance of teachers' awareness of their own feelings and needs in their encounter with students. In this context, teachers often note that some students act in disrespectful or aggressive ways toward them. In these cases, we suggest that teachers would do well to address their feelings concerning respectful student behavior. Finally, to minimize technical and non-sensitive application of ostensibly growth-promoting activities,

- we encourage teachers to accompany the activities with ongoing talk about the meaning of the activities for students, and to address students' experiences while engaged in the activities.
- b) *Experiential component*: In each session, teachers in the workshop share personally meaningful stories and experiences from their schools. This process aims to help teachers to experience a dialogue that supports their own needs. The counselor-facilitator of this process attempts to demonstrate various ways to facilitate meaningful autonomy-supportive I–Thou dialogue.
 - c) *Implementation component*: In each session, teachers plan specific acts they may take to promote autonomy-supportive I–Thou dialogues in their classrooms. The implementation's timing, frequency, contents, and processes are not structured in advance; rather, they emerge according to the school's needs, teacher preferences, and the opportunities afforded by the circumstances and developments characterizing each classroom and school. Following each teacher workshop, the teacher conducts a dialogue with some students. It is recommended that teachers would try to conduct dialogues with their students not only during regular classes, but also during special periods called "dialogue meetings" which are explicitly devoted to enhancing teacher–child communication, and which the school principal is asked to encourage and allocates time for. In the discussion of teachers' attempts to develop dialogues with their students, group facilitators often emphasize that autonomy supportive dialogue does not solely denote choice giving, but rather includes the willingness to hear criticism, as well as to render the learning process as relevant to students' goals and concerns.

6 The present research

The autonomy-supportive I–Thou dialogue program (ASIT Dialogue) was implemented for two years, and its effects on students' positive and negative feelings in the classroom and on violence in the classroom were assessed by comparing the level of these variables before and after the program was implemented. Also assessed were students' perceptions of the extent to which teachers engaged in three aspects of autonomy supportive dialogue, which were found to affect students' feelings in previous research (e.g., Assor et al. 2002): talking on the relevance of subjects being studied to students' lives, goals and interests, providing choice, and allowing criticism and promoting independent thinking. In our measurement attempts we focused on these three aspects of autonomy support because research has shown that these three components appear to capture central aspects of the autonomy support construct (e.g., Assor et al. 2002; Ryan and Deci 2000a).

We hypothesized that comparisons of data collected before and after the program was conducted would indicate that students of teachers participating in the program would show a significant increase in positive feelings, and significant decreases in negative feelings and violence. We also explored changes in teachers' autonomy-supportive dialogue behaviors (as perceived by students) in an attempt to identify which kind of autonomy supportive dialogue behaviors would be affected by the program.

7 Method

7.1 Sample

The 2-year dialogue program assessed was conducted with teachers of junior high schools. Due to the longitudinal nature of the program, we administered questionnaires only to students who at the beginning of the program were in the seventh grade, so that a post-intervention assessment would be possible. Thus, we examined the effects of the program based on the responses of the 420 students (48% male) of 18 seventh grade home-room teachers who stayed with their classes for 2 years. The students belong to eight junior high schools in two major cities in southern Israel. The schools serve populations from lower and middle class neighborhoods.

7.2 Procedure

Students in the seventh grade completed a pretest questionnaire several weeks before their home room teacher started the dialogue program. Then, their home room teachers participated in the program for two school years. As part of the program, teachers from each of the eight participating schools met in their own schools in small groups for one and half hours every 2 weeks. There were 7–12 teachers in each group, although as was already noted, the research assessed the effects of the program only among students of the eighth grade teachers. The groups were heterogenic regarding teachers' demographic characteristics (gender, age, number of years of experience, etc). The workshop facilitators were school counselors, with a Masters degree, and each worked with teachers from her/his own school. All counselors had undergone training by the first author as part of their routine professional preparation for work in the schools. Following the termination of the program, at the end of the spring semester, students responded again to the same questionnaires which they completed before the program started. The questionnaires referred to students' experiences and perceptions during the classes taught by specific teachers who participated in the dialogue program.

7.3 Measures

The questionnaire completed by students before and after the program assessed seven variables: Three variables refer to expected socio-emotional outcomes: positive feelings, negative feelings and violence in the classroom. The other variables refer to four aspects of autonomy-supportive I–Thou teacher–student dialogue. The scales assessing these variables were all validated in previous research (Assor 1999; Assor and Kaplan 2001; Assor et al. 2002; Kaplan and Assor 1998a,b; Assor et al. 2005; Weinstock et al. 2009). Students were asked to rate their agreement with each questionnaire item on a 4-point scale ranging from *Agree* (4) to *Disagree* (1).

7.3.1 *Positive feelings while in the classroom*

In this scale students indicate the extent to which they feel five positive emotions when they are in the teacher's classroom. The scale is a somewhat extended version

of the positive emotions scale used by Assor et al. (2002), and refers to the affects of interest, enjoyment, happiness, enthusiasm and feeling calm. Cronbach's α in the first and second administrations (Times 1 and 2) were both 0.70.

7.3.2 Negative feelings while in the classroom

In this scale students indicate the extent to which they feel five negative emotions when they are in the teacher's classroom. This scale too is a somewhat extended version of the negative emotions scale used by Assor et al. (2002), and refers to the affects of anger, worry, sadness, shame, and boredom (α in Time 1 = 0.65; α in Time 2 = 0.63).

7.3.3 Perceived violence in class

This 2-item scale examines the extent to which students perceive their classmates as behaving in ways that are physically or verbally aggressive. The items were: "In my class there are a lot of students who hit other students" and "In my class there are a lot of students who insult and make fun of other students" (Time 1: α = 0.68; Time 2: α = 0.74). Although this scale contained only two items, previous studies showed it to have satisfactory validity (Assor 2002; Feinberg et al. 2005, 2006, 2008). For example, in these studies perceived violence in class had moderate and significant positive correlations with students' reports on the number of times in the past month other students hit them, forcefully took their belongings, or cursed them.

Three components of teachers' talk assumed to promote autonomy-supportive I–Thou Dialogue were examined by scales adapted from Assor and Kaplan (2001) and Assor et al. (2002) and Weinstock et al. (2009).

7.3.4 Relevance focused dialogue

This variable was assessed by a 3-item scale capturing the extent to which the teacher is seen as talking to students about why it is important to learn the subject matter and do the assignments, as well the relevance and value of the subject matter and the assignments to their personal goals and interests. A sample item is: "We talk with our teacher about the connection between learning and the real world". Reliabilities were: α Time 1 = 0.65; α Time 2 = 0.65.

7.3.5 Choice focused dialogue

This variable was assessed by a 3-item scale capturing the extent to which the teacher was seen as allowing choice as part of the learning process and as conversing with students about choices. A sample item is: "The teacher lets us talk about things that bother us in class". Reliabilities were: α Time 1 = 0.59; α Time 2 = 0.67.

7.3.6 Criticism supporting dialogue

This variable was assessed by a 4-item scale capturing the extent to which the teacher was seen as enabling free and open expression of critical thoughts and independent

opinions. A sample item is: “The teacher listens to students’ ideas and opinions in class”. Reliabilities were: α Time 1 = 0.63; α Time 2 = 0.67.

8 Results

8.1 Preliminary analyses

The correlations between the three socio-emotional indicators (positive feelings, negative feelings and violence), and the correlations between these three indicators and the autonomy support variables are all in line with theoretical expectations, For example, as expected, the three autonomy supportive dialogue features all correlate negatively with violence and negative feelings and positively with positive feelings.

Pearson inter-correlations between the study variables examined at the pretest and posttest intervals are presented in Tables 1 and 2. Inspection of the correlations shows that the variables are distinguishable. Nonetheless, the moderate correlations between the three indicators of autonomy-supportive dialogue indicate that the dialogue dimensions are certainly interrelated. Thus, teachers perceived by their students as allowing criticism are also perceived as discussing the relevance of the studied subject matter to students’ own lives. These interrelations between the different dimensions of needs satisfaction are theoretically expected and were also found in previous studies (e.g., Deci et al. 2001; La Guardia et al. 2000).

Table 1 Pearson correlations between study variables at pretest (seventh graders)

	1	2	3	4	5
1. Choice-focused dialogue	–				
2. Relevance-focused dialogue	.45**	–			
3. Criticism supporting dialogue	.42**	.55**	–		
4. Positive emotions	.25**	.31**	.32**	–	
5. Negative emotions	–.20**	–.19**	–.17**	–.48**	–
6. Class violence	–.18**	–.25**	–.22**	–.20**	.10**

$n = 420$; * $p < .05$, ** $p < .01$

Table 2 Pearson correlations between study variables at posttest (eighth graders)

	1	2	3	4	5
1. Choice-focused dialogue	–				
2. Relevance-focused dialogue	.51**	–			
3. Criticism supporting dialogue	.43*	.53**	–		
4. Positive emotions	.30**	.30**	.32**	–	
5. Negative emotions	–.17*	–.17**	–.10*	–.48**	–
6. Class violence	–.12*	–.15*	–.18**	.05	.05

$n = 420$; * $p < .05$, ** $p < .01$.

Table 3 Students' feelings and perceptions before and after the program

Variables	Pretest		Posttest		<i>t</i>	<i>p</i>
Students' feelings and violence in the classroom						
Positive emotions	1.96	(.70)	2.86	(.67)	11.6	.000
Negative emotions	2.77	(.53)	2.09	(.57)	11.9	.000
Class violence	2.29	(.90)	2.03	(.93)	3.67	.000
Students' perceptions of teacher's autonomy supportive talk						
Choice-focused dialogue	2.54	(.71)	2.61	(.76)	1.36	ns
Relevance-focused dialogue	2.71	(.76)	2.91	(.74)	2.88	.004
Criticism supporting dialogue	3.17	(.57)	3.19	(.65)	0.35	ns

n = 420; Figures not in parenthesis are means, figures in parenthesis are standard deviations

8.2 Primary analyses: pretest–posttest comparisons

A pretest–posttest comparison was conducted using *t* tests for dependent samples. Due to the number of comparisons, we set the significance level to 0.005. Results are presented in Table 3.

The comparisons between students' reports on the three socio-emotional indicators in the post-test versus the pre-test clearly showed that students reported more favorable outcomes in the post-test. Thus, at the end of the program students reported more positive feelings, less negative feelings and less violence than they reported at the beginning of the program. All three differences were highly significant.

Results of comparisons on the three indicators of autonomy-supportive dialogue were less conclusive. Thus, the difference between the pre and post-tests were significant only in the case of relevance-focused dialogue, and in this case the change was as expected, so that students perceived their teachers as conducting more relevance-supporting dialogue at the end of the program than at the beginning. While the change in the choice-focused indicator was in the predicted, more favorable direction, this change was not statistically significant. Interestingly, there was essentially no change on the indicator of criticism-supporting dialogue.

To examine the possibility that the positive changes in the three socio-emotional indicators might be accounted for by change in relevance-focused dialogue, we conducted three repeated-measures analyses of covariance (ANCOVA). Each analysis examined the significance of the difference between the pre- and post-measure of one socio-emotional indicator while controlling for the effect of changes in the measure of relevance-focused dialogue. To ensure rigorous testing of the potential role of relevance-focused talk in promoting socio-emotional changes, we conducted two types of ANCOVAs. In one set of analyses the pre and post indicators of relevance-focused dialogue were entered as covariates, whereas in a second set of analyses the covariate was the difference between the pre and post measures of relevance-focused dialogue. Results of both sets of analyses indicated that the difference between the pre and post socio-emotional indicators remained significant also when the effects of relevance-focused dialogue were held constant. These findings suggest that the positive changes

in the three socio-emotional indicators cannot be ascribed to program-related increases in relevance-focused dialogue.

9 Discussion

In general, the results suggest that the dialogue program did have a positive effect on students' feelings and on violence in the classroom. Specifically, students of teachers who participated in the program reported more positive feelings in the classroom at the end of the program than in the beginning of the program, and the reverse was true for negative feelings and student-perceived violence in the classroom. While it is not possible to draw conclusive causal inferences from our study due to lack of a control group and the non-experimental nature of the research, the findings do demonstrate the potential value of programs fostering teachers' capacity and inclination to conduct autonomy supportive I–Thou dialogues with their students.

The finding concerning an increase in positive feelings and a decrease in negative feelings while students are in the classroom is particularly noteworthy given the general tendency of older students to report decreased enjoyment of their studies and schooling relative to younger students (e.g., [Anderman et al. 1999](#); [Assor and Eilott 2001](#); [Eccles et al. 1996](#); [Harter 1981](#); [Kaplan et al. 2003a,b](#); [Skinner and Belmont 1993](#)). Thus, in contrast to the fairly normative trend of age-related decrease in positive school-related feelings, our research has shown that students who participated in the program showed an increase in classroom-related positive feelings between the beginning of seventh grade and the end of the eighth grade. This trend reversal may therefore suggest that our dialogue program may be potent enough to cancel and perhaps even reverse general age-related trends pertaining to studying and spending time in the classroom. Given the focus of our program, the results may indicate that teachers' initiation of autonomy supportive I–Thou dialogue may help early adolescent students to experience studying and being in the classroom as valuable and enjoyable despite age-related inclinations to be highly critical of schools.

The above interpretation points to the possibility that the well known decrease in positive feelings regarding studying and school in general may not be a general developmental phenomenon but rather is determined at least partly by the extent to which adolescents experience their teachers as responsive to their growing need for autonomy. Thus, when teachers and schools respect students' need for autonomy via the dialogue they engage in, and by allowing students opportunities for self expression, students may experience positive feelings in the classroom also in ages when oppositional attitudes toward social institutions and adult authorities are common. This view is also consistent with [Eccles and Midgley \(1989\)](#) stage-fit theory, according to which adolescents often show low levels of motivation and positive affect toward their junior high schools because they experience these schools as frustrating and inconsistent with their increased need for autonomy.

Although in our quantitative research we focused on three specific autonomy supportive behaviors, it is important to note that in our training program we aim less at the production of specific behaviors and more at the deep and autonomous internalization of autonomy supportive values and beliefs, as well as the development of a general

autonomy supportive style. According to [Reeve \(2006\)](#) such a style “subsumes a set of beliefs and assumptions about the nature of student motivation, and it is not a prescribed set of techniques and strategies” ([Reeve 2006](#), p. 229). If teachers participate in programs such as ours at the beginning of their careers, autonomy support may become integrated into the teachers’ way of life at school and may guide teachers while instructing and connecting with their students.

In contrast to the findings on the socio-emotional indicators, results pertaining to the program’s effect on teachers’ display of the three components of autonomy-supportive dialogue were less strong. Thus, there was a significant change in relevance-focused dialogue, but not in the other two components of autonomy-supportive dialogue. The finding that the program was associated with increase in relevance-focused dialogue but no significant changes in choice- and criticism-supporting dialogue suggests that perhaps it is more difficult for teachers to change their behavior patterns when it comes to providing more choice or allowing expression of critical opinions. According to this account, choice and criticism support might be perceived by teachers as involving greater risk of losing control over the classroom than does relevance-focused dialogue. Thus, teachers may think that if they provide considerable choice, students would pay much more attention to their own urges and ideas than to teachers’ instructions and requests. Similarly, many teachers may suspect that allowing students to express critical opinions might cause students to show less respect for their teachers. Of course, other potential explanations are also possible, and only future research might provide a deeper understanding of the pattern of results obtained in this study with regard to the three components of autonomy supportive dialogue.

Importantly, however, the finding that students perceived their teachers as engaged in more relevance-focused dialogue at the end of the program (relative to the pretest) seems important. Thus, [Assor et al. \(2002\)](#) found that clarifying the relevance of academic subject matters to students’ current lives and future plans is a central aspect of autonomy support. Moreover, [Assor et al. \(2002\)](#) reported that teachers’ focus on relevance was a stronger predictor of junior high-school students’ positive emotions and school engagement than both choice-provision and allowing criticism. It is therefore particularly encouraging that of the three autonomy supportive teachers’ behaviors examined in the present research, the program appears to have had the most positive impact on the component found in previous research to be particularly beneficial for junior high students.

The present research did not examine the impact of participation in the program on teachers’ feelings or their sense of job satisfaction and personal fulfillment. Yet, it is quite possible that participation in such programs may enhance teachers’ satisfaction from their work. Teachers often feel that they only rarely have the time and opportunity to generate meaningful discussions and relationships with their students, although the desire for such relationships was often a major motive for becoming a teacher in the first place (see [Huberman 1993](#); [Richardson and Watt 2006](#); [Watt and Richardson 2008](#)). Therefore, a program that helps teachers create authentic dialogue with their students can help teachers regain the sense of meaningful connection with students which was once so important for them and which many still hope to attain.

9.1 Limitations and future directions

In this section we consider first some limitations of the program and second limitations of the research on the program. The current program did not involve the principals and did not include the complete staffs of the schools involved. The non exclusive nature of the program might have reduced its effects on teachers and students. In addition, the program only focused on dialogue and did not include organizational changes which might have further supported teachers' and students' sense of autonomy and well being, for example, allocating specific times and locations for dialogues, instituting curriculum and organizational changes that would provide teachers and students with more opportunities for choice, self expression and influence on the school life.

It appears, then, that more significant changes are likely to occur in both students and teachers if the dialogue program is incorporated in a comprehensive school change program that includes the principal and the complete school staff. Some examples of such programs are the First Things First Program (e.g., [Connell and Broom 2004](#); [Levin et al. 2006](#); [Deci 2009](#)), the Caring Community program (e.g., [Solomon et al. 2000](#)), and the *Personal and Social Growth program* ([Assor et al. 2000a,b, 2009](#)).

In line with SDT emphasis on autonomy support and the [Cook-Sather \(2002\)](#) approach, it appears that such comprehensive school-wide change processes would promote deeper growth-promoting changes if they would include students as true partners in the planning and implementation of the change process.

The research on the program had several important methodological limitations. As mentioned earlier, the lack of a control group limits our ability to draw conclusions on the effects of the program. The current program was implemented with a relatively small sample of teachers and was restricted to the seventh and eighth grades. Future research should examine the effects of the program with a larger number of teachers and with students from a wider age range. Other limitations include the reliance on relatively few measures of well being and autonomy support, as well as the use of only two items to measure violence. Despite evidence pertaining to the scale's validity ([Assor 2002](#); [Feinberg et al. 2006, 2008](#)), future research would do well to utilize broader scales containing more items.

However, perhaps the most significant limitation involves the potential insensitivity of our measures to specific change processes that occurred in the different schools. The very core of this autonomy-supporting program, with its focus on meaningful dialogue, was its flexible application to the needs and preferences of each teacher, class, school, and facilitator. As was previously described, although the program's central SDT–Buberian axis remained constant, this adaptability resulted in great variability between teachers and schools in the implementation's timing, frequency, contents, structures, and processes. The quantitative assessment process referring to all eight schools might have missed some of this uniqueness and possible additional effects. Therefore, future investigations of similar programs may need to employ a wider range of qualitative and quantitative assessment tools which would be adjusted to the specific change processes developing in each school.

10 Summary

The integration between the SDT approach and Buber’s philosophy allowed for the construction of a program aimed at fostering the teachers’ capacities and inclinations to conduct autonomy-supportive “I–Thou” dialogue with their students. At present, we do not have conclusive evidence concerning the effectiveness of the dialogue program relative to other interventions. However, the current initial findings suggest that the program enhances students’ positive feelings and well being in the classroom, as well as teachers’ initiation of relevance-focused dialogue with students. We would like to close with a quote from an interview with Ariel, a ninth grader who participated in the program for 2 years. Ariel was asked: “What is a meaningful dialogue for you in school?” His answer shows the value of what appears to be a truly autonomy-supportive I–Thou dialogue between students and teachers:

For me, a meaningful dialogue is a dialogue where both sides are willing to change their point of view or to compromise. When you can speak freely without fear. . . . Usually we [the students] don’t feel that way at school, but it’s different with David [the homeroom teacher who participated in the program]. He really listens and I can really express myself.

Interestingly, Ariel points to one feature of autonomy-supportive I–Thou dialogue that was especially meaningful for him: the teachers’ willingness to allow open and secure expression of students’ opinions, and consequently change their views following such dialogue. Future studies of dialogue-promoting educational programs may focus on this aspect and examine the extent to which teachers and students actually change their views and behavior following dialogues.

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Appendix

Autonomy Supporting Dialogue Questionnaire

Choice-focused dialogue

1. The teacher asks us which subject we want to study more and which to study less.
2. The teacher asks if we want to change something in the way we study in class.
3. We often speak with our teacher about different ways that might help us make better choices.

Relevance-focused dialogue

1. We talk with our teacher about the connection between learning and the real world.
2. We talk with our teacher why it is important to study certain subjects in class or school.
3. The teacher talks with us about our feelings toward the class.

Criticism supporting dialogue

1. The teacher listens to students' ideas and opinions in class.
2. The teacher lets us talk about things that bother us in class.
3. The teacher says that if we do not agree with him/her it is important that we tell him/her.
4. The teacher is willing to listen to students' demands or complaints regarding his/her class.

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