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Allowing Choice and Nurturing an Inner Compass: Educational Practices Supporting Students' Need for Autonomy*

Avi Assor

Abstract

This chapter focuses on seven practices of autonomy support which are likely to promote two major components of the need for autonomy: (a) lack of coercion and optional choice and (b) formation and realization of an inner compass: authentic, direction-giving values, goals, and interests. A special emphasis is put on research pertaining to three autonomy supportive practices which are assumed to support formation and realization of authentic, direction-giving values, goals, and interests, whose impact on perceived autonomy was not sufficiently examined so far: (a) IVD – intrinsic value demonstration, (b) SVE – support for value/goal/interest examination, and (c) FIV – fostering inner-directed valuing processes. The autonomy supportive practices that foster the development of stable authentic values and goals might be especially important in western countries, in which postmodern moral relativism and the abundance of information and options make it particularly difficult for youth to form stable and authentic values and goals.

The hope to see students motivated and engaged in activities that contribute to their intellectual, socioemotional, and moral growth is widely shared. However, students often appear less and less engaged in learning as they grow older (e.g., Gottfried, Marcoulides, Gottfried, Oliver, & Guerin, 2007). According to self-determination

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A. Assor (⋈) Educational and School Psychology Program, Ben Gurion University, Be'er-Sheva, Israel e-mail: assor@bgu.ac.il theory (SDT, Ryan & Deci, 2000), one major factor which may explain why students are often poorly motivated and poorly engaged is that they do not feel that school-related activities support their need for autonomy.

The need for autonomy is conceptualized in this chapter as involving two major components: (a) the striving to avoid coercion and have optional choice and (b) the striving to form and realize authentic and direction-giving values, goals, and interests (i.e., the striving for an inner compass). In this chapter, I describe various practices of teachers, parents, and schools that can support students' need for autonomy and therefore promote engagement. In particular, I describe

three practices that promote the examination (and consequent formation) of authentic goals and values and are relatively underemphasized in extant work on autonomy support:

- (a) Intrinsic value demonstration (IVD)
- (b) Support for value/goal/interest examination (SVE)
- (c) Fostering inner-directed valuing processes (FIV)

These practices are especially important in the postmodern era in which many face considerable value confusion.

Motivation

I view the concept of motivation as referring to people's intentions to perform actions. These inclinations or intentions (i.e., motives) have two important attributes: intensity (strength) and phenomenological quality. The intensity dimension refers to the amount of effort which people intend to put in an attempt to reach a certain goal, often in the face of difficulties. The quality dimension refers to people's perception and experience of the reasons or sources of their intentions or motives. Specifically, when people perceive their intentions as emanating from their authentic self, the phenomenological quality of the motivation is high because the intentions are experienced as autonomous, whereas intentions that are perceived as unauthentic are experienced as controlling and unpleasant (e.g., Roth, Assor, Niemiec, Ryan, & Deci, 2009; Ryan & Deci, 2000). For example, two students may intend to invest a great deal of effort in a school assignment, so the intensity of their motivation is similar (both are high on intensity). However, the quality of the motivation may be high for the student who perceives the assignment as something that she/he would authentically want to do. In contrast, the quality of the motivation to do the assignment would be low for the person who feels that the assignment is a task that is completely unconnected to her/his authentic values and interests.

Based on SDT, then, I differentiate between: (1) Motives or intentions that are experienced as controlling, nonautonomous and therefore stressful

and nonoptimal, and (2) Motives or intentions that are experienced as autonomous, emanating from one's true self, highly volitional, and therefore leading to full engagement and well-being (e.g., Ryan & Deci, 2000). Specifically, controlled motives can be driven by (1) the desire to avoid external punishments and threats and/or the hope to attain rewards (e.g., doing your homework in order to avoid being grounded or in order to win a desired gadget) and/or (2) the desire to avoid internal feelings of guilt and shame and/or the hope to feel grand and unique (e.g., Assor, Vansteenkiste, & Kaplan, 2009). Autonomous motives can be guided by (1) the perception of the task as valuable, perhaps even central to the realization of one's central values (but not necessarily pleasant), and/or (2) the perception of the task as interesting and enjoyable.

The concept of engagement refers to the amount and quality of actual efforts and actions aimed at reaching a certain goal. While motives refer to intentions or inclinations to do something in order to reach a certain goal, engagement refers to actual actions that are performed as one attempts to reach a certain goal. Simply put, the difference between motives and engagement is the difference between goal-oriented intention and action. If the goal is learning new concepts or skills, then people can differ in the amount of effort they invest (i.e., persistence, determination), as well as the effectiveness, flexibility, or creativity that characterize their efforts. Research guided by SDT indicates that while controlling motives can lead to a great deal of effort, autonomous motives are much more likely to promote flexible and creative engagement in learning (e.g., Deci & Ryan, 1985; Roth et al., 2009).

Given the pleasant emotional experience associated with autonomous motives and the role of such motives in facilitating flexible and creative engagement in learning, it is important to discover factors which may contribute to autonomous motivation. SDT posits that there are at least three basic human needs whose satisfaction promotes autonomous motivation and therefore high-quality engagement: the need for relatedness, competence, and autonomy (e.g., Ryan & Deci, 2000).

While the needs for competence and relatedness have received considerable attention from other

theorists (e.g., Baumeister & Leary, 1995; Elliot & Dweck, 2005; White, 1959), SDT is unique in its emphasis on the need for autonomy.

Freedom from Coercion and Optional Choice

The first striving within the need for autonomy, to be free from coercion and have the possibility to choose one's actions, is similar to Fromm's (1941) notion of "Freedom From," as well as Berlin's (1969) notion of negatively defined autonomy (see also Aviram & Assor, 2010, on this issue). Research anchored mainly in SDT has shown that when people are pressured and coerced (from outside or from within) to behave in specific ways, they experience frustration. This frustration has been shown to undermine engagement, well-being, and vitality (e.g., Assor, Kaplan, & Roth, 2002; Reeve, 2006; Reeve & Jang, 2006).

As for choice, there is ample research showing that people, in general. prefer to have the option to choose (see Patall, Cooper & Robinson, 2008), although they do not always need to be the ones who make the choice, especially when someone else chooses for them what they anyway want (e.g., Katz & Assor, 2007). For example, Katz and Assor showed that when parents choose for children learning and leisure activities that children have a sustained interest in, children willingly engage in these activities. In contrast, when parents choose activities that are inconsistent with the child's interests, children do feel controlled and nonautonomous. Thus, it appears that while people do not always have to choose things by themselves, they do want to have the option to choose so that if they lose trust in a person who does the choice for them, they could determine their choices and actions themselves.

Inner Compass

The striving to develop and realize directiongiving and authentic values, goals, and interests (an inner compass) is similar to Fromm's (1941) notion of "Freedom For," as well as Berlin's (1969) notion of positively defined autonomy (see also Aviram & Assor, 2010). The formation of this inner compass is very important because it provides inner criteria for making important decisions. When people do not have clear and authentic values, goals, and interests, the availability of choices might be a threat or a burden, as indicated in Fromm's writings on the phenomena of escape from freedom. It is only when one has clear and authentic inner compass that one welcomes choice (if this choice is meaningful; see Katz & Assor, 2007). Thus, it is possible that the finding that people feel burdened by too much consumerist choice (e.g., Iyengar & Lepper, 2000) may at least, in part, be a product of lack of clear and authentic values which enable people to quickly discard many of the choices offered to them as irrelevant and harmful.

Authentic, direction-giving goals, values, and interests also provide people with internal criteria for evaluating others and themselves and a foundation a for feeling that their actions are coherent and meaningful, and they also make people less dependent on others' evaluations (Assor, 2010, 2011; Reeve & Assor, 2011). Highly developed and authentic value systems which guide decisions and actions function as elaborate, multilevel, categories which are anchored in a more general self and world view, embedded in a historical perspective (e.g., Assor, 1999, 2011; Assor, Cohen-Melayev, Kaplan, & Friedman, 2005).

Teacher, Parent, and School Practices That Support the Need for Autonomy

In this section, I will describe seven practices of teachers, parents, and schools that are likely to support the two components of the need for autonomy. Research demonstrating the contributions of these practices to students' perceived autonomy, engagement, achievement, high-quality learning, and/or well-being will be briefly described. I will start with practices that support the striving for no coercion and optional choice and then move to practices supporting the formation of authentic values, goals, and interests (Fig. 20.1).

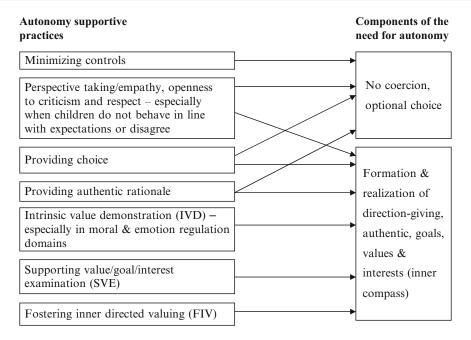


Fig. 20.1 Practices supporting the need for autonomy

Minimizing Controls

This practice refers to behaviors of other people or features of the educational context which cause students to feel controlled. Minimizing controls may be a necessary but not sufficient condition for supporting the need for autonomy. That is, while the presence of controls can undermine the need for autonomy, its absence may not be enough to make people feel that they can choose and organize their actions or formulate and realize direction-giving values, goals, and interests.

Soenens and Vansteenkiste (2010) describe two forms of control: (a) behaviors that pressure one to behave in a specific way in order to avoid unpleasant bodily experiences, loss of material benefits and privileges, as well as in order to gain various material benefits and privileges (external control), and (b) behaviors that pressure one to behave in a specific way in order to feel worthy of love and esteem (internal control; see also Assor, Roth & Deci, 2004).

External control includes behaviors such as physical punishment, withdrawing privileges, physical threats, and power assertion, as well as bribes or material rewards that are not informative in terms of level or quality of one's performance. Research surveyed by Deci, Koestner, and Ryan (1999) indicated that when people are already intrinsically motivated to perform certain tasks (including learning), the offering of material rewards, in general, tends to undermine intrinsic motivation, perceived autonomy, and performance quality. Other external controls involve direct commands and surveillance, imposing of deadlines, intruding and interfering with the child's natural rhythm of work, and suppressing the expression of disagreement or critical opinions.

One study that examined the impact of the teachers' use of external controls on children was conducted by Assor, Kaplan, Kanat-Maymon and Roth (2005). Israeli fourth and fifth graders completed questionnaires assessing teachers' tendency to intrude and interfere as children worked on their assignments, as well as to discourage any answer that diverts from teachers' opinion. Children's academic engagement was assessed by their primary teachers. Path analyses supported the hypothesis that children's perceptions

of their teachers as using external controls arouse children's anger and anxiety, and these emotions then undermine academic engagement. Similarly, Assor et al. (2002), in a study conducted with Israeli students in grades 3–8, also showed that interfering with children's or early adolescents' preferred pace of learning and not allowing critical and independent opinions predicted negative emotions during learning and poor academic engagement. Importantly, these findings were obtained also when the effects of autonomy supportive behaviors such as providing choice were held constant via regression analyses.

Research by Assor, Roth, and their colleagues (Assor & Roth, 2005; Assor, Roth, & Deci, 2004; Roth et al., 2009) has identified one type of control that undermines students' need of autonomy by linking their sense of love-worthiness and self-worth to the enactment of expected behaviors. This type of controlling behavior was termed "using conditional regard as a socializing practice." In this practice, educators provide more affection or esteem when children enact behaviors or attain outcomes that are valued by educators; similarly, children lose affection or esteem when they do not comply with expectations (see Assor et al., 2004). Research with ninth-grade Israeli adolescents has shown that when parents were perceived by their children as using conditional regard to promote academic achievement and investment, children felt a sense of internal compulsion, as well as anger and resentment in relation to parents. Importantly, research by Roth et al. (2009) has shown that even the seemingly benign practice of using conditional positive regard (i.e., providing more affection and esteem when the child invests and achieves in school) is also associated with feelings of internal compulsion and a rather rigid, grade-focused mode of engagement in school.

Assor, Roth, Israeli, and Freed (2007) conducted a follow-up study to examine whether the Roth et al. (2009) findings concerning conditional regard predicting adolescents' sense of internal compulsion would emerge also when conditional regard was assessed via parents' reports. Results obtained with ninth-grade Israeli adolescents clearly replicated the pattern obtained by Roth

et al., thus indicating that the negative emotional effects of parental conditional regard are not simply an artifact of adolescents' self-reports.

Indirect evidence for the autonomy suppressive nature of conditional regard comes also from research on the construct of psychological control. The concept and measure of psychological control (Barber, 1996; Barber, Stolz, & Olsen, 2005) is essentially similar to that of conditional negative regard, as both concepts include clear elements of love withdrawal when children do not comply with parents' expectations. Research on this widely used concept has shown that parents' use of psychological control in the domain of achievement predicts a variety of maladaptive child outcomes such as depressive feelings, poor self esteem, and maladaptive perfectionism (e.g., Barber et al., 2005; Soenens & Vansteenkiste, 2010; Soenens et al., 2005). The offspring participating in these studies ranged in age from 11 to 24 years and came from ethnic groups characterized by widely different religions and cultural values in Europe, North and South America, Africa, and Asia. The major negative effects of psychological control were observed in all the ethnic groups examined.

Perspective Taking, Empathy, Openness to Criticism, and Respect When Children Disagree or Display Negative Feelings

This practice refers to the ability and inclination to try to understand and respect the other's perspective, including perspectives that are inconsistent with one's own views or seem unreasonable or wrong. Perspective taking and respect in the case of disagreements can take different forms depending on the content of the disagreement. For example, when children do not want to engage in studying a certain topic, the teacher can first ask them why they do not invest much in this topic. If the students say that they are bored or that they feel that no matter what they would do, they would never succeed, the empathic teacher acknowledges those feelings and respects them, and then relies on additional autonomy supportive practices such as offering a rationale and some choice to try to promote autonomous internalization of the value of learning the task at hand.

The task of being empathic, taking others' perspective, and respecting their feelings and opinions is relatively easy when others feel incompetent, confused, or distressed and therefore need someone to help them. In such cases, our interest and respect may only mean that we care and are not threatened by the distress or the other person. Moreover, such cases usually do not pose a threat to our beliefs, values, power, or self-esteem (as people who know what is right or wrong).

In contrast, being empathic and respectful is much more challenging when others do not necessarily feel incompetent and/or in need of help but simply hold *opposite* views and beliefs. Let us consider, for example, a high school student who is interested in arts and literature and therefore wants to take a minimal load of studies in the natural sciences. For parents who admire the natural sciences and want their child to study these subjects because they know she/he is very intelligent (and/or think these subjects can secure a high income), it might be extremely difficult to show respect for the child's different opinions, plans, and feelings on this issue. The difficulties in respecting the child's view may arise not only from our concern about the child's well-being and future opportunities but also from the feeling that respecting opposite opinions may indicate that our view is not so valid or even that we have no authority or are unsure of our views.

Because children and adolescents have at least some understanding of the challenge involved in respecting their opinions and feelings because they have already have at least some capacity for perspective taking (e.g., Epley, Morewedge, & Keysar, 2004), they really value the capacity of significant others to respect their differing opinions and negative feelings. Consequently, empathy and respect for oppositional opinions and feelings may provide particularly strong support for the child's need for autonomy. Consistent with this view, reports by Assor et al. (2002) and Assor and Kaplan (2001) on research with elementary and high school students in Israel

showed that their perceptions of their teachers as suppressing the expression of different and sometime critical opinions were negatively associated with their engagement in studying and positive feelings during studying. Importantly, this effect was also detected when the effects of other aspects of teacher behavior (as perceived by students) were statistically controlled for. The aspects of teacher behavior that were held constant were teachers' provision of choices, clarification of the relevance of the subject matter to students' goals, competence supporting feedback, and a warm behavior toward the student. While in these studies acceptance of differing opinions or negative feelings was not found to have positive correlates when entered with other variables in the regression analyses, it should be noted that openness to differing opinions was found to have positive and significant Pearson correlations with engagement.

The importance of perspective taking and empathy when teachers or parents disagree with children was also demonstrated in several studies conducted by Assor, Roth, and their colleagues, as in these studies, one major component of the autonomy support measure reflects the capacity to take children's perspective when they disagree with adults regarding school issues (e.g., Assor et al., 2007; Roth et al., 2009). The Roth et al. (2009) study is described in some detail in the section focusing on intrinsic value demonstration.

Providing Rationale

This attribute refers to teachers' inclination and ability to provide a coherent, age-appropriate rationale for their expectations. When students are provided with clear and convincing rationale for actions they do not find particularly interesting or valuable, they tend to feel less coerced (Assor, 2011; Grolnick, Deci, & Ryan, 1997). Moreover, when students understand and identify with the rationale for their school-related activities, they feel that the act of studying supports their need for autonomy because studying allows them to express and promote their values and goals. For example, when a high school teacher

shows students how good writing ability has allowed many past graduates to attain jobs they find interesting and socially valuable, this rationale enables many students to believe that by improving their writing abilities, they would be able to realize their authentic goals and values and therefore feel autonomous. Consistent with this view, Assor et al. (2002) and Assor and Kaplan (2001) have shown that the provision of a sound rationale to students in elementary school, middle school, or high school was a particularly good predictor of engagement and positive feelings regarding studying. Other research, conducted with adolescents and young adults in Israel and the USA, also supports the benefits of providing a rationale for actions expected from children (e.g., Deci, Eghrari, Patrick, & Leone, 1994; Koestner, Ryan, Bernieri, & Holt, 1984; Roth et al., 2009). In all these studies, it was found that children showed more autonomous motivation to act in accordance with adults' requests when adults provided a rationale for their requests.

Supporting Choice and Initiation

This attribute directly supports the striving for optional choice. Studies examining the impact of choice provision on the motivation to perform a relatively uninteresting task or on effort investment in class have shown that choice provision often enhances autonomous motivation and positive feelings while working on the task at hand (e.g., Assor et al., 2002; Cordova & Lepper, 1996; Deci et al., 1994; Katz & Assor, 2007; Reynolds & Symons, 2001; Zuckerman, Porac, Lathin, Smith, & Deci, 1978).

However, Katz and Assor (2007) noted that choice may be unimportant or even frustrating when students do not have clear goals or values or when the options available do not allow realization of students' goals and values. For example, Katz and Assor described research showing that when students can work on a task that they are highly interested in, the choice factor makes no difference. That is, students show similar (high) level of autonomous motivation irrespective of

whether they were given choice on not given choice. Thus, it appears that if one is able to do what one values as important or interesting, the provision of choice becomes insignificant. Thus, choice appears to be important mainly when it allows student to better realize their interests and values, or at least avoid activities that undermine their interests or values.

Intrinsic Value Demonstration

This attribute refers to the demonstration of valued attributes and behaviors by parents and teachers. It is important that the people demonstrating the valued behavior would not only enact it often but would also fully identify with it and perhaps would also appear to enjoy it. These feelings indicate that the behavior is worth engaging in, and as a result, children may feel that they really want to adopt these behaviors and they do not have to be forced to do them. IVD differs from modeling in that in IVD, it is important not only that the behavior is demonstrated often but also that the modeled behavior appears intrinsically worthy (valuable and/or enjoyable). IVD might be even more convincing than the provision of rationale because rather than talking about the importance of the valued behavior, you demonstrate its value in your own life and ongoing actions.

The identification with the demonstrated valued behaviors helps children to internalize values and goals around which their identity is formed and then renegotiated as they grow older (Erikson, 1950, 1968). As such, IVD by significant others may be necessary to support one key striving constituting the need for autonomy, namely, the striving for the formation of authentic directiongiving values and goals. One implication of the important role of IVD in the formation of values and goals is that when parents and educators do not provide IVD, youth may find it very difficult to feel that they have authentic values and goals that they really identify with and experience as a source of perceived autonomy and vitality. Thus, lack of IVD by significant others, especially in the moral, religious, and character domain, may

lead to a state of identity diffusion that is characterized by the feeling and the belief that nothing is really valuable and worthy to put effort into (e.g., Assor, 2011; Marcia, Waterman, Matteson, Archer, & Orlofsky, 1993). And indeed, research carried by Cohen-Malayev (2009) (see also Assor, Cohen-Malayev et al., 2005; Cohen-Malayev, Assor, & Kaplan, 2009) indicates that young adults raised in modern Orthodox Jewish families had significant difficulties developing a firm and satisfying religious identity and experienced many of the features characterizing identity diffusion when their parents were low on IVD of religious behavior.

The first study demonstrating the value of IVD from an SDT perspective was conducted by Roth and Assor (2000). They found that Israeli college students' perceptions of their parents as demonstrating the intrinsic value of prosocial actions predicted autonomous prosocial motivation, which in turn predicted students' engagement in prosocial behavior. All variables in this research were assessed via students' self-reports, and therefore the findings may, in part, reflect self-report bias.

A second, and more comprehensive, study of the correlates of IVD was conducted by Roth et al. (2009) with ninth-grade Israeli adolescents. IVD was assessed via items such as "My mom enjoys studying and expanding her knowledge." In addition, the study also assessed parents' perspective taking and rationale provision when the parent and child disagreed about how much studying the child should do. Results showed that adolescents' perceptions of their parents as using the practices of IVD, perspective taking, and rationale provision in the academic domain predicted adolescents' sense of choice with regard to studying, which in turn predicted teacher ratings of adolescents as showing interest-focused engagement in learning. The participants in the study came from diverse socioeconomic backgrounds, but there was no information available on the socioeconomic status of each participant; consequently potential effects of SES on the relations detected were not examined.

Another interesting finding in that research pertained to adolescents' perception of their parents as using the practice of conditional positive regard. Conditional Positive Regard (CPR) in the academic domain involves the provision of more affection and esteem when the child studies and achieves more. It was found that CPR, unlike the autonomy supportive practices, predicted feelings of internal compulsion with regard to studying, which in turn predicted teacher ratings of adolescents' engagement as grade-focused rather than interest-focused. (see Roth et al., 2009). It should be noted that the correlation between CPR and IVD was very low and not significant.

The importance of modeling, a construct somewhat similar to IVD, for engagement in prosocial acts has long been demonstrated by empirical research (see Eisenberg, Fabes, & Spinrad, 2006). However, so far there is almost no research comparing IVD and modeling in the domain of prosocial behavior.

Intrinsic value demonstration obviously does not apply to domains which students may find interesting and educators may value yet have no expertise or interest in. For example, adolescents may develop a serious individual interest in a musical instrument or a certain kind of art or sports domain which the parents know little about. In such cases, of course, parents cannot engage in IVD. However, if they value the development of intrinsic interests, engagement, and competence in their children and/or value the domain, they can rely on other autonomy supportive practices to foster the continual engagement and growth of their child within the relevant domain. For example, they can minimize controls and provide choice and, in addition, also support their child's need for competence by helping them find a teacher who presents optimal challenges and feedback (for applied implications of this point, see Madjar & Assor, in press).

Moreover, although parents may not be able to engage in IVD in the specific domain the child is interested in, they can demonstrate the value of general attitudes and skills that can help their children to persist and overcome difficulties in the domain they have chosen. For example, parents can show persistence and task-oriented coping skills in their personal hobby or some volunteer work, and their children can then adopt this orientation and skills in their specific interest domain.

While IVD may not be crucial to the development of individual interests, it is likely to be especially important in the moral, prosocial, and emotion regulation domains (Assor, 2011), and to some extent also in the academic domain. In these domains, the great majority of parents and teachers believe that it is important that their children adopt certain values and attitudes, for example, being honest, responsible, and considerate; regulating one's anger and aggressive reactions in order to avoid inflicting extreme pain on others or avoid undermining one's own future chances; and being able to persist in the face of difficulties in the pursuit of important self-determined goals. In all these domains, parents are likely to face significant difficulties in transmitting their values to their children if they do not demonstrate these valued behaviors in their every day conduct.

Importantly, if parents demonstrate behaviors and use additional autonomy supportive methods (such as minimizing controls, perspective taking, rationale, and choice), the demonstrated behaviors can serve as a potential foundation for offspring's sense of authentic self and identity. In particular, deep internalization of parents' values is more likely to occur if parents support adolescents' inclination to seriously examine the values endorsed and demonstrated by them. Research supporting this idea is presented in the next section which focuses on the practice of supporting value and goal examination.

The role of IVD in supporting the construction of direction-giving values and goals might be especially important in postmodern western societies and perhaps also to other societies in a globalized world (e.g., Aviram & Assor, 2010). In these societies, clear guidelines regarding the worthy and unworthy do not exist anymore due to increasing moral relativism, and the collapse of traditional moral and ideological authorities and norms. As in postmodern societies it is less possible to rely on recognized societal authorities and traditions, IVD by parents and teachers can fill an important social gap and become a particularly important source of authentic direction-giving values and goals, which then provide a relatively solid basis for youth emerging identity and future goals.

It appears then that the accumulating experience of being exposed to adults who have again and again demonstrated the value of certain values and virtues, and at the same time were careful not to force these values on their children, is likely to create a deep appreciation for the importance of these values and virtues even in a cynical and morally relativistic world. Consistent with the above view, it is probable that students would be much more engaged in various school-related activities if the intrinsic value of persistence, trying to understand things in depth, high-quality performance, and learning were often demonstrated by their parents and teachers in their own behavior. However, among adolescents in postmodern western cultures, IVD may not be sufficient to promote persistent engagement in learning (or other parentally valued activities) and might have to be complemented by educators' willingness to support youth inclination to examine parentally valued behaviors in terms of their own personal judgements, goals and values. The next section focuses on the practice of support for value examination and its potential contribution to youth engagement in various tasks.

Supporting Value/Goal/Interest Examination

This practice refers to acts that encourage youth to engage in activities, experiences, and discussions that allow them to examine and reflect seriously and critically on their goals, values, and interests. The notion of support for value examination (SVE) is illustrated in Table 20.1 via items of a scale assessing school-based support for value examination (Assor, 2010, 2011; Kanat-Maymon & Assor, 2011). As the concept of SVE is fairly new, research demonstrating the utility of this scale is only now emerging and is described in the following sections.

While SVE shares some similarities with perspective taking, it also differs from the latter in that in a typical perspective-taking act, the child already has relatively clear feelings or desires, which the educator tries to understand. In contrast, in the case of SVE, the youngster does not

Table 20.1 A scale assessing school support for value examination (SVE)

- The activities/studies in school sometimes cause me to think about important things I would like to do in my life
- 2. The activities/studies in school help me to find out what are the things I value in people
- School studies/activities enable me to examine my attitude to important issues in life
- School studies/activities do *not* provide me with opportunities to examine important questions that I am concerned with (Reverse coded)
- School studies/activities cause me to think of traits (attributes) I would like to have
- School studies/activities help me to think about just and desirable ways of acting in complex situations
- School studies/activities help me to think about what is more important and what is less important in life

Students respond to the above items on a 5-point Likert scale

know what she/he feels or wants, and it is the role of the educator to support an active, reflective, open-ended search of what one truly values, wants and feels. SVE also shares some similarities with choice provision. However, here too, the options may not be clear or they do not even exist at the present. But, as part of the exploration process they can be discovered or created.

As depicted in Fig. 20.2, the examination and reflection process is assumed to be part of a larger integration process, in which youth construct direction-giving, authentic goals, values, and interests (i.e., an inner compass). In Fig. 20.2, the process is depicted as a linear one. However, in reality, the process may often be spiral; for example, sense of autonomy may support deeper reflection and examination of one's goals and values. However, there is a general progress in the direction depicted in Fig. 20.2.

Following Ryan and Deci (2000), I view the integration process as a gradual attempt to resolve intra- and interpersonal inconsistencies between important goals and values (including conflicts between parents' and teachers' values and new ideas the adolescent develops). This can be accomplished by prioritizing goals and modifying practices so they fit together and, most importantly, so they reflect one's authentic inclinations, values, and goals. However, before goals and

values can be prioritized, they have to be seriously examined. The exploration process allows such an examination.

As shown in Fig. 20.2, an open and reflective examination process is assumed to advance a deep integration process, one in which values and goals are experienced as authentic, fit each other, and are embedded in a rich world view. As cognitiveemotional structures, these values constitute elaborate, multilevel categories. Consequently, when youth hold a certain value, they not only endorse abstract categories such as social justice or selfdirection (as is typically the case in value questionnaires), but they also have representations of specific attitudes and actions reflecting these values, as well cultural and historical narratives, symbols, and memories associated with these values. The formation of such integrated schemas is assumed to support youth sense of autonomy and also contributes directly to the enactment of demanding actions (e.g., Assor, 1999). Sense of autonomy is then assumed to enhance vitality and positive affect, as well as engagement in demanding actions. Empirical evidence for the processes depicted above is presented below.

As was already noted, the formation of integrated, direction-giving values and goals might be especially important in postmodern western societies in which clear guidelines regarding the worthy and unworthy do not exist anymore (see Aviram & Assor, 2010). Under these conditions, reflection-based integrated values and goals may be a crucial source of sense of autonomy and therefore vitality. These integrated values and goals can then provide a solid foundation for an identity that can resist the pressures and pulls of passing fads and contradictory cultural beliefs.

The above model was supported by two research projects. The first set of studies (Assor, 2010, 2011; Kanat-Maymon & Assor, 2011) focused on adolescents' perceptions of the extent to which their schools or their youth movement contexts support value and goal examination. The second project focused on parents' support for value examination in the religious domain.

Inspection of the model in Fig. 20.3 indicates that the first research project focused on two components of the comprehensive model presented

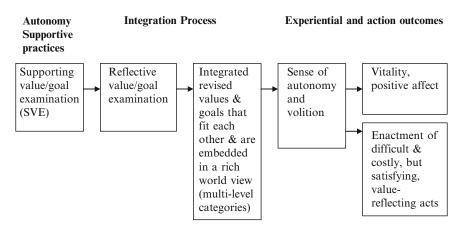


Fig. 20.2 The process by which support for value examination (*SVE*) is assumed to promote the formation of integrated and authentic values/goals and consequent positive outcomes

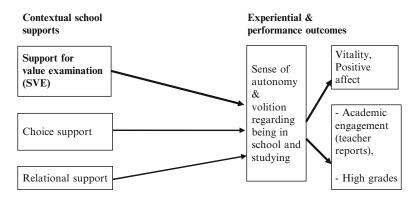


Fig. 20.3 The model examined in research project 1: SVE as a predictor of perceived autonomy and consequent affective and behavioral outcomes in educational contexts

in Fig. 20.2. Specifically, this project focused on SVE as a predictor of perceived autonomy and consequent positive outcomes. As can be seen from Fig. 20.3, this research did not examine the hypothesis that SVE promotes an integrative value examination process which then leads to the formation of authentic and elaborate value and goal schemas. This aspect of the comprehensive model is examined in the second project to be described later.

The first test of the model described in Fig. 20.3 was conducted with adolescents (11th grade) who completed a self-report questionnaire assessing the variable of interest with regard to

their schools (Assor, 2010). Adolescents came from four schools serving students coming mostly from middle class neighborhoods. Factor analysis indicated that students clearly distinguished between school supports for value examination, choice, and relatedness. The construct validity of the SVE scale (presented in Table 20.1) was supported by the finding that this scale was unrelated to social desirability or neuroticism measures. Moreover, as expected, perceptions of the school context as high on SVE were positively and significantly associated with reporting that studying and participating in school activities increased the importance of the intrinsic values

of community contribution, self-understanding, and health, and at the same time reduced the importance of the extrinsic values of wealth and power and prestige (see Kasser & Ryan, 1996 on intrinsic versus extrinsic values).

The degree to which participating in school activities increased or decreased the importance of intrinsic or extrinsic values was assessed via a questionnaire which included a list of 15 items reflecting the three intrinsic values noted above and 10 items reflecting the two extrinsic values. In relation to each item, participants were asked to indicate: "To what extent did the activities, studies and discussions in school strengthen or weaken your belief in the following values, goals and aspirations?" The response scale ranged from 1(weakened the importance of this value for me) to 5 (strengthened the importance of this value for me). An example of an extrinsic value is "being wealthy," and an example of intrinsic value is "work for the improvement of society." Each value was assessed via five items.

According to SDT, authentic value examination should connect people with their basic needs and the intrinsic values associated with them. Therefore, the positive correlations between SVE and enhanced intrinsic values and the negative correlation between SVE and enhanced extrinsic values suggested that the process assessed by our measure of SVE indeed promoted a relatively authentic, intrinsically oriented value examination.

Results of structural equation modeling and mediation analyses confirmed that perceptions of the school as supporting value examination predicted perceived autonomy regarding studying in the school, which in turn predicted engagement in studying and feelings of vitality while in school. Interestingly, choice support did not have a unique effect on the outcomes examined (i.e., choice provision was not significantly associated with engagement and vitality when the effects of SVE were also considered). Importantly, the effects of SVE were detected also when the effects of choice support were statistically controlled for. Together, these findings indicate that SVE may be a more important determinant of student engagement and vitality in high school.

The second test of the model was conducted with many of the adolescents who completed questionnaires on their school context. However, in this part of the study, the context and the investment referred to youth movement activities (Assor, 2010; Kanat-Maymon & Assor, 2011). The term "youth movement" refers to informal education set ups like the scouts or other frameworks. Specifically, the youth movement studied was the Israeli Scouts, which is an organization that tries to promote youth activities that contribute to society, as well as conduct social activities and nature trips. The instructors in this setup are typically only several years older than the members of the group, and the relation between instructors and members is rather informal.

Results again highlighted the importance of SVE as a predictor of perceived autonomy and consequent positive outcomes. Choice support again had no unique effect. The fact that choice support did not have a unique effect suggests that perhaps the choices offered to students were not sufficiently meaningful to students, and consequently, the provision of choice did not have positive effects.

One limitation of the first two studies was their complete reliance on students' self-report measures. This problem was addressed by the second study (Assor, 2010; Kanat-Maymon & Assor, 2011), in which students' engagement in studying was assessed by teacher ratings. In addition, students' grades and student-rated positive affect were also assessed. Results were consistent with the results of the first two studies. The third study (Assor, 2010; Kanat-Maymon & Assor, 2011) used the same measures employed in the third study but, in addition, also included two additional scales: social desirability and students' perception of teacher as providing warmth and caring (relational support). Results again replicated the findings of previous studies, showing that SVE had unique positive effects on teacher-rated student engagement, student grades, and student-rated positive affect.

In sum, the studies described in this section suggest that when adolescents and children feel that being in their school (or in the youth movement) helps them to form personal goals and values, this promotes a sense of autonomy and volition regarding being in the school (or the youth movement), which in turn leads to increased engagement, vitality, and positive Importantly, in all these studies, perceived support for value examination (SVE) had unique positive effects on perceived autonomy, investment, and well-being also when perceived choice and perceived teacher warmth and caring were statistically controlled for. In fact, SVE consistently had considerably stronger effects on perceived autonomy, investment, and well-being than did choice support. This is not surprising in view of other studies showing that choice provision is useful only when the choices are meaningful or when choice recipients have clear interests and goals (e.g., Assor et al., 2002; Katz & Assor, 2007). The detection of unique effects of SVE is of special interest because it indicates that SVE is a unique component of autonomy support and consequent engagement and well-being. Thus, provision of choice and relational support may not be enough to promote desired student processes and outcomes. Moreover, the fact the SVE had unique effects beyond two other positive teacher supports indicates that the positive effects of SVE cannot be ascribed to a general positive perception of the teacher or the youth movement instructor. However, one limitation of the above studies is their reliance on correlations, which precludes conclusions regarding causal inferences.

The second research project examined the complete model depicted in Fig. 20.1, referring to the process by which SVE is assumed to promote the construction of integrated, directiongiving goals and values and consequent positive outcomes. This research project was conducted by Cohen-Malayev and her colleagues (Assor, Cohen-Melayev et al., 2005; Cohen-Malayev, 2009; Cohen-Malayev et al., 2009). Participants were modern Orthodox Jewish students in Israel, coming from religious homes who also embraced modern technology and ways of life, and were therefore exposed to views and materials disseminated by the secular mass media. Moreover, these students also studied in a nonreligious and fairly secular institution. Because the norms and values of the secular contexts and of Orthodox Judaism often differ widely, modern Orthodox

Jewish students face a rather demanding task of forming values and goals that integrate contradictory religious and secular viewpoints in ways that feel coherent, authentic, and autonomous. To enable these youth to cope with the value integration task successfully, parents and teachers may need to be particularly understanding and supportive of their children's need to examine values and goals gradually and thoroughly. Thus, the practice of SVE might be particularly important in the case of modern Orthodox Jewish youth.

Cohen-Malayev and her colleagues (e.g., Assor, Cohen-Melayev, et al., 2005; Cohen-Malayev, 2009) conducted two quantitative studies and one qualitative study. The quantitative study was based mainly on free-response questionnaires asking participants coming from a modern Orthodox Jewish background to describe their experiences, feelings, and thoughts on religion, challenges they face in this domain, and ways of coping with these challenges. In addition, all the variables appearing in Fig. 20.3 were also assessed by questionnaires developed for this purpose (using Likert type scales). The questionnaires were validated via small space analyses (see Guttman, 1968) and correlations supporting their divergent and convergent validity relative to other measures (see Assor, Cohen-Melayev, et al., 2005; Cohen-Malayev, 2009). Results of qualitative analyses, as well as regression analyses and cluster analyses, generally supported the model presented in Fig. 20.3.

Qualitative analysis of the free response questionless indicated that contribution of SVE to the development of integrated values, perceived autonomy, and consequent positive outcomes was particularly apparent in relation to the issue of women's roles. This contribution and process is summarized in Fig. 20.4.

The issue of women's role in Jewish religion is particularly problematic for modern Orthodox Jewish women studying in nonreligious colleges because in Orthodox Judaism, women are not allowed to take leading religious roles. However, these religious norms are clearly inconsistent with the values and norms of the surrounding secular college context regarding gender roles and egalitarianism. Consistent with our general

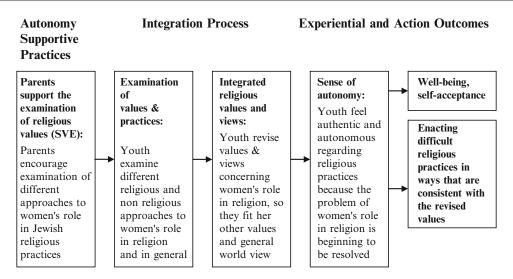


Fig. 20.4 Effects of SVE on the integration of religious values concerning women's roles and consequent outcomes in modern orthodox Jewish youth

model, we found that when parents encourage young women to examine different approaches to women's role in religion, these young women are indeed more inclined to examine this issue through talks with different people and by studying different sources (e.g., Assor, Cohen-Melayev, et al., 2005). This examination and reflection process then helps women to revise their values and views concerning women's religious role so that these values and views then fit their more liberal and egalitarian world view. For example, they now endorse a practice where women are allowed to lead prayer or sit next to men in the synagogue. As a result, these women feel more autonomous and experience better well-being and are also are more willing to enact difficult religious practices that do not pertain to women's role. Importantly, when compared to women whose parents did not support religious value examination, women whose parents did support value examination (SVE) showed a similar level of religious behavioral enactment of religious practices, but for these women (those receiving high SVE), this enactment was accompanied by a higher level of sense of autonomy and well-being.

Similar findings were obtained in relation to another difficult religious issue: women's sexual behavior and appearance. In Orthodox Judaism, women's sexual behavior is expected to be rather conservative. These religious norms are clearly inconsistent with the less conservative values and norms of the surrounding secular college context. As was the case for women's gender roles, here too parents' support for value examination promoted a value examination process that yielded values and beliefs that integrated modern secular views regarding sexual behavior with traditional Jewish Orthodox commandments. For example, women who conducted value examination in this domain allowed themselves to wear clothing items that although not seductive, are considered illegitimate in most orthodox religious circles.

While the results of our studies generally supported the proposed model, there was one unexpected, yet interesting, finding in the second quantitative study, which employed more refined measures (see Cohen-Malayev, 2009). Thus, results of separate cluster analyses yielded two types of examination: revisionist and orthodox. In revisionist value examination, there is a more

comprehensive exploration of religious principles in relation to nonreligious ideas, as a result of introspection and a personal spiritual quest. For example, in revisionist examination, a woman can ask herself why is it that women are not allowed to be Rabbis. In orthodox examination, there is an examination of more practical issues, with an attempt to seek answers by consulting various religious sources. For example, a woman feels uncomfortable with various sex-related prohibitions or commandments and therefore tries to see if there is a way of doing things differently that is more in line with what she feels and yet is also acceptable to some religious authorities.

Interestingly, it was found that when SVE was associated with parents' demonstration of the intrinsic value of religious practices (IVD), it led to a more limited value examination, whereas when SVE was not accompanied by IVD, it led to the more comprehensive revisionist examination. Moreover, perhaps not surprisingly, orthodox examination was more predictive of: (a) self acceptance, (b) positive relations with other people, and (c) enactment of traditional religious practices (Cohen-Malayev, 2009).

It appears, then, that when parents provide a convincing and authentic demonstration of the practices they would like to transmit (IVD), and in addition also support value examination (SVE), youth may not feel a need to seriously challenge their parents' values and thus engage in a more limited type of value examination. This limited examination tries to modify parents' values so they fit better with offspring's everyday needs and constraints. Importantly, this limited exploration also seems to promote somewhat greater well-being in the sense of more peaceful relations with self and others. Thus, in contrast to what a romantic view of identity exploration might suggest, it is possible that for most youth, the more natural and preferred type of exploration is gradual and nonradical, that is, exploration that gradually builds on values that are already well internalized and only need minor revisions.

While the studies focusing on religious behavior did not focus on student motivation and engagement, they appear to have important implications

for the domain of religious education in countries other than Israel, and in particular, religious education of youth that is exposed to the general mass media and secular ideas and lifestyles. Thus, it appears that religious schools that would support value examination in the religious domain are likely to help students to develop values and views that would enable them to feel more autonomous and more vital in relation to their religious behavior. The school's willingness to address these religious questions openly and seriously may also result in an increased willingness to attend the school and to participate in various nonreligious school activities (as was the case for the students studied by Assor and Kanat-Maymon [Assor, 2010, 2011; Kanat-Maymon & Assor, 2011]).

As we end the discussion of SVE, I would like to present one note of caution regarding this generally desirable autonomy supportive practice. Although the first studies on SVE suggest that it has fairly positive correlates, it is possible that educators support for value examination can sometimes fail to enhance perceived autonomy because the exploration is too difficult or confusing. To increase the likelihood that support for value examination would result in value and goal integration, commitment, and vitality, it appears important to support a special type of examination, which can be termed *Optimal* Support for Value Examination (OSVE). Optimal support for value examination can include:

- (a) Gradual exposure of adolescents to views and experiences that might lead them to examine their goals and values
- (b) Help in reflecting on the new ideas and their potentially unsettling personal implications

Future research may attempt to identify the attributes of optimal versus harmful ways of encouraging value and goal examination in youth. However, research conducted by Assor and his colleagues (Assor, 2010, 2011; Madjar, Assor, & Dotan, 2010) already identified one educational attribute that appears to increase the capacity of adolescents to engage in value examination also when this examination is difficult and confusing. This attribute is discussed in the next section.

Table 20.2 Items illustrating the three components of FIV

- 1. Enhancing children's ability to withstand confusion and take their time before they make serious decisions "When other kids pressure me to accept their opinion, my mom let's me feel that it is better to take the time and calm down before I decide what to do"
- Encouraging examination of one's authentic values and goals when faced with a difficult decision or social pressures
 - "When I have to make a tough decision, my mom encourages me to first examine what I think is the right and desirable thing to do"
- 3. Encouraging consideration of alternatives and relevant information before making a decision "As a child, when I had to choose what to do, my mom and me thought together on the consequences of each possible choice"

Fostering Inner-Directed Valuing Processes

FIV is another autonomy supportive practice which promotes the formation and realization of authentic direction-giving values, goals, and interests. This construct refers to a cluster of educator's behaviors which help students pay attention to their *authentic* values and needs more than to social pressures. FIV is important because it is posited to enhance youth capacity to persist in the often frustrating task of exploring one's authentic goals, values, and interests, as well as strengthen their capacity to make decisions based on their authentic values and needs. As such, FIV can be viewed as training in authentic decision making.

More specifically, FIV is assumed to include three components: (a) enhancing students' ability to withstand confusion and take their time before they make serious decisions, (b) encouraging the examination of one's values and goals when faced with a difficult decision and/or social pressures, and (c) encouraging the consideration of alternatives and relevant information before making a decision. FIV differs from general support for value examination in that it is a socializing practice that is used only when the child faces difficult decisions and social pressures, and unlike SVE, it provides a certain "training" in authentic and rational decision making under stress.

Items assessing parents, fostering of inner-directed valuing processes (FIV) are presented in Table 20.2.

Figure 20.5 shows how FIV is posited to operate together with SVE in supporting reflective value and goal examination, and consequent perceived autonomy and its positive outcomes.

Inspection of Fig. 20.5 shows that FIV and SVE are assumed to have additive influence on reflective value and goal examination. However, future research may examine the possibility that FIV may also moderate the effects of SVE on value examination. This moderating effect may occur because although SVE may foster the initial urge to engage in value examination, FIV may allow this examination to proceed when the exploration process gets difficult and confusing.

Research on the correlates and potential benefits of FIV has just begun. The first study focusing on this construct (see Assor, 2009, 2011; Madjar et al., 2010) showed that adolescents' perceptions of their parents as high on FIV were found to predict identity exploration and the formation of commitments that are experienced as autonomous. In this study, FIV was also found to predict adolescents' capacity to experience anger and anxiety without losing control or immediately suppressing these feelings, as well as their tendency to try to understand the sources of these feelings and the implications of these feelings for one's life and relationships.

So far, research did not examine the implications of FIV for engagement in studying and school activities. However, it is reasonable to assume that the increased capacity for inner valuing and for resisting social pressure would enable students to engage in studies that are less popular

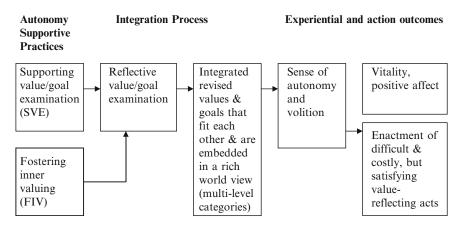


Fig. 20.5 The joint contribution of FIV and SVE to integrated values/goals and consequent positive outcomes

but are interesting for them. In addition, increased capacity to tolerate ambiguity during the exploration of one's authentic interests and values may enable students to engage in a more thorough examination of various subjects relevant to their emerging interests, goals, and values.

Conclusion

Summing up, in this chapter I focused on seven practices of autonomy support which are likely to promote two major components of the need for autonomy: (a) lack of coercion and optional choice and (b) formation and realization of an inner compass: authentic, direction-giving values, goals, and interests. A special emphasis was put on three autonomy supportive practices which are assumed to support formation and realization of authentic, direction-giving values, goals, and interests, whose impact on perceived autonomy was not sufficiently examined so far: (a) IVD – intrinsic value demonstration, (b) SVE – support for value/goal/interest examination, and (c) FIV – fostering inner-directed valuing processes. The autonomy supportive practices that foster the development of stable authentic values and goals might be especially important in western countries, in which postmodern moral relativism and the abundance of information and options make it particularly difficult for youth to form stable and authentic values and goals.

In future research, it may be interesting to examine the unique contributions to students' school engagement and well-being of the three autonomy supportive practices that were relatively underemphasized in SDT-based research: intrinsic value demonstration (IVD), support for value examination (SVE), and fostering inner valuing (FIV). In this research, it would be important to assess autonomy support practices and outcomes based on measures that are not based solely on self-reports, using longitudinal designs that can point to possible causal effects.

References

Assor, A. (1999). Value accessibility and teachers' ability to encourage independent and critical thought in students. *Social Psychology of Education*, 2, 1–24.

Assor, A. (2010). Two under-emphasized components of autonomy support: Supporting value examination and inner valuing. Paper presented in the 4th international conference on self determination theory, Gent, Belgium.

Assor, A. (2011). Autonomous moral motivation: Consequences, socializing antecedents and the unique role of integrated moral principles. In M. Mikulincer & P. R. Shaver (Eds.), *Social psychology of morality: Exploring the causes of good and evil.* Washington, DC: American Psychological Association.

Assor, A., Cohen-Melayev, M., Kaplan, A., & Friedman, D. (2005). Choosing to stay religious in a modern world: Socialization and exploration processes leading to an integrated internalization of religion among Israeli Jewish youth. Advances in Motivation and Achievement, 14, 105–150. 438 A. Assor

- Assor, A., & Kaplan, H. (2001). Mapping the domain of autonomy support: Five important ways to enhance or undermine students' experience of autonomy in learning. In A. Efklides, R. Sorrentino, & J. Kuhl (Eds.), *Trends and prospects in motivation research* (pp. 99–118). Dordrecht, The Netherlands: Kluwer.
- Assor, A., Kaplan, H., Kanat-Maymon, Y., & Roth, G. (2005). Directly controlling teacher behaviors as predictors of poor motivation and engagement in girls and boys: The role of anger and anxiety. *Learning and Instruction*, 15, 397–413.
- Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: Autonomy-enhancing and suppressing teaching behaviors predicting students' engagement in schoolwork. British Journal of Educational Psychology, 27, 261–278.
- Assor, A., & Roth, G. (2005). Conditional love as a socializing approach: Costs and alternatives. Scientific Annals of the Psychological Society of Northern Greece, 7, 17–34.
- Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality*, 72, 47–88.
- Assor, A., Roth, G., Israeli, M., & Freed, A. (2007). The harmful costs of parental conditional regard. Paper presented in the Society for Research in Child Development, Boston.
- Assor, A., Vansteenkiste, M., & Kaplan, A. (2009). Identified versus introjected-approach and introjected-avoidance motivations in school and in sports: The limited benefits of self-worth strivings. *Journal of Educational Psychology*, 2, 482–497.
- Aviram, R., & Assor, A. (2010). In defense of personal autonomy as a fundamental educational aim in liberal democracies. Oxford Review of Education, 36, 111–126.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67, 3296–3319.
- Barber, B. K., Stolz, H., & Olsen, J. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. Monographs of the Society for Research in Child Development, 70, 1–151.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Berlin, I. (1969). Four essays on liberty. Oxford, UK: Oxford University Press.
- Cohen-Malayev, M. (2009). Religious exploration and identity The tension between religion and religiosity: Examination of the internalization process of Jewish religious values in modern-orthodox context. Doctoral dissertation, Ben Gurion University, Be'er-Sheva, Israel.
- Cohen-Malayev, M., Assor, A., & Kaplan, A. (2009). Religious exploration in a modern world: The case of Modern-Orthodox Jews in Israel. *Identity: An International Journal of Theory and Research*, 9, 233–251.
- Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of

- contextualization, personalization and choice. *Journal of Educational Psychology*, 88, 715–730.
- Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 62, 119–142.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A metaanalytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627–668.
- Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum Press.
- Eisenberg, N., Fabes, R. A., & Spinrad, T. L. (2006). Prosocial development. In R. M. Lerner, N. Eisenberg, & W. Damon (Eds.), *Handbook of child psychology: Vol.*3. Social, emotional and personality development (pp. 646–718). New York: Wiley.
- Elliot, A. J., & Dweck, C. S. (2005). *Handbook of competence and motivation*. New York: Guilford Press.
- Epley, A., Morewedge, C. K., & Keysar, B. (2004).
 Perspective taking in children and adults: Equivalent egocentrism but differential correction. *Journal of Experimental Social Psychology*, 40, 760–768.
- Erikson, E. (1950). Childhood and society. New York: W. W. Norton.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: W. W. Norton.
- Fromm, E. (1941). *Escape from freedom*. New York: Rinehart.
- Gottfried, A. E., Marcoulides, G. A., Gottfried, A. W., Oliver, P. H., & Guerin, D. W. (2007). Multivariate latent change modeling of developmental decline in academic intrinsic math motivation and achievement: Childhood through adolescence. *International Journal* of Behavioral Development, 31, 317–327.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values* (pp. 135–161). New York: Wiley.
- Guttman, L. (1968). A general nonmetric technique for finding the smallest coordinate space for a configuration of points. *Psychometrika*, 33, 469–506.
- Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, 79, 995–1006.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 80–87.
- Kanat-Maymon, M., & Assor, A. (2010). Perceived Maternal Control and Responsiveness to Distress as Predictors of Young Adults' Empathic Responses. Personality and Social Psychology Bulletin, 36, 33–46.
- Kanat-Maymon, Y. & Assor, A. (2011). Supporting Value Exploration: Another Important Aspect of Autonomy Support. Ben GUrion University, Israel: Unpublished manuscript.

- Katz, I., & Assor, A. (2007). When choice motivates and when it does not. *Educational Psychology Review*, 19, 429–442.
- Koestner, R., Ryan, R. M., Bernieri, F., & Holt, K. (1984). Setting limits on children's behavior: The differential effects of controlling versus informational styles on children's intrinsic motivation and creativity. *Journal* of Personality, 54, 233–248.
- Madjar, N., & Assor, A. (in press). Two types of perceived control over learning: Perceived efficacy and perceived autonomy. In J. A. C. Hattie & E. M. Anderman (Eds.), *International handbook of student achieve*ment. New York: Routledge.
- Madjar, N., Assor, A., & Dotan, L. (2010). Fostering inner valuing processes in adolescents. Paper presented in the convention of the American Educational Research Association, Denver, CO.
- Marcia, J., Waterman, A., Matteson, D., Archer, S., & Orlofsky, J. (1993). *Ego identity*. New York: Springer.
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). The effects of choice on intrinsic motivation and related outcomes: A meta-analysis of research findings. Psychological Bulletin, 134, 270–300.
- Reeve, J. (2006). Teachers as facilitators: What autonomysupportive teachers do and why their students benefit. *The Elementary School Journal*, 106, 225–236.
- Reeve, J., & Assor, A. (2011). Do social institutions necessarily suppress individuals' need for autonomy? The possibility of schools as autonomy promoting contexts across the globe (pp. 111–132). In V. Chirkov, A. M. Ryan, & K. Sheldon (Eds.), Personal autonomy in cultural context: Global perspectives on the psychology of freedom and people's well-being. New York: Springer.
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98, 209–218.

- Reynolds, P. L., & Symons, S. (2001). Motivational variables and children's text search. *Journal of Educational Psychology*, 93, 14–22.
- Roth, G., & Assor, A. (2000). The effect of conditional parental regard and intrinsic value demonstration on academic and pro-social motivation. Paper presented at the conference of the European Association for Learning and Instruction (EARLI), Malmoe, Sweden.
- Roth, G., Assor, A., Niemiec, P. C., Ryan, R. M., & Deci, E. L. (2009). The negative consequences of parental conditional regard: A comparison of positive conditional regard, negative conditional regard, and autonomy support as parenting strategies. *Developmental Psychology*, 4, 1119–1142.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Soenens, B., Elliot, A. J., Goossens, L., Vansteenkiste, M., Luyten, P., & Duriez, B. (2005). The intergenerational transmission of perfectionism: Parents' psychological control as an intervening variable. *Journal of Family Psychology*, 19, 358–366.
- Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of selfdetermination theory. *Developmental Review*, 30, 74–99
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297–333.
- Zuckerman, M., Porac, J., Lathin, D., Smith, R., & Deci, E. L. (1978). On the importance of self-determination for intrinsically motivated behavior. *Personality and Social Psychology Bulletin*, 4, 443–446.