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# Contents

<b>Original Articles and Reviews</b>	Preventive Interventions for Children and Adolescents: A Review of Meta-Analytic Evidence <i>Leslie Morrison Gutman and Ingrid Schoon</i>	231
	Physical and Psychological Benefits of Written Emotional Expression: Review of Meta-Analyses and Recommendations <i>Éva Kállay</i>	242
	Three Lines of Personality Development: A Conceptual Itinerary <i>Dan P. McAdams</i>	252
	Like a Horse and Carriage? The Dynamic Interplay of Attachment and Sexuality During Relationship Development <i>Gurit E. Birnbaum</i>	265
	Autonomy Support in the Classroom: A Review From Self-Determination Theory <i>Juan L. Núñez and Jaime León</i>	275
<b>EFPA News and Views</b>	News and Announcements: From the EFPA Network of National News Correspondents	284
	Meeting Calendar	286
<b>Volume Information</b>	Reviewers 2015	287

# European Psychologist

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# Autonomy Support in the Classroom

## A Review From Self-Determination Theory

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**Abstract.** Why are some students more engaged in and adjusted to school than others? Why are some students more competent and why do they perform better than others? Self-determination theory is a theory of human motivation to explain students' classroom behavior, learning process, and relationship with the environment. The goal of this paper is to review the concept of autonomy support in the classroom within the self-determination framework. Autonomy is defined as a form of voluntary action, stemming from a person's interest and with no external pressure. Social environments that support autonomy provide meaningful rationale, acknowledge negative feelings, use noncontrolling language, offer meaningful choices, and nurture internal motivational resources. In classrooms where teachers support autonomy, students improve their academic performance, are more creative and better adjusted, engage more in school, and feel less stress. We provide theoretical and methodological suggestions for future research.

**Keywords:** academic context, autonomy support, motivation, self-determination

Students usually display different attitudes in the classroom. Sometimes, they may be active and cooperative, and sometimes they may adopt passive and reluctant attitudes. Within the framework of the self-determination theory (SDT; Deci & Ryan, 1985, 2000), Reeve (2006, 2009) has explained how students' behavior and feelings depend on social factors such as the teachers' attitudes. The class environment generated by the teacher is an essential element to explain students' motivation and emotions. Therefore, in order to understand students' behavior, it is necessary to study the teacher's role. SDT is a macro-theory of personality, human motivation, and optimal functioning that has been established as a theoretical framework to explain these issues.

In this review, we focus on autonomy support within the SDT framework. We will introduce this concept by describing intrinsic motivation and the Cognitive Evaluation Theory; we will then explain the concept of autonomy and the different types of extrinsic motivation posited by the Organismic Integration Theory. Finally, we will address the Basic Psychological Needs Theory to explain the motivational determinants of an autonomous behavior. These three latter theories are considered mini-theories within the broader SDT framework. Subsequently, we will focus on autonomy support. To conclude, we will highlight some aspects that might be of interest for future studies.

### Intrinsic Motivation

The intensity with which adolescents study, as well as why they study, may be relevant because people not only vary in the amount of an activity they perform, but also in the types of motivation to perform it (Ryan & Deci, 2000a). In the educational context, intrinsic, and extrinsic motivation are two key aspects (e.g., Habgood & Ainsworth, 2011; Lepper, Corpus, & Iyengar, 2005). Intrinsic motivation is characterized by satisfaction, interest, and pleasure when performing an activity, whereas extrinsic motivation is defined by low levels of satisfaction and consists of engaging in behaviors due to external reinforcement such as obtaining a reward or internal pressures such as avoiding feeling guilty. Deci (1971) proposed that the cognitive appraisal of rewards would affect intrinsic motivation, finding that intrinsic motivation decreased when money was used as an external reward, but increased when verbal reinforcement and positive feedback were used. These results can be explained by the Cognitive Evaluation Theory. This mini-theory proposes two processes to explain changes in intrinsic motivation (Frederick & Ryan, 1995; Ryan, 1982). The first process is through locus of causality. The construct locus of causality refers to the extent to which individuals perceive their own actions as a result of either external or internal causes.

External rewards can shift the perceived locus of causality from internal to external, thereby diminishing intrinsic motivation. However, providing meaningful choices would have the opposite effect, increasing intrinsic motivation. The second process consists of enhancing competence: if students feel more competent, their intrinsic motivation will increase.

## Autonomous Motivation

Autonomy, or the ability to think, feel, and make decisions by oneself is a developmentally normative process and particularly important to adolescents within the school context (McElhaney, Allen, Stephenson, & Hare, 2009). Autonomous motivation means that students engage voluntarily in the learning process, that is, the individual is origin of his or her actions. Within SDT, acting autonomously implies being self-governing and the initiator of one's own activities (Gillet, Vallerand, & Lafrenière, 2011). Actions are engaged in freely based on one's values and interests; these individuals perceive an internal locus of causality of their actions (deCharms, 1968). Autonomy is not the same as independence because a person may be voluntarily dependent or forced to rely or depend on others (Ryan, La Guardia, Solky-Butzel, Chirkov, & Kim, 2005). Weinstein, Przybylski, and Ryan (2012) distinguish three facets of the concept of autonomy: (a) authorship or self-congruence, referring to the individual experience of being the actor of one's own behavior; (b) interest-taking, which refers to the spontaneous tendency to think openly about internal and external developments. Interest-taking facilitates self-awareness and self-understanding; and (c) absence of internal and external pressures.

In contrast, in controlled self-regulation, people tend to feel that they have less choice. In this case, their behavior depends on external pressures, rewards, or other external elements. Controlled behaviors are characterized by externally perceived locus of causality. People with low autonomy perceive a lower degree of personal choice and initiative, and their behavior is a response to other people's pressure, inner expectations, or internal or self-imposed pressure.

It is important to note that students will be intrinsically motivated only for activities that they find interesting, novel, or challenging, but many school activities do not match these ideal conditions, thus, it is important to know how to motivate students to comply with school activities without external pressures (Ryan & Deci, 2000b). For instance, when it comes to motivating students extrinsically, the pursued reward may be found in the environment or it may be internal (Jang, Kim, & Reeve, 2012), thus, students may do homework for different reasons: to avoid parental punishment, to avoid feeling guilty, or to get good grades in order to be admitted in a certain university. All of these motives are extrinsic, varying from external to autonomous. When students do homework to avoid being punished, they feel controlled by external forces, but when they do it to gain access to a certain university, the regulation is more autonomous, as the goal of the behavior is

intrinsic to the self, instead of coming from the outer environment. In this example, we have seen two assumptions of the Organismic Integration Theory, a mini-theory of the SDT framework. According to the first assumption, people tend to internalize values and practices carried out under external regulation: the student began doing homework pressured by external forces but ended doing it due to intrinsic goals. The second assumption described in the example is that these types of motivations vary in their integration into the self, going from external to autonomous (Ryan, Williams, Patrick, & Deci, 2009).

There are two types of autonomous motivation: intrinsic motivation, which implies engagement in an activity for the pleasure and satisfaction inherent to the activity and which should be considered a sign of self-determination (Deci & Ryan, 1985; Ryan & Deci, 2000b), and identified regulation, which is an autonomous form of extrinsic motivation, as the individual values the goal of the behavior and considers it important. In contrast, controlled motivation implies that students engage in the learning process due to a sense of pressure and coercion. Controlled motivation includes two types of extrinsic motivation: external regulation, which refers to engagement in an activity to gain rewards or to avoid punishment; and introjected regulation, in which behavior is regulated by requirements and demands and individuals begin to internalize the reasons for their actions and are energized by factors such as an avoidance of shame or guilt, contingent self-esteem, and ego involvement (Deci & Ryan, 2008). The motivational literature has established that autonomous and controlled motivation lead to very different outcomes, whereby autonomously motivated students display greater psychological well-being (Núñez, Fernández, León, & Grijalvo, 2015), better performance (Kusurkar, Ten Cate, Vos, Westers, & Croiset, 2013), and greater engagement (Hafen et al., 2012).

Deci and Ryan (2000) consider that autonomously motivated students believe in what they do, feel self-congruent, perceive their behavior as integrated, and are open to self-exploration. Low autonomy reflects a general feeling that one's behavior is controlled by external influence or contingencies, including social pressure (deCharms, 1968; Ryan & Connell, 1989). Both autonomous and controlled motivation energize and direct behavior, in contrast to amotivation, which occurs when no contingencies are perceived between the behaviors and their outcomes. In this case, the individual is neither intrinsically nor extrinsically motivated but only feels incompetence and loss of control (Deci & Ryan, 1985; Vallerand & Ratelle, 2002).

## Basic Psychological Needs Theory

The basic psychological needs theory (BPNT) is a mini-theory stating that the fulfillment of the three basic psychological needs – autonomy, competence, and relatedness – will affect one's tendencies toward the integration of a priori external regulations, leading to a sense of well-being. Therefore, environments that support these needs (instead of thwarting them) will have a positive effect on

well-being. These needs are innate, universal, and essential for growth, well-being, and personal and social development (Ryan & Deci, 2000b), regardless of gender, social class, or cultural context (Vansteenkiste, Niemiec, & Soenens, 2010). The need for *autonomy* refers to the experience of will and psychological freedom and is determined by the level of external pressure when performing an action (deCharms, 1968; Deci & Ryan, 1985). Individuals who are autonomous feel that they choose their behavior, and perceive this behavior as something born within, which agrees with their values and interests. The need for *competence* implies that individuals want to interact effectively with their environment in order to feel capable of producing desired outcomes and preventing undesired ones (Connell & Wellborn, 1991). Finally, the need for *relatedness* refers to the desire to feel connected with, and mutually supportive of, significant others. BPNT posits that need satisfaction predicts individual differences in health and wellness across time. This has been studied in longitudinal analyses, in which the accumulation of these experiences over time was shown to predict wellness outcomes (León & Núñez, 2013; Quested & Duda, 2009).

The three basic psychological needs provide the basis for predicting whether or not the social environment will promote an autonomous behavior (Deci & Vansteenkiste, 2004). This is an important aspect because the adequacy of a social environment (e.g., a classroom) to meet autonomous needs determines, for example, the adolescents' level of engagement. This has been empirically supported in a longitudinal school-based study where adolescents' perception of their level of autonomy in the classroom at the beginning of the school year predicted their engagement at the end of the year (Hafen et al., 2012). Sheldon and Filak (2008) found support for a model in which teacher autonomy support directly affects student need satisfaction. Of these three needs, autonomy plays the most important role in the SDT (Deci & Ryan, 2000; Gagne & Deci, 2005) and has received more attention from SDT researchers, but it should be borne in mind that all three needs are necessary for optimal functioning (Ryan, 1995). When people engage in activities that make them feel autonomous or self-driven, they will feel enhanced well-being, that is, optimal psychological functioning and positive experiences (Vansteenkiste, Ryan, & Deci, 2008).

## Motivational Determinants

Social factors do not influence motivation directly, but instead mediated by autonomy, competence, and relatedness. If social factors satisfy basic psychological needs, motivation will be more integrated within the self (Deci, Vallerand, Pelletier, & Ryan, 1991). This aspect is especially important in academic contexts. Teachers will increase students' autonomous motivation if they promote a social classroom context in which students feel that the learning process depends on them, their behavior is related to their interests, they feel competent, and that they belong to and are connected with the group. Consequently, these

students will function optimally at the cognitive, behavioral, and emotional levels.

Learning experiences that fulfill the needs of autonomy and competence enhance autonomous motivation, whereas events that reduce these feelings lessen it. Both autonomy and competence are experiences that are completely determined by the social environment (Ryan et al., 2009). One of the most important and most extensively studied social factors within this framework is autonomy support (Deci & Ryan, 1991; Stefanou, Perencevich, Dicintio, & Turner, 2004).

## Autonomy Support

An essential aspect that teachers should take into account in classroom is the importance of supporting students' autonomy (Deci & Ryan, 1985). Autonomy support is the interpersonal behavior teachers provide during instruction to identify, nurture, and build students' inner motivational resources (Deci & Ryan, 1985; Reeve, Deci, & Ryan, 2004). Thus, autonomy support refers to an atmosphere where students are not pressured to behave in a specific way, and where they are, instead, encouraged to be themselves (Ryan & Deci, 2004).

Deci, Eghrari, Patrick, and Leone (1994) argue that three interpersonal conditions are necessary for individuals to feel that their autonomy is supported: providing meaningful rationale (i.e., verbal explanations that help others to understand why self-regulation of the activity would have personal utility), acknowledging negative feelings (i.e., tension-alleviating acknowledgment that one's request to others clashes with their personal inclinations and that their feelings of conflict are legitimate), and using noncontrolling language (i.e., communications that minimize pressure, absence of the terms "should," "must," and "have to," conveying a sense of choice and flexibility in the phrasing). New interpersonal conditions based on the theory have been added to the definition of autonomy support, such as: offering meaningful choices (i.e., providing information about options, encouraging choice-making, and initiation of one's own action) and nurturing inner motivational resources (i.e., reinforcing the other's interest, enjoyment, psychological need satisfaction, or sense of challenge or curiosity while engaging in a requested activity). According to Su and Reeve (2011), 84% of intervention studies designed to support autonomy include at least four of these five conditions that define autonomy support. Furthermore, Assor, Roth, and Deci (2004) include as an essential element of autonomy support, the behavior of providing unconditional positive regard, and Reeve (2009) adds displaying patience so as to allow time for self-paced learning to occur.

According to Stefanou et al. (2004), the characteristic elements of autonomy support can be classified into three categories: (a) organizational autonomy support: students can choose group members, evaluation procedures, due dates, etc.; (b) procedural autonomy support: students can choose what materials to use in their schoolwork, how to

display their work, etc.; and (c) cognitive autonomy support: students can find multiple solutions to problems, debate ideas freely, have time to make decisions, etc. These categories have different effects: organizational autonomy support can make students feel better and more comfortable with the way the classroom works, procedural autonomy support can foster initial learning engagement, while cognitive autonomy support encourages a stronger investment in learning activities.

In the classroom, autonomy support has been seen as opposite or mutually exclusive to the concept of structure (Daniels & Bizar, 1998). The reason for this is that structure was erroneously understood as control. Structure refers to the amount and clarity of information that teachers provide to students about their expectations and ways of effectively achieving the desired educational outcomes (Skinner & Belmont, 1993). It helps to provide clear and consistent guidelines in class, just the opposite of a chaotic situation in which teachers are confusing or contradictory, or fail to communicate clear expectations and directions. Structure has positive motivational consequences and is and should be complemented with autonomy support (Jang, Reeve, & Deci, 2010; Sierens, Vansteenkiste, Goossens, Soenens, & Dochy, 2009). In fact, students' engagement will be greater if teachers support autonomy and structure the class.

It is noteworthy that, in the educational context, autonomy support and controlling behavior have been identified as opposite elements along a continuum ranging from controlling to very autonomy-supportive (Reeve, Jang, Carrell, Jeon, & Barch, 2004; Soenens & Vansteenkiste, 2005). In this line, Deci and Ryan (1985, 1991) argue that autonomy support implies promoting choice, minimizing pressure to perform tasks in a certain way, and encouraging initiative, in contrast to controlling behavior, characterized by deadlines, external rewards, or potential punishments (Deci, Connell, & Ryan, 1989; Deci & Ryan, 1991). However, some authors have proposed that controlling behavior might not be the exact opposite of autonomy-support (Silk, Morris, Kanaya, & Steinberg, 2003). In this sense, teachers can employ an autonomy-supportive style and, at the same time, display controlling behavior, such as pressuring students and being negative (Reeve & Jang, 2006; Tessier, Sarrazin, & Ntoumanis, 2008). The opposite of autonomy support is controllingness. Controllingness refers to teachers' interpersonal behavior during instruction to gain their students' compliance with their prescribed way of thinking, feeling, or behaving. Controlling teachers motivate students through extrinsic incentives and pressuring language, so that students' classroom participation is not regulated by their inner motivational resources. Students in classrooms with autonomy-supportive teachers, as compared with those who have controlling teachers, will feel better understood, and teachers will accept students' decisions instead of directing their way of thinking. Autonomy-supportive teachers will offer choices of different activities, they use noncontrolling and informative feedback, nurture inner motivational resources, and acknowledge and accept expressions of negative affect (Deci et al., 1989; Reeve, 2009; Su & Reeve, 2011). Some studies have shown that

the teachers' attitudes – autonomous versus controlling – are stable throughout the academic year (Deci, Schwartz, Scheinman, & Ryan, 1981), and multiple benefits have been observed, for example: better academic performance in classrooms (Flink, Boggiano, & Barrett, 1990), greater perceived competence (Álvarez, Estevan, Falcó, & Castillo, 2013; Williams, Wiener, Markakis, Reeve, & Deci, 1994), greater creativity (Koestner, Ryan, Bernieri, & Holt, 1984), more school engagement (Assor, Kaplan, & Roth, 2002), higher grades and better school adjustment (Patrick, Anderman, & Ryan, 2002; Ryan, Stiller, & Lynch, 1994; Wentzel, 2002), and less experienced stress (Torsheim & Wold, 2001). Recently, Bonneville-Roussy, Vallerand, and Bouffard (2013) showed that the students' persistence towards their own schooling could be partly explained by the autonomy-supportive style implemented by their teachers. These results show the importance of supporting autonomy in the classroom to predict students' educational benefits.

But, what are the determinants or predictors of an autonomy-supportive teaching style? Pelletier, Seguin-Levesque, and Legault (2002) tested the impact of various social factors, concluding that teachers' self-determined motivation positively predicted autonomy-supportive teaching behaviors. Taylor, Ntoumanis, and Standage (2008) found that teachers' perception of the satisfaction of their psychological needs predicted autonomy-supportive teaching styles, and Taylor, Ntoumanis, and Smith (2009) showed that teachers' own performance appraisal, cultural norms, and time constraints determined their autonomy-supportive teaching. In contrast, Soenens, Sierens, Vansteenkiste, Dochy, and Goossens (2012) found that teachers' perceived emotional exhaustion and depersonalization were predictors of controlling teaching styles.

We highlight the fact that teachers' adoption of an autonomy-supportive style in classroom is not enough; it is also necessary for students to perceive that the teacher supports their autonomy (Hagger et al., 2007). Scientific literature has shown that perceived autonomy support in the classroom is associated with an increase of students' autonomous motivation. Vansteenkiste et al. (2012) noted that students in the high autonomy support-clear expectations cluster reported the highest degree of autonomous motivation. Also, Koka (2013) showed that students who perceived that their teacher emphasized teaching, took students' abilities into account, and exhibited interest and concern for the students' welfare experienced a higher level of autonomous motivation in physical education. Recently, De Naeghel et al. (2014) stated that teachers' autonomy support was related to intrinsic reading motivation, particularly of girls.

In addition, autonomy support in the classroom is related to greater well-being (Black & Deci, 2000), better performance (Boggiano, Flink, Shields, Seelbach, & Barrett, 1993; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004), greater engagement (Hafen et al., 2012), higher intrinsic motivation (Reeve & Jang, 2006), and, finally, improved time management and concentration (Vansteenkiste, Zhou, Lens, & Soenens, 2005). Taylor and Ntoumanis (2007) showed that the effect of perceived

autonomy support on well-being was mediated by students' autonomy. In short, autonomy-supportive teaching is related to educational benefits (Reeve, Ryan, Deci, & Jang, 2007). It is also important to underscore that autonomy support is independent of students' achievement; that is, if students' perceive teacher autonomy support, both high- and low-achieving students should experience the same educational benefits (Guay, Ratelle, Larose, Vallerand, & Vitaro, 2013).

## Future Directions

Motivation is the engine that drives our behavior, but not all kinds of motivation are adequate for optimum classroom behavior. SDT states that more self-determined or autonomous forms of motivation involve more positive consequences, such as long-term task persistence. A deep analysis of the determinants of persistence in the classroom would have a significant social impact in areas with high dropout rates. Future studies could show which student environmental factors (e.g., structure or involvement) may explain such an important dimension as students' persistence in school. Cross-cultural studies comparing the explanatory level of autonomy-supportive style on students' persistence in different countries will be of interest.

SDT shows that certain environmental factors are responsible for predicting or determining students' autonomous motivation. However, this influence is not direct, but mediated by the basic psychological needs (autonomy, competence, and relatedness) that must be satisfied. As seen above, one of the most important environmental factors is students' autonomy support in the classroom provided by their teachers. This teaching style is of great benefit to the students, as opposed to the controlling teaching style. However, one deficit of the autonomy support in the classroom research is the lack of study of these teaching style determinants. Very few studies have explored the autonomy support antecedents (Roth, & Weinstock, 2013). Research has identified several factors that influence autonomy-supportive teaching behaviors, such as teachers' self-determined motivation, their personal characteristics, their perception of the satisfaction of their basic psychological needs, and their own performance appraisal, cultural norms, and time constraints. However, which of these factors exerts the greatest influence is unknown. Future research should examine which identified environmental factors have the greatest influence on teachers in order to develop evidence-based interventions. Currently, there is an intense debate on cross-culturally universal benefits of autonomy support in the classroom. SDT states that the benefits of autonomy support are universal (Chirkov, & Ryan, 2001; Vansteenkiste et al., 2005), but several authors disagree with this universal approach, arguing that such benefits are only present in students from individualistic societies (Markus & Kitayama, 2003). As indicated by Reeve et al. (2014), future cross-cultural studies contemplating collectivistic and individualistic societies could cast more light on this debate. In this regard, Reeve et al. (2014), in a

multinational study, found a modest negative correlation between autonomy support and teacher control, which could indicate that teachers consider these two styles as independent and not so much as opposites. Future research could consider this variable and help to resolve the debate about the universality of autonomy support (Reeve et al., 2014).

According to the tenets of SDT, the controlling context is associated with negative consequences, as it does not satisfy students' need for autonomy. However, Radel, Pelletier, Sarrazin, and Baxter (2014) analyzed the paradoxical effect of controlling contexts on intrinsic motivation. Results showed that when an individual is exposed to a controlling context, this generates an increase of intrinsic motivation in the next task. The authors argue that individuals attempt to restore their lost autonomy in the next task if this task has no controlling elements. Autonomy restoration could be evaluated in future studies. Another possible line of inquiry to explain this phenomenon could be the analysis of individuals' expectations before facing a task. Radel, Sarrazin, Legrain, and Wild (2010) claim that students' intrinsic motivation depends more on individual expectations based on the preliminary information received than on teaching style. In any case, this effect should be examined in greater depth in the academic context.

Su and Reeve (2011) clearly establish the elements that define autonomy support in the classroom, and the vast majority of autonomy support intervention programs have integrated them. Currently, it is recommended to include multiple and complementary elements of autonomy support in an intervention program, but further research is needed to determine the essential elements of optimal autonomy support. In this sense, qualitative analyses may be necessary to include new conceptualizations of autonomy support in the classroom and modify the existing ones. To explore the variety of ways in which teachers provide autonomy in the real context of class may be relevant. In many traditional classrooms, autonomy support is difficult to implement because the school resources and tasks limit the availability of interesting experiences (Rogat, Witham, & Chinn, 2014). Tsai, Kunter, Lüdtke, Trautwein, and Ryan (2008) showed that providing a greater sense of control in the cognitive activities of class increased students' interest in lessons of different subjects. However, there is very little direct empirical research of the three categories of autonomy support proposed by Stefanou et al. (2004): organizational autonomy support, procedural autonomy support, and cognitive autonomy support. Future studies could analyze more deeply the effects of the three categories on the learning experience in the classroom.

Most studies have reached conclusions on the basis of student perceptions of their teachers' teaching style. A multi-informant approach can prevent this weakness. The assessment of student perceptions of teaching dimensions needs to be complemented with teacher perceptions and direct observations. It might be interesting to compare students' self-reports, teachers' perceptions, and direct observations.

Both in childhood and adolescence, the figures of teacher and parents become reference points for students'



development. SDT proposes that autonomy support by significant others (i.e., teacher, parents, and friends) promotes perceived competence, autonomous regulation, and academic achievement (Guay et al., 2013). It would be interesting to study in greater depth the relationship between teacher autonomy support and the autonomy support provided by significant others. It seems likely that parents and teachers may sometimes be autonomy-supportive and other times controlling, in order for students to achieve their educational goals. However, this explanation is more theoretical than scientific and should be confirmed in future research. The influence of peers on individual and social development is obvious. However, research has focused very little on the effect of peers on student motivation. Studies of the influence of peers' motivational characteristics on student autonomous motivation at school could be especially interesting. Very little is known about the influence that friends may have compared to the influence of parents and teachers.

According to some of the recommendations proposed by Guay, Ratelle, and Chanal (2008), we consider it necessary to perform, on the one hand, a greater number of longitudinal studies to demonstrate the causal link between positive variables more effectively – for example, the effects of autonomy support on autonomous motivation and the effects on the latter on positive outcomes in the class setting, such as persistence, achievement, and well-being; and, on the other hand, more intervention studies at different education levels and in children from different backgrounds. All this will help us to better understand the various processes underlying autonomy support in the classrooms.

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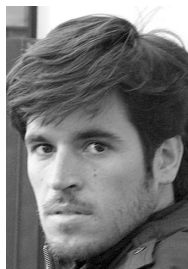
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