



**Ewa Wojtowicz**

The Christian Theological Academy in Warsaw, Poland

ORCID 0000-0001-8520-8238

**Aleksandra Jędrzysek-Geisler**

Management Academy of Applied Sciences in Warsaw, Poland

ORCID 0000-0002-8360-8622

## **Autonomy-supportive teaching - applications of self-determination theory in the classroom**

**Nauczanie wspierające autonomię – zastosowania teorii  
autodeterminacji w klasie szkolnej**

**Abstract:** School is one of the key environments for meeting the needs of pupils, and functioning in a school setting translates into the well-being of children and young people. More than 50 years of research on self-determination theory (SDT) conducted by its founders - Edward L. Deci and Richard M. Ryan - as well as researchers focused on validating the concept's assumptions - has allowed the identification of factors that foster students' social development and educational achievement. The practical implications of SDT equip teachers with an evidence-based perspective of the classroom and the tools to work effectively considering the realities of the educational process.

**Keywords:** education, self-determination theory, autonomy, motivation.

### **Theoretical background of self-determination theory**

Contemporary social, economic, and technological changes pose a challenge for education to adapt to a dynamic reality. It becomes crucial to seek modern, scientifically grounded solutions that support both students and teachers in functioning effectively within this changing environment. Schools are implementing approaches aligned with the principles of evidence-based

social science, which enrich teachers' practices and make the teaching process more effective. In this context, Self-Determination Theory (SDT) plays a significant role by identifying factors that support students' motivation and engagement. The particular importance attributed to self-determination theory stems from its empirical nature, the verification of assumptions through the integration of different approaches and the emphasis on rigorous research methods (Krettenauer and Curren, 2020; Ryan, Deci, Vansteenkiste and Soenens, 2021), to gain a comprehensive understanding of human functioning in different areas of human activity. The aim of this article is to demonstrate how findings from research on Self-Determination Theory can be applied to teaching practice, enhancing educators' work while fostering an educational environment that supports students' autonomy, competence, and interpersonal relationships. The SDT approach is grounded in humanistic values, such as caring for personal development and student well-being, while also characterized by its empirical rigor, making it a versatile tool in the educational process. This theory complements other approaches that have played a significant role in education for decades (e.g., cognitive-behavioral approaches). Such integration enables the development of comprehensive, scientifically-based educational strategies that more effectively address the diverse needs of students. A significant international body of work offers the prospect of applying the presented concept to a variety of spheres of human functioning, with the aim of supporting the activities of the individual and enhancing the overall quality of life (e.g. health, work, organisational activities, physical activity, upbringing, education, environment and ecology, politics, public safety, religiosity and spirituality, entertainment).

Nowadays, the self-determination theory is used as a theory of motivation, personality, development and well-being, which sees the human being as an active organism with the potential to act. Sources of potential are located both within the individual (e.g. drives, emotions) and in environmental influences. This theory describes the human being as a self-actualising system with a tendency to develop and integrate its actions, and this integration is the foundation of healthy individual functioning. Years of research have focused on finding factors that support and inhibit the integration process in order to better understand the factors involved in human development (Ryan i Deci, 2019). As a consequence of the involvement of researchers from around the world, 6 sub-theories exploring different processes to explain human activity in the self-determination theory strand have emerged: CET (*Cognitive Evaluation Theory*), OIT (*Organismic Integration Theory*), BPNT

(*Basic Psychological Needs Theory*), COT (*Causality Orientations Theory*), GCT (*Goal Content Theory*), RMT (*Relationship Motivation Theory*).

Initially, SDT was focused around the issue of motivation and related factors. According to this theory, intrinsic motivation is the foundation of an individual's proactive approach to learning and development. It is understood as a natural need to assimilate and achieve mastery in the activities performed and a desire to explore new areas and issues. Intrinsic motivation is also central to an individual's social and cognitive development (Ryan and Deci, 2000). Edward L. Deci (1971) showed that intrinsically motivated people show greater commitment to their activities compared to those whose motivation is derived from external stimuli. In the process of inducing intrinsic motivation (through an increased sense of self-determination), the type of rewards and feedback is important. Some rewards limit the sense of self-determination and are perceived by people as controlling. Feedback that is informative, as opposed to controlling, enables the individual to feel more autonomy in taking action, thereby increasing intrinsic motivation (Reeve and Lee, 2019; Ryan, Mims and Koestner 1983).

According to SDT, extrinsic (instrumental) motivation can vary considerably in content and nature. Accordingly, four regulatory styles have been distinguished, which depend on the degree of internal autonomy and the integration of behaviour with the individual's personal value system (Deci and Ryan, 1990; Ryan and Deci, 2020; Vallerand and Bissonnette, 1992). Regulatory styles form a specific continuum, ranging from more controlled to more strongly autonomous forms of motivation (Ryan and Deci, 2017). The lowest level of self-determination is found in external and introjected regulation. The action is not accepted by the individual, and the behaviour is the result of external or internal pressure - in the former instance it is regulated by rewards and punishments, and in the latter it is undertaken to reduce anxiety, guilt or enhance a sense of pride. A stronger level of statehood is observed for identification. The individual assimilates the behaviour in question within the framework of personal values. Through this type of regulation, the possibility of choice (autonomy) is felt, although activity is still treated as a means to an end, rather than the end itself. In contrast, integration - the last of the regulatory styles - strikes a balance between behaviour and individual values, is integrated with self-knowledge and is consistent with the individual's personal goals and activities.

More autonomous forms of motivation are positively linked to the satisfaction of needs, which facilitate stronger internalisation of behaviour. The result of the research was to establish a set of three universal needs that

define human beings regardless of gender, time or cultural factors: the need for competence, relationships and autonomy. Their satisfaction promotes higher levels of well-being and strengthens a person's internal resources related to mental resilience (Martela, Lehmus-Sun, Parker, Pessi and Ryan, 2023; Chen, Wang, Wang and Zhou, 2020; Nalipay, King and Cai, 2020; Chirkov, Ryan, Kim and Kaplan, 2003). There are strong relationships between needs, meaning that the same behaviour can be beneficially associated with the satisfaction of more than one need (Reeve, 2012; Vansteenkiste, Niemiec i Soenens, 2010). The frustration of needs leads to various forms of psychopathology and reduced quality of life, and consequently, prevents the satisfaction of needs in a manner that is healthy and valuable to the individual (Ryan, Deci, Grolnick and Guardia, 2006; Vansteenkiste and Ryan, 2013).

### **Characteristics of SDT in the school environment**

The issue of education figures prominently in work on the development of self-determination theory. School is the environment in which the most key influences and interventions that shape (or inhibit) learner autonomy occur. It is responsible for a climate that is a support (or constraint) for the satisfaction of basic psychological needs, the construction of more autonomous forms of motivation, the exploration of reality and activities leading to an increased quality of life for children and young people.

Reports from needs research suggest that the school plays a key role in meeting these needs. In education, the need for autonomy is characterised by experienced freedom in terms of tasks and deciding on one's own activities. The need for competence will be related to the expression of one's individual potential, the development of interests and abilities and the belief in one's self-efficacy in interactions experienced in the school environment. The need for relationships is about the quality of those relationships and a sense of connection with peers and teachers (Raižienė, Gabrielavičiūtė and Garckija, 2017; Sierens, Vansteenkiste, Goossens, Soenens and Dochy, 2009; Tian, Han, and Huebner, 2014). In contrast to controlling outcomes (through, for example, rewards, punishments), meeting students' needs strengthens their intrinsic motivation, resulting in educational achievement. These findings suggest that promoting autonomy, developing competence and building appropriate interpersonal relationships are key to achieving positive educational outcomes and healthy psychosocial functioning for students.

Intrinsic motivation is likely to be responsible for the vast majority of human learning over the life course and, in the instance of students, plays a significant role in shaping engagement in learning and positive school

performance (Gottfried, Marcoulides, Gottfried and Oliver, 2009; Scherrer and Preckel, 2019). It manifests itself in activities that are engaging or rewarding to perform and is not influenced by external stimuli (Ryan i Deci, 2020). As intrinsic motivation translates into educational success, it becomes important to describe in detail the factors having a positive or negative impact on it.

In the concept of SDT, much research has been devoted to exploring the relationship between psychological needs, intrinsic motivation and student autonomy, pointing to the particular importance of autonomy in school settings. At the same time, some authors believe that the school as an institution does not support students' self-determination (Ryan i Deci, 2020). Typically, educational interventions focus on modifying the child's thinking in order to display teacher-approved behaviour. However, the results obtained suggest that valuable student behaviour does not need to be controlled by external factors. When the teacher promotes autonomy (as opposed to control), students are characterised by higher intrinsic motivation to learn and basic psychological needs are met. The formation of autonomy is fostered by an educational environment in which students have the opportunity to make decisions, make choices and experience the validity and importance of their opinions.

In the light of the research in the SDT approach, many positive effects related to teachers' autonomy support are evident. Pupils are characterised by stronger intrinsic motivation, better self-evaluation of their competences and higher self-esteem, achieve better grades and put more effort into learning (np. Cheon, Reeve and Marsh, 2023; Deci, Sheinman, Schwartz and Ryan, 1981; Guay, Ratelle, Roy and Litalien, 2010; Hardre and Reeve, 2003; Howard, Bureau, Guay, Chong and Ryan, 2021; Núñez and León, 2016; Vallerand, Fortier and Guay, 1997).

Autonomy support by teachers can also be a way of preventing negative changes in students' well-being. The school's impact on life satisfaction by constructing conditions that support students' overall development, improved adaptability and mental health appears to be of great importance, particularly for students with reduced school effectiveness, understood as educational success as measured by knowledge and grades (Kleinkorres, Stang-Rabrig and McElvany, 2023).

To fully illustrate the role of the type of motivation in educational activities, it is also worth identifying why controlling teacher interventions can negatively affect students' functioning in school. For example, research by Carl A. Benware and Edward L. Deci (1984) showed that when the goal of

teaching was to pass an exam then students felt lower levels of intrinsic motivation than students who knew that they would be teaching other students after learning the material. Other studies have shown that forced competition and pressure to win, and a directive teaching style using control words (e.g. “you should”, “you must”) adversely affected students’ autonomous motivation (Reeve i Deci, 1996). In a study by Johnmarshall Reeve and Sung Hyeon Cheon (2021), teachers who avoided controlling messages, allowed students time to think and ask questions, and fostered students’ feelings of autonomy. It also appears that the tone of voice of the teacher can have a negative impact on students’ motivation. Children hearing a teacher using a controlling tone of voice had lower confidence in the teacher and a lower sense of self-worth (Paulmann and Weinstein, 2023)

In summary, autonomous (intrinsic) motivation promotes students’ well-being, while controlling (extrinsic) motivation hinders the satisfaction of basic psychological needs and limits the possibility of feeling satisfied with the activities undertaken. It is therefore suggested that three basic psychological needs are met in the school environment, which are conducive to both academic achievement and the overall well-being of students (Tiane et al., 2014).

### **Practical implications of SDT – learner-centred attitude versus autonomy**

In popular opinion, as well as in legal terms, school is an environment for the cognitive and social development of children and young people. Teachers and students are expected to work towards this development, and educational success is mainly measured by grades and children’s adequate and adaptive functioning in their relationships with peers and teachers. However, researchers observe a decline in students’ engagement in school activities with the number of years of education (Gottfried, Marcoulides, Gottfried, Oliver and Guerin, 2007). SDT sees the reason for this state of affairs as a lack of focus on arousing autonomous learning needs. Indeed, research indicates a positive correlation between autonomy-supportive teaching and important educational outcomes for students, both in terms of intellectual and social-emotional development, as well as increases in pro-social behaviour among students and decreases in antisocial behaviour (Assor, Feinberg, Kanat-Maymon and Kaplan, 2018; Kaplan and Assor, 2012). Therefore, in addition to pointing out the benefits associated with autonomous functioning, there were questions about instruments and ways for teachers to help initiate support for student autonomy.

The basis for fostering autonomy among students is the quality of interaction and the manner in which the teacher builds relationships. The first step will be to mentally change the way one perceives one's role in the classroom and to realise that the teacher's behaviour can limit or support students' autonomy. This modification of perspective will define attitudes towards learners differently - from an oppositional, confrontational, coercive position of obedience and submission (self vs. learners) to a learner-centred attitude characterised by forbearance and curiosity (Reeve and Halusic, 2009). This attitude is often opposed and resented by teachers due to a misunderstanding of its meaning. Student orientation does not mean being submissive to the student, but working with the student for their effectiveness in achieving tasks by discovering and developing individual interests and meeting psychological needs. According to Johnmarshall Reeve and Hye-Ryen Jang (2006) autonomy support means identifying and developing a student's motivational resources, whereas behavioural control focuses on oppressive interventions towards students in order to modify their behaviour according to the teacher's expectations. In order to shape the intentionality of the students' actions, the teacher has various tools at their disposal: evaluating their own work with the students, listening and setting aside time for discussion among the students and for them to share their thoughts, giving feedback, helping them to find connections between the school task and their personal goals, guidance, encouragement and staying in active contact with the students by responding to their doubts or answering their questions. There is no single exemplary type of autonomy-promoting behaviour among pupils, but there is a perceived need for different forms of support regardless of the age of the pupils (Assor, Kaplan and Roth, 2002). However, if we look at these tools, they are linked to the teacher's capacity for self-reflection, an attitude of openness towards the students, communicative competence and, in the methodological layer, to active forms of classroom management.

Johnmarshall Reeve and Sung Hyeon Cheon (2021) point to teacher behaviours that foster more autonomous forms of motivation among students: a) adopting the student's perspective (focusing on students' viewpoints, fears, concerns), b) fostering intrinsic motivation through two actions – encouraging activity in line with interests and constructing lessons in a manner that allows psychological needs to be met (e.g. through the possibility of choice), supporting internalisation (explaining and justifying the task, accepting negative emotions, encouraging, showing patience by giving the pupil time to work at their own pace). The authors suggest that teachers should place more importance on modifying their own behaviour to support students'

autonomy (e.g. instead of giving instructions with prescriptive language provide explanations, understand resistance and encourage activity by pointing out the personal benefits and relevance of the task for the student). They also note that the teacher's activity belongs to two areas: arousing volitional and controlling processes – but they do not see them as opposing, but rather independent of each other. In practice, this means teacher activity related to both the development of autonomy among pupils and seeking to replace one's own controlling behaviours with behaviours that support pupils' autonomy.

As part of the teacher's actions, it is worthwhile to ensure a stimulating, contact with the student and to give value to teaching, to create a space of cooperation rather than competition between students. The problems illustrating the lesson topic should be practical, linked to the students' experience, emphasising the purpose of teaching. Tasks should be challenging, aiming to take responsibility for the outcome and becoming an expert on a particular topic. Failures should be discussed in a manner that identifies taking more effective action in the future and using effective tools - feedforward rather than looking for people to blame and pointing out deficits that prevent the task from being completed (Reeve and Jang, 2006; Ryan and Deci, 2020).

It is also worth noting that research verifying the personality determinants of learning styles has not been positively validated. The skills involved in supporting student autonomy are modifiable and can be developed. Based on questionnaires to analyse learning styles, Reeve and Halustic (2009, *Learning Climate Questionnaire, Teacher Controllingness Scale*, s. 151), created a short list of items to assess students' learning styles. The extracted sentences can become – for interested teachers – the basis for training towards the development of a more autonomous teaching style. Elements related to autonomy support include, for example, “I feel that my teacher provides me with choices and options. My teacher conveys confidence in my ability to do well in the course. My teacher encourages me to ask questions. My teacher tries to understand how I see things before suggesting a new way to do things”. In turn, an exemplary item for assessing perceived control: “My teacher tries to control everything I do. My teacher uses forceful language. My teacher puts a lot of pressure on me”.

## Summary

In conclusion, the practical nature of the self-determination theory encourages the application of its findings to the reality of schooling and to consider it as a resource for appropriate relationships between teachers and



students, to support the effectiveness and well-being of students as well as one's own development as a teacher.

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