

# [Self determination theory in teaching](https://assignbuster.com/self-determination-theory-in-teaching/)

In the United Kingdom it is compulsory for all children to receive schooling until the age of sixteen. In the present educational climate it is foreseeable that this age limit could be extended to eighteen. In light of this, it is my firm belief that a teacher must not only have well-grounded subject knowledge and an intimate understanding of relevant pedagogy, but an effective teacher must also be able to motivate students to learn. However, to be a proficient motivator one has to understand the rudiments of what it is that drives and motivates people to act. This has long been the endeavor of Motivation Theory – a well-established and active area of research within the field of psychology. It has clear links to many of the other social sciences, including education.

## Setting the scene

As a trainee teacher I have a keen (somewhat vested) interest in understanding theories of motivation. In this review I will be placing an emphasis on Self-Determination Theory, its sub-theories, and ultimately its realization in the form of Sudbury schools. However, I would first like to develop the necessary historical context within which to discuss it.

Between the 1930s and 1950s Motivation Theory was dominated by Clark Hull’s work on biological Drive-Reduction. This was one of the earliest attempts to systematize and formalize our understanding of motivation. Hull posited that humans seek to maintain a state of homeostasis. He said that we have drives which arise in response to biological needs such as hunger and thirst. These drives motivate us to act in order to reduce their effects and hence maintain homeostasis.

Hull’s work was gradually superseded as researchers abandoned biological theories for cognitive alternatives. 1952 saw the publishing of Robert W. White’s Motivation Reconsidered: The Concept of Competence. In this article White first conceived the idea of competence motivation – which one might describe in layman’s terms as people like playing to their strengths. White said that we are motivated towards behaviour that makes us feel competent, knowledgeable or powerful.

The fifties also saw the emergence of Incentive theories as pioneered by the likes of Berrhus Frederic Skinner. These focused principally on research into operant conditioning, behavior modification through reinforcement, punishment and extinction (Skinner, 1938). Skinner’s theories were notably criticized by none other than renowned intellectual Noam Chomsky (Chomsky, 1967). In his review Chomsky undermined the scientific credibility of Skinner’s methodology, claiming that his work was merely an emulation of science.

In 1956 Leon Festinger published When Prophesy Fails, now regarded as a seminal book for its development of the cognitive dissonance theory of motivation. Festinger, building on Piaget’s concept of disequilibrium, believed that humans are motivated to reduce dissonance to such an extent that one can change another’s attitudes by altering their behavior or vice versa. This has since been a highly successful and extensively studied theory of motivation.

Until this point psychology had been split into two competing paradigms; behavioural (subject-object relationships) and Freudian (psychoanalysis). In the 1960s a new generation of researchers came to the fore, rejecting this apparent dichotomy and spawning the so-called Third Force in psychology, focusing on human aspects such as fulfillment, self-actualization and meaning; concepts which so far had been omitted from most leading theories. The key player during this era was Abraham Maslow. He had rejected Freudian analysis as he perceived its focus to be pointed far too much towards sex and violence. He also rejected behaviourist approaches because they were overly impersonal and failed to address what he termed higher motives of human beings. Maslow’s ideas about motivation are best illustrated by his eponymous hierarchy of needs; a tiered pyramidal structure. The bottom tier of the hierarchy is comprised of biological needs; above those are security needs, relationship needs, self-esteem needs and finally self-actualization needs at the top. Maslow believed that when the majority of needs within a tier are met, the individual will become motivated to satiate the needs within the tier above. This process continues until the individual is finally motivated towards self-actualization (Maslow, 1943). Maslow’s theory has proven difficult to test experimentally, and although conceivably true, it fails to provide satisfactory explanations for many exceptional cases, and has duly received significant criticism (Wahba & Bridgewell, 1976).

## Self-Determination Theory

So far I have highlighted but a few of the salient developments within Motivation Theory from the mid twentieth century. I would now like to limit my focus to one in particular, Self-Determination Theory (SDT). SDT is a relatively contemporary meta-theory of motivation; its origins can be found in the early works of Richard Ryan and Edward Deci at the University of Rochester (Deci, 1971). At the time of its conception Ryan and Deci realized that aspects of competing humanistic, behavioural, cognitive and post-modern theories could be unified into a contiguous whole; forming what eventually became SDT (Deci & Ryan, 2002). The name Self-Determination Theory is now regarded as an umbrella term for a broader collection of five sub-theories, each of which I shall review in turn. Much of SDT has evolved from initial studies into the dualistic notions of intrinsic and extrinsic motivation e. g. Lepper et al. (1973). SDT places emphasis on humans’ natural intrinsic tendencies to explore, develop, learn and create without reward. This attitude is in stark contrast to the operant ideas purported by Skinner, who insisted that all behaviour is motivated by reward (Skinner, 1953). An assumption of SDT is that humans have an innate tendency to “ assimilate their ongoing experiences into a unified and integrated sense of self” (Horn, 2008, p. 134). The increasing level of interest in SDT is self-evident given the large number of meta-analyses, reviews and special issues within the research literature (Hagger & Chatzisarantis, 2008).

## Classifying motivation

For over thirty years researchers have differentiated motives into two broad categories, which ultimately reflect the locus of motivation. Intrinsically motivated behaviour is when an individual wants to act of their own volition, because a task is interesting or challenging, or purely for the sake of it. It is internally-sourced motivation, inherently connected with the individual’s attitudes and sense of self. Extrinsically motivated behaviour is a response to an external factor such as a promise of reward or threat of punishment; often misaligned with the attitudes of the individual (Ryan & Deci, 2000).

Intrinsic motivation has proven to be of great interest to educational psychologists, as it can be “ catalyzed or undermined by parent and teacher practices”, and fosters improved learning and creativity (Ryan & Stiller, 1991). My own sentiments are in accordance with Ryan and Deci’s views on intrinsic motivation – “ with an attitude of willingness that reflects an inner acceptance of the value or utility of a task the extrinsic goal is self-endorsed and thus adopted with a sense of volition.” (Ryan & Deci, 2000). The process of accepting an external motive and internalizing it as a new source intrinsic motivation is referred to as integration. It is no secret that teachers often have to deliver material which is either boring or dull. Therefore, knowledge of strategies for encouraging integration would clearly be advantageous when motivating students.

## Cognitive Evaluation Theory

The first sub-theory of SDT is called Cognitive Evaluation Theory (CET). This examines how social, environmental and other external factors influence intrinsic motivation by affecting an individual’s sense of competence and autonomy. CET offers three prepositions for explaining the impact of these influences.

Firstly, changes in intrinsic motivation towards an activity are coupled to an individual’s perceived competence at that activity (Deci & Ryan, 1985a).

Secondly, external attempts to regulate an individual’s behaviour can result in increased, decreased or unaltered intrinsic motivation (Deci & Ryan, 1985a).

Thirdly, influences which an individual perceives as threatening or promoting their sense of autonomy will respectively diminish or develop their intrinsic motivation (Deci & Ryan, 1985a).

There has been a long and arduously fought debate as to whether or not teachers should employ rewards (extrinsic motivation) in order to encourage their students. Kruglanski et al. (1972) found that rewarding students for participating in a game resulted in a notable decrease in their intrinsic motivation. Similarly, it has been suggested that verbal praise can condition students into behaviour which has the specific intent of elliciting praise, undermining their intrinsic motivation (Deci et al., 2001). The effects of increased perceived autonomy have been studied by Goudas et al. (1995), who found that when students were given more control over the direction of their lessons their intrinsic motivation increased. Similar results where found by Mandigo & Holt (2000) who claimed that perceived autonomy also increased the likelihood of students being optimally challenged, that is, taking on challenges in-line with their own skill level. Perceived loss of autonomy has been found to diminish students’ initiative and ability to learn, particularly complex or abstract concepts (Benware & Deci, 1984). Related studies have found that students faced with complex tasks performed more highly when intrinsically motivated than when extrinsically motivated (Condry & Chambers, 1978). According to Lepper (1988), extrinsically motivated students will only put in the minimum effort required, and tend to undertake less difficult tasks than those who are intrinsically motivated. Lepper (1988) claims that in order to promote intrinsic motivation, activities should be “ challenging but achievable” and stimulate students’ curiosity. Lepper suggests that teachers can raise intrinsic motivation by contextualizing learning, so that students can appreciate the benefits of what they are doing.

The construct of optimal challenge is of fundamental importance not just to SDT, but to other leading motivational theories such as Harter’s Competence Motivation and Csikszentmihalyi’s Flow Theory, which all establish connections with intrinsic motivation (Mandigo & Holt, 2006). Deci and Ryan (1985) state that optimally challenged individuals will develop increased intrinsic motivation because they experience greater competence at a particular activity.

In the literature one often comes across the concept of perceived locus of causality (PLOC). This is where an individual perceives their successes and failures to originate from. When an individual feels in control (perceived autonomy) this is described as an IPLOC (intrinsic). Conversely, when an individual feels they are subordinated by an external agent this is described as an EPLOC (extrinsic). Several studies have revealed that changes in intrinsic motivation can occur without a change in the PLOC (Boal & Cummings, 1981; Harackiewicz et al., 1984). This is in disagreement with the third proposition outlined above. Also in contradiction to this proposition are the results of Salancik (1975) who, after rewarding participating students with money (extrinsic motivation), found they reported increased perceptions of control (autonomy). CET predicts that extrinsic motivation should result in a shift in the PLOC, thus undermining intrinsic motivation.

There have been alternate theories attempting to explain why rewards might undermine intrinsic motivation. Dickenson posited three ideas; overly repetitive tasks gradual deplete motivation, rewards deemed to be coercive are undermining, and extrinsically motivated actions tend to receive less praise from peers (Dickinson, 1989).

## Organismic Integration Theory (OIT)

The second sub-theory of SDT is called Organismic Integration Theory (OIT). Its primary concerns are modes of behaviour regulation, and the degree to which they are internalized (Deci & Ryan, 1985a). Hagger & Chatzisarantis (2008) describe it as explaining how people integrate behaviours that are initially non-self-determined. Deci and Ryan (1985) proposed a heuristic continuum of regulatory modes ranging from totally non-self-determined at one end to totally self-determined at the other. The validity of this continuum has since been supported by research (Horn, 2008, p. 134):

* Amotivation – total absence of motivation, linked to perceived incompetence.
* External regulation – a form of compliance to external influences, the removal of which will likely cause an individual to cease a particular behaviour.
* Introjection – acting on self-imposed pressures such as guilt, or finding self-esteem in the perceived approval of others.
* Identification – consciously acknowledging the value of undertaking a particular behaviour.
* Integration – internalization of regulation such that it is entirely compatible with attitudes and sense of self, still as a means to an end.
* Intrinsic regulation – internalization of regulation, undertaking activities for their own sake and enjoyment with no regard to external factors.

One has to be careful not to confuse the term external with extrinsic. Certain extrinsic modes of regulation are perceived to be equally as internal to an individual as intrinsic motivation. They are extrinsic in the sense that they contingent on external consequences, but internal in the sense that the motivation emanates from within. It thus makes sense to also delineate between internal and intrinsic. All intrinsic motivation is inherently internal, but not all internal motivation is intrinsic.

“ One can be as tyrannical toward oneself as others can be. The issue is not so much whether the source of control is oneself or another, but whether or not one is being controlled” (Deci & Ryan, 1985).

## Causality Orientation Theory (COT)

The third sub-theory of SDT is concerned with how individuals perceive the events which initiate, regulate and hence mediate the level of self-determination of their behaviour, viz. their causality orientation (Deponte, 2004). This new personality dimension grew out of prior work laid down by Heider and deCharms (Deci & Ryan, 1985b). The General Causality Orientations Scale was synthesized by Deci & Ryan, (1985b) as a fairly persistent means for characterizing aspects of personality and motivation. They outlined three orientations, namely autonomy, control and impersonal, then measured how subjects responded to various hypothetical situations (Horn, 2008).

Autonomy oriented individuals have higher self-esteem (Horn, 2008), are self-initiating and actively pursue opportunities for self-determination; structuring their lives around their own goals and interests. These individuals exhibit a higher degree of intrinsic motivation and hence maintain greater self-determination in the face of extrinsic influences. External rewards hold little influence over these individuals and merely serve to affirm their competence (Deci & Ryan, 1985b).

Control oriented individuals interpret their behaviours as originating from, and being regulated by, external or internal controls. These individuals depend on pressure, surveillance, deadlines, threats and expectations to motivate their actions. They experience the world in terms of defiance and compliance (Deci & Ryan, 1985b).

Impersonal oriented individuals can experience helplessness and deem their actions as ‘ out of their hands’. They perceive themselves as unable to influence the course of their own lives. Impersonal orientation is correlated with depressive attitudes and feelings of incompetence (Deci & Ryan, 1985b).

Recently published research conducted by Friedman et al. (2009) has claimed that extrinsically motivated individuals can become intrinsically motivated by observing the behaviour of an intrinsically motivated individual.

## Basic Needs Theory

Now to the fourth sub-theory of SDT, Basic Needs Theory (BNT). This sub-theory posits that intrinsic motivation originates from a universal, biologically-hard-wired need to achieve autonomy, competence and relatedness. An individual will not experience complete fulfillment of a specific need unless all three are satisfied in concert. Due to the fundamental nature of these needs, humans have a natural preference to act on intrinsic rather than extrinsic motivation (Deci & Ryan, 2000). BNT has empirical backing which supports it as a culturally independent theory (Sheldon et al., 2001).

## Goal Contents Theory

The fifth and final sub-theory of SDT is called Goal Contents Theory (GCT). Within this construct a goal’s contents is described as either intrinsic or extrinsic. Classic examples of extrinsic contents are fame, wealth, physical appearance, reputation and most other materialistic or superficial motives. In contrast, intrinsic contents tend to be concerned with personal development and acceptance, community contribution, health, fulfillment and establishing meaningful relationships (Kasser & Ryan, 1996). The pursuit of intrinsic goals has been suggested to satiate the three fundamental needs of competence, autonomy and relatedness, and hence facilitates the growth of intrinsic motivation (Vansteenkiste et al., 2003). The opposite effect has been proposed for the pursuit of extrinsic goals (Vansteenkiste et al., 2007).

## Self-Determination Theory in summary and in context

A review of such fascinating research literature would seem rather pointless if no practical applications were to emerge from it. For this reason I have distilled some of the salient ideas into a more digestible form, in the hope that theory may be put into practice. In the context of education, teachers need only remember the following outline of SDT:

All people have three basic needs (competence, autonomy and relatedness).

Satisfying these needs has been shown to promote intrinsic (self) motivation.

Intrinsic (self) motivation has been shown to improve students’ learning and performance.

Teachers should employ strategies which help students to satisfy their three basic needs.

The task for teachers is therefore to find effective strategies for helping their students to feel competent within their subject, to feel in control of their own learning and have input into what goes on in lessons, and to feel that their views, opinions and work are appreciated and respected.

## Key advice for the research-informed classroom

The use of computers in the classroom gives the students a sense of privacy, autonomy and self-pacing (Underwood & Brown, 1997).

Research has shown that positive and negative feedback can subsequently increase and decrease students’ perceived competence and hence intrinsic motivation (Vallerand & Reid, 1984).

Offering tangible rewards in order to coerce or encourage students will undermine their intrinsic motivation. The effect has less impact if rewards are presented unexpectedly (Deci et al., 2001, p. 4).

Verbal praise which is intended to control students’ behaviour will undermine their intrinsic motivation (Deci et al., 2001, p. 4).

“ evidence suggests that teachers’ support of students’ basic psychological needs for autonomy, competence, and relatedness facilitates students’ autonomous self-regulation for learning, academic performance, and wellbeing” (Niemiec & Ryan, 2009).

Give students choice, and freedom to decide what they learn and how (Goudas et al., 1995).

Contextualize learning so that students know why they are learning things (Lepper, 1988).

Teachers can raise intrinsic motivation by showing enthusiasm (Friedman et al., 2009).

## Sudbury Schools

These schools employ a system of complete educational democracy in which students and teachers are treated as equals. There is no formal curriculum per se, as students decide on what they would like to learn. In addition, Sudbury schools do not grade, evaluate or assess their students’ performance. All learning is intrinsically motivated and optimally challenging. The first Sudbury school was Sudbury Valley School, Massachusetts which opened in 1968. There are presently over thirty such schools around the world, although predominately in the United States and Japan. In some Sudbury schools there are no well-defined classrooms, and it is common for students to be mixed by age. Students in these schools have a significant role in the recruitment and dismissal of staff. Visitors have often described the students as being in a state of perpetual recreation (Holzman, 1997). Sudbury schools are a testament to and realization of SDT in the domain of education.