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Beyond the Quantity of Motivation: Quality of Motivation in Self-Determination Theory

3

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Contents

Introduction

Have you ever been passionate about a theoretical approach you learned in class? When the class ended, you may have approached the professor to ask for clarifications, elaborations, and maybe additional reading materials. Later, during a coffee break, you discussed the ideas with your friends and were eager to go online to look for more information.

At the same time, I'm sure you remember other classes in which passion and eagerness could not describe your experience, but pressure and anxiety definitely could. You may have felt pressure to succeed because the course was mandatory in your program and you needed a certain grade. You found the material uninteresting and meaningless. The professor lectured monotonously and slowly, without distinguishing between the important and the unimportant. However, you did not dare to skip a single class because you wanted to make sure that you took all the necessary notes for the final exam. The course was a millstone around your neck, and you couldn't wait to put it behind you. You probably studied hard before the exam to make sure your grade was high enough.

You may also remember another class experience where after half an hour, you found yourself staring at the professor with no idea what she was talking about. You may have taken some

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© Springer Nature Switzerland AG 2019
K. Sassenberg, M. L. W. Vliek (eds.), *Social Psychology in Action*,
https://doi.org/10.1007/978-3-030-13788-5_3

notes but in an automatic manner without really paying attention; before the final exam, you might have read them but couldn't remember anything, questioning if you were the one who actually wrote this stuff. It does not mean that you necessarily felt incompetent in this class. The material was not beyond your ability to understand. You may even have felt it was quite simple, even trivial.

As a high achiever and to ensure good grades in the three classes, you may have invested equal effort before the final exams. So even though you felt quite competent in the three classes, and you made efforts to succeed, your experience as a learner was completely different: enthusiastic and eager in one class, stressed and anxious in the second, and bored and maybe even irritated in the third. Thus, the different experiences cannot be explained by different levels of ability or different levels of overall motivation (at least in relation to the final exam). It seems that in these aspects, the experiences are similar. However, they diverge in another important aspect, and that's the topic of this chapter.

Self-determination theory (SDT; Ryan & Deci, 2017) distinguishes between the amount (intensity) of motivation and its quality. The three common experiences described here differ in the quality of motivation but not necessarily the amount or intensity. The theory specifically distinguishes between two types of motivations differing in their quality: *autonomous motivation* and *controlled motivation*. When autonomously motivated, people perceive themselves as the "origin" of their own behavior, whereas in controlled motivation, they perceive themselves as "pawns" subject to other forces. Research in the last three decades has demonstrated that autonomous motivation has an advantage over controlled motivation in many respects, including better psychological health and better quality of behavior (e.g., flexible behavior versus rigidity).

The chapter begins by defining autonomous and controlled motivation and explaining their measurement. It turns to a discussion of the outcomes of the different types of motivation and describes a portion of the large body of research on each. The chapter concludes with a summary of research on human behavior in applied settings and a discussion of a field study in an educational context.

Types of Motivation

SDT researchers are interested in the types of motivations that drive behavior (Ryan & Deci, 2000). Such research often focuses on the distinction between intrinsically and extrinsically motivated behavior. In the former, people do something because it is inherently interesting or enjoyable; in the latter, they are looking for a reward of some kind or are trying to avoid punishment (Deci & Ryan, 1985). Yet, other types of motivations do play a role in explaining behavior (Deci & Ryan, 2000). Undoubtedly, much of what people do involves external pressure to act in a certain way, to believe specific ideas, and to hold specific values and opinions. SDT suggests that non-intrinsically motivated activities encouraged by others (such as parents, teachers, or employers) may allow different levels of perceived autonomy, reflecting the degree to which the values of the behavior have been internalized by the individual (Grolnick, Deci, & Ryan, 1997).

Advanced SDT conceptualizations of underlying motivations not only distinguish extrinsically and intrinsically motivated behaviors but also point to extrinsically motivated behaviors that vary in their relative autonomy level (Roth, Assor, Kanat-Maymon, & Kaplan, 2006; Ryan & Connell, 1989). These conceptualizations are reflected in the distinction between autonomous and controlled motivations. Autonomous motivation involves volition and choice and includes intrinsic motivation and well-internalized forms of extrinsic motivation. In contrast, behavior driven by controlled motivations involves an external or internal sense of compulsion and poorly internalized forms of extrinsic motivations (Grolnick et al., 1997; Roth, Assor, Niemiec, Ryan, & Deci, 2009).

Definition Box

Autonomous motivation: involves volition and choice and includes intrinsic motivation and well-internalized forms of extrinsic motivation.

Controlled motivation: involves an external or internal sense of compulsion and includes poorly internalized forms of extrinsic motivation.

Amotivation, Controlled Motivation, and Autonomous Motivation

Amotivation denotes an absence of motivation. For example, an individual may not value an activity, may not think it will lead to a desired result, or may not feel capable of performing it. One consequence of amotivation is resentment: one study found amotivated individuals resented those agents perceived as acting on them; as a result, they disengaged and performed poorly (Roth et al., 2009).

Controlled motivation denotes behavior performed under a sense of pressure or compulsion. The control can be either external or introjected. In external motivation, behavior is controlled by external reward and punishment, with little internalization. The behavior is maintained only in the presence of the controlling person (e.g., a parent, teacher, or employer). Introjected motivation is a superficial type of internalization. The individual takes in the externally expected behavior's value but does not really accept it as his or her own. Acting on a sense of inner compulsion, this individual imposes on himself/herself the same contingencies of approval that the controlling person had previously imposed. Put otherwise, their self-esteem is contingent on enacting specific behaviors. Thus, although motivation now lies within the individual, it continues to be controlled. For example, students with controlled motivation may make a considerable effort (large amounts of motivation) to enhance their self-esteem or to avoid embarrassment (introjection), or they may try to outperform other students because they wish to please the professor or to avoid sanctions (external motivation). Controlled motivation, reflected in feeling pressured to perform specific behaviors, can result in constricted and shallow behavioral functioning and performance, diminished well-being, and low-quality behavior (e.g., Grolnick & Ryan, 1989; Roth et al., 2009).

Autonomous motivation denotes behaviors performed with a sense of volition and choice. It can be divided into three subtypes: identified, integrated, or intrinsic. In identified motivation, an individual has already identified with a behavior's importance to him or her and performs the behavior autonomously. In integrated motivation, a behavior is deeply internalized and autonomous because it has been assimilated with other aspects of the self. In intrinsic motivation, an individual performs an activity because it is inherently interesting and internalization is not needed. Altogether, autonomous motivation characterizes individuals who invest efforts because they are interested, take pleasure, or find value in doing so.

It is possible to view the types of motivation as levels of internalization of behaviors and/or values, reflecting different stages on a continuum of autonomy. For example, we may agree that no child is born with the intrinsic motivation to brush his/her teeth twice a day. When the parent does it for him/her, the regulation is purely external. While the child grows and can do it effectively by himself/herself, the parent may explain the importance of brushing teeth for oral hygiene, allowing him/her to identify with the value of brushing his/her teeth consistently and effectively. Thus, thanks to the parental provision of a rationale, the child internalizes the importance of the behavior, and instead of external motivation, the behavior becomes motivated autonomously based on identification with its value for oral hygiene. Later in the chapter, I will discuss contextual support for autonomous motivation (e.g., the parents' provision of a rationale), but first I want to talk about how these different types of motivation (or levels of internalization) are measured.

Measurements and Outcomes of Autonomous and Controlled Motivation

Motivation has obvious application in a classroom situation, and, here, Ryan and Connell (1989) were innovators. By implementing deCharms's (1968) concept of the "perceived locus of causality," they assessed four of the five types of motivations discussed above (external, introjected, identified, and intrinsic) by asking students to indicate the reasons for their actions in academic achievement and also in prosocial behavior. External motivation referred to external authority, fear of punishment, or rule compliance as reasons for behavior; introjected motivation referred to internal, esteem-based pressures; identified motivation referred to the students' own values or goals; and intrinsic motivation referred to inherent interest and enjoyment[1] (see Table 3.1).

As they expected, when they tested the students, Ryan and Connell (1989) found a simplex-like pattern of correlations among the four types of motivations. The simplex concept comes from Guttman's (1968) Radex theory on the ordered relations of correlated variables, whereby the magnitude of the correlations among variables reflects their conceptual similarity. In this case, the largest correlations were between adjacent, conceptually similar motivation types (e.g., identified and intrinsic), and they tapered off as the types became conceptually more distant. Ryan and Connell also created a relative autonomy index (RAI), an overall indicator of autonomous motivation, by assigning positive weights to the two autonomous motivations (identified, intrinsic) and negative weights to the two controlled motivations (external, introjected). Since its development, their approach has been used extensively in various domains and cultures; the RAI index associates positively with diverse desirable outcomes and negatively with undesirable ones (Assor, Roth, & Deci, 2004; Pelletier, Dion, Slovinec-D'Angelo, & Reid, 2004; Roth et al., 2006).

Table 3.1 Measuring types of motivations: examples for achievement in class (Ryan & Connell, 1989)

"When I'm working on class work I do so because…"
External motivation
I'll get in trouble if I don't.
That's what I'm supposed to do.
Introjected motivation
I'll feel bad about myself if I don't.
I'll feel ashamed of myself if I don't.
Identified motivation
I want to understand the subject.
I think it's important to.
Intrinsic motivation
I enjoy it.
It's interesting for me.

[1]Integrated motivation is generally not examined using self-reports because it can be difficult to distinguish between identified and integrated motivations

Consequences of Autonomous and Controlled Motivation

Empirical research consistently shows that autonomous motivation predicts greater behavioral persistence in the absence of external controls, higher quality of performance, and better emotional experience and well-being than controlled motivation. Because autonomously motivated individuals value a behavior or find it interesting and/or enjoyable, they experience less internal conflict about performing it and are more dedicated to it (Ryan & Deci, 2017). In contrast, controlled motivation can involve internal conflict and a sense of internal compulsion (i.e., introjected motivation; Roth, 2008) or external conflict and a sense of external compulsion (i.e., external motivation) and is therefore related to rigid behavior, less persistence, and a sense of ill-being (Pelletier et al., 1995; Vansteenkiste et al., 2010).

Hence, consequences of the types of motivation have been noted in quite varied domains, including education, relationships, health care, psychotherapy, religion, aging, and sports (for a review, see Ryan & Deci, 2017). For explanatory purposes, I will provide a few examples.

Ryan and Connell (1989) found autonomous motivation was related to positive affect and a proactive coping style, greater empathy, more

mature moral reasoning, and more positive relatedness to others. In contrast, controlled motivation was related to negative affect and maladaptive coping, as well as anxiety magnification following failure, suggesting controlled motivation makes people vulnerable when they fail to perform the desired activity.

In a later study, Roth (2008) found controlled motivation was related to *ego-oriented prosocial helping* (a helping behavior enacted for the sake of others' approval and appreciation), whereas autonomous motivation was related to *other-oriented helping* (a helping behavior performed while focusing on the needs and inclinations of the other in need).

Evans and Bonneville-Roussy (2015) studied college students' motivation for music studies. Interestingly, but not surprisingly, autonomous motivation predicted more frequent practice, higher quality of practice, and greater preferences for challenging parts of music. Looking at high schoolers, Vansteenkiste et al. (2010) found autonomous motivation predicted more sophisticated informational processing, better distinction between the important and unimportant, better concentration (students' ability to direct and maintain their attention on academic tasks), and better time management strategies for academic tasks. It was negatively related to cheating attitudes and unrelated to test anxiety. Controlled motivation, however, was positively related to test anxiety and unrelated to the other outcome measures.

Aelterman et al. (2012) studied objective indicators of physical activity among secondary school students as a function of their types of motivation. Their multilevel analysis revealed that 37% and 63% of the variance in physical activity were explained by between-student and between-class differences, respectively. Thus, autonomous class motivation was positively related to between-class variation in physical activity.

Finally, in a study of health care, Halvari, Halvari, Bjørnebekk, and Deci (2012) found that autonomous motivation for dental home care predicted dental health behavior and oral health.

I could go on, but as the few studies mentioned here demonstrate, autonomous motivation is essential for adaptive functioning and well-being (for a review, see Ryan & Deci, 2017; or go online to selfdetermination.org). Therefore, it seems important to explore its antecedents. Over the last three decades, researchers have developed a vast theoretical and practical knowledge of factors supporting and frustrating autonomous motivation.

Antecedents of Autonomous and Controlled Motivations

Can social conditions facilitate (or inhibit) autonomous motivation? SDT postulates that humans have an inherent and deeply evolved propensity to explore, assimilate knowledge, and develop new skills. They strive to integrate these new experiences into a harmonious sense of self (Deci & Ryan, 2000). But SDT also recognizes that the tendency to be actively involved does not happen automatically; in fact, some individuals become passive or counterproductive (Ryan & Deci, 2000). SDT suggests these natural propensities can be supported or undermined by contextual factors, including a person's immediate situation and developmental history, making the social context a key factor in growth, integration, and mental health (Ryan & Deci, 2000; Van Den Broeck, Vansteenkiste, & De Witte, 2008). Specifically, SDT posits that autonomous motivation is facilitated by the satisfaction of three primary psychological needs: competence, relatedness, and autonomy (Deci & Ryan, 2000; Ryan, 1995). Several psychological approaches use the concept of needs but do it very differently. Therefore, before I move on to the definition of each of these three specific needs and the contextual factors that may support or frustrate them in the next section, I first briefly touch on some unique aspects of SDT's definition of needs.

Two main approaches to psychological needs have been developed in the literature. One tends to view needs as learned during socialization (e.g., McClelland, 1985) and therefore differing in strength as a function of that learning, and the other views them as universal and innate (Deci & Ryan, 2000).

McClelland (1985) and others draw on the former theory to predict behavior. More specifically, these researchers predict variations in the strength of individuals' acquired needs based on the social conditions creating them, test for these differences, and then predict various outcomes based on need strength. This hypothesis has been used to examine the consequences of different levels of achievement motivation (Atkinson, 1958) and power motivation (Winter, 1973) and to probe the outcomes of different combinations of need strength. Importantly, they do not associate psychological need satisfaction with health and well-being.

In contrast, in the second approach, SDT research defines psychological needs as innate necessities, not acquired motives. In SDT, meeting these needs is considered essential for well-being. Therefore, a basic difference in the research approaches is that SDT research does not focus on variations in need strength. Rather, it examines the extent to which individuals experience basic psychological need satisfaction in different social contexts. It also asks if different degrees of satisfaction have different consequences. The primary assumption and subsequent findings reveal that in contexts that support **basic psychological needs** for relatedness, competence, and autonomy, individuals experience greater well-being and more autonomous motivation, whereas in contexts that frustrate these psychological needs, individuals experience controlled motivation or amotivation and ill-being.

Box 3.1 Questions for Elaboration

Think about a class in which the professor is articulate, provides clear explanations, and gives assignments that you can understand and follow. However, the professor does not like to hear students' comments and seems impatient when you try to express your opinion. When you see him/her on campus, it seems that he/she does not recognize you and never greets you. In SDT's conception, this professor seems to support your sense of competence (provides clear explanations and optimally challenging assignments) but does not support your sense of relatedness (ignores you) or autonomy (suppresses your voice). How do you evaluate your type of motivation in this class (autonomous versus controlled)? Can you compare your experience and motivation in this class to other classes where the professor is more interested in your personal opinion?

Basic Psychological Needs: Definition and Contextual Support

People are more likely to engage in an activity if they think they can do it (Ryan & Deci, 2000). *Competence support*, often defined as the provision of structure (versus chaos), refers to guidelines for behavior and involves communication of expectations, explanations and administration of consequences, and informational feedback (Grolnick et al., 1997). In the school setting, such support is essential for both students and teachers. In studies of students, Skinner, Johnson, and Snyder (2005) and Jang, Reeve, and Deci (2010) demonstrated that when teachers communicate[2] well-defined expectations and give explicit directions, students' **competence** and engagement are supported. In a study of teachers, Fernet, Austin, Trepanier, and Dussault (2013) found that role ambiguity diminishes teachers' sense of personal accomplishment at school by decreasing their sense of competence. A role is ambiguous if an individual does not have enough information to perform it properly and does not know what is expected of him or her (Rizzo, House, & Lirtzman, 1970). Such persons are obviously less likely to feel competent (Cherniss, 1980).

[2]It is important to distinguish between structure (competence support) and control. For an excellent discussion and findings disentangling structure and control in education, see Jang et al. (2010).

Autonomous motivation requires a sense of **relatedness** with others (Grolnick et al., 1997). Feelings of belonging and connection (Baumeister & Leary, 1995; Ryan & Deci, 2000) are essential for motivations to become integrated. Put otherwise, people need a "secure base" with a significant other (Bowlby, 1979). If parents, teachers, and employers seek behaviors that are neither interesting nor enjoyable, individuals may be more motivated to engage in them if they have a relationship with a social agent who is affectionate, caring, and connected (Ryan & Deci, 2000). This type of *environmental support*, often defined as interpersonal involvement, requires the provision of warmth and caring and an interest in the other person's activities. Ultimately, interpersonal involvement may predict the internalization of extrinsically motivated behaviors (Grolnick et al., 1997), a hypothesis substantiated by Ryan and Grolnick (1986) who found that children who felt more connected to and cared for by their parents better internalized positive school-related activities.

Autonomy is critical to internalization and integration. In SDT, autonomy refers to "endorsing one's actions at the highest level of reflection" (Ryan & Deci, 2017). More simply stated, the individual's behavioral engagement corresponds with his or her personal values, interests, and needs. Thus, to integrate a behavior, the individual must grasp its meaning and synthesize that meaning with the individual's other goals and values.

Therefore, competence and relatedness may not suffice for autonomous motivation because external contingencies (rewards and punishments) may facilitate behavioral engagement based on external regulation, as long as the individual feels competent. Likewise, when a behavior or attitude is endorsed by a social group to which one feels related, one may enact the behavior because of a desire to feel affiliated to the group and to enhance one's self-esteem (an introjected rather than autonomous regulation). However, only an environment based chiefly on autonomy support can generate autonomous motivation and integration by allowing the person to satisfy all three primary psychological needs: competence, relatedness, and autonomy.[3]

Autonomy support refers to the following behaviors by socializing agents: taking note of other people's perspectives (e.g., children, students, employees, and partners); performing actions that foster choice, self-initiative, and participation in decision-making; supplying meaningful rationales and relevance; and abstaining from language or actions that may be experienced as a pressure to display a specific conduct. Supporting autonomy in these ways has been found to enhance children's intrinsic motivation, facilitate well-internalized extrinsic motivation, prompt the experience of autonomy and authenticity, and result in effective performance and psychological well-being (Reeve, 2006; Roth, 2008; Vansteenkiste, Zhou, Lens, & Soenens, 2005).

Definition Box

Basic psychological needs (Ryan & Deci, 2017)

Relatedness: Feeling connected and involved with others and having the sense of belonging

Competence: Feeling effective in one's interactions with the social environment

Autonomy: Endorsing one's actions at the highest level of reflection

Autonomous Motivation in Health Care and Education

Given the empirical support for SDT propositions on antecedents and outcomes of the various types of motivation, it is not surprising that interventions have been made to promote autonomous

[3]Outside the realm of SDT, the concept of autonomy has often been depicted as antagonistic to relatedness and as equated with independence. However, the SDT definition of autonomy is orthogonal to independence. An extensive discussion of this topic may be found in Chirkov, Ryan, and Sheldon (2011) and Chirkov (2009).

motivations in many contexts, including education, work, and health care (Ryan & Deci, 2017). For example, Williams, Niemiec, Patrick, Ryan, and Deci (2009, 2016) conducted experimental studies based on SDT to evaluate the effectiveness of an intensive tobacco dependence intervention intended to support autonomy and perceived competence in facilitating long-term tobacco abstinence. Adult smokers were recruited into a randomized cessation induction trial. The results revealed that smokers in the intervention group were more likely to attain tobacco abstinence. Furthermore, these effects were partially mediated by changes in both autonomous motivation and perceived competence over a period of 6 months. In the following paragraphs, I'll describe an applied study in more detail that explores implications of the theory for education.

Students may make efforts at school based on both controlled and autonomous motivation. However, from the research reviewed so far, it is clear that students whose motivation is controlled may suffer poorer quality of learning, for example, relying on memorization rather than deeper cognitive processing (Vansteenkiste et al., 2010), and poorer well-being. Furthermore, controlled motivation, especially when characterized by external regulation, is based on external supervision of students' behavior that is always limited to a specific time and place. Briefly stated, SDT has a unique implication for instruction. Under SDT, the teacher hopes to get to the point where psychological need satisfaction, rather than the teacher himself/herself or any other external contingency, drives the students' activities in the classroom.

Cheon, Reeve, and Moon (2012) designed an experimentally based teacher-focused intervention to help physical education teachers be more autonomy supportive of their students. Nineteen teachers participated in the intervention. Data were collected from their 1158 middle and high school students and from independent observers. The teachers in the experimental group ($n = 10$) participated in a three-part intervention during the spring semester (late February through mid-July), while teachers in the control group ($n = 9$) participated in the intervention experience after the study ended. The intervention meetings were moderated by an SDT professional focusing on autonomy-supportive teaching practices (nurturing students' inner motivational resources) in physical education classes. Following SDT, the intervention was focused on the following practices: (1) considering the students' perspective and incorporating students' input and suggestions into the day's instructions; (2) relying on noncontrolling language by communicating in ways conveying flexibility (e.g., offering information on options) and minimizing pressure; (3) providing explanatory rationales to help students comprehend why a specific request or activity has a personal value; and (4) acknowledging negative affect in general and also as elicited by the teachers' expectations and/or by the learning process. The first meeting was a 3-hour workshop on the nature of autonomy support. A second 2-hour meeting took place 6 weeks later; it focused on the teachers' autonomy-supportive practices since the beginning of the semester. More specifically, the teachers discussed advantages and pitfalls based on their personal experiences. Part three took place 6 weeks later; at this session, teachers shared ideas about how to be autonomy supportive in physical education classes. Teachers in the experimental group completed two additional booster reflective activities between meetings.

Data were collected from students at three time points, at the beginning of the semester (after the first teachers' meeting), in the middle (after the second teachers' meeting), and again when the semester had ended. The students completed 11 dependent measures. Two served as manipulation checks and nine served as students' outcomes: three measures were the satisfaction of the needs for relatedness, competence, and autonomy, in addition to amotivation, autonomous motivation, classroom engagement, perceived skill development, future intentions with respect to physical activity, and class achievements. In addition to students' self-reports, the autonomy-supportive teaching was measured by professional raters who visited the classrooms after the second teachers' meeting (equivalent to the students' time two measurements) and provided scores

based on a rating sheet developed and validated by Reeve, Jang, Carrell, Jeon, and Barch (2004). Two raters, who were blind to the teachers' experimental assignments, rated each teacher. The two observers' ratings were highly positively correlated on each instructional behavior, allowing the researchers to average the two ratings into a single score for each of the four autonomy-supportive instructional behaviors.

Manipulation checks based on student reports and observations revealed that the teachers in the experimental group were more autonomy supportive than the teachers in the control group. Since data were collected from students over time, the researchers were able to analyze the differences between groups over time. Although the condition main effect was significant, the two conditions (teachers in experimental group vs teachers in the control group) did not differ at the baseline (i.e., at the start). As expected, the condition X time interaction was significant; by that I mean perceived autonomy support increased significantly for the students of the teachers in the experimental group from the first to the second measurement and again from the second to the third measurement, but it decreased significantly for the students of the teachers in the control group.

The results of the outcome measures follow SDT predictions. Namely, the three measures for psychological need satisfaction revealed a main effect for condition (control group/experimental group), indicating that the students of teachers in the experimental group reported higher need satisfaction than students of teachers in the control condition. The interaction of condition and time was also significant for the three measures of the three needs indicating that at the start, there were no differences between groups, but over time, the students of teachers in the experimental group reported higher need satisfaction. The results were similar for student reports of their autonomous motivation, class engagement, skill development, future intentions, and for course achievement. Thus, students of the teachers in the experimental group showed meaningful gains in all six course-related outcomes that were assessed. Additional analysis revealed that the relation between condition and the six outcomes was mediated by a composite score of the three need satisfactions. These mediation paths were supported while controlling for the initial level of each outcome measure (i.e., controlling for the measurement at the baseline) and while controlling for gender and grade level.

Interestingly, Cheon and Reeve (2013) collected a follow-up dataset to determine whether those earlier observed benefits endured 1 year later. Compared to teachers in the control group, teachers in the experimental group were more autonomy supportive and less controlling based on independent observations and on the perceptions of their students. Furthermore, their students consistently reported greater autonomous motivation and more positive outcomes than did the students of teachers in the control group.

In sum, this research suggests the effectiveness of an SDT-based teacher-training intervention program and demonstrates its effectiveness for students' autonomous motivation, achievements, engagement, and skill development.

Concluding Remark

Let's go back to the example that opened this chapter. I asked you to think of three quite different classes. You were enthusiastic and eager in one, anxious and stressed in the second, and bored maybe even irritated in the third. Perhaps the second and third professors had no idea how you were reacting. While the first professor either had good instincts or good training (or both), the others may have benefitted from knowledge of SDT. Or perhaps you might have been able to do something? As a final remark, I would like to introduce Reeve's (2013) conceptualization of students' agentic engagement. It refers to the extent of students' constructive contribution to the flow of the instruction in terms of asking questions, expressing preferences, and letting the teacher know what they want and need. According to Reeve, agentic engagement is an active way by which students may help their instructors become more autonomy supportive in their teaching. You may find more information on this new concept in Reeve's work.

Summary

- SDT goes beyond simply analyzing how the quantity of motivation affects behavior to take a closer look at how the type (i.e., quality) of motivation matters.
- The main distinction is between autonomous motivation and controlled motivation. Although the strength of motivation may be high whether it is autonomous or controlled, the former is related to adaptive behavior and well-being, and the latter is related to maladaptive behavior and ill-being.
- SDT's discussions of the contextual antecedents of autonomous and controlled motivation opened the door for research on factors that may predict autonomous motivation in many different contexts, from sports to education and health care. This research, in turn, has triggered interventions in all of these varied fields.

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