

Self-Determination Theory: A Macrotheory of Human Motivation, Development, and Health

Edward L. Deci and Richard M. Ryan
University of Rochester

Self-determination theory (SDT) is an empirically based theory of human motivation, development, and wellness. The theory focuses on types, rather than just amount, of motivation, paying particular attention to autonomous motivation, controlled motivation, and amotivation as predictors of performance, relational, and well-being outcomes. It also addresses the social conditions that enhance versus diminish these types of motivation, proposing and finding that the degrees to which basic psychological needs for autonomy, competence, and relatedness are supported versus thwarted affect both the type and strength of motivation. SDT also examines people's life goals or aspirations, showing differential relations of intrinsic versus extrinsic life goals to performance and psychological health. In this introduction we also briefly discuss recent developments within SDT concerning mindfulness and vitality, and highlight the applicability of SDT within applied domains, including work, relationships, parenting, education, virtual environments, sport, sustainability, health care, and psychotherapy.

Keywords: self-determination theory, autonomous motivation, personality development, wellness

As a macrotheory of human motivation, self-determination theory (SDT) addresses such basic issues as personality development, self-regulation, universal psychological needs, life goals and aspirations, energy and vitality, nonconscious processes, the relations of culture to motivation, and the impact of social environments on motivation, affect, behavior, and well-being. Further, the theory has been applied to issues within a wide range of life domains.

Although the initial work leading to SDT dates back to the 1970s and the first relatively comprehensive statement of SDT appeared in the mid-1980s (Deci & Ryan, 1985), it has been during the past decade that research on SDT has truly mushroomed. Basic research expanding and refining motivational principles has continued at a vigorous pace, but the huge increase in the volume of published SDT studies has been most apparent in the applied fields—in sport, education, and health care, for example. Indeed, the diversity of topics covered in the papers of this special issue, along with the amount of research cited in each paper, make clear how extensive the literature has become.

Earlier this year we published an article in *Canadian Psychology* presenting an overview of SDT (Deci & Ryan, 2008). Here we present a much briefer introduction to the theory that will provide a structure to help focus readers as they begin the series of papers. It is particularly appropriate that this special issue appears in *Canadian Psychology* insofar as a substantial portion of the contributions to SDT has been accomplished by Canadian scholars, beginning with the work of Vallerand (e.g., Vallerand, 1983).

Since then SDT has been extended and applied by scholars across Canada, to which the papers in the current volume clearly attest.

Differentiating Motivation

Whereas many historical and contemporary theories of motivation have treated motivation primarily as a unitary concept, focusing on the overall amount of motivation that people have for particular behaviours or activities, SDT began by differentiating types of motivation. The initial idea was that the type or quality of a person's motivation would be more important than the total amount of motivation for predicting many important outcomes such as psychological health and well-being, effective performance, creative problem solving, and deep or conceptual learning. Indeed, an abundance of research has now confirmed that the initial idea was sound.

The most central distinction in SDT is between autonomous motivation and controlled motivation. *Autonomous motivation* comprises both intrinsic motivation and the types of extrinsic motivation in which people have identified with an activity's value and ideally will have integrated it into their sense of self. When people are autonomously motivated, they experience volition, or a self-endorsement of their actions. *Controlled motivation*, in contrast, consists of both external regulation, in which one's behavior is a function of external contingencies of reward or punishment, and introjected regulation, in which the regulation of action has been partially internalized and is energized by factors such as an approval motive, avoidance of shame, contingent self-esteem, and ego-involvements. When people are controlled, they experience pressure to think, feel, or behave in particular ways. Both autonomous and controlled motivation energize and direct behavior, and they stand in contrast to amotivation, which refers to a lack of intention and motivation.

An enormous amount of research, some of which is reviewed in the papers of this special issue, has confirmed that, across domains,

Edward L. Deci and Richard M. Ryan, Department of Psychology, University of Rochester.

Correspondence concerning this article should be addressed to Edward L. Deci, Department of Psychology, University of Rochester, P.O. Box 270266, Rochester, NY 14627. E-mail: deci@psych.rochester.edu

autonomous motivation and controlled motivation lead to very different outcomes, with autonomous motivation tending to yield greater psychological health and more effective performance on heuristic types of activities. It also leads to greater long-term persistence, for example, maintained change toward healthier behaviors.

In recent years, research on autonomous versus controlled motivation has been extended to examinations of nonconscious processes. Studies using priming methodologies and implicit assessment methods have begun to show how the motivational processes and principles of SDT operate at both the conscious and nonconscious levels, and at both levels the advantages of autonomous motivation for many important outcomes have become apparent. The paper in this issue by Levesque, Copeland, and Sutcliffe (2008) reviews some of the research on nonconscious processes.

Basic Psychological Needs

Based on years of research on intrinsic motivation and internalization we found that a satisfactory account of the various empirical results required the hypothesis that there is a set of universal psychological needs that must be satisfied for effective functioning and psychological health. Subsequent research in a variety of countries, including some cultures with collectivist, traditional values and others with individualist, equalitarian values, have confirmed that satisfaction of the needs for competence, autonomy, and relatedness do indeed predict psychological well-being in all cultures. Thus, although some cultural relativists have maintained, for example, that the need for autonomy is important only in cultures that value individualism and is essentially irrelevant in cultures that value collectivism, that turns out not to be the case. Feelings of autonomy, like competence and relatedness, are essential for optimal functioning in a broad range of highly varied cultures.

The concept of human needs turns out to be extremely useful because it provides a means of understanding how various social forces and interpersonal environments affect autonomous versus controlled motivation. More specifically, by considering whether a particular contextual factor such as a monetary reward, an opportunity for choice, or a performance evaluation is likely to support versus thwart satisfaction of the basic psychological needs, people are able to predict the effects of that factor on such outcomes as motivation, behavior, affect, and well-being. In addition the postulation of basic needs helps explain why only some efficacious behaviors actually enhance well-being, whereas others do not.

Individual Differences

Many theories of motivation have as their primary individual difference the strength of one or more psychological needs—for example, the need for achievement, for intimacy, or for control. The idea is that needs are learned, and some people develop stronger needs than others. Because SDT maintains that the needs for competence, relatedness, and autonomy are basic and universal, the individual differences within the theory do not focus on the varying strength of needs but instead focus on concepts resulting from the degree to which the needs have been satisfied versus thwarted. Specifically, within SDT there are two general individual difference concepts, causality orientations and life goals.

Causality Orientations

Causality orientation are general motivational orientations that refer to (a) the way people orient to the environment concerning information related to the initiation and regulation of behavior, and thus (b) the extent to which they are self-determined in general, across situations and domains. There are three orientations: autonomous, controlled, and impersonal. Development of a strong autonomous orientation results from ongoing satisfaction of all three basic needs. Development of a strong controlled orientation results from some satisfaction of the competence and relatedness needs but a thwarting of the need for autonomy. And development of the impersonal orientation results from a general thwarting of all three needs. According to SDT, people have some level of each of the three orientations, and one or more of these can be used in making predictions about various psychological or behavioral outcomes. Consistently, the autonomy orientation has been positively related to psychological health and effective behavioral outcomes; the controlled orientation has been related to regulation through introjects and external contingencies, to rigid functioning, and diminished well-being; and the impersonal orientation has been reliably associated with poor functioning and symptoms of ill-being, such as self-derogation and lack of vitality.

Aspirations or Life Goals

Considerable empirical work within the SDT tradition has focused on the long-term goals that people use to guide their activities. Empirically, these goals fall into two general categories that have been labelled intrinsic aspirations and extrinsic aspirations (Kasser & Ryan, 1996). Intrinsic aspirations include such life goals as affiliation, generativity, and personal development, whereas extrinsic aspirations include such goals as wealth, fame, and attractiveness. Numerous studies have revealed that an emphasis on intrinsic goals, relative to extrinsic goals, is associated with greater health, well-being, and performance (Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

Aspirations have been studied in terms of their strength or importance. As such, they bear similarity to what some other researchers refer to as needs and motives. We do not, however, consider them to be needs, for needs are essential nutrients rather than learned desires. Instead, we understand aspirations to be acquired as a function of the degree to which the basic needs for competence, relatedness, and autonomy have been satisfied versus thwarted over time. When needs have been thwarted, for example, people tend to adopt extrinsic goals that will lead to external indicators of worth, rather than the internal feelings of worth that result from need satisfaction. As such, extrinsic aspirations are one type of need substitute—they provide little or no direct need satisfaction but people pursue these goals because they provide some substitute or compensation for the lack of true need satisfaction. Unfortunately, as extrinsic goals are being pursued they tend to crowd out pursuit of basic need satisfaction, and they fail to foster integration or wellness, even when attained.

Some Newer Developments

In recent years there have been many developments and extensions of the research and theorizing within the SDT tradition. We now mention a few of these.

Mindfulness

SDT has always maintained that the development of integrated, autonomous functioning depends on awareness. Recently SDT researchers have begun to incorporate that idea through studies of mindfulness, defined as an open awareness and interested attention to what is happening within and around oneself (Brown & Ryan, 2003). Mindfulness has been associated with autonomous motivation and with a variety of positive psychological and behavioral outcomes. Accordingly, promoting mindfulness or awareness has been theorized to be a central element in psychotherapy, one that allows inner exploration, reflective examination of needs and feelings, and the development of a more autonomous orientation. We (Ryan & Deci, 2008a) address this matter more fully in our paper on psychotherapy within this special issue.

Energy and Vitality

An important aspect of motivation concerns the energization of people's psychological processes and behaviors. Within SDT, the energy for action comes either directly or indirectly from basic psychological needs, and we have been particularly interested in the concept of *vitality*, which is the energy that is available to the self—that is, the energy that is exhilarating and empowering, that allows people to act more autonomously and persist more at important activities. Whereas other theories have posited that self-regulation and choice are draining of energy, SDT researchers have hypothesized and demonstrated that only controlled regulation depletes energy (e.g., Moller, Deci, & Ryan, 2006). Autonomous regulation is not depleting but can instead be vitalizing, and indeed SDT posits that whereas controlled motives drain energy, actions that lead to need satisfaction can actually enhance energy available for self-regulation (Ryan & Deci, 2008b).

Applications

Finally, as we said earlier, there has been a surge of activity in applying SDT to many of life's domains. In this special issue we are pleased to have papers summarizing some of the research applying SDT concepts to the important topics of close relationships (La Guardia & Patrick, 2008), parenting (Joussemet, Landry, & Koestner, 2008), education (Guay, Ratelle, & Chanal, 2008), work (Gagné & Forest, 2008), well-being and health (Miquelon & Vallerand, 2008), sport and exercise (Wilson, Mack, & Grattan, 2008), and sustaining our planet (Pelletier & Sharp, 2008). These applications are inspiring in terms of the quality of research supporting them, but perhaps more importantly because they demonstrate that comprehensive theorizing, when backed by a tradition of strong empirical testing, can actually lead to improvements in social practices and the betterment of individuals and the collectives in which they are embedded.

Résumé

La théorie de l'autodétermination est de nature empirique et concerne la motivation, le développement et le bien-être de l'être humain. Elle porte davantage sur les types de motivation que sur son ampleur et elle cible en particulier la motivation autonome, la motivation basée sur le contrôlé (extrinsèque) et le manque de

motivation en tant qu'indicateurs prévisionnels des résultats en matière de performance ainsi que de rapports et de bien-être humains. La théorie touche aussi les conditions sociales qui sont favorables ou non à ces types de motivation, en suggérant puis en concluant que les diverses façons dont les besoins psychologiques fondamentaux en matière d'autonomie, de compétence et de rapprochement sont soutenus ou non affectent tant le type que l'ampleur de la motivation. La théorie de l'autodétermination examine aussi les objectifs et les aspirations de vie des gens, en comparant les éléments différentiels entre les objectifs de vie intrinsèques et extrinsèques par rapport à la performance et à la santé psychologique. Dans notre introduction, nous abordons aussi brièvement l'évolution récente de la théorie de l'autodétermination concernant la conscience et la vitalité, et nous soulignons l'applicabilité de la théorie de l'autodétermination au sein de domaines appliqués, dont le travail, les rapports humains, le parentage, l'éducation, les environnements virtuels, le sport, la durabilité, les soins de santé et la psychothérapie.

Mots-clés : théorie de l'autodétermination, motivation autonome, développement de la personnalité, mieux-être

References

- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822–848.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology, 49*, 14–23.
- Gagné, M., & Forest, J. (2008). The study of compensation systems through the lens of self-determination theory: Reconciling 35 years of debate. *Canadian Psychology, 49*, 225–232.
- Guay, F., Ratelle, C. F., & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology, 49*, 233–240.
- Joussemet, M., Landry, R., & Koestner, R. (2008). A self-determination theory perspective on parenting. *Canadian Psychology, 49*, 194–200.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 80–87.
- La Guardia, J. G., & Patrick, H. (2008). Self-determination theory as a fundamental theory of close relationships. *Canadian Psychology, 49*, 201–209.
- Levesque, C., Copeland, K. J., & Sutcliffe, R. A. (2008). Conscious and nonconscious processes: Implications for self-determination theory. *Canadian Psychology, 49*, 218–224.
- Miquelon, P., & Vallerand, R. J. (2008). Goal motives, well-being, and physical health: An integrative model. *Canadian Psychology, 49*, 241–249.
- Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and Social Psychology Bulletin, 32*, 1024–1036.
- Pelletier, L. G., & Shapr, E. (2008). Persuasive communication and pro-environmental behaviours: How message tailoring and message framing can improve the integration of behaviours through self-determined motivation. *Canadian Psychology, 49*, 210–217.
- Ryan, R. M., & Deci, E. L. (2008a). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology, 49*, 186–193.

- Ryan, R. M., & Deci, E. L. (2008b). From ego-depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2, 702-717.
- Vallerand, R. J. (1983). The effects of differential amounts of positive verbal feedback on the intrinsic motivation of male hockey players. *Journal of Sport Psychology*, 5, 100-107.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87, 246-260.
- Wilson, P. M., Mack, D. E., & Grattan, K. P. (2008). Understanding motivation for exercise: A self-determination theory perspective. *Canadian Psychology*, 49, 250-256.

Received December 15, 2007

Revision received May 17, 2008

Accepted May 17, 2008 ■