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Self-Determination Theory and the Explanatory Role of Psychological Needs in Human Well-Being*

Maarten Vansteenkiste, Richard M. Ryan, and Edward L. Deci

Introduction

Human capabilities and happiness have received increasing attention from psychologists and economists over the past half-century. Implicit in such concepts are ideas such as thriving and flourishing—ideas that involve individuals having resources and opportunities to live healthy, full, and productive lives. At the same time, both economic and psychological theories have been limited by assumptions about the power of tangible rewards and incentives to drive behavior and about accumulation of wealth as the behavioral outcome, rather than taking a fuller view of both what people need to flourish and live well, and what goals, given adequate freedom, they would feel most fulfilled in pursuing. One result has been that the intrinsic motivations that underlie much of human functioning have tended to be neglected or peripheralized. Yet there is substantial evidence that intrinsic satisfactions can have great potency in fostering individual and collective motivation, optimal performance, productivity, and wellness.

Herein we review a rapidly growing theory in motivational psychology, the implications of which bear on prescriptions for both personal and economic development and human well-being. Specifically, we discuss self-determination theory (SDT) (Deci & Ryan, 2000a; Ryan & Deci, 2000b), which empirically addresses both the basic psychological needs associated with well-being across gender, development, and culture, and the motivational and social

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conditions that allow for fulfillment of these needs. Further, SDT accounts for why rewards and material acquisitions so often fail to produce sustained motivation, performance, and well-being.

Psychology, Motivation, and Well-Being

For many decades the dominant view within psychology was that people are largely driven and shaped by reward contingencies in their external environment (e.g., Skinner, 1953). Moreover, even after behaviorism began to wane as a dominant view, the cognitive models that replaced this reinforcement view advocated a relatively content free “expectancy-valence” view (e.g., Vroom, 1964) that still underpins current social-cognitive models (e.g., Bandura, 1989). In these latter views, people thrive and do well whenever they feel efficacious with respect to their goals and have the capabilities to accomplish them. What is interesting about such views is how they focus mainly on the success of instrumentalities, but not at all on the contents of the goals underlying them or on the forces that initiate people’s goal pursuits (Vansteenkiste et al., 2005). In the expectancy-valence view, it is presumed that as long as one feels effective at one’s valued goals, well-being results, and, as such, all goals are “created equal” (see Ryan et al., 1996).

Research guided by SDT has made it increasingly apparent, however, that people’s motivated actions, even when efficacious, are not all equally beneficial either to themselves or to others. People can be afforded capabilities, and even rewarded for reaching many goals, but SDT suggests that differences in both what goals are pursued and why individuals embrace them predict differences in the motivational, performance, and well-being outcomes that result.

With respect to the “why” of goals, evidence suggests that pursuing and attaining goals can be done through autonomous (or self-endorsed) versus heteronomous (or controlled) regulations. When people feel controlled by external forces, or lack a true inner endorsement of a pursued goal, efficacy and success at the goals do not yield the enhanced well-being that classic expectancy-valence models predict. Further, controlled regulation of behavior is linked to poor performance and lack of persistence when the contingencies are removed (Deci & Ryan, 2000).

As well, much research suggests that goal contents—the “what” of motivation—can be characterized as either intrinsic or extrinsic (Kasser & Ryan, 1996), a distinction that empirically holds up across diverse cultures (Grouzet et al., 2005). Investment in and success at intrinsic goals such as self-development, affiliation, and community contribution, which are said to be most directly related to satisfaction of basic psychological needs, reliably enhance well-being. In contrast, the pursuit of, and even success at, extrinsic goals such as materialism, appearance, and fame do not reliably enhance wellness, and can diminish it (e.g. Kasser, 2002; Ryan et al., 1999; Vansteenkiste, Simons, Lens,
Sheldon, & Deci, 2004), a position echoed by some consumer psychologists (e.g., Richins & Dawson, 1992). The lynchpin in these findings is satisfaction of the basic psychological needs for autonomy, competence, and relatedness, which mediates these differential relations between goal contents and the outcomes they yield. Such findings, like those concerning the autonomy versus control distinction, have deep implications for understanding people’s thriving, and what is entailed in living personally and collectively meaningful lives (Ryan, Huta, & Deci, 2008).

Economics, Development, and Human Freedom

Within economics, examination of human flourishing has taken some parallel pathways. Most mid-century economists held to a view of people as rational beings who function to maximize their own gains, and these economists assumed that people’s pursuit of self-interests ultimately benefits the society as a whole. However, the concept of self-interest has often been viewed narrowly in terms of maximizing extrinsic outcomes, without due attention to intrinsic satisfactions that are key to human nature and critical for optimal performance and well-being.

Important contributions in economics over the past half-century have challenged the traditional assumptions that decision-making is wholly rational and that individuals’ view self-interest primarily in terms of extrinsic incentives. Indeed, it has become increasingly clear that these assumptions lead to an unsatisfactory view of freedom, development, and well-being. Thus, as in psychology, it has been necessary to distinguish among types of benefits individuals’ motivated action might yield if one is to understand the thriving of both individuals and the collective.

Among the earliest contributions that challenged traditional economic reasoning was Simon’s (1955) theory of decision-making that involved people making choices that satisfy rather than optimize their interests and thus are not fully “rational” in the sense that some economists had used that term. Further, Tversky and Kahneman (1987) showed how various information-processing factors lead people to make choices that are often not rational, and Frey (1997), in line with psychological work by Deci and Ryan (2000), presented an economic examination of some negative consequences of monetary rewards in decision-making and behavior. Finally, over the past two decades, the work of Sen (1999) has emphasized that raw economic growth is only part of the story of promoting human well-being. Sen’s work changed the focus from economic expansion as the sole outcome of economic development to freedom, which economic development can help promote but does not guarantee. Freedom entails provisions that allow people to actualize capabilities, and thus to thrive.
Psychological and Economic Contributions to Happiness and Human Capabilities

The simultaneous growing interest in the study of positive mental states and human freedom within psychology (e.g., Diener, 1984; Ryan & Deci, 2000b; Ryff & Singer, 1998) and economics (e.g., Frey & Stutzer, 2001; Sen, 1999) provided the foundation for the International Workshop on Capabilities and Happiness that was held in Milan, Italy in 2005 and spawned this collection. One of its central premises is that human capabilities too frequently remain under-actualized because social conditions interfere with the actualization. These conditions include not only material affordances, but also the social and economic conditions that allow individuals to freely engage their capabilities, which, we argue, they are intrinsically prone to pursue.

Self-Determination Theory

In this chapter, we lay out basic aspects of SDT (Ryan & Deci, 2000b) as they relate to concepts of development, autonomy, well-being, and freedom. SDT is a psychological theory that goes to the heart of the issues of happiness and human capabilities and deals directly with the ideas of human actualization and flourishing. The primary level of analysis of the theory is on individual psychological processes; however, the theory also addresses how social environments affect need satisfaction and motivation—whether the environments are experimentally induced (e.g., Vansteenkiste et al., 2004), are ongoing social contexts such as work groups or families (e.g., Deci, Connell, & Ryan, 1989; Grolnick & Ryan, 1989), or are cultural and macro-economic systems (e.g., Chirkov, Ryan, Kim, & Kaplan, 2003; Deci et al., 2001).

We turn now to a discussion of the basic psychological needs for competence, autonomy, and relatedness that are essential for human flourishing and wellness (Ryan, 1995) and then address both the regulatory processes involved in intrinsic and extrinsic motivation (the “why” of behavior) and the contents of people's goal pursuits (the “what” of behavior). Finally, we discuss some implications of SDT for social-economic systems.

Basic Psychological Needs in Motivation and Wellness

Self-determination theory (SDT) maintains that humans have three basic and universal psychological needs: the need for competence—that is, feeling effective in one's interactions with the social and physical environments (Deci, 1975; White, 1959); the need for relatedness—that is, caring for and feeling cared for by
others (Baumeister & Leary, 1995; Ryan, 1995); and the need for autonomy—that is, feeling volitional and fully endorsing one's actions, (de Charms, 1968; Deci & Ryan, 1985). According to SDT, when social contexts allow satisfaction of these psychological needs, people thrive, but ill-being follows thwarted satisfaction.

Although the concept of psychological needs has been used by various psychologists over the years (e.g. McClelland, 1985; Ryan, 1995) and has received increasing empirical attention (e.g. La Guardia, Ryan, Couchman, & Deci, 2000; Reis et al., 2000), the construct of needs has been controversial concerning whether needs are innate or acquired; what criteria are necessary for naming a need; what distinguishes basic needs from need derivatives; and whether any psychological needs are universal (e.g. Baumeister & Leary, 1995; Chirkov et al., 2003; Markus, Kitayama, & Heiman, 1996; Ryan, 1995).

**Psychological Needs: Basic and Universal**

SDT takes a unique position on needs by maintaining that the concept specifies the nutriments essential for growth, integration, and wellness (Deci & Ryan, 2000). Whether or not need satisfaction is personally valued or culturally endorsed, SDT suggests that failure to satisfy a need will yield negative consequences across individuals and cultures. Thus, SDT's definition provides objective criteria for assessing the effectiveness of social contexts, organizations, and cultures—namely, whether or not they promote satisfaction of the basic human needs.

Using this definition, SDT identified the needs for competence, relatedness, and autonomy, and we have not yet found any compelling empirical evidence for adding others (see Deci & Ryan, 2000). By strictly defining the needs concept, SDT provides a means of parsimoniously accounting for a broad variety of phenotypically divergent phenomena with very few constructs. Such parsimony is very important from an applied perspective, because it provides socializing agents and policy makers in diverse contexts with a concise but comprehensive theoretical framework for structuring organizations (e.g. schools, companies, families) and optimally motivating other individuals (e.g. students, employees, children).

Supporting the claim that basic need satisfaction promotes thriving and optimal functioning, studies have shown that greater psychological need satisfaction promotes greater well-being, beyond personal income (e.g. Vansteenkiste, Neyrinck et al., 2007), as well as health and fewer physical complaints (e.g. Deci et al., 2001; La Guardia et al., 2000; Sheldon, Ryan, & Reis, 1996). Studies of within person variations in daily need satisfaction have indicated that satisfaction of each need independently predicts well-being, indexed by variables such as vitality and life satisfaction, and is negatively
associated with ill-being, indexed by variables such as depression and negative affect (Reis et al., 2000). Supports for basic need satisfaction have also predicted thriving in the domains of work (e.g. Baard, Deci, & Ryan, 2004), physical exercise (e.g. Ntoumanis, 2001; Standage, Duda, & Ntoumanis, 2003), religion (Ryan, Rigby & King, 1993), and health care (e.g. Sénécal, Nouwen, & White, 2000; Williams et al., 2006).

Competence, Relatedness, and Autonomy

The need for competence (White, 1959) describes the natural propensity to explore, manipulate, and master the environment, and actively to seek challenges that extend physical and psychological functioning. The need for competence underlies people's exploratory nature, contributes to their growth, and helps them adapt to complex surrounds. When people are not afforded opportunities to master the environment or when they fail at their mastery attempts (e.g. they receive regular indicators of incompetence), they tend to become amotivated—that is, they display little motivation and tend to function poorly. The need for competence maps well onto theories of self-efficacy, perceived control, and expectancy value (e.g. Bandura, 1989; Rotter, 1966), even though they do not explicitly posit competence as a basic need. Still, because the concept of competence is so pervasive in contemporary psychology, the postulate of a need for competence has been non-controversial.

The psychological need for relatedness assumes people are naturally inclined to seek close and intimate relationships and to work toward a sense of belonging within social groups (Ryan, 1993; Baumeister & Leary, 1995). This goes beyond the idea of interdependence for physical maintenance and is satisfied only by the experience of supportive, caring relationships in which people feel significant and respected. The need for relatedness underlies the human propensity to engage in social-support systems (Ryan & Solky, 1996), form secure attachments (La Guardia et al., 2000), and transmit communal knowledge among individuals and between generations (Deci & Ryan, 2000). The construct of a relatedness need helps interpret findings from the study of close relationships in social psychology (Reis & Patrick, 1996) and with developmental perspectives such as attachment theory (Bretherton, 1987). This postulate of a relatedness need, like that for competence, has been relatively non-controversial.

The need for autonomy, SDT's third basic need, is manifest in striving to feel a sense of volition and choice in behavior. The idea that people are naturally inclined to experience themselves as origins of their behavior was emphasized by de Charms (1968), and we (e.g. Deci & Ryan, 1985) have argued that the need for autonomy stems from the general self-organizing tendencies of human development leading to actions that are integrated and self-endorsed.
Autonomy provides many adaptive advantages, including the ability to regulate actions and emotions better, to become more internally coherent, and to disengage from exogenous goals when necessary. Nonetheless, unlike the needs for competence and relatedness, specifying a need for autonomy has been highly controversial, with authors suggesting that it is primarily a Western, male value rather than a universal need (Jordan, 1997; Markus, Kitayama, & Heiman, 1996). One implication of these latter views is that people from collectivist cultures, or women, would not need autonomy, that they can flourish without a sense of volition or choice. Yet, the empirical evidence shows that autonomy is associated with enhanced well-being in Eastern as well as Western cultures (e.g. Chirkov et al., 2003; Vansteenkiste, Zhou, et al., 2005) and in women as well as men (Deci et al., 2006; Vallerand, 1997).

The Regulation of Behavior

We turn now to a discussion of behavioral regulation and its relation to need satisfaction. Regulation concerns the motivational processes that organize and direct behaviors and is reflected in people’s reasons for engaging in the behaviors—for example, whether they act out of interest or because they would be punished for not acting. Much SDT research has focused on different types of behavioral regulation and their distinct consequences.

Intrinsic and Extrinsic Motivation

The differentiation of behavior regulation begins with the broad distinction between intrinsic and extrinsic motivation. To be intrinsically motivated means to engage in an activity because the activity itself is interesting and enjoyable. Intrinsically motivated behavior is spontaneously satisfying so it persists without reinforcement from operationally separable consequences (Deci, 1975; Ryan & Deci, 2000a). When intrinsically motivated people become absorbed in the activity and may experience what Csikszentmihalyi (1975) referred to as “flow,” an intensely positive experience in which people’s attention is highly focused on an activity and they lose a sense of time. For example, soccer players, at their best moments on the field, will be fully immersed in the game, feeling excited, engaged, and wholly focused on the play.

Intrinsic motivation is considered a prototype of autonomous or volitional motivation because people’s interest is central to a self-catalyzing chain of activities. It is also the earliest expression of autonomy, as infants are intrinsically motivated actively to explore and learn. When pursuing interests, people’s behavior emanates spontaneously from their sense of self. In the terminology of attribution theory, intrinsic motivation is characterized by an
internal perceived locus of causality (I-PLOC) (de Charms, 1968; Ryan & Deci, 2000a).

In contrast to intrinsic motivation, extrinsic motivation entails doing an activity because it leads to some outcome that is operationally separable from the activity. Extrinsic motivation concerns activities enacted because they are instrumental rather than because one finds the actions satisfying in their own right (Deci & Ryan, 2000). The classic cases of extrinsic motivation are behaviors done to obtain externally administered rewards or to avoid punishments levied by others. Such extrinsic motivators are often brought to bear to prompt or sustain behavior. For example, when children show no interest in studying, parents may offer them rewards to do homework. Although such rewards may have a short-term impact, the contingencies have been found, typically, to diminish autonomy and intrinsic motivation (Deci, Koestner, & Ryan, 1999), and to be ineffective in longer-term maintenance of behavior. In attribution terms, the behavior has an external perceived locus of causality (E-PLOC).

An important question, however, is whether extrinsically motivated behavior always has an E-PLOC or can sometimes be autonomous. SDT maintains that some extrinsically motivated behavior is experienced as volitional and autonomous. SDT specifically argues that individuals can assimilate the personal or social importance of an uninteresting behavior, in which case the behavior and its regulation would be experienced as autonomous rather than controlled. For instance, traffic laws are introduced by policy makers and have significant punishments associated with violations; but when people follow the laws because they accept their importance for preventing accidents and saving lives, they are likely to do them autonomously. Once accepting the value of traffic laws, people are also more likely to take responsibility for regulating corresponding behaviors (Deci & Ryan, 1985; Ryan & Deci, 2000b).

**Internalization and Types of Regulation**

The process of coming to value or endorse an extrinsically motivated action is described within SDT by the concepts of internalization and integration. On the basis of both their needs for relatedness and autonomy, SDT argues, people are prone towards attempting to adopt and integrate into their personal value system ambient social norms and practices. This tendency toward internalization is of vital importance for the effective functioning of our society because it is the crucial means through which individuals are socialized and thus adopt the regulations, mores, and values societies transmit (Maccoby, 1984; Ryan & Deci, 2003). In other words, internalization describes the active processes of taking in and integrating social norms.

When considering such behaviors as recycling, paying taxes, or voting, none of which are typically inherently enjoyable and thus not intrinsically
motivated, SDT suggests that when people internalize and integrate a regulation, they more likely perform the behavior well and persist at it over the long term (e.g., Koestner et al., 1996). SDT proposes, further, that internalization can occur to varying degrees; in other words, people can internalize a value and regulation more or less fully. In fact, the theory distinguishes among four types of regulation that represent different degrees of internalization of extrinsically motivated behaviors, and predicts different outcomes for each of these regulatory types.

The least internalized form of motivated actions is depicted within SDT as externally regulated. Such behaviors are initiated and controlled by contingencies of reward and punishment that are wholly external to the person. The concept of external regulation relates to operant behaviorism (Skinner, 1953), which maintains that behaviors are controlled by reinforcement contingencies. Thus, external regulation is the only form of regulation well conceptualized within operant theory. Although external regulation is a powerful form of motivation, its downfall concerns the phenomena of maintenance and transfer (Deci & Ryan, 1985). Because externally regulated behaviors are dependent on the external contingencies, the behaviors will not be forthcoming when the contingencies are not active. For example, if a boy eats vegetables because his parents reward him with dessert for doing so, he is unlikely to eat them when his parents are away or there is no dessert (a lack of maintenance), or if he goes into a new situation such as summer camp (a lack of transfer). From the perspective of SDT, this failure of generalization occurs because the behavioral regulation has not been internalized.

A second form of extrinsic motivation within SDT is introjected regulation. Introjection derives, etymologically, from the Latin words “intro” and “jacere”, which mean “into” and “to throw”. Introjection is thus a process in which an external value or regulation is thrown into people. People then use these internalizations as a basis for regulating themselves. They thus engage in behaviors to meet intra-individual (instead of external) pressures, such as avoiding shame, aggrandizing themselves, or feeling social approval. As a result, introjected regulation is still experienced as nonautonomous because people feel pressured to do the activity (Deci & Ryan, 2000). To illustrate, a man who recycles because he imagines he will feel approval only if he does so would be displaying introjected regulation.

A behavior becomes more autonomous as people begin to identify with the value of the behavior for themselves. As they personally understand its importance, they accept the regulation and become more volitional in carrying it out. Identified regulation thus occurs as people find meaning in an activity and feel a sense of choice when performing it. Canceling a tennis match in order to stay home and care for a sick child would represent identified regulation if the person did it volitionally, recognizing that it was more important than playing the sport.
An even greater sense of self-determination will be experienced when people not only identify with the importance of an activity, but also bring that identification into coherence with other values, desires, and identifications. This is labeled integrated regulation. As people adopt various identifications, each needs to be integrated with other values and motives to establish psychological harmony and cohesiveness. Identifications that remain compartmentalized may feel volitional when enacted, but insofar as they are not fully integrated, they may be less stable and can conflict with other motives or values. For instance, a man who works continuously to accumulate wealth, but who simultaneously wants to spend time with his children may have difficulty integrating the two identifications. SDT posits that integrated regulation is the endpoint of the internalization process and is the highest degree of autonomy for extrinsic motivation.

From the perspective of SDT, intrinsic motivation and well-internalized forms of extrinsic motivation represent two different forms of autonomous motivation. When intrinsically motivated, people behave volitionally because the behavior is interesting and enjoyable; when autonomously extrinsically motivated, they act because they have accepted the value of the behavior as their own. The two types of autonomous motivation do, however, share the sense of volition, the feelings of willingness and choice, and the experience of an internal perceived locus of causality that characterize autonomous motivation (Reeve, Nix, & Hamm, 2003).

To summarize, although external, introjected, identified, and integrated regulation are all forms of extrinsic motivation, they differ considerably in their degree of autonomy. Research in the 1980s resulted in a conceptual shift away from intrinsic versus extrinsic motivation as the central motivational distinction to autonomous versus controlled regulation as the more important distinction for making predictions about health, persistence, performance, and relationship quality (Ryan & Deci, 2000b). In other words, whereas in early theories only one form of extrinsic motivation had been specified and was viewed as an antipode to intrinsic motivation and self-determination (e.g. de Charms, 1968), the recognition that some types of extrinsic motivation can be relatively autonomous led to the alignment of intrinsic motivation and well-internalized extrinsic motivation as positive forms of human mobilization.

Figure 1, derived from Ryan and Connell (1989), shows the basic taxonomy of motivation types, which fall along a continuum of relative autonomy or self-determination. At the far right is intrinsic motivation, representing a prototype of autonomy. To its left is extrinsic motivation with its four types of regulation shown on the line below. The types of regulation that are more autonomous are closer to intrinsic motivation on the continuum. On the left end of Figure 8.1 is amotivation. It refers to lacking either type of motivation. When people feel unable to do a behavior, when they do not value the behavior or the outcome it yields, or when they do not believe that their
behavior is reliably related to outcomes they will not be motivated—that is, they will be amotivated. Amotivation stands in contrast to both extrinsic and intrinsic motivation because it represents a lack of motivation (i.e., a lack of intention to behave), whereas intrinsic and extrinsic motivation are the two important classes of motivated or intentional actions.

**Independence, Conformity, and Agency: Their Relation with Autonomy**

Although the concept and dynamics of autonomy have been examined empirically from the SDT perspective more than from any other perspective, various other psychologists have also discussed the concept of autonomy with respect to cross-cultural, developmental, and personality perspectives. Below, we discuss other views as they relate to SDT.

**INDEPENDENCE AND AUTONOMY**

Some perspectives within cross-cultural (e.g., Markus, Kitayama, & Heilman 1996) and developmental (e.g., Steinberg & Silverberg, 1986) psychology have equated autonomy and independence. This has led to considerable confusion in the literature, because although autonomy and independence are sometimes dynamically related to one another, they often are clearly distinct. In SDT, independence refers to not relying on others, whereas autonomy refers to experiencing volition and choice. As argued by Ryan and Selig (1996), it is possible to depend on others autonomously. Thus, the opposite of
autonomy is not being dependent, but is being heteronomous or controlled. Relying on others for support can be done either autonomously or non-autonomously (Ryan & Lynch, 1989; Soenens et al., 2007). One can willingly accept guidance from others, but it is a very different matter when one feels coerced to accept the guidance. Simply put, autonomy does not necessarily imply lack of reliance on others, nor independence from them (Ryan et al., 2005).

Consistent with the view that autonomy and relatedness are highly compatible, Hodgins, Koestner, and Duncan (1996) demonstrated that autonomous regulation allows people to be more open and less defensive in their daily interpersonal experiences with parents and peers, presumably because the interactions are seen as a source for personal growth and satisfaction. Further, Soenens and Vansteenkiste (2005) showed that autonomy-supportive parenting predicted more autonomous regulation of adolescents’ friendships, indicating that autonomy is indeed compatible with having close relationships with parents and peers.

Confusions persist however, when autonomy and independence are not conceptually or empirically distinguished. For example, Markus, Kitayama, & Heiman (1996) have argued that the concepts of autonomy and individuality (which they equate) do not enhance mental health within collectivist cultures and individuals with an interdependent (versus independent) self-construal. They thus criticized SDT, with its concept of autonomy, as being a Western theory in which the assumption that autonomy is universally important for well-being and optimal performance is inappropriate. The problem is that they defined autonomy as independence rather than volition so their criticism of SDT was irrelevant to the theory.

Autonomy involves volitionally regulating one’s actions, experiencing a sense of choice, and concurring with one’s actions when they are viewed from the highest or truest level of reflection (Friedman, 2003). There is no inconsistency between autonomy and either collectivism or interdependence. A person can fully internalize a collectivist value and thus be autonomous (i.e., volitional) in enacting it, just as one could fully internalize an individualist value and be autonomous in enacting it. Indeed, Chirkov et al. (2003) found that autonomy was an important predictor of psychological health in both Eastern cultures such as South Korea and Western cultures such as the United States, even though the specific practices that people experience as more or less autonomous can differ across cultures. Further, Vansteenkiste, Zhou, et al., (2005) found that Chinese students’ autonomous reasons for studying positively predicted their self-regulated learning, performance, and well-being. Similar findings have been obtained in Germany (Levesque et al., 2004), Japan (Hayamizu, 1997), Russia (Chirkov & Ryan, 2001), Israel (Assor et al., 2005), Korea (Chirkov et al., 2003), and Belgium (Vansteenkiste, Lens, et al., 2004).
Just as some cross-cultural psychologists maintain that autonomy is not crucial for all cultural groups, some developmental psychologists argue that the development of autonomy involves breaking away from dependence rather than developing volition and self-regulation. Blos (1979) argued that adolescents must “individuate” from their parents, becoming what he describes as self-reliant and autonomous. In line with this, Steinberg and Silverberg (1986) argued that adolescents must move away from relying on parents to become healthy adults. As pointed out by Ryan and Lynch (1989), however, that view implies that establishing autonomy requires adolescents distancing themselves from parents, a view that SDT does not endorse.

SDT suggests that people can be autonomously dependent or autonomously independent (Ryan et al., 2005). Steinberg and Silverberg viewed autonomy as the pursuit of independence, implying that autonomy's positive effects on optimal functioning would necessarily undermine relatedness to others (particularly to parents). Ryan and Lynch (1989) showed in contrast that, when autonomy was understood as volition, autonomy was not antagonistic to relatedness; indeed, having a strong supportive relationship with parents facilitated adolescents' autonomy rather than diminished it. Further, Niemiec et al. (2006) found that autonomy support from parents predicted their adolescents' well-being.

CONFORMITY AND AUTONOMY

The concept of conformity, although it might seem similar to control (and thus antagonistic to autonomy), is, conceptually, largely orthogonal to autonomy, as also suggested by philosophical analyses of autonomy (e.g. Dworkin, 1988). This is premised on the definition of conformity as simply acting in accord with an external prompt, rule, or norm. SDT (Ryan, 1993) suggests people's adherence to external guidelines and influences may reflect mere obedience or coercion, in which case it would be controlled and thus not autonomous, or it might represent a reflective valuing of the direction or guidance that these inputs provide, in which case the people would be acting autonomously. For instance, students might follow a teacher's rules because they fear the teacher's reprimand or because they believe fully in the rules' importance. The former conforming would be heteronomous, the latter autonomous.

As such, SDT maintains that merely acting in accord with social norms is not a hallmark of “authentic” or preferred behavior, as suggested by some cross-cultural perspectives (Markus & Kitayama, 2003). Rather, it is the degree of subjective endorsement and ownership of these norms that determines whether the adherence to social obligations constitutes authentic willingness versus pressure and coercion (Ryan & Deci, 2003).
SELF-REGULATION AND AGENCY

Within the SDT framework, self-regulation refers to regulation by the self, that is, by one's personal interests that spontaneously emanate from the self (i.e. intrinsic motivation) or by one's personal values and commitments that have been accepted and integrated (i.e. fully internalized motivation). Introjected regulation, even though it is regulation by an aspect of the person, is not typically referred to as true self-regulation or autonomy because it is not regulation by well internalized aspects of the self.

In psychology, being agentic is typically equated with being motivated. As such, within many psychological perspectives (e.g. Bandura, 1989) agency does not distinguish between motivated actions that are autonomous versus controlled. Thus, the SDT approach goes beyond agency to emphasize the importance of autonomous action for the realization of capabilities.

SDT's view of self-regulation is largely compatible with Sen's (1999) capabilities approach. For Sen, "functionings" refer to a person's current way of behaving whereas capabilities refer to possible functionings. The distinction between functionings and capabilities is between what has been realized and what is possible, that is, between what people have actualized and the options and opportunities that are available to them and from which they can choose to live the lives they have reason to value. Agency within this approach is defined as the capacity to turn capabilities into effective functionings through action. Agentic behavior is the means for actualizing capabilities. Thus, we interpret Sen's position to suggest that it is through motivated actions that people realize their capabilities. Further, Sen placed valuing in a key position with respect to agency. In this regard there is overlap with the SDT position. Certainly the flavor of autonomy appears in Sen's writings, but the importance of specifying autonomy, and the conditions that support it, is in our view critical for appreciating the processes that transform capabilities into effective functionings and, as result, promote thriving.

The Benefits of Autonomous Functioning

Much of this research on the benefits of autonomous regulation is founded on the assessments of regulation introduced by Ryan and Connell (1989), who were examining correlates and consequences of autonomous versus controlled motivation. Subsequently, dozens of studies have applied the Ryan and Connell (1989) approach to the domains of relationships (Blais et al., 1990), religion (Ryan, Rigby, & King, 1993; Neyrinck, Lens, & Vansteenkiste, 2005), work (Gagné & Deci, 2005), education (Black & Deci, 2000), parenting (Grolnick, Ryan, & Deci, 1991), and health care (Williams et al., 1996). These studies have convincingly shown that regulating one's behavior more on
the basis of autonomous than controlled motives is associated with greater persistence, more effective performance, higher quality relationships, and better social adjustment and well-being.

As an example, studies have shown that acting in a pro-ecological manner for more autonomous reasons (i.e. out of personal valuing) predicts engaging in a broad variety of such pro-ecological behaviors, including reusing old materials, using environmentally friendly transportation, and saving energy (Pelletier et al., 1998). The positive effects of more autonomous regulation are especially prevalent for difficult ecological behaviors—behaviors that require considerable effort and energy. Controlled regulation can yield initial pro-environment efforts, but they are unlikely to be maintained over time.

**Promoting Self-Regulation through Autonomy Support and Need Satisfaction**

SDT maintains that individuals have the natural tendencies to be intrinsically motivated and to internalize and integrate extrinsic motivation and thus to be autonomous and self-regulating. Nonetheless, these natural tendencies toward self-determination and growth require the support of the basic psychological needs. Numerous studies have shown that specific structures and events in the social environment as well as general interpersonal climates affect autonomous behavior and in turn performance and well-being outcomes. Many of the studies have compared interpersonal contexts that are autonomy supportive versus controlling.

An autonomy supportive context is one in which people are empowered as their feelings of volition and choice are supported. Structurally, this entails the minimal use of external regulators, the maximal provision of meaningful rationales when demands are forwarded, and the opportunity to choose when alternative strategies or goals are possible. In such contexts authority figures such as managers set policy and relate to others such as employees in ways that consider the others’ perspective and are responsive to the others’ needs. Concretely, this would involve allowing an optimal amount of choice, encouraging self-initiation, providing meaningful rationales and feedback, and using a style of communication that is encouraging (Deci et al., 1994). Autonomy support allows people to experience need satisfaction, because the authority is acknowledging them, conveying respect for their judgment, and supporting their initiative, which facilitates greater internalization and autonomous regulation.

In contrast to autonomy support, a controlling context is one that pressures people to think, feel, and behave in particular ways. Controlling contexts can be externally controlling or they can prompt people's introjects thus being
"internally controlling" (Ryan, 1982). Externally controlling contexts created with rewards, punishments, and overtly controlling language pressure people and tend to prompt external regulation. Internally controlling contexts, which involve the use of contingent love and guilt induction (Assor, Roth, & Deci, 2004; Barber, 1996; Soenens et al., 2006), pressure people by stimulating introjected regulation. Regardless of whether the pressure is activated through internally or externally controlling means, SDT predicts that such controlling means of motivating others undermines autonomous motivation and, in turn, yields less effective performance and poorer well-being.

INTERPERSONAL CONTEXT

The concept of an interpersonal context refers to the general social climate that exists in a situation. For example, the language used and the attitudes conveyed by an authority figure in a particular situation (e.g. a teacher in a classroom) could convey a general sense of control—of things having to be done the way the authority wants them to be done. Other contexts, however, are more generally supportive and encouraging of people’s initiative. The concept of autonomy-supportive versus controlling interpersonal contexts has been studied in both the laboratory and the field.

Deci et al. (1994) performed a laboratory experiment in which they created an autonomy-supportive context for individuals doing a signal-detection task, contrasting that context with a controlling one. Results indicated that those in the autonomy-supportive condition displayed greater internalization as reflected in greater subsequent behavior, and also that the internalized regulation they displayed was better integrated. In contrast, participants in the controlling condition were less likely to internalize the regulation of the activity and those who had internalized it merely introjected rather than integrated the regulation. A recent set of field experiments (Vansteenkiste, Simons, et al., 2004) replicated and extended these above findings by showing that using an autonomy-supportive (versus controlling) style to introduce a learning activity enhanced persistence at studying, and led to deeper-level processing and better performance.

Reeve and Jang (2006) identified specific autonomy-supportive teaching practices and found that these instructional behaviors, such as asking questions, being empathic, listening to students, being responsive to questions, encouraging students, providing positive feedback, and offering a meaningful rationale, were associated with students being more autonomously engaged in learning. In contrast, teachers who were directive, used controlling language, asked controlling questions, and gave solutions were experienced as autonomy thwarting. Such research sheds light on concrete instructional behaviors that support students’ autonomy.
Many other studies have been done in which autonomy-supportive versus controlling climates were assessed with questionnaires or observations in field settings. For example, studies examined health-care climates and physicians' communication style and indicated that when health-care providers are autonomy supportive their patients become more personally motivated to behave in healthy ways (e.g. exercising regularly or taking prescribed medications), and their health improves. For example, when providers were more autonomy supportive, patients with diabetes were better able to regulate glucose levels in a healthy range (Williams, Freedman, & Deci, 1998), and patients who used tobacco were more able to quit (Williams et al., 2006).

Deci, Connell, and Ryan (1989) found that when managers in a multinational corporation were more autonomy supportive, their employees were more trusting of the organization and satisfied with their jobs. Similarly, Deci et al. (2001) found that when managers both in a U.S. corporation and in Bulgarian state-owned companies were more autonomy supportive, employees in both cultures reported greater satisfaction of psychological needs, were more engaged in their jobs, and experienced less anxiety. Baard, Deci, and Ryan (2004), who assessed U.S. workers, similarly found that employees of autonomy-supportive managers evidenced better performance and wellness.

Studies of parenting and education have shown comparable results, with autonomy supportive teaching and parenting promoting engagement and well-being in children and adolescents of varied cultures (Chirkov & Ryan, 2001; Niemiec et al., 2006). Supporting people's autonomy by using an encouraging communication style and creating a general autonomy-supportive climate appears to be relevant and desirable in all of life's domains.

EVENTS AND STRUCTURES

Within the SDT research tradition we have used the term "event" to refer to a specific environmental occurrence—for example, the offer of a reward for doing an activity, the opportunity to choose which activity to work on, the imposition of a deadline, or a piece of performance feedback. There has been an enormous amount of research examining the effects of specific events on autonomy, intrinsic motivation, and perceived competence. People can experience these events as being either supportive of autonomy or controlling of behavior, and such events can become enduring, structural components of dyadic relationships, groups, organizations, and societies. For example, as a motivational strategy, managers can create competitions and reward winners with bonuses. As another example, clinics for patients with eating disorders may make weekend family visits contingent upon gaining weight. State or federal governments similarly apply "high-stakes" to test scores as a strategy of motivating schools or students to improve performance. Each strategy in these examples relies on reward contingencies to motivate behavior, and these
structures interact with general interpersonal climates to affect the motivation of people exposed to them.

To predict whether particular events or structures will positively or negatively affect people's intrinsic motivation and/or internalization, it is important to consider what is called the functional significance or psychological meaning of these events to people (e.g., Ryan, 1982). Any event—for example, a reward contingency, a piece of feedback, an imposed goal, or an opportunity to make a choice—has both an informational component and a controlling component, and these components are differentially salient in different events. It is the relative salience for a person of these two components that will determine the effect of the event on that person. The informational component signifies competence while affirming one's sense of autonomy, whereas the controlling component pressures people to behave. To the extent that an event is perceived as informational, it is likely to facilitate people's growth tendencies by satisfying their basic needs for autonomy and competence, whereas to the extent that it is perceived as controlling it is likely to undermine growth by frustrating these needs.

Frequently, in people's lives, authority figures and organizations will use tangible rewards, deadlines, or other such events as ways of getting the people to do things they would not otherwise do, so people come to experience these events as controls and thus as undermining of autonomy. On the other hand, positive feedback, which can also be controlling (Ryan, 1982), is typically used as a way of acknowledging good performance and is thus often competence enhancing. Events that are controlling are expected to decrease intrinsic motivation by thwarting the need for autonomy, whereas those that are not controlling are expected to increase intrinsic motivation by satisfying the need for competence and allowing autonomy.

A great deal of research has examined the effects of various events on people's intrinsic motivation, performance, and well-being, but the event that has received by far the most empirical attention is the offer of a tangible reward. In fact, more than 100 experiments have examined reward effects on intrinsic motivation. Deci, Koestner, and Ryan (1999) performed a meta-analysis of these studies and the results showed consistently that the use of tangible rewards to motivate behavior tended to leave people feeling controlled and to diminish their intrinsic motivation for the target activities. When participants were told they would get rewards (money, prizes, or symbolic awards) if they worked on a task, finished it, did well at it, or beat others at it, people found the task less interesting and persisted less long at it after the rewards were terminated than did participants who had not been offered rewards. It seems that working on a task for rewards shifts the focus from the task to the rewards and shifts the perceived locus of causality from internal to external. As well, it undermines people's sense of autonomy and intrinsic motivation.
Threats of punishment, imposition of deadlines, close surveillance, and competitions where participants tried to beat each other also tended to diminish people’s sense of autonomy and undermined their intrinsic motivation. In fact, it seems that many of the ways people typically think of for motivating others tend to backfire, diminishing rather than enhancing the types of motivation that are associated with effective performance, creativity, positive affect, and well-being (e.g., Amabile, DeJong, & Lepper, 1976; Deci et al., 1981; Plant & Ryan, 1985). Findings also indicated that such external events result in poorer achievement and less conceptual integration of learning, presumably because such controlling factors all produce an external perceived locus of causality (see Deci & Ryan, 2000).

Structures and events can also serve to support autonomy and enhance intrinsic motivation when the informational component is highly salient. For instance, at some universities, students are given considerable flexibility in choosing elective courses that interest them. This allows more self-regulation and conveys a sense of competence and respect for the students. Further, positive feedback can provide people with information to use in self-regulating. When people make meaningful choices and receive competence-enhancing feedback, they tend to experience the feedback as informational, which leads to greater satisfaction and enjoyment (Levesque et al., 2004). For example, studies showed that when people were given choice about what activities to do or how to do them, they tended to feel more autonomous and interested, and they persisted longer at the activities (Deci et al., 1994; Ryan, 1982; Zuckerman et al., 1978). Similarly, positive feedback has been found to enhance intrinsic interest and persistent behavior (Deci, Koestner, and Ryan 1999; Vansteenkiste & Deci, 2003).

To summarize, experiments have studied the effects of various events on intrinsic motivation, and have shown that some events—tangible rewards, deadlines, surveillance—tend, on average, to have a controlling functional significance and thus undermine intrinsic motivation. Other events—choice and positive feedback—tend, on average, to be perceived as informational and thus are likely to enhance intrinsic motivation.

EVENTS AND INTERPERSONAL CONTEXTS
It is important to keep in mind that, although specific events (e.g. tangible rewards) tend to have a particular functional significance, the events interact with the general interpersonal climate within which they are administered. Thus, for example, although tangible rewards tend, on average, to undermine intrinsic motivation, if they are administered in an autonomy supportive context, they will be less detrimental and may even enhance intrinsic motivation (Ryan, Mims, & Koestner 1983). Similarly, although competition is often controlling, Reeve and Deci (1996) found that much of competition's detrimental effect comes from pressure to win applied by coaches or parents.
A condition in which people were competing in a more autonomy-supportive context did not affect intrinsic motivation. As another example of the interaction of events and interpersonal contexts, positive feedback has enhanced intrinsic motivation in many situations (Deci, 1971), but Ryan (1982) showed that when positive feedback was given in a controlling context, its effects on intrinsic motivation were more negative.

In sum, specific events such as reward structures tend to have either an informational or controlling functional significance, so they tend to affect autonomy, interest, and persistence accordingly. However, these events interact with the interpersonal climate, which can change the functional significance. Controlling events become less controlling if the interpersonal context is autonomy supportive, and informational events become more controlling if the interpersonal context is controlling. Simply stated, both events and interpersonal contexts affect intrinsic motivation, internalization, persistence, and performance in accord with the degree to which they support versus thwart satisfaction for the basic needs for autonomy, competence, and relatedness.

Goals and Aspirations

The previous section of this chapter focused on types of motivation and their corresponding styles of regulation, with the emphasis being on autonomous versus controlled motivation and the types of regulation associated with each. That focus on motives and regulations concerned the reasons people were doing a behavior (e.g. because I would feel guilty if I did not) and was thus said to address the “why” of behavior (Deci & Ryan, 2000). Another important question for the field of motivation concerns what it is that people are trying to achieve or attain. We turn now to the importance of distinguishing among the contents of people’s goals.

Intrinsic and Extrinsic Goals as Individual Differences

Within the SDT tradition, goals researchers have worked primarily with the concept of intrinsic versus extrinsic goals or aspirations (Ryan et al., 1996). Intrinsic aspirations refer to goals that are satisfying in their own right because they are closely linked to satisfaction of the basic psychological needs. Empirical projects by Kasser and Ryan (1993, 1996) have shown that growing and developing as a person, becoming more physically healthy and fit, cultivating meaningful relationships, and being generative and contributing to the collective are all intrinsic goals. In contrast, extrinsic goals are ones that are less directly linked to need satisfaction and healthy development but are instead more compensatory and superficial, representing external signs of worth and success. They include amassing wealth, creating an attractive image, having
power over others, and becoming famous. Kasser and Ryan (1996) showed that the two groups of goals are factor-analytically distinct across many diverse cultures (Grouzet et al., 2005).

GOAL PURSUITS

Many studies have shown that a strong emphasis on extrinsic aspirations is negatively associated with well-being and positively associated with ill-being. When people placed greater importance on attaining extrinsic goals than intrinsic goals, the individuals were lower on self-esteem, self-actualization, and life satisfaction, and higher on anxiety, depression, and physical symptoms (Kasser & Ryan, 1996; Sheldon et al., 2004). Of course, some wealth, appeal, and recognition is important for people, but when these goals become stronger for people than the intrinsic goals that provide deeper need satisfaction, there tends to be ill effects. Further, adolescents embracing extrinsic goals are more likely to engage in risky behaviors such as smoking tobacco, drinking alcohol, and starting sexual intercourse earlier in life (Williams et al., 2000). Strong extrinsic aspirations are also associated with poorer quality relationships and with greater social dominance and ethnic prejudice (Duriez et al., 2006; McHoskey, 1999). Bauer, McAdams, and Sakaeda (2005) studied life narratives and found that people whose stories emphasized the intrinsic goals of personal growth, relationships, and community displayed greater hedonic and eudaimonic well-being than did those whose stories emphasized the extrinsic goals of wealth, status, approval, and appearance.

Research in a work organization by Vansteenkiste et al. (2007) showed other negative consequences of strong extrinsic, relative to intrinsic, aspirations, including lower job satisfaction, more symptoms of burn-out, and greater tendency to leave the organization.

DEVELOPMENT OF LIFE GOALS

Kasser et al. (1995) found that teens who strongly valued the extrinsic aspiration for money had mothers who were low on democracy and warmth and high on controllingness, suggesting that parents who thwart their children’s need satisfaction tend to promote development of extrinsic aspirations. Similarly, the Williams et al. (2000) study found that the teens who perceived their parents as low in autonomy support (i.e. as more controlling) had significantly stronger extrinsic aspirations than those who perceived their parents as high in autonomy support.

Kasser, Koestner, and Lekes (2002) analyzed data collected over a twenty-five-year period from 30-year-old adults whose mothers had first provided data when the children were 5 years old. The results showed that the adult children
tended to have strong relative extrinsic goals when their mothers had been very restrictive many years earlier. In contrast, the adult children who displayed strong, relative intrinsic aspirations had mothers who had been less restrictive with the children when the children were young. It appears that parents who thwart their children’s basic psychological needs lead their children to develop extrinsic aspirations.

MOTIVES AND GOALS: INDEPENDENT EFFECTS

Studies have indicated that when people are pursing intrinsic goals such as health or community contribution they tend to be autonomous in those pursuits, whereas when they are pursuing extrinsic goals such as wealth they tend to be controlled. This raises the interesting question of whether the effects of the content of people’s goals such as wealth or community contribution can be reduced to the effects of the motivational style through which they are pursued. In fact, some psychologists have suggested that the effects of goal contents accrue not from the content per se, but from the fact that the contents are associated with particular motives (Carver & Baird, 1998; Srivastava, Locke, & Bartol, 2001).

In fact, the statistical relations between the “what” and “why” of behaviors is only modest because it is possible to pursue an intrinsic goal for either controlled or autonomous reasons. Sheldon et al. (2004) conducted a set of studies examining whether there are significant unique effects of goal contents (the “what”) and goal motives (the “why”). They assessed the strength of people’s intrinsic and extrinsic goals, as well as the motives people have for pursuing each of the goals. Analyses indicated that the two concepts—intrinsic relative to extrinsic goals and autonomous relative to controlled motives—were correlated, as expected. However, analyses also showed that each concept contributed significant independent variance to psychological well-being. In other words, the content of people’s goals has a direct relation to well-being even after controlling for the motives people had for pursuing those goals.

GOAL ATTAINMENT

The research about goal contents discussed thus far has concerned primarily the intrinsic versus extrinsic goals people are pursuing. We now turn to the question of what happens when people actually attain the intrinsic versus extrinsic goals they are pursuing.

Many goal-setting theories (e.g. Locke and Latham, 1990) argue that the attainment of valued goals, whatever type of goals they might be, is beneficial for well-being. In contrast, SDT maintains not only that the pursuit of extrinsic goals has negative correlates but that even the attainment of extrinsic goals is typically not beneficial, as these goals do not typically fulfill basic psychological needs. Studies (Kasser & Ryan, 2001; Ryan et al., 1999) have found that the
degree of attainment of people's extrinsic aspirations was unrelated to their well-being after controlling for their degree of intrinsic goal attainment. Niedner, Ryan, and Deci (2007) in a longitudinal study showed that the attainment of intrinsic goals had a positive effect on well-being and a negative effect on ill-being, whereas the attainment of extrinsic goals did not contribute to well-being but contributed to symptoms of anxiety and depression. The study also showed that the reason attainment of intrinsic aspirations was related to psychological well-being is that intrinsic attainment promoted need satisfaction. Specifically, change in attainment of intrinsic aspirations over a one-year period predicted change in psychological well-being over that period, and this relation was significantly mediated by change in need satisfaction. In contrast, change in attainment of extrinsic aspirations did not affect change in need satisfaction.

THE MATCH HYPOTHESIS: PERSONAL AND CONTEXTUAL GOALS

Although the negative relations between people valuing extrinsic life goals and their well-being seem to be quite strong, some people have argued that this effect is likely to be moderated by the type of goals prevalent in people's environment. For example, perhaps students studying in a business school where wealth is highly valued would not demonstrate the negative relations that appeared in past studies (e.g., Kasser & Ryan, 1993, 1996) because they might benefit from holding goals consistent with those endorsed by the social context within which they operate. Certainly, such match hypotheses have been advocated in areas such as social psychology (Sagiv & Schwartz, 2000) and organizational studies (Meglino, Ravlin, & Adkins, 1989).

Vansteenkiste, Duriez, Simons, and Soenens (2006) examined the relations between the relative importance of extrinsic goals and well-being among business school students and education students and found that extrinsic goals were negatively related to well-being among both student groups. Thus, it appears that the negative association between strong extrinsic life goals and psychological health holds whether or not the extrinsic goals are strongly valued in the social environment, thus disconfirming the match hypothesis.

ASPIRATIONS AND POLICY

Earlier we suggested that the thwarting of basic psychological needs leads people toward more extrinsic aspirations with their negative consequences. It is probable that deprivation of basic material goods would also promote strong materialistic goals. For example, Kasser et al. (1995) found that teenagers whose life circumstances were more disadvantaged in terms of low socio-economic status and crime-ridden neighborhoods placed stronger values on extrinsic, relative to intrinsic, aspirations and also displayed poorer psychological adjustment. This is consistent with Inglehart's (1990) argument that individuals and
societies that hold strong materialistic values are likely to have developed these values from experiencing a sense of material deprivation and insecurity during formative periods. In contrast, individuals and societies that had experienced material security would be likely to have developed more of a focus on intrinsic, non-materialistic goals. More broadly, we suggest that individuals who had grown up in disadvantaged neighborhoods or societies are likely to have been deprived of basic psychological need satisfaction and that this psychological need deprivation is likely to promote the insecurity described by Inglehart. In terms of policy implications, this work seems quite consistent with the capabilities approach used by Sen (1999) and others, for it highlights not only the importance of opening economic opportunities for individuals and groups that have experienced deprivations but also providing other freedoms such as educational opportunities that provide basic psychological need satisfaction.

**Intrinsic and Extrinsic Goals When Prompted by Others**

The research on intrinsic versus extrinsic goals that we have examined until now used the concept of aspirations or life goals as individual differences that developed over time as a function of the satisfaction versus thwarting of the basic psychological needs. Further, the bulk of the research concerned the relations of the pursuit and attainment of the intrinsic versus extrinsic goals with well-being and ill-being outcomes.

Vansteenkiste and colleagues have extended this work by examining whether presenting and emphasizing intrinsic versus extrinsic goals in a particular situation such as a classroom will have direct effects on the optimal learning, persistence, performance, and well-being of people in that situation. As is the case for autonomy-supportive versus controlling environmental factors, the induction of intrinsic versus extrinsic goal orientations for particular activities can be examined at the level of events (e.g., the focusing of a particular learning activity on an intrinsic versus extrinsic goal) and more broadly as a structural or climate factor (e.g., a broad endorsement within, say, a school of a particular goal such as pro-environment actions). Thus far, the research has focused primarily on specific events using experimental paradigms in real life situations where people's goal orientations to an activity have been manipulated with instructions.

Vansteenkiste, Simons, et al. (2004) reported three experiments that examined differences in learning, persistence, and performance that resulted when students were given a rationale for their learning that represented either an intrinsic goal or an extrinsic goal. In the first study, college-level education students were given a text related to recycling and reusing materials. Some were told that learning about this topic was important because it could help save the environment (an intrinsic goal), whereas others were told it was important because it could help them save money (an extrinsic goal). Those who received intrinsic-
goal framing subsequently reported having learned the material more deeply, and they performed better in testing sessions. Further, the students given the intrinsic rationale engaged in additional activities to learn about recycling. Another interesting aspect of this experiment is that half the participants in each goal condition were given the introduction to the learning task with an autonomy-supportive style and the other half were given it with a controlling style. Analyses showed that not only did goal framing have a significant main effect, but also the interpersonal style yielded a main effect, with the autonomy-supportive style leading to better learning, performance, and persistence than did the controlling style. Finally, the condition in which the intrinsic-goal framing was done in an autonomy-supportive way led to better outcomes than would be expected from two main effects. That is, the intrinsic-goal framing and autonomy-supportive style were positively synergistic.

In a second experiment, the effects were replicated with college-level business students who read about communication styles, because it would serve either the intrinsic goal of self-development or the extrinsic goal of making more money in business (Vansteenkiste, Simons, et al., 2004). Finally, in the third experiment, high school students from grades 10–11 learned a physical activity, Tai-bo. The goal induction portrayed the activity as being useful either for being healthier (intrinsic) or more attractive (extrinsic), and was done in either an autonomy-supportive or a controlling way. Results of this study replicated the first two studies of the series.

Other studies (e.g., Vansteenkiste, Simons, et al., 2005) extended the above results confirming that orienting people toward intrinsic versus extrinsic goals can impact people’s learning and performance. For instance, framing a learning activity in terms of attaining both an intrinsic and an extrinsic goal was found to undermine performance and persistence compared to framing the learning activity in terms of just an intrinsic goal (Vansteenkiste, Simons, Lens, Soenens, et al., 2004). This finding could not be predicted on the basis of expectancy-valence models, which would suggest that adding value or utility to a learning activity should result in more optimal learning (Wigfield & Eccles, 2000).

Extrapolating the research on the specific event of framing task engagement with an intrinsic versus extrinsic goal prompt we see that goal prompts can be embedded in the structural components of organizations (e.g., companies, schools, sport clubs). Some companies, for example, provide employees with regular training opportunities, which relates to the intrinsic goal of self-development. Some health clubs place mirrors on the walls of their fitness areas, likely prompting exercisers to focus more on their looks (extrinsic) than their health (intrinsic).

Intrinsic versus extrinsic goals can also be studied as general aspects of the interpersonal context—that is, as goals endorsed by authority figures in a setting—and could thus affect the way people being supervised by the
authority figures would orient in that situation. It seems likely that when people are supervised or taught by someone who is extrinsically oriented, the people will become more extrinsic, at least in that situation. Further, interacting with an authority who emphasizes intrinsic goals may lead people to become more intrinsic. Vansteenkiste, Duriez, et al. (2006) had parents rate the extent to which they promoted intrinsic and extrinsic goals in their family environment for their adolescent children who also participated in the research. Then, the adolescents completed questionnaires. The parents' general intrinsic versus extrinsic goal emphasis was found strongly to predict their children's ethnic prejudice. Although much more work is needed to confirm these initial findings, the study does indicate that the type of goals that are emphasized in individuals' interpersonal environments has ramifications for their own goals and their effective social functioning.

Both the specific and more general framing of activities in terms of intrinsic versus extrinsic goals have important relevance for social policy at the societal level. Cultures can be more oriented toward intrinsic versus extrinsic aspirations and goals, and they can form national policies that are in line with intrinsic versus extrinsic goals. For example, the Belgian minister of culture provided funding to sponsor local committees to organize festivals that were intended to bring people together and reinforce the importance of social relationships. Other policies such as the high-stakes tests that are currently widely prevalent in American schools focus people's attention on getting grades rather than on learning—that is, on extrinsic rather than intrinsic values and goals. As would be expected, on the basis of SDT, policy favoring high-stakes tests has had a range of negative consequences in classrooms, schools, and districts (Ryan & Brown, 2005).

Economic Systems

Thus far we have focused on how autonomy, motivation, performance, and well-being are affected by (1) specific events such as the offer of a reward; (2) immediate interpersonal contexts, such as managerial, classroom, or coaching climates; and (3) organizational or government policies such as competitive "pay-for-performance" systems or "high-stakes" tests. It is possible to extend this to a still more global level, considering how economic factors can affect people's basic psychological need satisfaction, motivation, and psychological health.

We suggest that macroeconomic systems can differentially impact human motivation, thus generating to differing degrees human capital, defined as the catalyzation of energy, talents, and positive effort. It would come as little surprise then that, from an SDT perspective, economic systems that depend largely upon external controls or threat-based motivations have, historically,
been less productive than those that depend on well internalized values or meaningful incentives. For example, studies of Bulgarian workers in state-run organizations (Deci et. al, 2001) found that workers generally felt deprived of competence feedback and recognition of talents, as the system was prone to "level" all workers. Surprisingly, however, in day-to-day work, these employees often felt more autonomy than their American counterparts. Typically, they were not closely supervised so they felt freedom to act as they chose, and in some cases they were able to elect their own supervisors and have a voice in work strategies. Nonetheless, central planning economies generally lack provisions for macro-choices as to vocation and life goals, as well as opportunities to pursue one's unique competencies and talents. Thus, SDT pinpoints numerous faults in central planning economies, because they often fail to facilitate needs for autonomy and competence, and sometimes even the relatedness that is ideologically central to the system.

As well, SDT points to motivational hazards in capitalism, often touted as the most productive macro-economic system in history (Kasser et al., 2007). In saying this, we point out that capitalism is not a unitary system, that it varies, for example, from market economies constrained by social policies, as in the "socialist democracies", to "Anglo-American" corporate capitalism (AACC), which represents a relatively unchecked operation of market forces and is typically embedded within cultures that emphasize individualism, giving it its unique motivational flavor. For purposes of parsimony our comments are focused on AACC.

AACC advocates (e.g. Locke & Latham, 1990) often emphasize the association of capitalism with freedom, and yet, that term requires some deeper consideration. A person can be politically free, but still lack opportunities, so he or she may feel very much controlled by economic necessities. Indeed, the employment conditions and very low pay experienced by many workers within AACC leave them feeling anything but free both on the job and in their lives (Ehrenreich, 2001). The low pay level may lead them to take two jobs to try to make ends meet, resulting in work weeks that are longer and harder than those of "medieval peasants," as highlighted by de Graaf (2003) among others. Because there is only a minimal safety net within AACC, these workers are especially vulnerable to experiencing little freedom of movement, and thus to being alienated, lacking any sense of autonomy, intrinsic motivation, or commitment.

It is also worth noting that, while AACC entails strong instrumentalities connecting behaviors to outcomes, which are the means for people being controlled, many individuals, for example because they were raised in poor, high-crime neighborhoods, have not had the opportunities to develop competencies to benefit from these instrumentalities. Thus, they are likely to experience amotivation and disaffection. There is ongoing political debate about the degree to which the public sector is responsible for helping such individuals (Sen, 1999).
In short, AACC may have negative motivational effects on people at lower socio-economic levels with few skills either because they feel controlled in their pursuit of a meager living or because they fall out of the bottom of the system and into amotivation.

Even many high-level workers also feel controlled by their work situations and thus pay significant costs in terms of their performance and well-being. For example, they may feel little choice about their working hours or tasks, and even about changing jobs. Moreover, rewards, along with the materialistic outlook cultivated within the AACC, can insidiously control these workers, making them dependent on pursuing more and more rewards. This is likely to lead to the thwarting of relatedness as there is no time for family and friends, and to the thwarting of autonomy as the workers are likely to feel a lack of volition, freedom, and choice in relation to their work. In short, people in high-level jobs may feel controlled into overworking by work demands coupled with the desire to amass wealth, which is emphasized within AACC.

SDT makes clear, as the above discussion implies, that the simple fact of a person’s pursuing a reward “agentically” does not mean he or she is autonomous or free. Rewards, as we noted, have both controlling and informational aspects, and the controlling aspect can be very potent. When economic rewards in the marketplace are structured to provide competence feedback through tangible incentives, as when they are distributed fairly in accord with effort, talent, and degree of responsibility, and when such structures are administered within an autonomy-supportive work climate, without emphasizing competition and using the rewards to pressure the workers, the rewards may well be experienced as informational, thus supporting the needs for both competence and autonomy. However, rewards can control worker’s behavior, and indeed often do, as when they are used to motivate without addressing other needs for voice or choice in the workplace. In such cases, the controlling aspect of the rewards will be more salient, to the detriment of the workers’ quality of engagement and health (Gagné & Deci, 2005).

There is another risk to the contingent rewards of the AACC system that have been isolated by SDT research. Specifically, pay-for-performance contingencies can encourage both organizational leaders and workers to take the shortest route to the desired outcomes (Shapira, 1976), often at great organizational, and sometimes societal (e.g. environmental), costs. During the past decade, revelations from the highest levels of numerous corporations have illustrated that outcome-focused contingencies such as huge bonuses and stock options for raising stock prices can lead managers not only to compromise the integrity of their companies, but even to engage in criminal behavior. It is not just at the top of organizations that such dynamics occur, as workers at any level may invest only in those aspects of their jobs that are rewarded and may cut various corners to get to the rewards. Similarly, in domains such as
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education where outcome-focused high-stakes tests are now prevalent, such deleterious results can accrue even when targeted outputs or test scores seemingly improve (e.g. Deci, Koestner, and Ryan, 1999; Ryan & Brown, 2005). Although the risks associated with outcome-focused rewards have not been deeply considered within performance-goal (e.g. Hidi & Harackiewicz, 2000) or operant (e.g. Eisenberger & Cameron, 1996) approaches, they are explicitly considered within SDT (Ryan & Brown, 2005).

Finally, as argued by Kasser et al. (2007), research on values and goals suggests that many of the values and aims traditionally associated with capitalism (such as materialism, self-interest, and competition) stand empirically in opposition to (i.e. are negatively correlated with) values and goals such as caring about the broader world, having close relationships, and, for many people, feeling competent and free (Grouzet et al., 2005; Schwartz, 1992). Given the current concerns with sustainability of our environment and the costs of massive accumulations of wealth by the few over the many, this clash of values, which is both psychological and cultural in nature, is an issue that accompanies the AACC relative to other forms of capitalism.

Every economic system has its strengths and weaknesses. Our aim is not to provide an evaluation of any system, but instead is to use empirically supported SDT principles to consider economic systems and cultures. The SDT principles include the idea that rewards and incentives are not only motivating, but can also be controlling and thus can crowd out or undermine important human propensities and the satisfaction of basic psychological needs. Moreover, when the goals of economic systems are extrinsic in nature they can stand opposed to intrinsic goals for caring, community, and sustainability that are critical to human well-being. In short, an economic system's success cannot be defined only by its total growth, or even the material security it provides, but must also be evaluated by its capacities to support satisfaction of people's inherent psychological needs.

Summary and Conclusions

Emerging research and interpretation based in self-determination theory provide an important and provocative basis for examining the actualization versus thwarting of human capabilities and wellness. SDT is based in the premise that all human beings have basic psychological needs for competence, relatedness, and autonomy that, in addition to basic physical needs, are required for human flourishing. The theory and accompanying research have shown that autonomous (versus controlled) motivation is associated with more effective behavioral regulation, enhanced performance, and greater psychological well-being, and the theory specifies the social contextual conditions that satisfy the basic needs and promote autonomous motivation and its
positive consequences. Further, SDT addresses the content of goals, distinguishing between intrinsic life goals for growth, relationships, health, and community, and extrinsic life goals for wealth, fame, image, and power. Research has confirmed that the relative strength of intrinsic-goal pursuits is associated positively with well-being, whereas extrinsic-goal pursuits, because they typically fail to fulfill basic psychological needs, are not associated with these positive outcomes. The research has also uncovered many of the interpersonal and social conditions that promote internalization of extrinsic relative to intrinsic values and pursuits, including the relative deprivation of material necessities as well as the thwarting of basic psychological needs during socialization. Such findings make clear that researchers in both psychology and economics who are concerned with developing policies and programs that promote human thriving should consider more deeply the basic needs that define human nature as well as the social and economic conditions that support it.

References


Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 7-26). New York: Guilford.


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Soenens, B., & Matos, L. (2005). Examining the motivational impact of intrinsic versus extrinsic goal framing and autonomy-supportive versus internally


