

1: Overview of Self-Determination Theory: An Organismic Dialectical Perspective

Richard M. Ryan
Edward L. Deci
University of Rochester

In the classical, Aristotelian, view of human development, people are assumed to possess an active tendency toward psychological growth and integration. Endowed with an innate striving to exercise and elaborate their interests, individuals tend naturally to seek challenges, to discover new perspectives, and to actively internalize and transform cultural practices. By stretching their capacities and expressing their talents and propensities, people actualize their human potentials. Within this perspective, active growth is complemented by a tendency toward synthesis, organization, or relative unity of both knowledge and personality. Moreover, the integration of that which is experienced provides the basis for a coherent sense of self—a sense of wholeness, vitality, and integrity. To the degree that individuals have attained a sense of self, they can act in accord with, or be “true” to, that self.

This general view of an active, integrating organism with the potential to act from a coherent sense of self can be found in psychodynamic and humanistic theories of personality and in cognitive theories of development. For example, psychoanalytic theorists posit inherent activity and a synthetic function of the ego (Freud, 1927; Nunberg, 1931; Meissner, 1981; White, 1963), and humanistic psychologists postulate an actualizing tendency (Angyal, 1963; Maslow, 1955; Rogers, 1963). Similarly, many cognitive developmental theories emphasize an organizational or integrative tendency as an endogenous feature of the organism, proposing that development is characterized by an overarching organization function through which new self-extensions are brought into coherence with other cognitive structures (Piaget, 1971; Werner, 1948).

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To varying degrees, some recent theories have continued to embrace such assumptions (e.g., Ford, 1992; Loevinger & Blasi, 1991; Kuhl & Fuhrmann, 1998), recognizing the intrinsic propensities of people to engage in active, curiosity-based exploration and to integrate new experiences to the self.

Despite its longevity and seeming popularity, the assumption of innate tendencies toward growth and integration is not without its critics. Among the more staunch opponents of constructs concerning growth and integration have been operant behaviorists who assume there is no inherent direction to development and suggest that behavioral regulation and personality are a function of reinforcement histories and current contingencies (e.g., Skinner, 1953). For them, any appearance of an inner organization to personality is attributable not to a presumed integrative tendency but rather to the fact that the relevant contingencies people encountered in their environments were organized and systematic.

Similarly, contemporary social-cognitive approaches portray personality not in terms of a self-unifying system, but rather as a collection of selves or self-schemas that are activated by cues. Personality is viewed as a repository for schemata related to various goals and identities, each of which can be elicited by features of the social contexts (Bandura, 1989; Higgins, 1987; Markus & Nurius, 1986; Mischel & Shoda, 1995). Unlike their operant predecessors, such social-cognitive theories do not deny the idea of a synthetic tendency in development, but instead peripheralize it, focusing on the unified properties within isolated goal schemata or regulatory structures rather than among such schemata or structures.

Finally, and perhaps most importantly, the concept of endogenous tendencies toward psychological growth and unity in development seems to fly in the face of everyday behavioral observations. Ambient evidence could readily support the view that people are no more characterized by tendencies toward growth and integrity than by propensities to be controlled, fragmented, and stagnated in development. Everywhere, we see signs of divided functioning, of inner conflict and a lack of concern with responsibility and community. These widespread symptoms are echoed in psychological theories (e.g., Broughton, 1987; Greenwald, 1982). In fact, Gergen (1993) viewed the metaphor of a core or true self that grows and struggles for unity as a post-romantic view that should be replaced by the acceptance of a postmodern perspective in which the self is more aptly described as fragmented, saturated, and diversely populated by identities that are imputed by the social world.

It seems indeed that the field of psychology is quite widely divided on the issues of inherent tendencies toward psychological growth, a unified self, and autonomous, responsible behavior. Whereas some theorists see our nature as including a self-organizing, growth promoting tendency, others see us as wholly lacking such an endowment, and thus as mere conditioned or reactive reflections of our surroundings. Importantly, each position seems to have some *prima facie* evidence in its favor.

This set of issues concerning the degree to which there are inherent tendencies toward growth and integration is important not only theoretically, but also

practically. Insofar as practitioners believe people have a natural tendency toward gaining integrity and enhancing their human potentials, they will orient to supporting and facilitating that endogenous tendency across a variety of settings, including homes, schools, work organizations, and therapy clinics. In contrast, insofar as practitioners assume no such inner tendency toward growth, self-construction, and inner coherence, then educational, therapeutic, and other practical intervention strategies will focus on exogenous means of training, shaping, controlling, and directing behavior towards ends deemed to be of value.

The Organismic Dialectic: An Integrating Perspective

The primary agenda of self-determination theory (SDT; Deci & Ryan, 1985b; Ryan & Deci, 2000b) has been to provide an account of the seemingly discrepant viewpoints characterized, on the one hand, by the humanistic, psychoanalytic, and developmental theories that employ an organismic metatheory and, on the other hand, by the behavioral, cognitive, and post-modern theories that do not. In other words, recognizing that there is compelling evidence in favor of human tendencies toward active engagement and development and that there is, as well, manifold indication of fragmentation and conditioned responses, SDT provides a framework that integrates the phenomena illuminated by these discrepant viewpoints.

SDT begins by embracing the assumption that all individuals have natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self. That is, we assume people have a primary propensity to forge interconnections among aspects of their own psyches as well as with other individuals and groups in their social worlds. Drawing on terms used by Angyal (1963), we characterize this tendency toward integration as involving both autonomy (tending toward inner organization and holistic self-regulation) and homonomy (tending toward integration of oneself with others). Healthy development involves the complementary functioning of these two aspects of the integrative tendency.

However, although SDT accepts this general integrative tendency as a fundamental aspect of human life, the theory also suggests that this tendency cannot be taken for granted. On the contrary, SDT posits that there are clear and specifiable social-contextual factors that support this innate tendency, and that there are other specifiable factors that thwart or hinder this fundamental process of human nature. Accordingly, SDT predicts a broad array of developmental outcomes, ranging from a relatively active and integrated self to a highly fragmented and sometimes passive, reactive, or alienated self, as a function of social-environmental conditions.

Another way of stating this is that the foundations of SDT reside in a dialectical view which concerns the interaction between an active, integrating human nature and social contexts that either nurture or impede the organism's active nature. Social environments can, according to this perspective, either facilitate and enable the growth and integration propensities with which the human psyche is endowed, or they can disrupt, forestall, and fragment these processes resulting in behaviors and inner experiences that represent the darker side of humanity. As such, psychological growth and integration in personality should neither be taken as a given, as something that will happen automatically, nor should it be assumed not to exist. Instead, it must be viewed as a dynamic potential that requires proximal and distal conditions of nurturance. In this, we fully agree with Allport (1961) who suggested that unity in personality is a matter of degree and should not be exaggerated. We add, however, that whatever the attained unity of the psyche, the importance of the issue of integration within personality cannot be over emphasized when one is attempting to understand the processes of healthy psychological and social development. As well, the issue is important for examining applied questions related to effective parenting, education, work, health care, exercise regimens, environmentalism, religiosity, psychotherapy, and other significant human endeavors.

Basic Needs and Social Contexts

Approaches to describing environments that support versus thwart effective or healthy functioning have been numerous in the social, personality, and developmental literatures. In SDT, the descriptions are organized with respect to the concept of basic or fundamental psychological needs. The theory posits three such needs, each of which has shown itself to be essential for integrating a variety of empirically illuminated phenomena. These needs—the needs for competence, relatedness, and autonomy—provide the basis for categorizing aspects of the environment as supportive versus antagonistic to integrated and vital human functioning. Social environments that allow satisfaction of the three basic needs are predicted to support such healthy functioning, whereas factors associated with need thwarting or conflict are predicted to be antagonistic. Thus, the concept of basic needs provides a critical linking pin within the organismic dialectic and is the basis for making predictions about the conditions that promote optimal versus nonoptimal outcomes in terms of both personality development and the quality of behavior and experience within a specific situation.

The nature of needs. Among the fundamental properties that separate the animate from the inanimate is the dependence of the animate on nutrients. Living beings must engage in continual exchanges with their environment to draw from it those necessities that allow them to preserve, maintain, and enhance their functioning. Stated differently, living things have *needs* that must be fulfilled if they are to persist and thrive (Jacob, 1973).

The concept of needs is relatively noncontroversial in the field of biology, a field that focuses primarily on the survival and reproduction of the physical structure of the organism. One can verify empirically that there are certain specifiable requirements, such as hydration, for organisms to survive and thrive. Withholding such an element will lead reliably to deterioration of growth and integrity, whereas making it available will lead to maintenance or enhancement. As such, the concept of needs is important because it supplies a criterion for specifying what is essential to life. At the same time, the concept says something about organismic nature because it is reasonable to argue that organisms are “built for” the satisfaction of needs—that is, that they have evolved functional structures and sensitivities that can lead to sustenance and integrity (see, e.g., Deci & Ryan, 2000).

The concept of needs has received far less attention and acceptance regarding essential psychological nutrients than essential physiological ones. SDT maintains, however, that there are necessary conditions for the growth and well-being of people’s personalities and cognitive structures, just as there are for their physical development and functioning. These nutrients are referred to within SDT as *basic psychological needs*. By this SDT definition, basic needs are universal—that is, they represent innate requirements rather than acquired motives. As such, they are expected to be evident in all cultures and in all developmental periods. Although they may have different expressions or different vehicles through which they are satisfied, their core character is unchanging. Clearly, this is a very restrictive definition, which is why the list of psychological needs within SDT is thus far so short, including only competence, relatedness, and autonomy. In humans, the concept of psychological needs further suggests that, whether or not people are explicitly conscious of needs as goal objects, the healthy human psyche ongoingly strives for these nutrients and, when possible, gravitates toward situations that provide them.

Competence refers to feeling effective in one’s ongoing interactions with the social environment and experiencing opportunities to exercise and express one’s capacities (Deci, 1975; Harter, 1983; White, 1959). The need for competence leads people to seek challenges that are optimal for their capacities and to persistently attempt to maintain and enhance those skills and capacities through activity. Competence is not, then, an attained skill or capability, but rather is a felt sense of confidence and effectance in action.

Relatedness refers to feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one’s community (Baumeister & Leary, 1995; Bowlby, 1979; Harlow, 1958; Ryan, 1995). Relatedness reflects the homonomous aspect of the integrative tendency of life, the tendency to connect with and be integral to and accepted by others. The need to feel oneself as being in relation to others is thus not concerned with the attainment of a certain outcome (e.g., sex) or a formal status (e.g., becoming a spouse, or a group member), but instead concerns the psychological sense of being with others in secure communion or unity.

Finally, *autonomy* refers to being the perceived origin or source of one's own behavior (deCharms, 1968; Deci & Ryan, 1985b; Ryan & Connell, 1989). Autonomy concerns acting from interest and integrated values. When autonomous, individuals experience their behavior as an expression of the self, such that, even when actions are influenced by outside sources, the actors concur with those influences, feeling both initiative and value with regard to them. Autonomy is often confused with, or melded together with, the quite different concept of independence (which means not relying on external sources or influences), but the SDT view considers there to be no necessary antagonism between autonomy and dependence. Indeed, one can quite autonomously enact values and behaviors that others have requested or forwarded, provided that one congruently endorses them. On the other hand, one can of course rely on others for directions or opinions in such a way that autonomy is not experienced, as is the case with mere compliance or conformity. In short, independence versus dependence is a dimension that is seen within SDT as being largely orthogonal to the issue of autonomy versus heteronomy (Ryan & Lynch, 1989; Ryan, 1993).

Needs and motives. Our concept of basic psychological needs is quite different from the broader idea of personal motives, desires, or strivings. Although people may formulate motives or strivings to satisfy basic needs, it is also clear that there are many motives that do not fit the criterion of being essential for well-being and may, indeed, be inimical to it. In other words, some motives may distract people from activities that could provide basic need fulfillment and thus detract from their well-being. Even when people are highly efficacious at satisfying motives, the motives may still be detrimental to well-being if they interfere with people's autonomy or relatedness. This is an extremely important point, because it makes clear that attaining one's goals efficaciously is not enough to ensure psychological well-being. As such, many motives and goals that organize behavior must be viewed dynamically either as being peripheral to psychological need satisfaction or as being need substitutes that developed as compensations when basic needs were thwarted (Deci, 1980; Ryan, Sheldon, Kasser, & Deci, 1996).

Summary

To summarize, SDT embraces both an organismic and a dialectical framework for the study of personality growth and development. As an organismic view, SDT conceives of humans as active, growth-oriented organisms, that innately seek and engage challenges in their environments, attempting to actualize their potentialities, capacities, and sensibilities. However, this organismic tendency toward actualization represents only one pole of a dialectical interface, the other being social environments which can either facilitate the individuals' synthetic tendencies, or alternatively wither, block, or overwhelm them.

The concept of psychological needs provides the basis for describing characteristics of the environment that support versus undermine the organism's

attempts to master or engage each new situation. To the extent that an aspect of the social context allows need fulfillment, it yields engagement, mastery, and synthesis; whereas, to the extent that it thwarts need fulfillment, it diminishes the individual's motivation, growth, integrity, and well-being.

Within SDT, the specification of needs and the study of need-related behavioral dynamics has been pursued as an empirical endeavor. The specification of needs, along with a stringent functional definition of what qualifies as a psychological need, has led to quite exacting, if sometimes counter-intuitive predictions about human behavior and the effects of social contexts. That is, by evoking needs and applying appropriate criteria, SDT research has been able to pinpoint and examine factors in social environments that facilitate self-motivation and well-being, and those that thwart initiative and positive experience across diverse settings, domains, and cultures.

The Basic Components of Self-Determination Theory

SDT has evolved over the past three decades in the form of mini-theories, each of which relates to specific phenomena. The mini-theories are linked in that they all share organismic and dialectical assumptions and all involve the concept of basic psychological needs. When coordinated, they cover all types of human behavior in all domains. Thus, together, the mini-theories constitute SDT. Specification of separate mini-theories was, historically, a consequence of building a broad theory in an inductive fashion. That is, our approach has been to research phenomena, construct mini-theories to account for them, and then derive hypotheses about related phenomena. Throughout this process, basic assumptions and approaches remained constant, so the mini-theories were logically coherent and readily integratable each with the others. As such, each represents a piece of the overall SDT framework.

In our writings, various aspects or propositions of the mini-theories have at times been presented with the terminology of the relevant mini-theories, but often they have simply been presented under the rubric of SDT. At this time, SDT comprises four mini-theories. *Cognitive evaluation theory*, the first, was formulated to describe the effects of social contexts on people's intrinsic motivation (Deci, 1975; Deci & Ryan, 1980). It describes contextual elements as autonomy supportive (informational), controlling, and amotivating, and it links these types of contextual elements to the different motivations. *Organismic integration theory* (Deci & Ryan, 1985b; Ryan & Connell, 1989) concerns internalization and integration of values and regulations, and was formulated to explain the development and dynamics of extrinsic motivation; the degree to which individuals' experience autonomy while engaging in extrinsically motivated behaviors; and the processes through which people take on the values and mores of their groups

and cultures. *Causality orientations theory* (Deci & Ryan, 1985a) was formulated to describe individual differences in people's tendencies to orient toward the social environment in ways that support their own autonomy, control their behavior, or are amotivating. This mini-theory allows for prediction of experience and behavior from enduring orientations of the person. Finally, *basic needs theory* (Ryan & Deci, 2000b) was formulated to explain the relation of motivation and goals to health and well-being, in part by describing associations of value configurations and regulatory styles to psychological health, across time, gender, situations, and culture. We address each mini-theory in turn.

Cognitive Evaluation Theory

Intrinsically motivated behaviors are those whose motivation is based in the inherent satisfactions of the behaviors *per se*, rather than in contingencies or reinforcements that are operationally separable from those activities. Intrinsic motivation represents a prototype of self-determined activity, in that, when intrinsically motivated, people engage in activities freely, being sustained by the experience of interest and enjoyment. Thus, as it is classically defined (see Ryan & Deci, 2000a), intrinsic motivation is noninstrumentally focused, instead originating autotelically from satisfactions inherent in action, whereas extrinsic motivation is focused toward and dependent on contingent outcomes that are separable from the action *per se*. DeCharms (1968) used Heider's (1958) concept of perceived locus of causality to describe the two types of motivation: with extrinsic motivation, deCharms suggested, people perceive the locus of initiation and regulation of their behavior to be external to themselves, whereas with intrinsic motivation, they perceive the locus to be within themselves. SDT has followed deCharms' perspective only in part. We agree with him that intrinsically motivated actions invariantly entail an internal perceived locus of causality, and that intrinsic motivation tends to be undermined when factors conduce toward an external perceived locus of causality. However, our view of extrinsic motivation is more differentiated, as we shall describe in our coverage of Organismic Integration Theory.

The intrinsic-extrinsic distinction provided the basis for the first experiments in the field. Specifically, research began with the question of how extrinsic rewards would affect people's intrinsic motivation for an interesting activity. In other words, if someone engaged in an activity freely without being rewarded and found it highly interesting and enjoyable, the person would clearly be intrinsically motivated. If he or she were then offered an extrinsic reward for doing the activity, what would happen to the person's intrinsic motivation?

The initial studies (Deci, 1971, 1972a, 1972b; Kruglanski, Friedman, & Zeevi, 1971; Lepper, Greene, & Nisbett, 1973) all found that tangible rewards—

whether concrete, such as money (Deci), or symbolic, such as good player awards (Lepper et al.)—decreased intrinsic motivation so long as they were expected and their receipt required engaging in the activity. However, the initial Deci studies also showed that positive feedback—or what is sometimes referred to as verbal rewards or praise—enhanced rather than undermined intrinsic motivation.

The undermining of intrinsic motivation by extrinsic rewards has been a controversial issue from the time the initial studies were published, in part because the finding appeared to fly in the face of operant theory which had a strong presence in empirical psychology at that time. In spite of the controversy and some fatally flawed attempts to deny the undermining phenomenon (e.g. Eisenberger & Cameron, 1996), a meta-analysis of 128 experiments confirmed that expected tangible rewards which require engaging in the target activity do indeed undermine intrinsic motivation for that activity, whereas verbal rewards tend to enhance intrinsic motivation (Deci, Koestner, & Ryan, 1999).

Perceived Causality and Perceived Competence

Cognitive evaluation theory (CET; Deci, 1975; Deci & Ryan, 1980), which expanded upon deCharms' analysis of perceived locus of causality, was initially formulated to account for reward effects on intrinsic motivation, as well as various other results that extended these phenomena. The theory suggests that the needs for competence and autonomy are integrally involved in intrinsic motivation and that contextual events, such as the offer of a reward, the provision of positive feedback, or the imposition of a deadline, are likely to affect intrinsic motivation to the extent that they are experienced as supporting versus thwarting satisfaction of these needs.

More specifically, Deci and Ryan (1980) suggested that there are two primary cognitive processes through which contextual factors affect intrinsic motivation. Change in *perceived locus of causality* relates to the need for autonomy: when an event prompts a change in perceptions toward a more external locus, intrinsic motivation will be undermined; whereas, when an event prompts a change toward a more internal perceived locus, intrinsic motivation will be enhanced. Tangible rewards, which were typically found to decrease intrinsic motivation, were theorized to have their effect by prompting a shift toward a more external perceived locus of causality for the rewarded activity. The second process, change in *perceived competence*, relates to the need for competence: when an event increases perceived competence, intrinsic motivation will tend to be enhanced; whereas, when an event diminishes perceived competence, intrinsic motivation will be undermined. According to CET, however, positive feedback is predicted to enhance intrinsic motivation only when people feel a sense of autonomy with respect to the activity for which they perceived themselves to be competent, a proposition upheld in various studies (e.g., Fisher, 1978; Ryan, 1982).

As initially presented, CET further specified that contextual events or climates contain both a *controlling* aspect and an *informational* aspect and that it is the relative salience of these two aspects of social contexts that determines the effects of the context on perceptions of causality and competence, and thus on intrinsic motivation. The controlling aspects of social environments are those that represent pressure toward specified outcomes, and thus conduce to a shift toward a more external perceived locus of causality. Features of the social environment that have controlling salience undermine intrinsic motivation. The informational aspect of social contexts pertains to effectance-relevant inputs. Specifically, informational events and communications provide feedback that supports people's experience of competent engagement. In discussions of CET, the concept of *functional significance* is used to convey the idea that individuals will actively construe social-contextual inputs in terms of their informational and controlling meanings, and that it is the relative salience of informational versus controlling components that will, in large part, determine subsequent intrinsic motivation. For example, an event such as the offer of a tangible reward (which studies have found to be controlling) is, on average, said to have a controlling functional significance; whereas, the functional significance of positive feedback is, on average, said to be informational. Accordingly rewards are predicted to undermine intrinsic motivation in many circumstances, whereas positive performance feedback is expected to enhance it.

The bulk of the experimental studies on intrinsic motivation has focused on the undermining of intrinsic motivation when the controlling aspect of an event is salient. Thus, in addition to the studies of expected rewards, others have shown that threats of punishment (Deci & Cascio, 1972), deadlines (Amabile, DeJong, & Lepper, 1976), imposed goals (Mossholder, 1980), surveillance (Lepper & Greene, 1975; Plant & Ryan, 1985), competition (Deci, Betley, Kahle, Abrams, & Porac, 1981), and evaluation (Smith, 1975; Ryan, 1982) all decreased intrinsic motivation, presumably because they were experienced as controls. Relatively little attention has been given to events that enhance intrinsic motivation through a shift toward a more internal perceived locus of causality. However, Zuckerman, Porac, Lathin, Smith, and Deci (1978) and Swann and Pittman (1977) reported that providing choice about what to do or how to do it enhanced intrinsic motivation, and Koestner, Ryan, Bernieri, and Holt (1984) showed that empathy and noncontrollingness can help maintain intrinsic motivation.

Furthermore, most feedback studies have focused on positive feedback, with only a few assessing the effects of negative feedback on intrinsic motivation. However, Deci and Cascio (1972) found negative feedback to undermine intrinsic motivation, and Vallerand and Reid (1984) found the undermining by negative feedback to be mediated by a decrease in perceived competence.

Social Contexts and Internal Events

CET was elaborated in the early 1980s in two important ways. First, it was suggested that although events such as rewards, deadlines, or positive feedback tend to have a particular functional significance, the interpersonal climate within which they are administered can significantly influence it. Thus, for example, Ryan (1982) showed that, whereas positive feedback is typically experienced as informational, if it is administered within a pressuring climate, emphasizing for example that people "should do well," the positive feedback tends to be experienced as controlling. Similarly, Ryan, Mims, and Koestner (1983) showed that although tangible rewards tend to be experienced as controlling, if they are administered in a non-evaluative context that supports autonomy, they tend not to be undermining. Furthermore, subsequent studies showed that limit setting will have a significantly different effect depending on whether the interpersonal context is informational or controlling (Koestner, Ryan, Bernieri, & Holt, 1984) and that competition can also be experienced as either informational or controlling, depending on the interpersonal climate (Reeve & Deci, 1996).

The second important extension of CET concerned internal initiating events. Specifically, Ryan (1982) suggested that people can initiate and regulate their actions in different ways that are relatively independent of the social context. For example, people can become ego-involved in an activity and its outcome. That is, their feelings of self-worth can become hinged to their performance such that they do the activity to prove to themselves that they are good at the activity and thus worthy individuals. Ryan contrasted this with task-involvement in which people are more involved with the task itself rather than with its implications for their own feelings of worth. He suggested that when the initiation and regulation of behavior is ego-involved the functional significance will be controlling relative to when the initiation and regulation is task-involved, and results confirmed this reasoning (Plant & Ryan, 1985; Ryan, 1982). A recent meta-analysis of experimental studies confirmed the CET proposition concerning the effects of ego versus task involvement on subsequent intrinsic motivation (Rawsthorne & Elliot, 1999). More generally, CET holds that self-controlling forms of regulation will be associated with diminished intrinsic motivation, whereas more autonomous forms of self-regulation will maintain or enhance intrinsic motivation.

Relatedness

As noted, we theorized that intrinsic motivation is integrally connected to the needs for competence and autonomy, and research has indicated that aspects of the social context which influence perceptions of competence and autonomy do

indeed affect intrinsic motivation. There remains, however, the question of how the need for relatedness is involved in intrinsic motivation. We have emphasized that all three needs are essential for growth and development, so one would expect relatedness to play a role in intrinsic motivation. Indeed, evidence from studies with infants indicates that exploratory behavior (i.e., intrinsically motivated curiosity) tends to be in evidence to the degree that the children are securely attached to a primary caregiver. For example, Frodi, Bridges, and Grolnick (1985) found that security of attachment, which implied relational satisfaction, was associated with exploratory behaviors. In other words, when the infants experienced a general sense of satisfaction of the relatedness need, they were more likely to display intrinsically motivated exploration.

A serendipitous finding from a laboratory experiment by Anderson, Manoogian, and Reznick (1976) indicated that when children worked on an interesting activity in the presence of a previously unknown adult experimenter who ignored them, the children displayed a very low level of intrinsic motivation, suggesting therefore that thwarting of the need for relatedness can have a deleterious effect on intrinsic motivation. Still, evidence which closely links competence and autonomy to intrinsic motivation is considerably more plentiful than that linking relatedness to intrinsic motivation, and there do appear to be many solitary types of activities for which people maintain high intrinsic motivation in spite of not relating to others while doing them. Accordingly, we (Deci & Ryan, 2000) have suggested that relatedness typically plays a more distal role in the promotion of intrinsic motivation than do competence and autonomy, although there are some interpersonal activities for which satisfaction of the need for relatedness is crucial for maintaining intrinsic motivation.

Organismic Integration Theory

As noted, CET focuses on the effects of social-contextual variables on intrinsically motivated behaviors. It thus applies primarily to activities that people find interesting, optimally challenging, or aesthetically pleasing. Activities that are not so experienced will not be intrinsically motivated and are thus unlikely to be performed unless there is an extrinsic reason for doing them. Still, socializing agents frequently find it necessary to promote these uninteresting behaviors, so they face the issue not only of how to prompt the behaviors but, even more importantly, how to promote self-regulation of the behaviors so they will persist over the long term.

Because early discussions of intrinsic motivation contrasted it with extrinsic motivation, and because extrinsic motivation has frequently been shown to relate negatively to intrinsic motivation, many commentators (beginning with

deCharms, 1968) have characterized extrinsic motivation as being nonautonomous—as being antithetical to self-determination. Indeed, research does make clear that extrinsic motivation in the form of working to attain tangible rewards is generally nonautonomous, for it tends to undermine intrinsic motivation (Deci et al., 1999). Nonetheless, we have assumed from the time we began this research that it is possible to be autonomously extrinsically motivated, and research within organismic integration theory has examined that issue extensively.

Internalization

Organismic integration theory (OIT) is based on the assumption that people are naturally inclined to integrate their ongoing experiences, assuming they have the necessary nutrients to do so. Accordingly, we postulated that if external prompts are used by significant others or salient reference groups to encourage people to do an uninteresting activity—an activity for which they are not intrinsically motivated—the individuals will tend to internalize the activity's initially external regulation. That is, people will tend to take in the regulation and integrate it with their sense of self. To the extent that this occurs, the individuals would be autonomous when enacting this extrinsically motivated behavior. Accordingly, in line with our active-organism metatheory, we view the phenomenon of internalization as a natural process in which people work to actively transform external regulation into self-regulation (Schafer, 1968), becoming more integrated as they do so.

An important element of OIT is that, unlike most other theories of internalization (e.g., Bandura, 1996), it views internalization not in terms of a dichotomy but rather in terms of a continuum. The more fully a regulation (or the value underlying it) is internalized, the more it becomes part of the integrated self and the more it is the basis for self-determined behavior. From this perspective, then, it is possible for individuals to internalize regulations without having them become part of the self. Regulations that have been taken in by an individual but not integrated with the self would not be the basis for autonomous self-regulation but would instead function more as controllers of behavior. Thus, extrinsically motivated behaviors for which the regulations have been internalized to differing degrees would differ in their relative autonomy. Those for which the regulations have been well integrated would be the basis for autonomous extrinsically motivated behavior, whereas those for which the regulations have been less fully internalized would be the basis for more controlled forms of extrinsic motivation.

Accordingly, OIT proposes a taxonomy of types of regulation for extrinsic motivation which differ in the degree to which they represent autonomy. Figure 1-1 presents the OIT taxonomy, arranged from left to right in terms of the extent to which the motivation for a behavior emanates from the self (i.e., is autonomous).

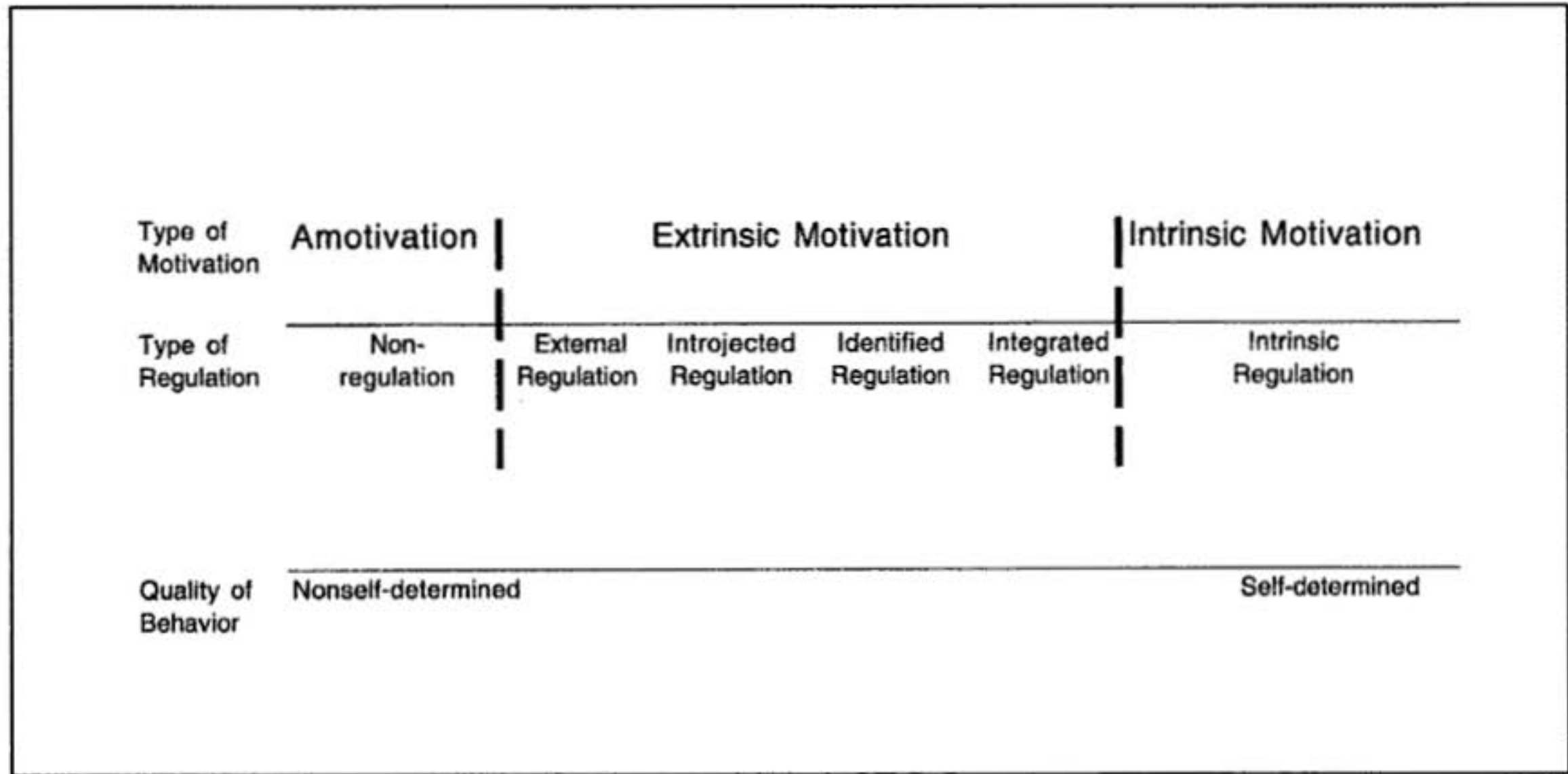


Figure 1.1. The Self-Determination Continuum, with Types of Motivation and Types of Regulation.

At the left end is *amotivation*, the state of lacking the intention to act. When people are amotivated, either they do not act at all or they act passively—that is, they go through the motions with no sense of intending to do what they are doing. Amotivation results from feeling either that they are unable to achieve desired outcomes because of a lack of contingency (Rotter, 1966; Seligman, 1975) or a lack of perceived competence (Bandura, 1977; Deci, 1975) or that they do not value the activity or the outcomes it would yield (Ryan, 1995).

The other five points on the continuum refer to classifications of motivated behavior. Each of these describes a theoretically, experientially, and functionally distinct type of regulation. At the right end of the continuum is *intrinsic motivation*, which we have already discussed as the state of doing an activity out of interest and inherent satisfaction. It is the prototype of autonomous or self-determined behavior. Extrinsically motivated behaviors, which are characterized by four types of regulation, fall along the self-determination continuum between amotivation and intrinsic motivation.

External regulation is the least autonomous form of extrinsic motivation and includes the classic instance of being motivated to obtain rewards or avoid punishments. More generally, external regulation is in evidence when one's reason for doing a behavior is to satisfy an external demand or a socially constructed contingency. External regulation has an external perceived locus of causality, is the type of regulation that is central to operant theory (e.g., Skinner, 1953), and is the form of extrinsic motivation that was contrasted with intrinsic motivation in the early discussions of the topic (e.g., deCharms, 1968).

Introjected regulation involves an external regulation having been internalized but not, in a much deeper sense, truly accepted as one's own. It is a type of extrinsic motivation that, having been partially internalized, is within the person but is not considered part of the integrated self. Introjection is a form of internalized regulation that is theorized to be quite controlling. Introjection-based behaviors are performed to avoid guilt and shame or to attain ego enhancements and feelings of worth. In other words, this type of regulation is based in contingent self-esteem (Deci & Ryan, 1995). Studies by Ryan (1982) and others have shown that, when ego-involved in an outcome, which is a form of introjected regulation, people tend to lose intrinsic motivation for the target activity, thus indicating that this type of regulation is, in fact, quite controlling.

Regulation through identification is a more self-determined form of extrinsic motivation, for it involves a conscious valuing of a behavioral goal or regulation, an acceptance of the behavior as personally important. Identification represents an important aspect of the process of transforming external regulation into true self-regulation. When a person identifies with an action or the value it expresses, they, at least at a conscious level, are personally endorsing it, and thus identifications are accompanied by a high degree of perceived autonomy. That is, identifications tend to have a relatively internal perceived locus of causality. However, SDT suggests that some identifications can be relatively compartmentalized or

separated from one's other beliefs and values, in which case they may not reflect the person's overarching values in a given situation. Nonetheless, relative to external and introjected regulations, behavior that stems from identifications tends to be relatively autonomous or self-determined.

Integrated regulation provides the basis for the most autonomous form of extrinsically motivated behavior. It results when identifications have been evaluated and brought into congruence with the personally endorsed values, goals, and needs that are already part of the self. Research has shown extrinsically motivated behaviors that are integrated to be associated with more positive experiences than the less fully internalized forms of extrinsic motivation. Integrated extrinsic motivation also shares many qualities with intrinsic motivation. Nonetheless, although behaviors governed by integrated regulations are performed volitionally, they are still considered extrinsic because they are done to attain personally important outcomes rather than for their inherent interest and enjoyment. In other words, they are still instrumental to a separable outcome whose value is well integrated with the self.

It is important to recognize that the relative autonomy continuum is intended descriptively, to organize types of regulation with respect to the concept of self-determination. We do not suggest that it is a developmental continuum *per se*, nor that people must progress through each stage of internalization with respect to each regulation. Rather, it is possible for people to take in a regulation at any point along this continuum, assuming they have relevant prior experience and the immediate interpersonal climate is sufficiently supportive (Deci & Ryan, 1991; Ryan, 1995). We assume that the range of behaviors that can be assimilated to the self does increase over time as a function of greater cognitive and ego development (e.g., Loevinger & Blasi, 1991; Piaget, 1971), and there is evidence that children's general regulatory style tends to become more internalized with age (e.g., Chandler & Connell, 1987).

Ryan and Connell (1989) developed an approach to assessing regulatory styles, and thus the relative autonomy of one's regulation for a behavior or class of behaviors, treating regulatory styles as behavior-specific individual differences. They then used the approach to show that these different types of regulation lie along a continuum of relative autonomy. Specifically, they found that the different regulatory styles were intercorrelated according to a quasi-simplex pattern, correlating most strongly with those other styles that were theoretically closest to them in terms of the underlying relative autonomy continuum.

The Ryan and Connell approach has been extremely useful for examining OIT in various applied domains, such as education (Miserandino, 1996; Ryan & Connell, 1989), child rearing (Grolnick & Ryan, 1989), health care (Williams, Grow, Freedman, Ryan, & Deci, 1996; Williams, Rodin, Ryan, Grolnick, & Deci, 1998), intimate relationships (Blais, Sabourin, Boucher, & Vallerand, 1990), religious behavior (Ryan, Rigby, & King, 1993), physical exercise (Chatzisarantis, Biddle, & Meek, 1997), political behavior (Koestner, Losier, Vallerand, &

Carducci, 1996), and environmentally friendly activity (Green-Demers, Pelletier, & Menard, 1997). Consistently, the research has shown varied advantages to being autonomously motivated, relative to controlled, including more volitional persistence, better relationships in one's social groups, more effective performance, and greater health and well-being.

Promoting Integrated Regulation

Because extrinsically motivated behaviors are not inherently interesting, people are unlikely to do them if the behaviors are not instrumental for a desired outcome. Thus, initially, such behaviors are typically prompted by significant others, whether with a simple request, the offer of a reward, or the fact that the others demonstrate their valuing of the activity by performing it regularly. That is, the dynamic involved in prompting such behaviors involves a significant other or group endorsing an action and in some way conveying their endorsement to the target individual. The individual, in turn, out of feeling related to the other person or the group, or out of the desire for such relatedness, will likely engage in the behavior with the expectation of gaining implicit or explicit approval for doing so. This suggests that the need for relatedness to others is centrally important for internalization. OIT proposes that supports for feelings of relatedness are, indeed, crucial for promoting internalization. In fact, a study by Ryan, Stiller and Lynch (1994) showed that children who felt securely connected to, and cared for by, their parents and teachers were the ones who more fully internalized the regulation for positive school-related behaviors. It seems that, whereas relatedness is less central than the other two needs for maintaining intrinsic motivation, it is very much central for promoting internalization.

Still, relatedness alone is not enough to ensure a full internalization of extrinsic motivation. As well, people will need to feel competent with respect to behaviors valued by a significant other if they are to engage in and accept responsibility for those behaviors. Thus, OIT suggests that support for competence will contribute to the facilitation of internalization and the subsequent self-regulation of extrinsically motivated activities. If people do not feel competent to perform a target behavior, they are unlikely to internalize regulation of the behavior; in fact, they will likely find an excuse not to do the behavior at all, even in the presence of the significant other.

Finally, from the perspective of OIT, perceptions of autonomy play an extremely important role in the processes of internalization and integration. As already noted, internalization can take the form of introjection, resulting in controlled regulation, or it can involve a much fuller internalization and integration. According to the theory, support for autonomy is the critical factor for determining whether the internalization that is promoted by supports for relatedness and competence will be only partial (as in introjection) or will be much fuller (as in

integration). Thus, although some internalization may occur without autonomy support, the type of internalization that will result in persistence, flexibility, and vitality—those being the factors that characterize self-determination—will be in evidence to the degree that supports for autonomy are present. Stated differently, to integrate the regulation of a behavior, people must grasp its meaning for themselves personally, and they must synthesize that meaning with other aspects of their psychic makeup. This type of engagement with the activity and with the process of internalization is most likely to occur when people experience a sense of choice, volition, and freedom from external demands. Accordingly, autonomy support is the basis for people's actively transforming a value and regulation into their own.

To summarize, external regulation is likely to occur when people feel competent enough to perform the requisite action, assuming there are salient consequences such as implicit approval from significant others. Further, with supports for relatedness as well as competence, introjection is a likely outcome. Only when the social climate also provides support for autonomy is there likely to be integration of the relevant regulation, thus providing the foundation for subsequent self-determined behavior.

Various studies have provided evidence for this reasoning. For example, Grolnick and Ryan (1989) found greater internalization and integration of school-related values among children whose parents were more supportive of autonomy and relatedness, and Williams and Deci (1996), using a longitudinal design, demonstrated greater internalization of biopsychosocial values among medical students whose instructors were more supportive of autonomy.

Deci, Eghrari, Patrick, and Leone (1994) performed a laboratory experiment with an uninteresting activity in which they manipulated the presence versus absence of three supportive factors—a meaningful rationale, acknowledgement of the person's perspective, and provision of choice rather than pressure. The researchers found internalization, as measured by subsequent behavioral persistence, to be a function of the number of facilitating factors. However, they also found that with relatively little support, whatever internalization occurred was in the form of introjection, whereas with relatively more support, the internalization was likely to involve integration.

Causality Orientations Theory

Self-determination theory, with its various mini-theories, has devoted considerable attention to the influence of social contexts both on motivation, behavior, and experience in a particular situation and on the development of personality over time. Whereas CET is concerned primarily with the effects of specific

social context on motivation, behavior, and experience, OIT is concerned more with the differentiation of extrinsic motivation in accord with internalization and on the influence of social contexts on the internalization of extrinsic motivation. More specifically, OIT posits that different regulatory styles for extrinsically motivated behaviors are developmental outcomes, and researchers have used those styles as individual differences to predict performance and well-being.

Throughout the development of SDT, we have assumed that a person's motivation, behavior, and experience in a particular situation is a function both of the immediate social context and of the person's inner resources that have developed over time as a function of prior interactions with social contexts. Causality orientations theory was developed as a descriptive account of these inner resources—that is, of relatively stable individual differences in one's motivational orientations toward the social world. Based on it, we developed an individual difference measure, the General Causality Orientations Scale (GCOS) that has been used for predictive purposes in numerous studies (Deci & Ryan, 1985a).

The causality orientations approach is intended to index aspects of personality that are broadly integral to the regulation of behavior and experience. It specifies three orientations that differ in the degree to which they represent self-determination—namely, the autonomous, controlled, and impersonal causality orientations—and people are assumed to have each of these orientations, to some degree. The *autonomy orientation* involves regulating behavior on the basis of interests and self-endorsed values; it serves to index a person's general tendencies toward intrinsic motivation and well integrated extrinsic motivation. The *controlled orientation* involves orienting toward controls and directives concerning how one should behave; it relates to external and introjected regulation. The *impersonal orientation* involves focusing on indicators of ineffectance and not behaving intentionally; it relates to amotivation and lack of intentional action.

Individuals get a score on each of the three orientations reflecting the strength of each general tendency for themselves. In the initial research by Deci and Ryan (1985a) the autonomy orientation was found to relate positively to self-actualization, self-esteem, ego development, and other indicators of well-being. As expected, the controlled orientation was not positively associated with well-being but instead was related to public self-consciousness and the Type-A coronary prone behavior pattern, indicating that the focus tends to be outward and pressured. The impersonal orientation was related to self-derogation, low self-esteem, and depression.

Koestner, Bernieri, and Zuckerman (1992) explored the relation of the autonomy and controlled orientations to integration in personality, hypothesizing that autonomy, relative, to control, would be associated with greater integration. They began by creating two groups, one of individuals who tended to be more autonomous and one of individuals who tended to be more controlled, based on a comparison of their standardized scores for the two orientations. The

researchers then examined the consistency among behaviors, traits, and attitudes within the two groups. Results indicated that autonomy-oriented individuals displayed a strong positive relation among behaviors and self-reports of traits or attitudes, whereas control-oriented individuals displayed weak or even negative relations among these various personality aspects. Thus, the studies drew an empirical link between the concepts of autonomy and integration by showing greater congruence among personality, awareness, and behavior for autonomy-oriented than for control-oriented individuals.

Numerous investigators have related general causality orientations to specific regulatory styles, to behavioral outcomes, to aspects of personality, and to well-being indicators, and much of that research is described in various chapters of this volume.

Basic Needs Theory

The concept of basic psychological needs has played an important, though often implicit, role in SDT and each of its mini-theories from the time the work began. The relatively recent formalization of this mini-theory was done to clarify the meaning of the concept and to detail its dynamic relation to mental health and well-being.

To qualify as a need, a motivating force must have a direct relation to well-being. Needs, when satisfied, promote well-being, but when thwarted, lead to negative consequences. Further, because needs are hypothesized to be universal, this relation between satisfaction and well-being must apply across ages, genders, and cultures. Of course, the means through which needs are satisfied (versus thwarted) vary as a function of age, gender, and culture. Thus, in an extreme case, it is possible for the same behavior to be need satisfying for one group and need thwarting for another. Still, the underlying process in which need satisfaction promotes health is theorized to be the same across all these groups.

Well-being

Recent research on well-being has been plentiful, although the concept of well-being has been treated in two different ways by different researchers (see Ryan & Deci, 2001). One approach focuses on hedonic or subjective well-being and essentially equates it with happiness (e.g., Kahneman, Diener, & Schwarz, 1999), whereas the other approach focuses on eudaimonic well-being and equates it with being fully functioning (e.g., Ryff & Singer, 1998). Although there is substantial intersection of the two concepts, we endorse the eudaimonic conception,

and much of our recent research has served to establish a clear empirical link between satisfaction of autonomy, competence, and relatedness needs, on the one hand, and eudaimonic well-being, on the other. In so doing, we have not used a specific measure of eudaimonic well-being, but have instead used several measures of positive affect and mental health to index the general organismic concept that involves people detecting the degree of their own vitality, psychological flexibility, and deep inner sense of wellness (Ryan & Frederick, 1997; Ryan, Deci, & Grolnick, 1995).

Research on Basic Needs Theory

Research on basic needs theory has thus far fallen into three categories. First, diary procedures have been used to examine whether daily variations in need satisfaction predict daily fluctuations in well-being. In other words, this research has considered the within-person relations between experienced need satisfaction and well-being over time, as well as the more standard between-person relations. Second, studies have explored the relation between the pursuit and attainment of specific goal contents, on the one hand, and well-being, on the other. Whereas most theories do not differentiate goal contents, suggesting simply a positive relation between the attainment of valued goals and well-being, basic needs theory suggests that there will be a positive relation between goal attainment and well-being only for those goals that satisfy basic psychological needs. In fact, pursuit of some valent goals may be negatively related to well-being if the goals distract people from satisfaction of the basic needs. Third, we have begun to examine need satisfaction across cultures, hypothesizing that need satisfaction will relate to well-being regardless of culture.

Need Satisfaction and Well-being

In two studies (Sheldon, Ryan, & Reis, 1996; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000), multilevel modeling was used to relate variations in need satisfaction to well-being. At both the between-person (i.e., individual-difference) level and the within-person (i.e., daily-fluctuation) level, measures of basic-need satisfaction related to positive affect, vitality, and the inverse of negative affect and symptomatology. These studies confirmed both that general satisfaction of each basic need contributed to general well-being and that daily satisfaction of each basic need explained daily fluctuations in well-being over time.

In other, between-person, studies, V. Kasser and Ryan (1999) found that satisfaction of the needs for autonomy and relatedness in the daily lives of residents of a nursing home were positively related to their well-being and perceived health. Two studies (Baard, Deci, & Ryan, 2000; Ilardi, Leone, Kasser, & Ryan,

1993) have further found that employees' reports of satisfaction of their basic needs in the workplace related to self-esteem, general health, vitality, and the inverse of anxiety and somatization. Thus, within the specific settings of nursing homes and workplaces, the evidence supports the hypothesis that satisfaction of the needs for autonomy, competence, and relatedness will predict psychological health.

Aspirations and Basic Needs

The relation of goal contents to well-being has been examined in a series of studies by Kasser and Ryan (1993, 1996) and others, concerning people's aspirations or life goals. Research on these issues is also discussed in the chapter by Kasser in this volume. Kasser and Ryan suggested that there are two types of aspirations, namely, *intrinsic aspirations*, which provide relatively direct satisfaction of the basic needs, and *extrinsic aspirations*, which are more related to obtaining external signs of worth and are less likely to provide direct need satisfaction. Examples of intrinsic aspirations are affiliation, personal growth, and community contribution, and examples of extrinsic aspirations (at least within the American culture) are wealth, fame, and image. Kasser and Ryan argued that, because of the hypothesized links of intrinsic aspirations to basic need satisfaction, pursuit and attainment of those aspirations, relative to extrinsic aspirations, should be more strongly associated with well-being. Whereas people might feel happy about attaining their extrinsic aspirations, the theory suggests that pursuit and attainment of extrinsic aspiration will not contribute to eudaimonic well-being.

Kasser and Ryan (1996) had individuals rate how important, in terms of their own lives, they considered each of a set of life goals. Using items related to three intrinsic aspirations (affiliation, personal growth, and community) and three extrinsic aspirations (wealth, fame, and image), they calculated how strong each aspiration was relative to all others. The critical issue in this program of research, then, is not so much the actual strength of an aspiration, but rather, where it stands relative to the others: is it, for example, unusually strong and thus out of balance with the others?

Kasser and Ryan (1993, 1996) found that the relative strength of intrinsic aspirations was significantly positively related to well-being indicators, such as self-actualization and vitality, and were significantly negatively related to anxiety, depression, and physical symptoms. In contrast, the index for the extrinsic aspirations showed the opposite pattern of relations. One of the studies in the series used clinical indicators, finding that a strong relative extrinsic aspiration for wealth related positively to conduct disorders and negatively to global social functioning and social productivity. These studies converged on the finding that placing high importance on extrinsic outcomes, relative to intrinsic ones, was related

to poorer well-being. Furthermore, the research showed that the effects on well-being of the relative strengths of aspirations was not accounted for by people's feelings of efficacy with respect to attaining the goals.

The aspirations studies reviewed thus far examined the relative *importance* to individuals of different aspirations or life goals, whereas other studies have shown that the *attainment* of intrinsic versus extrinsic aspirations also relates differentially to well-being. For example, Kasser and Ryan (2001) found that perceived current attainment of intrinsic aspirations was positively associated with well-being, but rated current attainment of extrinsic aspirations was not. Sheldon and Kasser (1998) found that well-being was enhanced by the actual attainment of intrinsic goals, whereas attainment of extrinsic goals provided little benefit. Together, these results suggest that pursuit and attainment of valued goals does not ensure well-being. The content of the goal itself makes a difference, and we theorize that this is because some goals (which we label intrinsic) provide more need satisfaction, whereas others (which we label extrinsic) provide less need satisfaction. In fact, the pursuit and attainment of extrinsic aspirations may actually detract from need satisfaction by keeping people focused on goals that are not directly need related.

Need substitutes. According to basic needs theory, extrinsic aspirations, which can be highly motivating, are likely to develop as substitutes for basic needs (Deci, 1980) under developmental conditions in which need satisfaction is relatively unavailable. As such, they can provide collateral satisfaction, but they do not provide the direct satisfaction of basic needs that are necessary for promotion of well-being.

Kasser, Ryan, Zax, and Sameroff (1995) studied teenagers and their mothers to test this reasoning by examining the developmental antecedents of placing high relative importance on extrinsic aspirations. They found, using both teens' perceptions of their mothers and also the mothers' self-reports of their parenting styles, that when the mothers were democratic, noncontrolling, and warm (thus being supportive of basic need satisfaction), the teens placed significantly less relative importance on extrinsic aspirations. The results suggest that parenting styles that thwart children's need satisfaction lead the children to develop extrinsic aspirations, such as wealth, that are visible indicators of "worth" and may represent substitutes for basic need satisfaction. These, in turn, are expected to perpetuate the lack of need satisfaction and exacerbate the negative, ill-being consequences.

Williams, Cox, Hedberg, and Deci (2000) studied high school students to test the hypotheses (a) that need-thwarting parental styles would lead to stronger relative extrinsic aspirations and (b) that this pattern of aspirations would promote risky behaviors that could further interfere with basic need satisfaction and health. Results of the study yielded a significant relation between the students' perceiving their parents as controlling and the students' having strong relative extrinsic aspirations. Further, students with less autonomy-supportive parents and stronger extrinsic aspirations reported more health-compromising behaviors,

including the use of tobacco, alcohol, and marijuana. It does appear, therefore, that social contexts that thwart need satisfaction can lead to goals that are compensatory and may involve serious risks to physical and psychological well-being.

Need Satisfaction Across Cultures

According to the basic needs perspective, a need is by definition universal and thus the relation between need satisfaction and well-being must apply in all cultures. There can, however, be considerable variability in the values and goals held within different cultures such that the means through which people satisfy basic needs will differ among cultures. In other words, the relations between specific behaviors and satisfaction of underlying needs may be different in different cultures because the behaviors come to have different meanings in accord with culturally endorsed values and practices. Recent research on motivation has begun to explore the relations between need satisfaction and well-being across cultures.

In some studies, investigators have examined issues in Asian or European cultures that had previously been studied in North America. By finding results that are similar to those from American samples, these studies provide initial evidence in support of the cross-cultural validity of propositions from basic needs theory. For example, Hayamizu (1997) used the self-regulation questionnaire to assess the motivation of junior high school students in Japan and found that the autonomous forms of motivation were associated with positive coping whereas the controlled forms were associated with maladaptive coping, thus replicating findings from the United States by Ryan and Connell (1989). Similar results were also found in Japanese children by Yamauchi and Tanaka (1998).

Chirkov and Ryan (2001) found that Russian and American students who experienced their parents and teachers as more autonomy supportive displayed greater well-being than those who experienced them as less autonomy supportive. Although there were mean level differences in the amount of perceived autonomy support, with Russians perceiving less, both the constructs and the relations between autonomy support and well-being were comparable across cultures. The importance of this and other Russian replications of SDT studies in the United States is that traditionally Russia has been an authoritarian, or vertical culture, which has led some theorists (e.g., Miller, 1997) to argue that autonomy should not matter there. However, showing parallel functions of autonomy support versus control suggests that such cultural or historical backdrops do not negate this basic dynamic of human nature.

A recent study of workers in Bulgarian state-owned companies operating in accord with central-planning principles investigated the relations among social contexts, need satisfaction on the job, and well-being (Deci, Ryan, Gagne, Leone, Usunov, & Kornazheva, 2001). Results of this study indicated construct compa-

rability between Bulgarian and American samples and supported the model in which contextual supports predict basic need satisfaction, which in turn predicts work engagement and well-being. In other words, employees in both Bulgaria and the United States who reported greater satisfaction of the competence, autonomy, and relatedness needs while on the job were more motivated and evidenced greater psychological health.

Other research has examined the relation of aspirations to well-being in different cultures. For example, Ryan, Chirkov, Little, Sheldon, Timoshina, and Deci (1999) found in Russian college students that those individuals whose life goals were focused more on relationships, growth, and community than on wealth, image, and fame evidenced greater well-being. Of course, aspiring for specific outcomes such as accumulating wealth can have different meaning for basic need satisfaction in different cultures, so we would not necessarily expect an invariant relation between aspirations and well-being across cultures (although we would expect invariance in the relation between need satisfaction and well-being). Thus, it is interesting that the results for these Russian college students largely replicated those for Americans, even though the two cultures are so different.

Summary

Self-determination theory focuses on the dialectic between the active, growth-oriented human organism and social contexts that either support or undermine people's attempts to master and integrate their experiences into a coherent sense of self. The concept of basic psychological needs for competence, autonomy, and relatedness serves to define those contextual factors that tend to support versus undermine motivation, performance, and well-being. SDT was formulated in terms of four mini-theories that share the organismic-dialectical metatheory and the concept of basic needs. Each of the metatheories was developed to explain a set of motivationally based phenomena that emerged from laboratory and field research and focused on different issues. Cognitive evaluation theory addresses the effects of social contexts on intrinsic motivation; organismic integration theory addresses the concept of internalization especially with respect to the development of extrinsic motivation. Causality orientations theory describes individual differences in people's tendencies toward self-determined behavior and toward orienting to the environment in ways that support their self-determination. And basic needs theory elaborates the concept of basic needs and its relation to life goals and daily behaviors, specifying the essential role of needs to psychological health and well-being.

About this Book

In this volume, researchers summarize their own contributions to the field of motivation and self-determination. Some chapters represent specific extensions of SDT by formulating theoretical models that systematize relations among SDT variables, elaborate a piece of the theory, or apply the concepts to new phenomena. Other chapters use the concepts and measures of SDT to shed important light on various applied problems or areas, helping to provide solutions for profound problems facing society. A final set of chapters adds significantly to the explication of SDT by relating its concepts to the concepts of other theoretical perspectives or fields of research. Each of these chapters describes exciting, programmatic, research that is helping to provide a comprehensive and meaningful system of psychological thought.

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