WHY WE DO WHAT WE DO

Understanding Self-Motivation

EDWARD L. DECI

WITH RICHARD FLASTE

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—E. L. D.

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ONE

Authority and Its Discontents

Struggling to make their way among the stresses and pressures of life, many people have been pushed to the point of acting irresponsibly. They are alienated and disaffected, and it shows up in countless ways. Violence has become commonplace within families and out on the streets. Acting out is rampant in our schools. Insider trading and price fixing seem to be the norm. Obesity and anorexia are at near-epidemic proportions. And people face crippling debt.

Surely, individuals pay dearly for their irresponsibility, but so also do those closest to them. The irresponsibility of parents is costly to their children, and the irresponsibility of managers, doctors, and teachers is costly to their employees, patients, and students. By failing to deal effectively with the stresses and pressures in their own lives, individuals add stresses and pressures to the lives of others.

Many people today have had enough of this. They feel like the world is raging out of control, and they're fed up. They want to crack down, achieve discipline, make those around them behave better. They resonate to the writers and politicians who call for more accountability, who view the problems in terms of morality, who say it's time to tighten control.

Control is an easy answer. It assumes that the promise of reward or the threat of punishment will make the offenders comply. And it sounds tough, so it feels reassuring to people who believe things have

gone awry but have neither the time nor the energy to think about the problems, let alone *do* something about them.

In spite of the appeal of control, however, it has become increasingly clear that the approach simply does not work. Attempts to apply stricter discipline have been largely ineffectual, and the widespread reliance on rewards and punishments to motivate responsibility has failed to yield the desired results. Indeed, mounting evidence suggests that these so-called solutions, based on the principle of rigid authority, are exacerbating rather than ameliorating the problems.

An alternative approach begins not with blame and control, but with asking why people are behaving irresponsibly in the first place—why they are being violent, engaging in unhealthy behaviors, going hopelessly into debt, or ignoring their children in order to amass a fortune. This approach takes the individuals' perspective, focuses on the motivation underlying their irresponsibility, and explicates the social forces that influence that motivation. It then addresses the factors that can lead people to behave more responsibly.

This book is about human motivation, and it is organized around the important distinction between whether a behavior is autonomous or controlled. Etymologically the term *autonomy* derives from *being self-governing*. To be autonomous means to act in accord with one's self—it means feeling free and volitional in one's actions. When autonomous, people are fully willing to do what they are doing, and they embrace the activity with a sense of interest and commitment. Their actions emanate from their true sense of self, so they are being authentic. In contrast, to be controlled means to act because one is being pressured. When controlled, people act without a sense of personal endorsement. Their behavior is not an expression of the self, for the self has been subjugated to the controls. In this condition, people can reasonably be described as alienated.

The issues of autonomy and authenticity, as opposed to control and alienation, are relevant in all aspects of life. They are sometimes

Focus on bright spots

manifest dramatically, with societal implications, and other times, subtly, with only personal ramifications.

A man who resists the pressures to succumb to price fixing because he personally believes it is wrong is acting autonomously and living authentically. But if he succumbs to the pressures, and in the process, brings serious harm to thousands and adds to the negative national tone, he is being controlled and inauthentic. A woman who serves on the school board with a full sense of volition because she believes in its importance is being autonomous and authentic. But if, in spite of not wanting to, she serves because she thinks it looks good to others, she too is being controlled and inauthentic.

To the extent that a behavior is not autonomous it is controlled, and there are two types of controlled behavior. The first type is compliance, and it is compliance that authoritarian solutions hope to accomplish. Compliance means doing what you are told to do because you are told to do it. I remember years ago when the television networks began the practice of following a Presidential address with the dissenting views of opposing senators or congressmen. A friend of mine remarked, "I don't think it's right for them to do that."

"What do you mean?" I replied. "Dissenting opinions deserve to be heard."

"But he's the President," my friend protested.

Although such reverence for the President seems almost quaint today, the comment epitomizes the compliant attitude. Noted author Charles Reich spoke about "the nameless authority." This was the authority firmly lodged in my friend's ideology, leading him to think and behave compliantly.

The other response to control is defiance, which means to do the opposite of what you are expected to do just because you are expected to do it. Compliance and defiance exist in an unstable partnership representing the complementary responses to control. Where there is one, there is also the tendency for the other, even though one or the other is typically dominant within an individual. Thus, we find some people who are highly compliant, always seeming to do what

the situation demands, and we find others who seem to defy all the demands and prods of authorities. But even with these people, where one response to control dominates, the tendency for the other will still be there and could come out in subtle ways. A subordinate who is outwardly obedient to all the boss's demands might, for example, engage in secret sabotage as retaliation.

Rebellion is the outward manifestation of people's tendency to defy controls, and it coexists uneasily with conformity, which is the expression of their tendency to comply. Authoritarians of our era have relied on control, and they have gotten a healthy dose of rebellion along with the conformity they had hoped for. But what is even worse, and what has gone largely unrecognized, is that the price of compliance is itself very steep. That price—profound alienation with all of its ramifications—is detailed in this book.

Authenticity necessitates behaving autonomously, for it means being the author of one's actions—acting in accord with one's true inner self. The key to understanding autonomy, authenticity, and self is the psychological process called integration. Various aspects of a person's psyche differ in the degree to which they have been integrated or brought into harmony with the person's innate, core self. Only when the processes that initiate and regulate an action are integrated aspects of one's self would the behavior be autonomous and the person, authentic. It is in this sense that to be authentic is to be true to one's self.

An obvious and important implication of our conception of self as the integrated center out of which one acts freely and volitionally is that it is possible, metaphorically, for the cause of an action to be within the person but not within the self. No one would say that psychotic behaviors are authentic or self-determined. They are initiated by some aspect of a person's psychic makeup, but they do not proceed from what we term the self. The serial killer "Son of Sam," for example, claimed to have heard voices telling him to murder.

Clearly, the voices came from within *him,* but they did not represent aspects of his *self.*

Less clear, but perhaps even more important, are common everyday instances in which people have internalized rigid controls from society and respond compliantly to those forces within them. Such behaviors lack the qualities of freedom and flexibility that characterize autonomy and authenticity. Think about the man who goes to church not because he wants to but because he thinks he should. He is being neither autonomous nor authentic when he behaves with the experience of "having to" rather than "choosing to."

There are also instances where people defy internal pressures. Think about the young woman who internalizes her parents' demands to become a physician, and then pressures herself to take premed courses in college. Not doing well, because her self is not in it, she eventually defies the pressures by dropping out of school altogether. In spite of enjoying learning about some subjects, she drops out because she is no longer willing to submit to the internal controls. She is being neither autonomous nor authentic in her act of defiance.

Because integration is a defining aspect of self, it is quite possible for behavior to be initiated and regulated by aspects of a person that are alien to the self. Taking account of such alien aspects is necessary for gaining an understanding of autonomy versus control, and of the rebellion, conformity, and "self-indulgence" that one observes every day. It is also necessary for understanding a variety of other manifestations of alienation and inauthenticity—behaviors such as spousal abuse and the battered wife syndrome, for example.

When one understands self to be the integrated, psychological core from which a person acts authentically, with true volition, it is easy to see why so much confusion has resulted from the writings of scholarly social critics such as Christopher Lasch and Allan Bloom who claim that authenticity spawns irresponsibility. For them, self—the "author" from which authenticity emanates—is essentially

equated with person, so a focus on any aspect of a person is said to be absorption with the self.

Lasch, for example, describes American culture as having a narcissistic preoccupation with the self. He might be right about a narcissistic preoccupation in this culture, but it is not a preoccupation with the *self.* On the contrary, narcissism involves desperately seeking affirmation from *others.* It entails an outward focus—a concern with what others think—and that focus takes people away from their true self. The narcissistic preoccupation results not from people's being aligned with the self but from their having lost contact with it. They adopt narcissistic values in a controlling society because they have not had the type of psychological nourishment they need to develop an integrated and healthy self. Narcissism is not the result of authenticity or self-determination, it is their antithesis.

There is another vein of confusion that runs through the discussions of self presented by many psychologists and social critics. It concerns the relation of freedom or autonomy to independence or aloneness. This confusion is evident in Bloom's description of authenticity as people caring about themselves rather than others, and in the comment by historian Loren Baritz that when people are free, they are radically alone and lacking in emotional warmth. These views come out of the misconception that when people come into fuller contact with themselves, when they become freer in their functioning, when they unhook themselves from society's controls, they will opt for isolation over connectedness. But there is no evidence for that. Quite the contrary, as people become more authentic, as they develop greater capacity for autonomous self-regulation, they also become capable of a deeper relatedness to others.

It should be clear that authenticity cannot be understood in terms of outward behaviors alone; one must look to the motivations that underlie them. Some of the people who marched for civil rights in the sixties were being authentic; others were not. Some of the people who hang around health clubs in the nineties are being authentic; others are not. It is only by considering people's motivation for

behaving—for going to church, doing their homework, dieting, having children, or, for that matter, stealing a loaf of bread—and examining the extent to which it is autonomous that we can address issues of authenticity, and ultimately, of responsibility.

For over twenty-five years I have been exploring the concepts of autonomy, authenticity, freedom, and true self, anchoring the exploration in motivational concepts. That work, which will be drawn upon in this book, has been done largely in collaboration with Richard Ryan. The work itself is presented in scientific form elsewhere, but in this book I use the work to address some fundamental issues related to the self in a social world.

Ryan and I are not the only psychologists who have been concerned with issues like autonomy and authenticity. Psychoanalytic writers Donald Winnicott and Alice Miller, for example, have also developed theories that emphasize the concept of true self. But their work has been done within a tradition that relies on therapeutic case material to provide the substance for theory development, whereas our work has been conducted within the so-called empirical tradition, which relies on the application of statistical principles to data gathered using scientific methods.

In using the empirical approach, we have employed concepts that are applicable to people's everyday lives, as they go to work or school, as they raise children and deal with the demands of their home lives, as they face challenges and make policies. Thus, by conceptualizing authenticity in terms of behaving autonomously, it becomes a specifiable quality of human functioning, rather than just an abstract philosophical concept. That has allowed it to be moved from the realm of reasoned speculation into the realm of psychological research. It has also given people a tool for reflecting on the extent to which they are being authentic in their own lives. Similarly, the concept of alienation, which philosophically means to be separate from one's self, can also be investigated and explained concretely in terms of behaviors that are pressured and controlled. The dozens of psychological investigations we have done have given palpable meaning to these concepts.

All of us find ourselves in a variety of relationships with differentials in status, power, or control—relationships which have a structure that might be referred to as one-up/one-down. These include relationships between parents and children, managers and subordinates, teachers and students, doctors and patients. In these relationships, one party—the parent, manager, teacher, or doctor—can be understood as a socializing agent. As such, that person has the job of facilitating motivation and responsibility in the other. In a sense, these roles make people the embodiment of society and confer on them the task of transmitting its values and mores. These relationships thus play a central role in the conceptions of autonomy and control—and of authenticity and alienation—that are presented in this book.

Most adults—as parents, community organizers, coaches, workgroup leaders, or health-care providers—are in positions where they dispense advice and make demands. But they are also, at times, on the receiving end. Even billionaire corporate CEOs have to follow the orders of their physicians or spouses from time to time—as well as the echoes of their parents' admonitions that also serve to control them. People never cease struggling to find their own voice and direction amidst the forces that operate on them in their various roles where others have authority over them.

Even intimate relationships—and others where people are ostensibly equal—are permeated by issues of autonomy and control. In those relationships, however, there exists a daunting complexity in which each partner not only struggles to be autonomous but also needs to support the autonomy of the other. It is a delicate balance between feeling free and supporting another's freedom, and it is a dynamic that exemplifies how the issue of human autonomy is woven through the texture of all connectedness among people.

To become more autonomous and authentic, people must come to grips with their one-up/one-down relationships. In a sense, they must transcend them. An examination of these relationships is particularly instructive because it highlights how people in positions of

authority—who are pivotal in creating what we call the social context of the people over whom they have authority—can affect the motivation of those people. It also reveals the strategies and needs of people in one-down positions as they strive to maintain and nurture their vitality for life. It is easy to find employees who feel like "slaves," but it is harder to find active workers who, in a meaningful sense, are their own masters. And not all managers help them. It is easy to find children who feel like part of "the crew," but it is harder to find ones who feel like the captains of their own ship. And not all parents and teachers help them. These are the kinds of issues that are relevant to fostering the motivation of people in one-down positions and, more broadly, to promoting human autonomy and responsibility within society.

Most people seem to think that the most effective motivation comes from outside the person, that it is something one skillful person does to another. There are numerous prototypes. Think for example of the locker-room speech where the coach, through the power of his gifted tongue, coddles and urges, shames and exhorts, and in so doing turns wimps into champs. Or think of the orderly classroom where the concerned teacher, through the cunning use of rewards and punishments, turns little beasts into compliant learners.

To the contrary, however, all the work that Ryan and I have done indicates that *self*-motivation, rather than external motivation, is at the heart of creativity, responsibility, healthy behavior, and lasting change. External cunning or pressure (and their internalized counterparts) can sometimes bring about compliance, but with compliance come various negative consequences, including the urge to defy. Because neither compliance nor defiance exemplifies autonomy and authenticity, we have continuously had to confront an extremely important—seemingly paradoxical—question: How can people in one-up positions, such as health-care providers or teachers, motivate others, such as their patients or students, who are in one-down posi-

tions, if the most powerful motivation, leading to the most responsible behavior, must come from within—if it must be internal to the self of the people in the one-down positions?

In fact, the answer to this important question can be provided only when the question is reformulated. The proper question is not, "how can people motivate others?" but rather, *"how can people create the conditions within which others will motivate themselves?"* When we formulated the question in this way our investigations repeatedly confirmed that the orientations and actions of people in positions of authority do play an important role in determining whether those whom they supervise, teach, or care for will effectively motivate themselves—and, in fact, whether they will develop greater autonomy and authenticity. This book lays out the way these social forces operate to affect motivation and development.

Throughout life people grapple with the issue of whether they are making their own choices—whether their actions are self-determined or, alternatively, are controlled by an external agent or by some powerful force within them. Choice is the key to self-determination and authenticity, and the question of whether someone really chooses to do something is essential to most civil and criminal trials. Millions of dollars may be decided over the issue of whether a patient really did give informed consent to a medical procedure. And the decision between the death sentence and incarceration in a psychiatric hospital may depend on a jury's answer to whether the gunman *chose* to pull the trigger or was forced by some internal urge that could be labeled "temporary insanity."

The issue for society concerns the conditions—both actual and psychological—under which people should be held accountable for their actions. And of course some lawyers have picked up on this and worked to push the balance one way or the other. In the most extreme modern development, the criminal justice system has toyed with the concept of "imperfect self-defense" in which, for example, Lorena Bobbitt or the Menendez brothers do not deny that they committed terrible acts, but maintain that the commission of these acts was not volitional, that they were driven by a personal environ-

ment so painful that they saw no alternative. They aggressed as a self-defense even though they were not under immediate attack. They acted with grotesque violence, it is argued, because they *believed* they had to.

Complex and fascinating as the issues of autonomy and authenticity may be when considered at the level of cultures or interpersonal relationships, they become even richer and more stimulating when viewed solely within the individual. A master-slave relationship exists to some extent within everyone. People can regulate themselves in quite autonomous and authentic ways, or alternatively in quite controlling and dictatorial ways, pressuring and criticizing themselves. The extent to which it is one versus the other depends on the degree of resolution of that master-slave dichotomy.

Many people find this idea easy to comprehend in the case of, say, an addict, who is a slave to her addiction, or of an obsessive-compulsive, who is a slave to his compulsions. But the dynamics are just as relevant for many other behaviors. The dynamics begin as interpersonal processes in the home, at school, and elsewhere, and are taken in by people in ways that are more healthy, or less. Understanding these processes—the intrapsychic processes as well as the interpersonal ones—allows meaningful answers to important questions. It is an understanding that can help people maintain smoking cessation, nurture an unflagging interest in learning, and perform well in sports. It is also an understanding that is essential for locating and anchoring one's true self amidst the seductive and coercive tides of modern culture.

The aims of this book are simply stated: They are to use a comprehensive body of motivational research to examine the relation between autonomy and responsibility and to reflect on the issue of promoting responsibility in an alienating world. The book is full of hope, for it speaks to what we can do for ourselves, and what we can do for our children, our employees, our patients, our students, and our athletes—indeed, what we can do for our society. The pre-

scriptions it offers are not panaceas, and they are not easy. But they are relevant to each of us in managing ourselves, and they apply to the roles of teacher, manager, parent, doctor, and coach. Indeed, they are relevant and important for everyone in policy-making positions. The prescriptions begin with an understanding of people's motivation—of the extent to which it is autonomous—and they involve using that understanding to manage ourselves more effectively, to relate differently to others, and to make more meaningful social policy.

Like the works by Lasch, Bloom, Baritz, and others, this book decries much of the state of things: The insidiousness of advertising that hooks people's egos; the way people in dominating positions control and demean the people with whom they interact; the incredible emphasis on instrumental thinking (of seeing everything as a means to an end); the overvaluing of material possessions; and the erosion of community giving. But in this book, social criticism is secondary; it is more implicit than explicit. What is primary is a delineation of the processes through which society's fragmentation affects the lives of its members and a consideration of what can be done about it.

In studying authenticity and alienation, Ryan and I have used scientific methods to explore their motivational bases. These methods were developed largely by people who believed in what Aristotle called the efficient causation of behavior, which essentially means that antecedent events force one to behave. But there is no reason why the methods cannot be applied to the study of concepts like psychological freedom that had previously been addressed primarily by humanists and philosophers without the aid of scientific methods.

Although use of the empirical approach has the great advantage of allowing confirmation or disconfirmation of theoretical hypotheses, it also has a substantial disadvantage: It is an enormously slow and methodical process. For more than a quarter century, the results of dozens of experiments and field studies—performed in the psychology laboratory as well as in homes, business, schools, and clinics in this country and abroad—have accumulated. In this book, I use

the results of those studies as a basis for discussing human freedom and responsibility. As such, the social criticisms and prescriptions contained herein represent extrapolations and speculations. What began as statistical inferences from systematic observations is here used to shed light on broad human problems.

Our study of personal autonomy—of authenticity and responsibility—has focused on motivational processes. By examining behaviors that can be properly described as autonomous and exploring the motivational processes through which they are regulated, we have been able to detail both the social-contextual antecedents of these behaviors and their consequences. These matters are at the heart of this book. They speak to why we do what we do, and they provide a basis for addressing concrete and practical questions such as how to promote responsible behaviors—like effective work performance, efficient and enjoyable learning, and long-term healthy behavior change—that benefit society as well as its individuals.

social-contextual antecedents of authentically autonomous behaviors, + their consequences

PART ONE

The Importance of Autonomy and Competence

TWO

I'm Only in It for the Money

Early Experiments on Rewards and Alienation

Visit any urban zoo, even a very progressive one, and you may well witness the familiar seal act. At the Prospect Park Zoo in Brooklyn, for instance, the young feeders enter the seal area at a designated hour, carrying their bags of fish, and proceed to create a spectacle that delights the youngsters and their parents who are crushed up against the fence watching. The feeders are not there as ringmasters to provide entertainment, but doing their job inevitably yields the bonus of a good show. As they drop each fish into the mouth of a ravenous seal, the seal will do almost anything to keep the supply coming. Clap their flippers together; wave to the crowd; arch their bodies like mermaids in a fountain. It's all there, and the spectators love it.

These feeders are extremely effective in the use of rewards to elicit desired behaviors, and such spectacles seem to attest to the power of rewards as a preeminent motivational technique. "If it works that well with the seals," a person might think, "it ought also to work with my children, and with my students and employees." The message seems simple: Reward the desired behavior, and there is increased likelihood that the behavior will be repeated.

As it turns out, the issue is really not so simple. And you can get a glimpse of the problem even with the seals. Just as soon as the feeders disappear, so too do the entertaining behaviors. The seals no longer have interest in clapping their flippers together or waving to

the crowd. Rewards may increase the likelihood of behaviors, but only so long as the rewards keep coming.

With our children, students, and employees we typically hope that the desired behaviors will continue even if we are not there to toss them a fish. We'd like them to keep learning, to keep producing, to keep doing their share of housework, and the question we face is how to promote such persistent self-direction rather than the irresponsibility or alienation that seems so prevalent in today's world. It is a big question indeed, and formulating the answer begins with an interesting concept from the work of Harry Harlow, a pioneering psychologist who spent most of his career studying rhesus monkeys.

Monkeys are an energetic lot, frequently engaged in all manner of playful antics. They run around, poke each other, throw things, make faces, and seem to have a very good time. But not all of their energy and attention goes to idle play. Harlow placed monkeys, one at a time, in a cage that contained a kind of puzzle apparatus—a series of hasps, hooks, and hinges. The monkeys took great interest in this mechanical puzzle. They would figure out how to open it; then how to close it up again. And they would repeat their actions many times. There were no tangible rewards for the behavior, and yet these naturally inquisitive monkeys were focused and determined. What's more, they seemed to be enjoying themselves. Harlow used the term intrinsic motivation to explain why the monkeys had spent many hours working on the puzzles, where the only possible "reward" seemed to be the activity itself.

Although it's important not to go too far with animal-human comparisons, the spontaneous, though clearly constructive, behavior of those monkeys inspires one to think about similar behaviors in young children. A child's curiosity is an astonishing source of energy. Children explore, manipulate, and question; they pick things up, shake them, taste them, throw them, and ask, "What's this?" Every bit as interested in a cardboard box as in a gleaming new plastic marvel, they try things, bend things, and transform one thing into another. They seek the novel and they are eager to learn. Clearly, something in them is alive and vital; something in them wants to

master the challenges of their lives. The term intrinsic motivation seems to apply just as well to these children as it did to Harlow's monkeys.

For young children, learning is a primary occupation; it is what they do naturally and with considerable intensity when they are not preoccupied with satisfying their hunger or dealing with their parents' demands. But one of the most troubling problems we face in this culture is that as children grow older they suffer a profound loss. In schools, for example, they seem to display so little of the natural curiosity and excitement about learning that was patently evident in those very same children when they were three or four years old. What has happened? Why is it that so many of today's students are unmotivated, when it could not be more clear that they were born with a natural desire to learn? It was this disturbing issue that prompted me to begin studying motivation in an attempt to understand more about the interplay of authenticity and the social world. After all, what could be more authentic than the curiosity and vitality of a normal three-year-old?

In the early 1960s, I had started studying psychology as an undergraduate at Hamilton College in Clinton, New York. It was the alma mater of B. F. Skinner, the renowned behaviorist whose pioneering work had led to the development of behavior modification programs and the systematic use of rewards—or, in the vernacular of behaviorism, reinforcements. At Hamilton, I was steeped in the principles of behaviorism: Deliver a reward for a specific, identifiable behavior and do so as soon after the behavior as possible; focus on rewards rather than punishments; and be consistent in delivering the rewards. These, of course, are precisely the principles that worked so well with the seals in Prospect Park.

The principles of behaviorism appeal to many psychologists and laymen alike; they fit philosophically with the general idea that striving for rewards—for financial success in particular—is the American way. They also fit with the increasing call for more control within society, and with the view taken by so many educators that the way to get students to learn is through the use of grades, gold stars, and

other rewards. Tell them what they should do and then reward them for complying. The answer to how to motivate children's learning, in this view, is quite straightforward: Use the appropriate reward contingencies.

Although the fine points of the behavioral approach are somewhat complex, its message, as behaviorist philosopher Barry Schwartz pointed out, is rather simple: People are fundamentally passive and will respond only when the environment tempts them with the opportunity to get rewards or avoid punishments.

In 1969, as a doctoral student in psychology at Carnegie-Mellon University in Pittsburgh, I became increasingly captivated by the question of what happens to people's curiosity and vitality over time. Although I had first formulated the question with respect to children's learning, the more I thought about it the more I realized that the question has relevance in many other domains as well. The behaviorist's answer to the question would be that any lack of motivation could be attributed to inadequate reward contingencies, but I found that answer noncompelling, even disturbing.

Behaviorist dogma assumes that there is no inherent motivation to learn, but this does not square with the fact that young children—in preschools and at home—ceaselessly explore and manipulate the objects they encounter. They challenge themselves to become competent, apparently just for the enjoyment of doing it. Children are not passively waiting to be drawn into learning by the offer of rewards but rather are actively engaged in the process of learning. Indeed, they are *intrinsically motivated* to learn.

The behaviorist's assumption that there is no inherent motivation may seem to have validity in that many people act unmotivated. In a variety of life situations, for example, people can be found doing as little as they can get away with. Even in schools, many children are passive, lacking the interest and excitement for learning that seems so natural in three-year-olds. That, of course, was the very discrepancy that left me wondering about intrinsic motivation and what happens to it over time.

My doubting the behaviorists' dogma only added to my resolve

that the questions so many people ask—namely, "How do I motivate people to learn? to work? to do their chores? or to take their medicine?"—are the wrong questions. They are wrong because they imply that motivation is something that gets done to people rather than something that people do. A more fundamental and useful way to think about the issue involves accepting the concept of intrinsic motivation, which refers to the process of doing an activity for its own sake, of doing an activity for the reward that is inherent in the activity itself. Intrinsic motivation describes perfectly the learning behavior of young children, and it also seems to have relevance to the behavior of all of us who engage in a variety of activities (like leisure pursuits) simply for the feelings of excitement, accomplishment, and personal satisfaction they yield. Thinking about this concept then leads one to ask the question of what kinds of experiences affect people's intrinsic motivation, often leading to its being undermined.

Robert Henri, perhaps the greatest American art teacher of the twentieth century, once captured the essence of being intrinsically motivated when he wrote: "The object of painting a picture is not to make a picture—however unreasonable this may sound. The picture, if a picture results, is a by-product and may be useful, valuable, interesting as a sign of what has passed. The object, which is back of every true work of art, is *the attainment of a state of being*, a high state of functioning, a more than ordinary moment of existence." Henri's point, quite simply, is that being intrinsically motivated has to do with being wholly involved in the activity itself and not with reaching a goal (whether the goal be making money or making a picture).

Most of the learning of preschool children is done not because it is instrumental for achieving something else, but because the children are curious, because they want to know. Clearly, their learning is intrinsically motivated, and their intense involvement with learning represents a prototype of the "more than ordinary moment of existence."

Although the idea of intrinsic motivation for learning seems to capture the truth of, say, preschool children's activity, the seeming fragility of this intrinsic motivation is quite haunting. And this seem-

ing fragility, of course, relates directly to the question of why there is not more intrinsic motivation for learning in older children. In thinking about it back in 1969, I had the fleeting—and surely blasphemous—thought that maybe all the rewards, rules, and regimentation that were so widely used to motivate schoolchildren were themselves the villains, promoting not an excited state of learning but a sad state of apathy.

Impelled by the possibility that I was onto something, I was finally able to formulate my question in a way so I could run an experiment to answer it. The question was this: "What happens to people's intrinsic motivation for an activity when they receive an extrinsic reward for doing the activity that they had previously been quite willing to do without the reward?" I decided to use a monetary payment as the reward to start what would turn into a major research program.

An appealing aspect of this inquiry, from the point of view of psychological science, was that I really had no idea if my suspicion about the deleterious effects of rewards was on the mark. Clearly, the dominant academic "wisdom" of the time was that the exact opposite would be true. Maybe intrinsic motivation and extrinsic rewards would combine in a positive and productive way, rather than a negative, antagonistic way. Maybe, for example, when people get an extrinsic reward for doing something they find intrinsically interesting, they enjoy the experience even more and want to keep doing it. If that turned out to be true, I would have to look for a different avenue into the issue of why so many students are not motivated to learn.

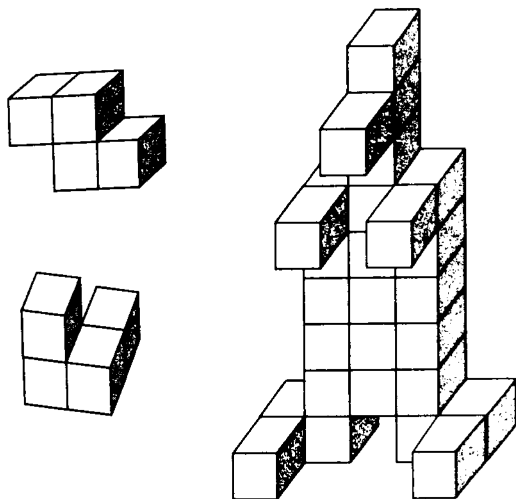
With the help of Victor Vroom, my mentor at Carnegie-Mellon, I developed a general research design—what is called an experimental paradigm—for exploring the question of how rewards affect intrinsic motivation. The work would take place in the psychological laboratory, which is a small, neutral room with few adornments where everything that happens can be controlled or manipulated by an experimenter. It's an artificial environment, of course, but we psychologists believe it provides the possibility for understanding the

real world through analogy. If we can make something happen in the lab, using stimuli (called independent variables) that occur in day-to-day life, we assume that the same phenomenon probably also occurs out there in the real world. The advantage of a lab is that it allows us to ask very specific questions and observe relatively definitive answers. Eventually, if we find interesting results in the lab, we can venture into the field—that is, into schools, homes, workplaces, and clinics—to see if the findings hold up there.

To do the experiment, I needed an experimental task, something that the college student subjects would surely find intrinsically motivating. Fortuitously, I wandered into the office of a fellow graduate student one day and discovered a set of oddly shaped blocks, a puzzle called Soma, just produced by Parker Brothers. "The World's Finest Cube Puzzle Game" is how it was described on the instruction booklet. The puzzle had seven pieces, each shaped differently, and when fitted together in a particular way, the pieces formed a three-inch cube. In addition, there were thousands of different ways the pieces could be assembled to form various patterns. One such pattern shown in the booklet was called "Sam's Sitting Dog," another, "The Couch," a third, "The Airplane," and so on. Two of the seven pieces and the pattern for the sitting dog are shown on the next page.

Some of the shapes were easy, others were very difficult. The fun came in using the various pieces to reproduce the designs, and when that happened the feeling of accomplishment was quite palpable. Once someone gets started with the puzzles, it is tough to stop. I immediately found myself in the puzzles' thrall, completing one design after another. In fact, I started solving them in my mind. It seems that once you become familiar enough with them, you can actually assemble them in imaginary space even though on first encounter they may seem nearly impossible.

Soma was perfect because it allowed so much flexibility for experimental purposes: The same pieces could form many different designs; the difficulty level could be varied as needed; and impossible ones could be made to look easy. But most important, of course, they were challenging and interesting, and pilot testing demonstrated that



students loved them and would do them just for fun. In the experiment, subjects were shown several configurations that had been drawn on sheets of paper, and they were asked to try to reproduce the designs, in three-dimensional space, using the actual puzzle pieces.

The paradigm called for two groups of subjects: one group would receive extrinsic rewards for solving the puzzles (a buck apiece—and a buck was still worth something in 1969), and the second group would receive no rewards. The central question was: What will happen to the intrinsic motivation of the rewarded subjects relative to that of the nonrewarded subjects? Will it increase while working on the puzzles for pay, will it remain unchanged, or will it decrease?

Measuring the subjects' intrinsic motivation turned out to be a tricky matter. Here's how it was done: During the experiment, subjects sat at a table working intently on the Soma puzzle for half an hour or so. Then, the experimenter would tell them the puzzle-solving session was over, that he had to leave the room for a few minutes to enter their data in the computer and let the computer print out a

questionnaire for them to complete. In actuality, the experimenter always departed for exactly eight minutes, and an essential part of the experiment concerned what the subjects did during that time. On the table near the students, there were some magazines intended to capture a variety of interests: *The New Yorker*, *Time*, and so on. During their time alone, the students could continue with the puzzles, read a magazine, or, I suppose, daydream. After the eight minutes had elapsed the experimenter returned with the questionnaire.

The most important period in this experiment wasn't the time the experimenter spent in the room, but the time he spent out of it. It was those eight minutes when the subjects could do as they pleased, waiting for the experimenter to return. As they waited, they were secretly observed to determine how much of the eight minutes of free-choice time they spent playing with the puzzles. The idea was that if they spent their free-choice time playing with the Soma, when no rewards would be forthcoming and when there were interesting alternative activities, then they must have been intrinsically motivated for the puzzles.

As it turned out, those students who had been rewarded monetarily for doing the puzzles were far less likely to play with them "just for fun" in the free-choice period. Stop the pay, and stop the play. It seems that once having been paid, these subjects were only in it for the money. And that was with an activity they had initially been quite willing to do without rewards. Introducing monetary rewards seems quickly to have made students dependent on those rewards, shifting their view of the puzzle from a satisfying activity in its own right to an activity that is instrumental for obtaining rewards. Unsettling though this finding may have been, from a scientific perspective it was very encouraging. Something important seemed to be emerging.

In a follow-up, I worked with the same general paradigm, but I took it into the field. I persuaded the editor of the school newspaper to put me in charge of headline writing so I could take an interesting activity students had been doing for free and start paying some of them for doing it. Then I could measure their continuing motivation

when, by golly, the funds had all dried up. Happily for me, this field experiment showed results comparable to those from the Soma-puzzle study: Once people started getting paid, they lost interest in the activity. Then, when the rewards stopped, they did not perform as well.

One day I excitedly told a friend about the experiments, and a few days later he gave me an old Jewish fable. The fable went something like this:

It seems that bigots were eager to rid their town of a Jewish man who had opened a tailor shop on Main Street, so they sent a group of rowdies to harass the tailor. Each day, the ruffians would show up to jeer. The situation was grim, but the tailor was ingenious. One day when the hoodlums arrived, he gave each of them a dime for their efforts. Delighted, they shouted their insults and moved on. The next day they returned to shout, expecting their dime. But the tailor said he could afford only a nickel and proceeded to hand a nickel to each of them. Well, they were a bit disappointed, but a nickel is after all a nickel, so they took it, did their jeering, and left. The next day, they returned once again, and the tailor said he had only a penny for them and held out his hand. Indignant, the young toughs sneered and proclaimed that they would certainly not spend their time jeering at him for a measly penny. So they didn't. And all was well for the tailor.

In doing research, it is important to remember that experimental findings are always vulnerable to refutation, no matter how perfectly devised and executed the experiment and no matter how persuasive the results. So any time someone finds a new, counterintuitive, or controversial result it is a good idea to try to obtain the result again. After all, in using the methods of statistical inference to reach a conclusion about people in general from a small sample of them there is always a small possibility of coming up with the wrong answer, just by chance, if nothing else. After I moved to the University of Rochester, I replicated the study and found the same results: Monetary rewards undermined people's intrinsic motivation.

This finding, of course, did not go down easily in some quarters of research psychology. After all, the assertion that monetary re-

wards can be counterproductive was almost brazenly iconoclastic. Neither was the position met with open arms by many people outside psychology. Indeed, even as investigators at other universities replicated and extended my results using other rewards (prizes, good-player awards, and food treats) and other-aged subjects (preschool children and high school students), sharp critiques began to appear in various journals and periodicals.

Obviously, money constitutes a powerful force. Certainly there can be no doubt that it motivates. One need only look around (even at oneself) to see how willing people are to engage in a wide range of activities for money. They drag themselves to work at jobs they hate, because they need the money. They get hooked on gambling, sometimes losing everything they own, because of the irrational belief that they will hit the big one. They take on extra assignments that unduly stress them, perhaps to the point of making them sick, because of the extra money. And they engage in a wide variety of nefarious activities that promise handsome rewards. Sure, money motivates, but that's not the point. The point is that while money is motivating people, it is also undermining their *intrinsic* motivation and, as we would later discover, having a variety of other negative effects as well.

In 1968, psychological theoretician Richard deCharms had published a book discussing the importance of a concept he called personal causation. He believed that the key to intrinsic motivation is the desire to be the "origin" of one's own action rather than a "pawn" manipulated by external forces. Using his line of thinking, the experiments seemed to suggest that rewards had undermined subjects' feelings of personal causation, and thus their intrinsic desire for mastery. Rewards seemed to turn the act of playing into something that was controlled from the outside: It turned play into work, and the player into a pawn.

Let's assume for a moment that these experiments have indeed isolated an important phenomenon and consider how these experi-

mental results are pertinent to the kinds of issues raised in the first chapter. Of course you could appropriately take exception to my extrapolating from a few simple experiments conducted in the psychology laboratory to speak about such problems, but let's leave that objection aside for the moment because in time many other studies were done in many different settings that would buttress these results.

The experiments had shown that when subjects began getting paid for working on interesting puzzles, they lost interest. Although they would continue to do the puzzles for money—as so many people continue to do all manner of activities for money—their relation to the activity had become strained and instrumental. Think about it. A strained, instrumental relationship to an activity is a sure sign of the state called alienation. I had, in essence, promoted alienation in these subjects during a short and seemingly innocuous experiment. If that could be so, what must money be doing to people in the real world where it exerts so much power?

People today work long hours. According to the Economic Policy Institute, the average work year is now 158 hours longer than it was when this first intrinsic motivation experiment was performed. An extra month has been tacked on to what in 1969 was considered a full-time job! It is extraordinary really. Imagine that a king were to tell his subjects that they had to start working an additional 158 hours each year. Surely there would be a palace coup unless his army was very strong. But that increase has in fact happened in our society in a relatively short time, and no coup has occurred. Indeed, there has been barely an objection; only further alienation.

The power that has brought this about is not coercion—it is not a king's army—it is the seductive capacity of the regal dollar, along with the socialization processes within our society that keep the dollar enthroned. Money is indeed a seducer, and it seems to be closely related to the nameless authority that Charles Reich spoke about. When, for a short time during the sixties, large numbers of people rebelled against the traditional authority, the power of money seemed greatly diminished. But that era has passed, and the ex-

panded work year has brought with it countless stresses and real costs to the individual.

Our experiments provide a scientific means of beginning to detail those costs quite specifically. The first cost is that people lose interest in many of the activities they perform. They begin to see the activities merely as instruments for attainment of monetary rewards, so they lose the excitement and vitality they once had for the activities. In an important sense, this finding is consistent with the idea that the people are losing contact with their inner selves when they become controlled by monetary rewards. Thus, these simple experiments may have begun to point to a profound phenomenon at the nexus between the inner person and the proddings of society.

When people talk about control, they usually mean coercion—they mean controlling through power and threats. Most people find it easy to accept that the use of force can have a range of negative consequences. Dictators control, and dictators are despised. But money also controls. When people say that money motivates, what they really mean is that money controls. And when it does, people become alienated—they give up some of their authenticity—and they push themselves to do what they think they must do. One take on the meaning of alienation is that it begins as people lose touch with their intrinsic motivation, with the vitality and excitement that all children possess, with the doing of an activity for its own sake, with the state of being that Robert Henri called a more than ordinary moment of existence.