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Handbook
of Eudaimonic
Well-Being

 Springer

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ISSN 2468-7227

ISSN 2468-7235 (electronic)

International Handbooks of Quality-of-Life

ISBN 978-3-319-42443-9

ISBN 978-3-319-42445-3 (eBook)

DOI 10.1007/978-3-319-42445-3

Library of Congress Control Number: 2016951487

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Internal Motivation, Instrumental Motivation, and Eudaimonia

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Barry Schwartz and Amy Wrzesniewski

8.1 Introduction

Every art and every inquiry, and similarly every action and pursuit, is thought to aim at some good, and for this reason the good has rightly been declared to be that at which all things aim...Now, as there are many actions, arts, and sciences, their ends are also many; the end of the medical art is health, that of shipbuilding a vessel, that of strategy victory, that of economics wealth.

—Aristotle, *Nicomachean Ethics*, I.1

In the golden era of learning theory in psychology, in the middle of the twentieth century, research methods were developed for studying the behavior of rats and pigeons that were meant to produce general principles that applied to the instrumental, goal-directed behavior of all organisms (Schwartz, 1978; Skinner, 1953). Rats would press levers, run down alleys, and negotiate mazes, for food or water. Pigeons would peck at illuminated disks, or keys. The central idea behind these methods was that since the relation between the response and the reward—the means and the end—was completely arbitrary, it would

be representative of all instrumental, goal-directed activity. Rats pressing levers for food could be a stand-in for people working in factories or offices for their paychecks.

An assumption that helped justify these methods was that the purely instrumental relation between means and ends is what characterized most human activity. Yes, some means might be more pleasant than others (rats seemed to “enjoy” running in exercise wheels, for example), but this was an incidental fact, a mere detail, that got in the way of understanding the far more general relation between means and ends. Without a paycheck, people wouldn’t work. With a paycheck, it hardly mattered what work people did. In making this assumption, learning theorists were following in the hallowed tradition of Smith (1776), the father of modern economics, and Frederick Winslow Taylor (1911/1967), the father of what came to be called “scientific management” (see Schwartz, Schuldenfrei, & Lacey, 1978 for elaboration).

We think this view of the relation between means and ends continues to dominate modern thinking about human motivation. To get CEOs to serve the interests of the company, give them company shares as a significant part of compensation. To get students to work hard in school, give them frequent tests and grades—and even better, rewards like pizza parties—if they do well. To get car salespeople to put all their effort into closing deals, pay them commissions. And to get

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doctors to do all, and only, what is necessary for high-quality patient care, pay them bonuses for good, but efficient, medical outcomes.

There is little doubt that much human activity is instrumental in just the way that rat lever-pressing and pigeon key-pecking is. But pure, arbitrary instrumentality is not the only possible relation between means and ends. Aristotle, for example, had quite a different view, as evidenced by the quote that opens this chapter, taken from the very beginning of his masterwork of moral philosophy, *Nicomachean Ethics*. Aristotle thought that most human activities had ends, or goals, that were specific to them. It was the human *telos* to pursue excellence, and what "excellence" meant was very much specific to the activity in question. The *telos* of the builder was to produce excellent buildings. The *telos* of the doctor was to cure disease. The *telos* of the athlete was to produce outstanding athletic performances. Of course, in each of these cases, the performer might earn a livelihood, but it was earning a livelihood that was incidental, and achieving the activity-specific *telos* that was central to human activity, at least among people who rightly understood the point of their activities.

In *Nicomachean Ethics*, Aristotle identifies happiness as the final *telos* of all human activity. But what he means by happiness is not pleasure, or material acquisition, but flourishing—*eudaimonia*. And *eudaimonia*, he says, derives from—indeed, *is*, "good activity" or excellence, rather than amusement. The happy life, Aristotle tells us, is the virtuous life, and the virtuous life requires exertion, the strenuous pursuit of excellence, and does not consist in amusement. Yes, many of the things that people do are instrumental. They are means to an end. But the ultimate end to which all activities lead is *eudaimonia*, and that requires excellences that are intimately related to the activities that pursue them.

Aristotle's teleological framework for understanding human nature is probably foreign to most modern students of human behavior. But with a little bit of translation, his ideas can be related to modern conceptions. In this chapter, we will try to do the translation, specifically in relation to human motivation. Partly in response

to the instrumentalist assumptions of learning theory, it has become a commonplace to distinguish between "intrinsic" and "extrinsic" motivation. Extrinsically motivated activity is directed to some other end. It is a means to that end. It is instrumental, like the rat's lever press. Intrinsically motivated activity is an end in itself. Extrinsically motivated behavior is work; intrinsically motivated behavior is play. Extrinsically motivated behavior is all about achieving some instrumental goal; intrinsically motivated behavior *is* the goal (see Deci, 1975; Deci & Ryan, 1985; Lepper, Greene, & Nisbett, 1973; Pink, 2011).

We believe that while the above distinction between intrinsic and extrinsic motivation offers a much richer view of human motivation than the purely instrumental view that it replaced, it fails to capture important distinctions that should be made between various types of relations between motives, actions, and consequences. In this chapter, we will try to make some of these distinctions and to clarify what the terms "intrinsic" and "extrinsic" ought to mean.

Psychologists have long realized that to understand human behavior, we need to know not only what someone does, but why he or she does it. Motives matter. Different types of motives have different effects on behavior even when the motives seem to point in the same direction. For example, Lepper et al. (1973) showed that giving nursery school children awards for drawing made them less interested in drawing, which they liked to do, and led them to draw less interesting pictures than if they weren't given awards. And Deci (1971, 1975) showed that giving college students money for solving puzzles made them less interested in working on such puzzles, which they enjoyed, later on, when money was not available. Similarly, Gneezy and Rustichini (2000) showed that adding a fine to the social sanctions already associated with parents coming late to pick up their children from nursery school weakened those social sanctions and increased lateness rather than strengthening those social sanctions and reducing lateness. In the first two cases, it might be said that the rewards that were added to the already enjoyable activities of drawing and puzzle-solving instrumentalized the activities,

turning “play into work,” and thus made the activities less enjoyable. Analogously, the fine for lateness instrumentalized that activity and thus gave parents permission to come late, since they were “paying” for it.

What *should* happen to the performance of demanding, effortful activities when intrinsic and extrinsic motives are combined? Logic would suggest that if you have one reason for doing something, adding a second reason to do the same thing would be even better, rendering motivation more tenacious, follow-through stronger, and outcomes better (see Cerasoli, Nicklin, & Ford, 2014, for a meta-analysis of this very question). Schools and workplaces are full of systems that attempt to tap people’s intrinsic motives to act (e.g., because engaging in the activity is the moral, interesting, or meaningful thing to do) while also providing rewards intended to spark extrinsic motives to pursue the same acts (e.g., grades, bonuses, promotions, etc.). Yet, as shown by the studies of nursery-school children’s drawing and nursery-school parents coming to fetch their kids, and in a direct challenge to this assumption, a substantial body of research suggests that far from boosting motivation, holding extrinsic motives can undermine whatever intrinsic motives may have been operating, leading to drops in overall motivation, persistence and performance (Deci, Koestner, & Ryan, 1999; Frey & Oberholzer-Gee, 1997; Frey, 1994; Kiviniemi, Snyder, & Omoto, 2002; and see Murayama, Matsumoto, Izuma, & Matsumoto, 2010 for evidence on the neural basis of this undermining effect). In short, this work suggests that salient instrumental incentives trigger extrinsic motives, which act to undermine motivation that would otherwise be based in the value and reward of doing the activity or engaging in the act for the sake of objectives that are intimately connected to the act itself. This effect, labeled the “motivational crowding out effect” by economists (Frey, 1994) and the “overjustification effect” by psychologists (Lepper et al., 1973), has been demonstrated across a range of experimental contexts (Deci et al., 1999), though there are some arguments that question both the reliability and the interpretation of such studies (Cerasoli et al.,

2014; Eisenberger & Cameron, 1996; Lacetera, Macis, & Slonim, 2012).

Much of the existing literature in the psychology of motivation treats intrinsic and extrinsic motivation as if there is a stark categorical distinction between them (but see Gerhart & Fang, 2015). Behavior is either intrinsically motivated or extrinsically motivated. In addition, intrinsic motivation is usually associated with the pleasure that derives from simply engaging in the activity, as if the consequences don’t matter. That is, the nursery school kids love to draw whether or not the end result is a nice picture. It is worth noting that this definition of intrinsic motivation rules out the possibility of being intrinsically motivated to do anything that is *not* pleasurable; an untenable definitional state of affairs to which we will return. What is more, researchers also often use the consequences of behavior as an indication of what motivates the behavior (e.g., if a student gets an “A” on an exam, she is assumed to be motivated by the grades). So, for example, an instrumental consequence may be added to a situation in an effort to improve performance (e.g., a gift certificate for high scores on a standardized test). If that consequence influences behavior (e.g., students do better on the test), researchers conclude that instrumental incentives work, and infer (since the incentives worked) that the behavior was instrumentally motivated in the first place. This presumption renders impossible the ability to discern intrinsic motives in cases where actions have produced any sort of instrumental outcome. Finally, it is generally assumed that intrinsic motivation leads to better performance than extrinsic, though interestingly, nearly every intervention designed to increase motivation focuses on the extrinsic. Though a recent meta-analysis suggests that extrinsic rewards can boost performance even when intrinsic motivation is present (Cerasoli et al., 2014), whether rewards *increase* intrinsic motivation (unlikely, in our view, as suggested by Deci, Koestner, & Ryan, 1999) or act as a supplementary boost to action is still somewhat uncertain.

We think that each of these assumptions is mistaken in ways that lead to oversimplification of what is an extremely complex relation between

motives, actions, and consequences. In this chapter we attempt to clarify some of these relations and delineate some important distinctions, leading to a series of questions for both theoretical and empirical analysis.

Let us begin our discussion with a prototypical example. Imagine a second-grade teacher who enjoys her work and is good at it. Her work produces a family of consequences for her. She gets pleasure from the minute-to-minute, day-to-day character of her job, and from interacting with young kids. She gets satisfaction from knowing that she is an excellent teacher—that she does the job well. She gets satisfaction from evidence that kids are learning and are enthusiastic. She enjoys respect and admiration from her peers. She enjoys respect and admiration from parents. She enjoys respect and admiration from society at large. She appreciates her nice salary and benefits as well as her job security. She is pleased that she can leave her workplace at three in the afternoon. She likes that she has lots of vacation days and the entire summer off.

Thus, this teacher's work has multiple consequences. Which of them are also motives? We can identify several possibilities: pleasure in the activity, pursuit of excellence, status and acclaim, salary, job security, and benefits, and the desire to have a positive impact on others. Which of these motives count as "intrinsic"? And what are the criteria for establishing a motive as intrinsic?

8.2 A Conceptual Framework for Understanding Intrinsic Motivation

We think the questions above can be profitably addressed from an Aristotelian framework, or more specifically, from a framework developed by neo-Aristotelian philosopher Alasdair MacIntyre. In *After Virtue* (1981), MacIntyre introduces the idea of a "practice," which he defines as "any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are

appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended" (p. 175).

This definition is complex, and has several important features that we will try to elucidate. Complexity is one feature. The game of chess is a practice, whereas tic-tac-toe is not. The game of football is a practice, whereas throwing a football accurately is not. Farming is a practice, whereas planting turnips is not.

The pursuit of excellence is a second feature. People who engage in practices strive to be good at them. Moreover, what constitutes excellence is itself defined by standards internal to the practice, largely established by practitioners themselves. Thus, one is perfectly free to say something like "I don't know much about art, but I know what I like." But one is not entitled to expect that anyone (especially artists) will care what you like or interpret your likes and dislikes as an indication of the quality of the art.

The concept of excellence is necessarily imprecise. First, if MacIntyre is right, excellence is a moving target, since as practices develop, the standards of excellence among practitioners change. And second, each practice has standards of excellence that are peculiar to it. There is no abstract standard of excellence that unites instances of excellence across different practices. Moreover, there is room for disagreement, both among practitioners and between practitioners and non-practitioners, about what excellence means. Nonetheless, however imprecise "excellence" may be, in MacIntyre's (and Aristotle's) telling, only activities that have standards of excellence can be practices.

A third feature of practices, most important for purposes of this chapter, is that practitioners pursue goods or ends that are internal to the practice itself. In other words, there is an intimate relation between the ends of the practice and the means to achieve those ends. For our hypothetical second-grade teacher, educating students and engendering in them enthusiasm for learning are internal to the practice. Salary and benefits, job security, and summers off are not. These ends

could be achieved in other ways, through any number of other occupations; the relations between her teaching and these ends are purely instrumental. Not even praise and admiration from parents and peers is unambiguously internal to the practice. Perhaps praise for excellence *as a teacher* is; praise for excellence more generally is not.

Finally, in MacIntyre's conception, practices and the goods toward which they are aimed develop. As people continue to practice—as farmers, chess players, biologists, or psychologists—standards of excellence change. What it means to be an excellent psychologist in 2015 is likely quite different from what it meant to be an excellent psychologist in 1965. The line between what is and is not a practice is sometimes fuzzy, and some activities may be practices at one point in their development but not at another. But we think the differences between prototypical practices and mere instrumental activities are clear. And we also think MacIntyre's framework enables us to discern whether a given participant in a practice is a true practitioner or not.

It is worth noting that there is no mention of pleasure in MacIntyre's account of practices. Of course, our second-grade teacher may derive pleasure from her day-to-day activities, but that is just icing on the cake. As Aristotle (1988, p. X.3) writes, "there are many things that we would be keen about even if they brought no pleasure... [And] we should choose these even if no pleasure resulted." Nussbaum (1990) observes in commenting on this passage that, "even if in fact pleasure is firmly linked to excellent action as a necessary consequence, it is not the end *for which* we act" (p. 57). In other words, not every consequence of an act is a motive for the act. What makes the second-grade teacher's activities "intrinsically motivated" is that she is pursuing aims that are internally and intimately related to teaching—aims that cannot be achieved in any other activity. The crucial point here is that participation in a practice is not aimless. It is not "play." Results matter. Indeed, results matter critically. But the route to achieving those results also matters, as much if not more. As we pointed out recently (Wrzesniewski et al., 2014), a com-

mitted gardener pursues a beautiful and bountiful garden, but will not hire someone else to produce and maintain that garden. The painter pursues a striking work of art, but will not hire someone else to paint it. The doctor wants to be the one who cures disease and eases suffering, the teacher wants to be the one who opens up and inspires young minds, and so on.

Competitive games have winners and losers, and people who love the games want to win. Indeed, if they are practitioners pursuing excellence, they *should* want to win. But they should not want to win by cheating. If they cheat, they are treating the ends as external to the activities that produce them. As practitioners pursuing excellence, the cheaters are cheating themselves. One of us (B.S.) discovered the difference between playing a game for amusement and distraction and playing a game to pursue excellence when he taught his 7-year-old granddaughter to play rummy. Rummy is a rather simple game, but playing it well requires that you notice which cards have been discarded and which have been picked up by your opponent, in an effort to construct your opponent's unseen hand, so you can avoid discarding cards that will improve that hand. When granddad pointed this out to granddaughter, by showing her cards he had withheld that she needed, she asked how he knew she needed those cards. He explained, thinking that her development as a rummy player was about to accelerate. She threw down her cards exclaiming that "I thought we were playing a game, not thinking." Thus ended her career as a rummy player.

It is perhaps an unfortunate accident that early research on intrinsic motivation focused on the drawings of 4-year-olds and the puzzle-solving of college students. Neither of these activities is a practice, and both are rather effortless. Thus, the focus was on pleasure in the activity—engaging in the activity "for its own sake," rather than on pursuit of excellence in the activity. But even in these cases, we doubt that the pre-schooler would be pleased if we did the drawing and handed it to her, or the college student would be pleased to get handed already-solved puzzles. Pre-schoolers want pleasing pictures *that they drew*, and college

students want solved puzzles *that they solved*. In other words, we think that the framework of means and ends is as characteristic of “intrinsically” motivated behavior as it is of “extrinsically” motivated behavior. The critical distinction between these two categories of means-ends relation is in the connection between means and ends. With so-called “intrinsically motivated” behavior, the relation between means and ends is anything but arbitrary.

For this reason, to focus on the relation between means and ends, we prefer the term “internal” to “intrinsic” and the term “instrumental” to “extrinsic” (Wrzesniewski et al., 2014). Both of our terms acknowledge that consequences matter, and focus on the relation between the consequences that matter and the activities that produce them. An instrumental relation means that it is a mere matter of contingency that a particular act produces a particular consequence. The instrumentally motivated actor is after the consequence and will presumably choose whatever route to that consequence is most efficient and convenient. The internally motivated actor cares about both the activity and the consequence as well as the relation between them.

We believe that our suggestion that consequences also matter to internally motivated activities calls attention to the most salient characteristics of those activities while at the same time honoring the distinction that previous researchers have made between intrinsic and extrinsic motivation. In reality, the pursuit of excellence in many, if not most, activities involves long periods of intense training that is often anything but pleasurable. Learning anatomy is not fun for most medical students. Weight training is not fun for most competitive athletes. If one takes “pleasure in the activity” as the hallmark of intrinsic motivation, then it is implausible to imagine, given the perseverance in the face of obstacles and challenges, and often the sheer boredom that accompanies some of what it takes to achieve excellence, that any pursuit of excellence could be regarded as intrinsically motivated. Young people searching for their “calling”

(see Wrzesniewski, McCauley, Rozin, & Schwartz, 1997) may use the pleasure they get from pursuing various activities as diagnostic of whether they are “called” to them, and may thus reject many activities that demand high effort at not especially pleasurable tasks as not right for them. Duckworth’s concept of “grit” captures well the point we are after (Duckworth & Gross, 2014; Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2010; Duckworth, Peterson, Matthews, & Kelly, 2007; Duckworth & Seligman, 2005). Grit, Duckworth tells us, has two components. One is perseverance—commitment for the long haul. The second is engagement. Engagement will not always be pleasurable, but it will keep people working at things that are hard. Grit turns out to predict success in a wide variety of domains better than various kinds of aptitude tests that are typically used. The reason why, we suspect, is that grit is what enables people to withstand the countless hours of deliberate practice, much of it focused on aspects of the activity that people do poorly, that are a key ingredient in the development of expertise (Ericsson, Krampe, & Tesch-Romer, 1993).

As currently discussed, grit is viewed as a personality variable. That is, some people are “grittier” than others. But it seems possible that individuals will be gritty with regard to some tasks but not others, or even, within a task, individuals will be gritty on some occasions but not others. We have no view on these issues. Our point in invoking grit is that it highlights the importance of perseverance even in activities that are internally motivated. Our view is that pleasure should not be seen as the hallmark of whether motivation is internal or instrumental. Rather, we see pleasure as an affective state that often accompanies engaging in activities that are internally motivated, but that needn’t. Nor do we think that experiencing pleasure disqualifies an activity as internally motivated (e.g., “she gardens because it gives her pleasure. Therefore, gardening is instrumental in the pursuit of pleasure.”) We think a focus on pleasure distracts us from the main point, which is a distinction between behavior whose motivating consequences are inti-

mately related to the acts and behavior whose motivating consequences are arbitrarily related to the acts.

8.3 What Motivates the Second-Grade Teacher?

With the distinction between internal and instrumental and MacIntyre's conception of practices in mind, let us revisit our second-grade teacher. As we said above, she appreciates interacting with and inspiring her students, seeing evidence that they are learning, gaining the approval of parents and peers, and having a nice salary and benefits, job security, and ample time off. Her work provides her with many attractive consequences. But which of them are motives? And which of the motives are internal to the activities?

It is obvious that the development of her students is internal to the practice of teaching. What else could excellence in pursuit of the *telos* of education mean if not this. And it is equally obvious that her salary, benefits, etc. are instrumental. She certainly appreciates all these features of her job, but would she continue to do her job if they disappeared? And would she willingly switch jobs if she found another occupation that provided similar salary and benefits?

The matter of status and approval from colleagues and parents is less clear cut. Does she want status, or *status as an educator*? If the former, then she might switch jobs if something became available that offered higher status. If the latter, then arguably what she wants is excellence as a teacher, and the acclaim she gets is just a by-product of her pursuit of the *telos* of education. The distinction here may be subtle, but we think it is a key to understanding the distinction we made some years ago between attitudes toward work as a "career" and attitudes toward work as a "calling" (Wrzesniewski et al., 1997). People with careers are interested in rising in the hierarchy and attaining the status that comes with advancement. But they are interested in advancement per se, rather than advancement that is simply a by-product of excellent practice in their

particular chosen occupation. People with callings, in contrast, certainly appreciate recognition, but they want recognition for excellence in the particular work they have chosen to do.

To illustrate this subtle distinction, imagine that the school in which the teacher we are describing works, influenced by the No Child Left Behind (NCLB) Act, adopts a set of standardized tests that assess student progress. Imagine further that status and acclaim will come to teachers whose students do best on these tests. Finally, imagine that our teacher believes that these tests as metrics are misguided, both as ways to measure educational attainment and as goals for teachers to strive to achieve. What will this teacher do? If she is motivated by status and the prospects for advancement (i.e., she has a "career"), she will play by the new rules and do whatever she can to help her students excel on the tests. If she is motivated by the *telos* of education, (i.e., she has a "calling") she will continue teaching as before, even if it means foregoing the opportunity to achieve the respect and approval of peers and parents.¹ Indeed, she might even agitate to get the school to abandon these tests, suggesting that in relying on them, the school is losing sight of the true *telos* of the practice of education.

Our analysis of the second-grade teacher suggests some of the complexity in assessing the nature of the motivation underlying job performance, and the difficulty of identifying motives as internal or instrumental. We think it is more realistic to imagine the distinction between internal and instrumental as a continuum rather than as categorical. Praise from parents and peers is less "instrumental" than salary and benefits. Moreover, some aspects of the teacher's work

¹But not all parents. One of us (A.W.) was thrilled when her daughter's veteran kindergarten teacher – with more than 25 years of experience honing her craft – explained at back to school night that she had little interest in the regimented, test-directed instructional system at use in the school, and instead planned to teach as she always had, with a single goal to guide her. That goal? "To make your children love learning." She assured us that all the rest would follow, which it did, in abundance, that year. Here was, quite clearly, a teacher dedicated to the *telos* of her practice.

that may seem quite instrumental may not be. She may value the time off she has for the opportunities it gives her to develop lesson plans and become an even better teacher. Does this make the school calendar less instrumental? We think probably it does.

More generally, it seems clear to us that some goods are only attainable through the particular activity, some are attainable through the activity but also some others (they are internal to success at a practice, but not unique to it), and some are completely arbitrary in their relation to a practice—a rule imposed from without rather than a connection that is built in.

8.4 Why and When Internal Motives Are Better Than Instrumental Motives

There is a widely held belief—almost a presumption—that internal motives will produce better performance than instrumental motives. How could this not be true? Internal motives drive people to achieve excellence in the activity. Instrumental motives will only yield this result if the instrumental outcomes depend on excellence. If a teacher is working principally for salary, benefits and time off, she will only be an excellent teacher if these aspects of her job depend on it.

We think this view is true in general, but not universally. We think that for certain kinds of work, instrumental motives may be just as powerful as internal ones. If the work involves relatively simple, routinized tasks, in which performance is easily assessed, instrumental motives will probably do the job (see Cerasoli et al., 2014). In Adam Smith's (1776) famous pin factory, the example with which he celebrates the productive efficiency that accompanies the division of labor, work is structured in exactly this way. The tasks are simple, repeated over and over, easily monitored, and with little training required. One might say that the division of labor was invented with an eye toward economizing on the need for employees who had a *telos*. For complex jobs that required flexibility and discretion, internal motives might be needed, or at least be

very helpful. Deskilling the task also decreases the need for workers with such motives. And it has the added benefit of putting control of the work in the hands of the manager, who organizes the instrumental incentives, instead of in the hands of the worker, who may or may not have the needed internal motives (Marglin, 1976).

We think Aristotle would be less impressed with the pin factory than Smith was. For Aristotle, excellence required doing the right thing, at the right time, in the right way, for the right reasons. Nussbaum (1990) calls this "the priority of the particular." Can all this "rightness" be measured and quantified in a way that enables one to reward good performance with instrumental incentives? If the work is simple, we think the answer is probably yes. If the work is complex, then no. Under complex conditions that require flexibility, internal motives will almost always lead to better performance than instrumental ones. Someone motivated to be excellent will be sensitive to feedback during execution of the task and continue to monitor and improve performance (see Deci & Ryan, 2014, for a review suggesting that feedback of this sort can boost intrinsic motivation). Instrumental incentives can't match this exquisitely detailed feedback loop between performance and outcomes. Someone motivated to be excellent will be responsive to unexpected obstacles and opportunities in a way that instrumental incentives can't match. And even in the simplest work, unexpected obstacles, challenges, and opportunities to act with excellence abound. One of us (A.W.) has shown that even in situations that require relatively simple and well-defined work (as in the case of hospital janitors) those employees who seem guided by the *telos* of hospital work grasp opportunities to step outside their well-defined occupational role to do what is needed, or would be helpful, in unforeseen circumstances. Employees who work with this *telos* in mind end up sounding a lot like someone striving to become excellent in a practice and develop complex systems for discerning what kind of response is needed, and when (see Schwartz, 2015).

We think that even rather simple and easily measured work benefits from what are sometimes

called "incomplete contracts." Few work contracts specify precisely what is to be done and how it is to be done. The contracts leave room for people to use their discretion when a situation calls for it. Incomplete contracts may be inevitable, and trying to make them complete almost always results in reduced employee effectiveness (Hirsch, 1976). But it is worth pointing out that there is much less danger in relying on incomplete contracts if employees are guided by internal motives than if they are guided by instrumental ones. Indeed, some of the research we described above on how "extrinsic motives" can undermine "intrinsic motives" (Deci, 1975; Lepper et al., 1973), or as economists prefer to describe it, how extrinsic motives can crowd out moral motives (Frey & Oberholzer-Gee, 1997), may suggest that the more complete one makes an employee contract, the more one threatens the aim of employees to pursue the *telos* of their occupation. We see this when dedicated teachers start "teaching to the test" as their employment status comes to depend more and more on student test performance. The problem with standardized tests is probably not the tests themselves, but the uses to which the test results are put, i.e., the outcomes that depend on student test performance.

Testing the assumption that the pursuit of *telos* in an activity can be undermined by the presence of more instrumental motives was our aim when we embarked, some years ago, on a study that assessed the long-term impact of different types of motives on outcomes in a real-world setting. We wanted to find a setting in which both internal and instrumental motives were possible, and where the outcomes at stake were of great significance to the lives of participants and to the wider world as well. And so we studied West Point cadets, chosen because they voluntarily undertake a grueling 9-year commitment when they matriculate at the United States Military Academy at West Point (Wrzesniewski et al., 2014). West Point has traditionally been the pre-eminent training ground for military leadership in the United States. After 4 years of undergraduate and military leadership education, involving a difficult physical component, graduates of West Point become commissioned military officers—

second lieutenants—with a 5-year commitment of military service. It is a significant undertaking, and one that requires a great deal of motivation and effort. It was the structure of the motivation of cadets, and their impact on the outcomes the cadets experienced, to which we turned our attention.

While one might expect that all West Point cadets matriculate out of a motivation to serve their country as military leaders—an internal motive, impossible to separate from the activity itself—it is also true that a West Point education and military officership can yield better career opportunities later—an instrumental motive. We followed 10,238 West Point cadets from ten consecutive entering classes for periods of up to 14 years to learn what happens to them as a function of their original motives to attend. The strength of their various motives was measured twice upon entry to West Point, and fell into categories reflecting internal and instrumental motives, among other types. We found that for key educational and career outcomes, those with stronger internal motives, who were there because they deeply desired training as a military leader who would serve the country, were more likely to graduate from West Point and become commissioned officers, to be identified as eligible for early promotion in their first 5 years as a military officer, and to remain in the military up to 6 years (the end of the window we measured) after their commitment to the country was fulfilled. In contrast, those with stronger instrumental motives were less likely to be identified as eligible for early promotion or to remain after their mandatory military service period was up.

Most striking, however, were our findings regarding the combined effects of internal and instrumental motives. For every outcome—graduation, early promotion eligibility, and remaining in the military—instrumental motives weakened the positive effects of internal motives. The undermining of internal motives by instrumental motives significantly hurt cadets' chances of ever graduating from West Point and becoming military officers. Even when cadets who had successfully become military officers were internally motivated, the mere presence of instrumental

motives made consideration for early promotion and the likelihood of staying in the military less probable. While our results could be interpreted to mean that internal motives can help to dampen the negative effects of instrumental motives, the story here is clear—salient instrumental motives, either on their own or in combination with internal motives, harm individual and institutional outcomes.

While the example of West Point cadets is rather specific, other evidence from individuals drawn from a range of occupations suggests that seeing work as a calling, in which the internal aims of the work are ends in and of themselves, corresponds with higher job and life satisfaction, as well as more time spent at work and fewer days of work missed (Wrzesniewski et al., 1997). Others find that those who see work a calling—whether they be classical musicians, zookeepers, or administrative assistants—are more engaged with, involved in, and motivated to stay in their jobs, even if they are no longer paid (see Bunderson & Thompson, 2009; Dobrow, 2013; Wrzesniewski et al., 1997). Indeed, people who find that the internal aims of their job are their motives for working are also more identified with and attached to the organizations in which they work (Cardador, Dane, & Pratt, 2011). Finally, while evidence on whether those with callings are better performers on the job is still thin, data showing a positive (and predictive) effect of callings on performance is growing (see Hall & Chandler, 2005; Wrzesniewski, Berg, Grant, Kurkoski, & Welle, 2015).

8.5 Conclusion: Instrumental Motivation, Internal Motivation and Eudaimonia

Research on the contrast between hedonic and eudaimonic experience suggests that while the former focuses on happiness and pleasure, the latter concerns well-being rooted in personal growth and development (Waterman, 1993). In this chapter, we have argued that engaging in and pursuing excellence in activities for reasons that underscore the purpose of the activities them-

selves marks a meaningful departure from the instrumental reasons so often assumed to be driving activities. What is more, to be internally motivated to pursue an activity need not be based in the pleasure that activity brings. Indeed, the opportunity to develop and grow in that activity can be an even more powerful and long-lasting motive (Ryan & Deci, 2001, Ryan & Martela, Chap. 7, this volume; Wrzesniewski et al., 2014).

This has important implications for how we understand well-being. Rather than well-being resulting from the pursuit of pleasure, or pleasurable ends—the focus of hedonic approaches to well-being, we align with a view of well-being that is based in the pursuit of excellence in the practices one undertakes. The depth, range, and nature of the well-being that results from deep engagement in activities for ends that are inextricably connected to the activities themselves is apparent in studies of work as a calling. In callings, as in any practice undertaken for the sake of the *telos* of the practice itself, well-being results from its pursuit, as well as its ends. The stability of well-being that depends not on the fleeting pleasure gotten from instrumental outcomes, but rather resides in the activity itself, makes all the difference in understanding what it is that makes work, play, or any other activity worth doing. It is possible that current efforts to measure well-being that are deployed by psychologists and other social scientists have the hedonic (rather than the eudaimonic) framework built into them, with their focus on the experience of positive and negative affect, so that pleasure seems even more important to well-being than it would if measures of well-being were differently constructed. This is so even in the face of evidence that well-being rooted in the eudaimonic framework (rather than the hedonic) is associated with better immune response at the cellular level (Fredrickson et al., 2013, Fredrickson, Chap. 12, this volume). Thus, a different set of tools for measuring well-being might provide even more impressive evidence for a eudaimonic conception of a life well-lived than is presently suggested by the evidence, though the importance to well-being of the sorts of experiences we have focused on in this chapter is impressive, even with the deck stacked against it.

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