James B. Schreiber, PhD, is a professor of epidemiology and statistics in the School of Nursing at Duquesne University. He received his PhD from Indiana University Bloomington in 2000. He has published over 60 articles, reviews, and book chapters, and has presented at over 120 national and international conferences. Previously, he has been a high school mathematics teacher, department chair, a professor of education, and associate dean for teacher education.
To my dad, who truly believed in persistence.
Contents

Preface ix

Chapter 1 Foundations 1

Chapter 2 Reinforcement 17

Chapter 3 Intrinsic Motivation 39

Chapter 4 Physiological and Neurological Needs 65

Chapter 5 Expectancy Value 89

Chapter 6 Goals 107

Chapter 7 The Self 125

Chapter 8 Positive Psychology and Growth 149

Chapter 9 Culture 169

Chapter 10 Research Methods 189

Index 215
My fascination with motivation has taken many forms during my life. I am watching people in the Orbis coffee shop as Samantha makes me a coffee and I write this sentence. As a child, I was described as a watcher, much like my son is now. There was never a time in my life when I was not enthralled by the factors that motivated people to engage, or not engage, in a behavior or activity. As a young child, I was utterly fascinated with the things my siblings (I am the last of eight) would do, and sometimes get into trouble for doing. My mother’s gambling escapades in Tahoe, Nevada, also provided material for me. In junior high and high school, I was interested in the behavior and activities of those who were financially quite well off compared with the “kid from over in Glendale.” In college, my fascination landed me in a marketing program heavily run by consumer behaviorists—although that was not apparent to me at the time. I spent time watching people freak out when the laundry detergent was moved in the grocery store, and talked to hundreds of luxury car owners about why they kept coming back.

This book is a culmination of that fascination. I cannot, and will not, cover every model in detail; each is worth a separate treatise. This book is meant to get you interested in understanding motivation from a perspective of basic knowledge, to provide you with a bit of the schema set a motivation researcher brings to these situations, and offer some guidance if you are really interested in one or more motivational models.

The book is written in a more reader-friendly format than my traditional academic writing. I use a great deal of personal stories to
PREFACE

highlight key features of the models presented. I use this approach here because my students react well to this style as they learn the language of motivation. This approach also provides a nice hook or anchor for learning the technical part of the models. I hope you create personal meaning and have some creative micro-moments as you read about the models and try to apply them to your life. You may find out what motivates you in a given situation and not another; as this occurs, you should notice that your head is moving up and down in agreement. We call that the *phenomenological nod*.

Despite the format being academically nontraditional, I have added a few textbook-like features. I provide you with some of Jim’s Nerdy Notes about the topics presented and the people involved with them. I also give you a large number of stories related to motivation information. But, most important, to really engage you in this book, there are several times when I ask you questions, and you should try to answer them. To get the most out of this book, I suggest you get a journal or notebook, or even scratch paper, so you can write down your thoughts as you read, so you can revisit them later.

James B. Schreiber
Genius 101
Dean Keith Simonton, PhD

IQ Testing 101
Alan S. Kaufman, PhD

Leadership 101
Michael D. Mumford, PhD

Anxiety 101
Moshe Zeidner, PhD
Gerald Matthews, PhD

Psycholinguistics 101
H. Wind Cowles, PhD

Humor 101
Mitch Earleywine, PhD

Obesity 101
Lauren M. Rossen, PhD, MS
Eric A. Rossen, PhD

Emotional Intelligence 101
Gerald Matthews, PhD
Moshe Zeidner, PhD
Richard D. Roberts, PhD

Personality 101
Gorkan Ahmetoglu, PhD
Tomas Chamorro-Premuzic, PhD

Giftedness 101
Linda Kreger Silverman, PhD

Evolutionary Psychology 101
Glenn Geher, PhD

Psychology of Love 101
Karin Sternberg, PhD

Intelligence 101
Jonathan Plucker, PhD
Amber Esping, PhD

Depression 101
C. Emily Durbin, PhD

History of Psychology 101
David C. Devonis, PhD

Psychology of Trauma 101
Lesia M. Ruglass, PhD
Kathleen Kendall-Tackett, PhD
IBCLC, FAPA

Memory 101
James Michael Lampinen, PhD
Denise R. Beike, PhD

Media Psychology 101
Christopher J. Ferguson, PhD

Positive Psychology 101
Philip C. Watkins, PhD

Psychology of Aging 101
Robert Youdin, PhD

Creativity 101, Second Edition
James C. Kaufman, PhD

Motivation 101
James B. Schreiber, PhD
Intrinsic Motivation

Sometimes when I work, I forget to take a break.

I want you to think of an activity that you engage in during which you lose track of time. Take a moment and really search your memory for those activities that you are so engrossed in that you forget to do something or cause you to be late to something else. For me, it really is woodworking. My grandfather, a master woodworker, had many apprentices over the years. But woodworking is the activity during which I lose all track of time and in which I always want to engage. I just finished some shelves and even though this was a small job, I was totally engrossed in it.

Another way to think of this is: What would you do if you did not have to worry about paying for your kids’ college, or groceries, or health care? What would you really do? Besides woodworking, I love mathematics. I always have. I bet you cringed just a bit, if not a great deal, when you read the word mathematics. Most people do. If I did not have to worry about retirement, college tuition, and so
on, I would go back and be a middle-school mathematics teacher. I would like to show all the students who hate mathematics by that point how mathematicians think about it and the interplay of how it works.

**OVERVIEW**

W. Edwards Deming talked about reinforcers over the life span as forces of destruction (see Deming, 1994, p. 122, Figure 10). Forces of destruction is the concept that links this chapter to Chapter 2. At the beginning of life, we are interested and intrinsically motivated to figure things out and to cooperate. Over time, with the start of gold stars; forced grade distributions; merit pay; competitive situations among people, groups, and divisions; and unattainable handed-down goals; we eventually have our intrinsic motivation crushed. These forces of destruction kept people, teams, and organizations from performing at their best and enjoying their work (Deming, 1994). Deming described much of what we do as the effort to “squeeze out” the inherent intrinsic motivation people have through extrinsic reinforcers that try to force people to compete for things. He argued that we build a fear system that destroys the natural joy of learning or doing a job well. It starts with awarding gold stars, moves to merit systems in which we judge and rank people, then moves to incentive pay, then weird numeric goals offered without a methodology, and then each division group’s focus as a profit center.

The last two interest me the most because I have lived both of them. At one of my previous jobs, we were supposed to have 12% sales increases from year to year. So if you had a goal of 10,000 sales in January of 2012, you had to have 11,200 sales in January 2013. There was no method for this, it was just a goal. This percentage system is impossible to sustain over time and makes you focus on the goal and not the client or the customer. The change in focus from client to goal eventually decreases sales as a result of poor customer service and poor word-of-mouth comments. On the surface it seems great, but it begins to fail quickly and you see a great deal of employee turnover. When you create each division as a profit center, you
can create serious problems. We had a purchasing division that was
given a numeric goal—reducting cost—and each member would get
bonuses if the goal was accomplished. It was. The problem occurred
when the material went into production and then was used—the
defect rate skyrocketed. The defects had to be dealt with by the sales
representatives in the stores and people’s homes, which is difficult to
handle until you realize what has happened. To solve the situation,
products had to be returned and new products made. This is very
costly, in terms of time, money, goodwill, and energy.

I consider myself quite lucky because I do love my profession. I
get to do a wide variety of activities, talk to really interesting people,
and sometimes travel the world. I also have forces of destruction that I
get caught up in: the competitive nature of article publishing, citation
indexes, the number of libraries that carry my book, goals with no
means of being met, and so on. We all have these forces and I notice
myself caught up in the middle of them when I say, “I do not have
time for X! I have Y to do.” That Y is usually a competitive goal, not
for me personally, but (for example) to be considered more excellent
than the rest of my excellent colleagues. I must do better than they do
to get full merit consideration, so I do not have an incentive to work
on anything that does not improve my personal evaluation score.

In your work, do you find joy during any part of the day? I am
not looking for you to say all day, but at least once a day is there joy
in your work? Take a minute and jot something down in your jour-
nal or notebook about this.

**INTRINSIC MOTIVATION**

We are intrinsically motivated when we act out of interest and act
spontaneously (Deci & Ryan, 1985; Reeve, 1996). But why is intrin-
sic motivation important? Why should I care? As long as I am do-
ing the job, or my employees, stu-
dents, spouse, kids, and friends are
doing what I want, who cares if the
motivation is intrinsic or extrinsic?

**Jim’s Nerdy Notes:**
Intrinsic motivation is our natural
engagement in activities that
we seek out or because we want
to expand our capacity and be
challenged.
There are several aspects related to being intrinsically motivated that are important to everyone. The first is persistence. We see persistence in a variety of activities. Let us talk about exercising. Do you exercise? Do you exercise every day? Those who persist and continuously stay involved in an exercise program tend to be more intrinsically motivated (Ferrer-Caja & Weiss, 2000; Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997). I do not know whether we are naturally inclined to exercise as a species, but it does seem that there needs to be a great deal of persistence to continue the activity. From an educational perspective, we also see persistence as a key factor in remaining in school (Hardre & Reeve, 2003; Tinto, 2006). At the doctoral level, all students enrolled have been successful at school and want to continue to attend. One separator of who completes the doctorate and who does not is persistence. It is a long process and writing a dissertation based on research you conducted is difficult and time-consuming. If you are not intrinsically motivated, it will be difficult to finish.

A second area is creativity. There is the “big” creativity, which is the production of novel and useful work that meets some set of parameters (Sternberg, Lubart, Kaufman, & Pretz, 2005). There is also the “small” creativity or mini-c, which is about novel and personally meaningful work (Beghetto & Kaufman, 2007; Beghetto & Schreiber, 2017; Kaufman, 2009; Runco, 2004; Sternberg, Grigorenko, & Singer, 2004). Whether you are talking about big creativity or mini-c, telling people to be creative, rewarding them, or bossing them around is not going to enhance creativity. When people are motivated by interest, enjoyment, and the challenge, then we see creative work, not when they are being pressured externally (Amabile, 1996).

In traditional school settings, we see the best learning when students are intrinsically motivated. Students tend to integrate academic content across areas, are more cognitively flexible in their thinking, and eschew rote memorization. Students who are filling out note cards as a tactic to study for a test tend not to integrate the material in the course, let alone integrate it with other knowledge. This is similar to inactive information processing in which you are trying to get the material “in” just long enough to get it “out” for the test. A day later, you cannot retrieve the information if asked a direct question.
INTRINSIC MOTIVATION

Stress and anxiety are lower when we are intrinsically motivated (Luo, 1999). This line of research is part of the larger health, well-being (Mayol, 2012), and optimal functioning/flow literature, but is very important to and overlaps with creativity and persistence. A detrimental increase in stress is not going to allow us to work optimally, will reduce our engagement, and impede development of novel solutions.

Think about your work. How is the system designed and how is it working? What is detracting from your natural desire to do a good job, that intrinsic aspect? What is adding to the natural desire to do a good job? In your work, do you find joy during any part of the day? I again am not looking for you to say “all day,” but at least once a day is there joy in your work?

It is time again to write some notes in your notebook.

SELF-DETERMINATION THEORY

When I graduated with my bachelor’s degree, I had a great job offer but had to wait a few months for the job to start. In the interim, I took another job to pay my bills. Many people thought I was starting my career with the interim company, but I knew that was not the case. The skills needed for the job were minimal at best, but as the company stated when I was hired, there was room to grow. What they meant was simply the possibility of making more money, but not really doing anything differently, such as expanding skills, developing new skills, and so on. There was not a great deal of variety in the job either. You performed the same behaviors every day. I did feel that I could do the job well, but it was simple: very busy at times, but still simple. In your workday, do you mainly have simple repetition? Or do you have the opportunity to develop new skills or take on new challenges?

I also watch a large number of classrooms, offices, and other venues where people work and learn. I am usually asked to observe in order to help teachers and managers understand what is occurring. In both settings, I see the antithesis of self-determination theory (SDT). I see the use of controlling motivational strategies. Some examples of these controlling strategies are surveillance (I will be
watching you, we are tracking all your computer keystrokes), compliance getters (if you do x you will get y), imposed goals without a means to get there (we must all be tested as proficient, you must have sales 12% over last year’s), and competition (schools with the highest scores get more state money, whoever sells 10 imaging devices first gets the trip to the Bahamas). None of these actually build motivation for the task at hand, but maybe motivate just for the moment. This is actually depressing to watch because of the amazing mismatch between the individuals and their bosses. Not much appears to be learned or developed and definitely the long-term health and wellness of the organization or the person are not enhanced.

SDT is a large-scale model for motivation. By that, I mean, it does try to explain all behavior or engagement in activities. The theory provides a large frame for examining intrinsic and extrinsic motivation and allows for the interaction between intrinsic and extrinsic motives that are inherent in the individual and act on the individual (Ryan & Deci, 2000). In addition, SDT allows for the discussion of social development, individual differences, and cultural factors that can assist or impede a person’s progress (Reeve, Deci, & Ryan, 2004).

**Main Needs in SDT**

As with all models of motivation, there are key attributes that you need to understand. SDT has three known main needs (Deci & Ryan, 2000): autonomy, competence, and relatedness.

**Autonomy**

*Autonomy* refers to one’s sense of self-determination; you have some choice in the activity without some system or person forcing you into the activity. You get a voice in the activity. This is different from having independence. One can be autonomously dependent, meaning one can experience self-determination in situations versus being in an undesired or forced independent situation. When our interests
and desires closely align with the actions and activities we engage in, we are more autonomous. We also feel an internal locus of control in which we have a high level of freedom and pretty low stress. This is a great spot to be in; when we are there, we are most likely more productive and successful!

For example, a group of teachers was given a scenario concerning students not turning in homework. They were asked to explain why students were not turning in the homework. Many of the responses were focused on a lack of student motivation or laziness (Deci, Schwartz, Sheinman, & Ryan, 1981). A few responses did acknowledge the students’ perspective, but all missed the key aspect about autonomy. If you have to engage in a behavior that you do not want to do, it is helpful to understand why it should be done and acknowledge the stress it might create. In your work, are there activities that you do not want to do? Do you do them because of compliance or because you understand how they fit into the larger picture? I have aspects of my job for which I do not get any autonomy, but I also understand why the activities need to be accomplished and how they fit into the larger effort of the organization. Knowing that makes it a bit easier to engage in them.

**Competence**

Competence is the need to be effective in your environment. Essentially, you are being successful and are able to seek out appropriate challenges to demonstrate and expand the skills and knowledge that you currently possess. Three areas to keep in mind with competence are cognitive competence, social competence, and performance competence (Harter, 1982). Cognitive competence is focused on academic or cognitive activities, such as feeling good about one’s performance. Social competence is associated with feelings of being well liked, or being easy to like. Performance competence is focused on those engaged with sports and other physical activities. We all have our own perceptions of our competence in each of these areas, but within each area we have different perceptions of competence. For example, my perception of my competence in playing baseball is currently lower than my feelings about skiing. I do not play baseball anymore but have started to ski again, and each season I pick new, more complicated ski runs to attempt, thus seeking out appropriate challenges to
redevelop my skiing skills. I also engage in activities that I am not competent in, and this is wonderful also (Carver & Scheier, 2000). I’m horrible at chess, but it is intrinsically rewarding to play with my son.

**Relatedness**

Relatedness is the need to develop long-term secure relationships with people. We desire frequent positive interactions with others in warm caring relationships (Deci & Ryan, 1991). People, especially students, tend to move toward those who provide a caring relationship based on respect. This does not mean, for example, the easy-grading teacher or friendly boss. Those are not really positive relationships in the SDT model. We form social attachments to people who we feel care for us. This appears to affect our emotional patterns and our cognitive processes (Baumeister & Leary, 1995).

**Interaction of Needs**

These three needs of SDT do not work independently, though they are discussed this way in the literature. When you are working with a boss or teacher and he or she provides a productive environment, you will be experiencing autonomy in a safe environment (relatedness) where you can use your skills and knowledge (competence) and develop new ones. The three needs work together, and when one is missing, the experience is not as strong or functional as it could be. In addition to these three main needs there are five subset models of SDT.

**Cognitive Evaluation**

Cognitive evaluation (CE) theory explains and predicts how an external action (e.g., reward, being watched, potential punishment) affects your intrinsic motivation. As stated previously, when we are intrinsically motivated our behaviors are based on satisfaction while engaged in an activity that keeps the behavior going. When we enter into an activity that we perceive is being forced on us or makes us feel incompetent, our intrinsic motivation decreases, sometimes extremely quickly. Within CE, there are informational and controlling components. When the parameters of the activity are controlling and pressure us to
perform a specific behavior or behaviors, then our intrinsic motivation should decrease. In addition, we also perceive an external locus of control (Chapter 7). Information we receive about our performance that helps us develop (positive feedback) should increase our intrinsic motivation and negative feedback we receive that is perceived as indicating incompetence will decrease intrinsic motivation. How feedback is given in relation to an activity is extremely important. If it is perceived as developmental and helpful and promotes the knowledge and skills of the student or employee, then intrinsic motivation will increase and the person will be more likely to engage in the activity later.

Johnmarshall Reeve and his colleagues were interested in whether training teachers to include more autonomy-supportive behaviors would increase engagement. By \textit{engagement}, I mean how intensely and emotionally someone engages in an activity. In addition, the researchers used a relatively small sample of teachers—20—because they felt that the difference between trained and untrained teachers would be so large that they did not need a larger data set. In inferential statistics, this is a large bet to make! They observed that the more teachers used autonomy-supportive behaviors, the more their students engaged in the class on two different measures (Reeve, Bolt, & Cai, 1999).

\section*{Organismic Integration}

Organismic integration (OI) theory focuses on understanding how people acquire, internalize, and then integrate extrinsic reinforcers. This can be viewed as a self-determination continuum that ranges from being amotivated to intrinsically motivated.

Figure 3.1 illustrates the types of motivation, ranging from amotivation through intrinsic motivation, along with the type of reinforcement and level of self-determination. Those who are in the state of amotivation are simply going through the motions. Sound familiar? You may be in this state for several reasons: The task assigned to you is impossible for you to do for a variety of reasons (e.g., lack of skill), you see no reason for the task to be completed, or you will not see the desired outcome. In every field and organization, not just in my field of education, you hear individuals making the comment, “I am just going through the motions.” More simply, you see individuals just not act at all. Right now, many of our merit and
performance systems are causing many people not to act, or to act just enough to be evaluated at a sustainable level.

Extrinsic motivators to action are based on regulating your behavior in reference to an external demand or reward (reinforcement). External motivation is the lowest level of self-determination and is the same as operant conditioning. With external motivation, we engage in the task to get a reinforcer or to avoid punishment. In the classroom, students are “compliant” to avoid punishment (e.g., loss of recess) or to get a reinforcer (e.g., an A, gold star, etc.). My favorite type of motivation to watch and discuss is introjected regulation. With introjected regulation, individuals have internalized some of the behavior needed, but they are typically behaving in ways others expect. Really, the expectation of others is driving the behavior and is not a choice made by the individual. There are components to introjection in which students use their internal control to maintain self-esteem or behave so to avoid feeling guilty. Many of my friends went off to college because that was what was expected of them, not necessarily because attending college was what they wanted to do. One friend attended a fine four-year private institution, received the degree his parents demanded, and after college moved to a different country, opened a small bed and breakfast, and has been quite happy. He is not doing anything with his engineering degree. When you value the extrinsic aspect and internalize it so that it becomes personally meaningful, you have moved to identification. The best indicator of identification is when you find yourself agreeing with the reward or reward system and embracing it. You may not always embrace it though, and may find later that it does not keep you truly

<table>
<thead>
<tr>
<th>Type of Motivation</th>
<th>Amotivation</th>
<th>Extrinsic</th>
<th>Intrinsic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Types</td>
<td>Regulation</td>
<td>External</td>
<td>Introjected</td>
</tr>
<tr>
<td>Amount of Self-Determination</td>
<td>Non—Impersonal</td>
<td>Fully external</td>
<td>Somewhat external</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>None</td>
<td>None</td>
<td>A little bit</td>
</tr>
</tbody>
</table>

Adapted from Deci and Ryan (2000).

**FIGURE 3.1** Transition from amotivation to intrinsic motivation.
engaged in the task. The move from identification to integration occurs when the extrinsic motivation aligns with other aspects of your values, goals, needs, and beliefs. Intrinsic motivation is seen when we are interested in the activity itself and it satisfies our psychological needs. When I talk to students about dissertations, semester-long projects, or becoming a teacher, I discuss the aspects of the activity and the need to choose the topic or career because of enjoyment of the activity itself. Finally, individuals do not go through the continuum from amotivation to intrinsic motivation as a developmental process every time for every activity (Ryan & Deci, 2000).

Take a moment and think about activities and components of work or school that fall along the continuum. Where are you going through the motions and where are you really interested in the activities and tasks?

Causality Orientations

Causality orientations (CO) theory is used to explain individual differences in the motivational forces that cause behavior. If you regulate your behavior in accord with personal needs, interests, and values you are able to act in a more autonomous pattern, that is, you exhibit behavior that is intrinsic, focused, and motivated. Therefore, think about how much you get to act out of your own interest and how much you value what is going on. Then, what are the rewards, gains, and approvals you are interested in? Finally, are there actions that you feel anxious about in relation to your competence level or do you not feel motivated?

Pick an activity at work that you have to engage in regularly. If you are highly autonomously motivated in the activity, then your focus is intrinsic or at least integrated. If you allow more external controls, such as incentives, to guide your behavior, then you are more oriented to control causality. Typically, when we are in a controlling environment or are involved in a controlling activity, we feel pressure to think, feel, and behave in specific ways (Deci & Ryan, 2008). The pressure felt is the disequilibrium between your “self” and the parameters of the activities. Finally, if you are not engaged at all, you have an impersonal
or amotivated focus. All jobs have all these three aspects in them—you just need to examine what you do in detail in order to find them.

**Basic Psychological Needs**

Within SDT, for optimal functioning, the basic psychological needs (BPN) are argued to be universal. We need to be able to act in a self-determined way, believe we are competent to complete the work, and develop good strong connections with others. When any one of these three attributes is not available, we tend to not perform optimally. From the perspective of a parent, teacher, manager, or trainer, understanding these three BPN helps to guide and facilitate motivation, engagement, and performance. Teachers are an interesting group to watch for these three needs and the best time to watch them is at the beginning of a school year. At the start of a school year, there are usually a few days of meetings and typically a new program, or plan, is “given” to teachers by their school to be integrated into the classroom. Teachers often have no choice in this matter. There are typically no incentives for this, just punishments. There is no assistance to make sure it is done well and no chance to discuss the new program with anyone. All three are missing, and, if you listen closely each year, you can hear teachers make statements such as, “What is the new X now?” “What will we be forced to do by December?” or “Ignore it, it will change in three months when they realize it is not working as fast as they want.”

**Goal Contents**

Goal content (GC) concerns whether your goals are intrinsic or extrinsically motivated and how that distinction affects your wellness and overall performance. Extrinsic goals can be seen as obtaining monetary wealth, having a beautiful appearance, popularity, or fame. These are distinctly different from goals that focus on community development, close relationships, personal growth, and individual development. There is a large issue in American culture about this, given the elephant-sized focus on “making it big” (financially, gaining fame, etc.) and even our commercials focus on that (see the
recent Super Bowl ad by Cadillac for its ELR vehicle titled “Work Hard”). The research, though, appears to support the idea that extrinsic goals are associated with lower wellness overall and poor relationships, self-worth tied to attaining goals, and focus too much on comparisons with others (Sheldon, Ryan, Deci, & Kasser, 2004).

### Everyday Life of SDT

SDT also acknowledges that culture plays a large part in the development of the individual. The theory has been discussed with in the larger framework of sociocultural influences and the individual, but here the focus is simply on the community and cultural influences (Reeve et al., 2004). Within your cultural background and experiences, what were some of your key values, priorities, and goals? Sometimes it is easiest to start with familial experiences. For example, when I wanted to learn about something, and my dad did not know about it, he would say, “Let’s go to the library and find some books.” He valued libraries and learning was a major priority for him as a goal to better yourself and be a better citizen. The goal was never tied to “getting a job” or “becoming rich,” it was always about the learning aspect. This clearly affected me, but it also affected my dad—he was always willing and eager to go to the library. Therefore, there was some symmetry in the motivation.

Autonomy is a main defining feature of SDT; is autonomy important across cultures? Yes, there is some support for this notion in the research literature (Sheldon et al., 2004). Students from South Korea, a more collectivist society, and the United States, a more individualistic society, were asked to rank 10 needs in order of importance. Autonomy, competence, and relatedness emerged at the top of both lists. There are obviously critics of this argument (Markus, Kitayama, & Heiman, 1996). There are also some specific and unique aspects to it. Individuals in collectivist societies tend to find a controlling environment less disruptive to their psychological needs (Ryan & Deci, 2001). There are also critics who state that SDT is about selfishness (Carver & Scheier, 2000). This seems to miss the forest for the trees, given that individuals can act autonomously within their cultural values and still not be selfish to peers and community members.
What Can You Do?

Examine the environments you are in and the ones you have created. Using the simple chart in Figure 3.2 may help with your examination.

To create an autonomy-supportive environment one must have solid structure, such as well-communicated expectations, procedures, and goals. These will allow for an opportunity to engage in optimally challenging tasks. A lack of structure will create a permissive or “anything goes” environment. The freedom aspect is based on freedom with limits. It does not mean just do whatever you want. A second distinction is that a permissive environment is a complete misrepresentation of autonomous support. Autonomy-supportive environments provide an opportunity to complete tasks or engage in tasks with an option for how to engage and sometimes an option for the tasks to be completed, all within explicit expectations and goals. Think of this as hiring people to do the job, and then just letting them do it. Controlling environments have a lot of structure but everything is controlled by the boss, teacher, leader, and so on. There is no room for individual choice or decision making. Demanding environments have a great number of “carrots and sticks” (rewards and punishments), but one never knows what is expected or what will lead to a reward or punishment, which results in chaos.

SDT provides an overarching model for understanding motivation and motivated behavior in any environment. The focus is on the distinction between an autonomy-supportive environment and

![Figure 3.2](image-url)
a controlling one. You can create a positive environment using the basics of the model here. There is a great deal of more nuanced understanding involved, but this is a good start for understanding the environment you have created.

**FLOW**

What are the conditions that create enjoyment? That cultivate the intrinsic motivation you have been reading about? Mihaly Csikszentmihalyi began to answer this question in the 1970s (see Csikszentmihalyi, 1975, 1982, 1990). To try to answer this question, he started with experts in physical activities like rock climbing, dancing, and basketball as well as experts in cognitive activities like chess. Eventually, he added more and more types of jobs and other activities, for example, students and television-show watchers. He observed that the joy or the fun came from what he termed a *flow experience*. If you have had this experience, you are so totally absorbed and engaged in an activity and want to get back to that experience. Take a moment and think about an activity that you really enjoy engaging in that is wholly absorbing—jot it down and also note why you think you really enjoy it. For me, this would be woodworking or playing the guitar. Either one completely absorbs my concentration.

As with every other topic in this book, the flow experience is a bit more nuanced than involving just what you enjoy. There is an interaction between the task’s challenge and the personal skills or competency you bring to the task. If the skill level is low and the challenge is high, you tend to worry and become anxious. If your skills are quite advanced and the task’s challenge is easy, then you become bored (Csikszentmihalyi, 1975). There is a sweet spot where flow occurs and enjoyment increases as the task challenge and skill set match.

In Figure 3.3, there are four basic flow categories. I like to use as an example hitting a baseball or softball and sometimes shooting free-throws or kicking a soccer ball because most students have tried one of these. If you are a beginner at hitting a baseball (low skills) and you are batting against a pitcher with low skills, you would be
CHAPTER 3

in spot 1 and could experience flow because skills and challenges match. Hitting the ball is not overly difficult and you are probably going to enjoy it and be pretty happy. The same goes for the pitcher. If your skills remain the same and you encounter a more experienced pitcher, you might feel anxious and would be in spot 3. The anxiety is the gap between your skills and the challenge presented to you by the new pitcher. This is pretty common in Little League Baseball in my area. They organize teams by grade level. But when there are mixed grades (and thus ages and developmental levels), you sometimes see batters appearing to be very much in flow and then the next inning they look quite anxious when facing a bigger, faster pitcher. The anxious individual is not enjoying the experience and is definitely not having a good time. What are the choices here? You could try to improve your batting skills through practice or you could hope to get a pitcher closer to your skill level. Most people do not want to step “backward” and tend to try to improve their skills—unless they perceive the distance between the skills they have and the challenge as too great.

Choosing to increase skills that meet the new challenge will put an individual back in the position of experiencing flow and he or she will be at spot 4. Here, the higher challenge is met with more skills, for example, by going to the batting cages and practicing every day. In actuality, as you bat in games more and practice more thereby increasing your skills, you will need to find a higher challenge; otherwise, you will end up in spot 2. If your skills are greater than your
challenges, you become bored and do not enjoy the activity and experience. This creates the unique nature of flow theory because to stay in the flow you need to increase your skills and find new challenges and so there is a strong inclination for growth and discovery.

Now is a moment for you to think about another example. What activities are you bored with at work or school or are anxious about? What activities do you find yourself engaged in during which you lose track of time? For me, writing research articles and getting them published has moved toward boredom. I can do this pretty easily at this point in my research career. Writing a book is a bit more challenging for me, but it is in the flow channel, so it causes a great deal of joy. Teaching, on the other hand, is always in the flow channel because each year brings new students, new challenges, and I constantly have to improve and develop my teaching skills.

**Flow at Work**

There are many areas where flow has been researched. Over the next few paragraphs, I highlight a few, starting with work. Flow at work is an interesting area of research because many aspects of work are externally driven. Csikszentmihalyi provides an example of two very different work experiences (Csikszentmihalyi, 2008). Think of a surgeon and a day laborer. The surgeon has the chance to learn new things and experience new challenges each day. The laborer does the same activities to exhaustion every day. The surgeon learns that she can perform increasingly difficult tasks and the laborer may simply learn about his own helplessness because, unlike the surgeon, the laborer is not in control.

Interestingly, in one study, people at a variety of jobs were observed to be in flow more often than when engaged in leisure activities (Csikszentmihalyi & LeFevre, 1989). Though people stated that they would rather be doing something else besides work, their leisure activities tended to not produce flow-like enjoyment. One issue may be their choice of leisure activities. Think back to the earlier question and your work environment. Does your work provide a good match between skill and challenge? Do any of your leisure activities do that?
Csikszentmihalyi and LeFevre hypothesized that maybe people were so worn out from work that watching television allowed them to recuperate. But they were not completely satisfied with that argument because farmers who work dawn to dusk tend to weave or carve or play an instrument once their work is done. Therefore, what activities do you engage in or want to engage in that could bring the same level of flow that work appears to do? From the perspective of a parent or manager or teacher, can you create an environment that matches the skill and challenge that allows people to get into flow? If you ski, the nature of different slopes provides a nice example. Beginners on the green slopes (easy) enjoy them and can experience a flow, but on the black slopes (very steep) they might be frightened—no flow. Now the challenge is to match skill and challenge to the person.

**Individuals and Culture**

Flow theory does not make any value judgments about the culture you live in because the focus is on the joy you have in your life—how much you are in the flow channel, so to speak. In the research mentioned previously, the focus was very aligned with American culture with a separation of free time and work time. Many studies have used this as a basis for understanding achievement, engagement, flow, and motivation in general. But not all cultures (and I use the term broadly) have a separation of work and leisure and there is no difference because it is all joyous. In the 1980s two researchers interviewed small cultural groups in the Italian Alps (Delle Fave & Massimini, 1988). In the small town of Pont Trentaz d’Aosta, about an hour and a half north of Torino, the researchers observed that the residents did not separate work and leisure. One individual, when asked what she would do if she had all the money and time she wanted, replied that she would tend to her cows and the hay, just as she does every day. She knows that there are other aspects to modern life but she takes great joy in what she does, she is in flow each day. A software programmer I know has the same belief system. He loves his work and would program whether he was getting paid for it or not. He does not consider it work; he sees every new task as a way to become better or make the user experience better.
Criminals

Flow can be observed anywhere, even with criminals. For many criminals, there is the challenge and the skill needed to enact the crime—let alone the excitement—or “joy” of the crime as the criminal perceives it. I think of the master art thief who views the activity as a challenge to his current skill set. Each theft gets more “daring” because the success of the previous theft indicates that the challenge was not enough. Flow can be both productive for society as well as destructive, just like any developed idea.

School

Schools have their own culture; if you think about what students do, the activities at times are not much more gratifying than the experience of Csikszentmihalyi’s example of the day laborer who does the same activity all day (e.g., digging vs. worksheets). In addition, the structural aspects of the school (building, classroom, desk design) are not really designed and created to help students get into flow, let alone keep them there. Then there is the extrinsic motivation model that most schools are set up on, such as gold stars, grades, and sometimes a chance to win a new car for taking five advanced placement (AP) classes (Lewin, 2006). Finally, there is the fact that students are mandated to be at school and that alone takes away the basic control aspect most people desire. Many people stop going to school because of the horrible memories they have of it—no joy, no flow. Were you good at “school”? Do you have many fond joyous memories or just a few? Most students make similar statements about their school experience. When parents ask me why their children say recess was the only high point of the day, I ask them to think about what is going on for their children that makes them say that. There are brief moments of flow for students, but most of the activities are focused on just getting things done and moving on to the next assignment, test, class, degree, and so on. Those flow moments really are an indication of where skills and challenge meet in an activity you are interested in—the rest feels like something you just have to do. More recent, differentiated instruction, which has roots in teaching machines and Keller’s Personalized System of Instruction, has
tried to match skill set with learning challenge for students, but this is still hard to do well across dozens of students in a single class.

**Creativity**

As you might have guessed, there is much thought and work on creativity and flow. For this introductory book, I provide nine areas that are argued to separate creative and less-than-creative individuals (Csikszentmihalyi, 1996) and briefly discuss them.

- *There are clear goals every step of the way.* When you are in flow, you know what needs to be done and see the finish line. You are not trying to figure out the next stop or the final goal.
- *There is immediate feedback to one’s actions.* You know when you have made a mistake. If you play an instrument, you know when you have missed a note. It is painfully obvious.
- *There is a balance between challenges and skills.* Your skills and challenge align and you can develop your skills to increase your challenges.
- *Action and awareness are merged.* What you are doing and what you are aware of doing are the same.
- *Distractions are excluded from consciousness.* You do not notice other events in the environment because your cognitive energy is spent on the activity; because of this, you are less likely to make mistakes, such as playing a wrong note.
- *There is no worry of failure.* This is self-explanatory: You are not in total control—we never really are—but the key is you do not notice that, it is not even in your thought processes.
- *Self-consciousness disappears.* You are too engaged to be worried about how you appear to others. So dance like no one is watching, so to speak. You will expand your capabilities if you are not worrying about yourself.
- *The sense of time becomes distorted.* You lose track of time. The actual amount of time used in your perception and the clock time do not match. Baseball players sometimes describe the time from the ball leaving the pitcher and hitting the bat as many seconds when it actually takes less than half a second at the professional level.
- *The activity becomes autotelic.* We do things because they are enjoyable as they are, not because we are trying to reach some goal.
Let us return to the start of the chapter where I asked you to think about an activity you do during which you lose track of time.

Did you choose the activity?
Were you doing the activity because you wanted to?
Did you feel competent while performing it?
Was the activity not too easy or not too hard, but just right?
How did you feel when you were done?

If you answered “yes” to the first four and “happy” or “joyous” to the last, then you were most likely intrinsically motivated and potentially experienced a flow moment. We tend to have these more often than we think, because when we are not paying attention to being in flow we are in flow. But the flow in American culture is different because we do not tend to talk about flow moments at work, but rather in leisure activities. The woman who lived in the Italian village demonstrates this, but there is also a generational component to it. The researchers also studied two later generations of people in the same village and observed a major difference by the third generation; they had almost four times as many flow experiences in leisure activities than in work: almost the direct opposite of the first generation. My grandfather saw no difference between woodworking (his job) and leisure—woodworking was what he loved. I have some of that with being a professor. I do find great joy in researching/writing, mentoring students, and teaching. But there are some serious nonflow moments that typically occur during meetings. You might have the same moments. Most important, the time reading and writing about flow has made me a tad more aware of when flow is occurring and when it is not. It is to be hoped that you will have similar experiences. Therefore, you should take some time to examine again the activities in which you engage in all your capacities, as an employee, manager, parent, friend, and so on, and look for those that are intrinsically motivating and appear to give you flow moments that lead to some level of joy.

With my classes, I want to try to create a positive environment and some flow moments. Most important, I do not have to offer any rewards or reinforcements or threaten students with a quiz to get
them to study and figure it out. I want them to learn the material, but I also want them to enjoy the quest of learning it. I spend a great deal of time trying to figure out ways to present material so that students become naturally engaged, not because there is a test or a paper due in the future. This is very difficult in the traditional parameters of teaching at the university level.

I am intrinsically motivated to teach topics on mathematics and statistics. I love it. My favorite subject in mathematics is number theory, the study of the properties of whole numbers. I could teach that all day—though I never get a chance to. So, you might ask, “Why aren’t you?” This is where I jump back into extrinsic motivation for a moment. I am not teaching mathematics at the middle- or high-school level anymore because the environment is too toxic, too punishing. I left in the late 1990s once state-mandated tests started driving all curriculum and pedagogical decisions. Teaching mathematics went from spending time working with students to help them understand the world from a mathematics’ perspective to being told what to teach, how to teach it, and when to teach it because of what was going to be on a state-mandated test that would be used to determine whether I was an effective teacher. The irony is that I knew during every moment whether I was being effective or not. Therefore, you can have something you love to do and maybe you do it, but the system you are in creates so much punishment that you leave or do not want to engage.

So, let us go back to your life. At work, do you have aspects that you love, tolerate, dislike? What does that do to your engagement in an activity or project at work? Take a moment and think about this before you read further.

REFERENCES


INTRINSIC MOTIVATION


CHAPTER 3


INTRINSIC MOTIVATION


SUGGESTED READINGS


Can I do it and do I care?

As I write this, it has been a long summer: either blistering heat or torrential amounts of rain causing leaks in my new house. Between cardiac issues for my father and the pneumonia I managed to get, I have fallen very far behind in my work and in play time with my children. The “motivation” to write this book has also suffered. In the larger picture, I am completely capable of completing the book on time and even early, but it is the “Do I want to?” aspect that has been dislodged a bit. In essence, at times it has become a task and not a source of natural enjoyment. We all experience this at different times and in different situations. Obviously, I kept writing, because you are reading this: So the task had enough value for me to keep me going. It is important, though, to understand when our expectations and values are associated with engaging or not engaging in an activity, or when engagement stops.
CHAPTER 5

OVERVIEW

Individuals have beliefs and judgments about their ability to successfully complete an activity or task. In the motivation world, we call these *expectations*. When I talk to new assistant professors, they all state that they will be successful and pass through the tenure and promotion processes easily. I bet when you went to get your driver’s license you expected to pass. I did: both the written and actual driving part. Why show up if you do not think you will pass? In general, as a task or activity is presented to us, we typically ask and answer the question, “Can I be successful at this?” When we say “yes,” we tend to engage in the task. If we do not believe we will be successful, we tend to not engage unless we have to, for example, at work or school. But those instances are a little different from the general expectations we have.

In addition to expectations, we also have a value system associated with the expectation. You might expect to succeed at something, but have no real desire to engage in the activity. You do not value it enough to engage and there is usually a reason. People have a variety of reasons for engaging, such as personal interest. If the reward is large enough, they know they have to engage. The easiest way to think about this is to consider what field of work you are in and what fields you avoided. I love conducting research and working with students, but I have no desire to perform administrative tasks because I view most of them as urgent and unimportant. Friends in college tried to escape the mathematics requirements for economics and switched to marketing, whereas I was already in marketing and took more mathematics classes. I thought I would be successful and I liked solving problems when there was a clear solution. What activities do you enjoy? Perhaps shopping, running, leisure time with friends, building things.

FAMILY HISTORY OF EXPECTANCY AND VALUE

Kurt Lewin and colleagues generated early ideas about expectancy and aspirations. *Aspiration* refers to the level of effort an individual
will set for an activity based on his or her previous experiences related to the task and his or her current understanding of the task. One of the interesting results from studying aspirations (see Weiner, 1992) is the fact that people believe they are more successful when they set personal goals than when someone else sets goals for them. (What is called an objectively or externally set goal.) Do you like setting your own goals? Are you able to do that at work? Or are goals preset for you? Take a moment and jot the answer down in your journal. You, like me, probably have a mix of both: There are some aspects that are preset and others that are more open for personal goal setting. My personal goals are always the most motivating, so to speak.

In the 1950s, John Atkinson’s work on motives/needs, expectancies, and values and their interactions became the foundation for achievement motivation. For me, and this book, achievement motivation comes into being as a motive, a probability of success, and an incentive. A motive is a stable trait that tends to distinguish people in the achievement motivation model and has two aspects to it. The first aspect is a motive to approach success, which is captured in our anticipation of success. If you are highly motivated, you are likely to engage in the activity. For example, I have an expectation and quite a high anticipation of finishing this book; I am motivated. The second aspect, easily thought of as fear of failure, occurs when we do not anticipate success, and therefore do not really engage; we run away in a sense.

After motive, one has the probability or expectancy of success; this is simply our personal view of the likelihood that we will succeed. We tend to rank tasks in terms of their perceived difficulty. The more difficult the task, the less likely we are to believe we will be successful. Nik Wallenda crossed the Grand Canyon in Arizona on a high wire. He most likely believed his probability of success was close to one when he started. If I had to do what he did, mine would have been close to zero. My son and daughter both wanted longboard skateboards and asked me to make them. Because I was trained to work with wood, my expectancy for success is close to one. Finally, the last aspect is the incentive value of success, or more simply the feeling of pride when you succeed. In general, people tend to have the most pride when the task is difficult but can be
completed successfully versus very easy tasks. Consistently throughout the literature on motivation, tasks of medium difficulty tend to be associated with the highest levels of motivation for high-need achievers. It also appears that this task level provides a good deal of diagnostic information to people about what their current ability level is.

Think about your life: Easy tasks just get done, but are not really rewarding. Extremely difficult tasks may be rewarding, but I know I always feel more relief than pride or excitement when these difficult tasks are performed. But this is not the case for everyone. Motivation is a bit more complex. Some individuals choose easy tasks or very hard tasks: the first to avoid failure and the latter to escape easily and say the task was simply too hard.

MODERN EXPECTANCY VALUE

Modern versions of expectancy value (EV; Eccles, 1993; Eccles et al., 1983; Pekrun, 2000; Wigfield & Eccles, 2002) are still descendants of Atkinson’s work and are based on achievement performance, persistence, and choice. Unique is the nuance work for EV that has been completed in relational psychology and sociology. More important, much of this work has been completed in real-world situations and across cultures. Out of this newer work, some of the most interesting components related to expectancy revolve around defining values as stable beliefs about what is desirable. This focus on beliefs allows one to understand values as motives that affect choice and behavior within and across contexts. For example, in my previous line of work (marketing), writing a book would not have been valued as a task to engage in, let alone continue. But in my current work as a university professor, writing a book is quite valued. As Feather (1988) observed, values affect such things as what academic major to choose.

Eccles has been one of the major developers and refiners of EV for the past three decades. In this line of research, there are four types of values for you to think about. Attainment value is how important it is for you to do a task well. You might value community
EXPECTANCY VALUE

involvement and have a high attainment value for such activities as volunteering at the local library. Intrinsic value is how naturally interesting and enjoyable a task is to you. I have mentioned that I personally love building objects out of wood. My kids’ skateboards turned out incredibly well and they love riding them, which is wonderful, but I grew up building almost everything and the building activity is naturally rewarding. In addition, I expect to be very successful in the endeavor. Utility value refers to your perception (belief) that the task is useful for something in particular. You may not particularly want to take a night course after working all day, but you know the course material will help you advance in your job. Cost is your view of the negative aspects of engagement. I have made the judgment that a task’s value is not worth the cost. For some, the task makes them too anxious, or they believe there is too much work to do, or more simply, it takes them away from another task in which they want to engage. Therefore, you can think a task is important but still not engage in it because you think the cost is too high.

What tasks have you previously engaged or not engaged in related to the topics described previously? Why do you think you valued them? Take a moment to jot some notes or recall some experiences. It will help you remember the material and apply it later. It might help you be a bit more reflexive later when you are thinking about a new endeavor (such as switching careers).

Recent Conceptualization

Eccles and colleagues have proposed an overarching model based on their research. Figure 5.1 displays an abbreviated version of the larger model. Think about the cultural world you live in (the milieu) and the people around you who taught you about the world, your socializers. This really is a fascinating area about where our beliefs and values began, in essence from where they come. I have my students create an intellectual history of their beliefs related to motivation and life in general to highlight culture. They have to interview friends, family, and former teachers. This activity is always completed on time and well done; it seems to be rather motivating.

For you, were stereotypes promoted heavily in your home, such as girls do this and boys do that? I grew up in the garage working on
wood projects and everyone was supposed to work on wood projects, though this seemed to only apply to the boys. I can’t ever remember my sisters in the garage, but I do remember my dad saying on many occasions that everyone needs to know how to saw, hammer, solder, and build. As the model is designed, it provides some nice opportunities to discuss interactions and differences of how the cultural environment you grew up in played out, coupled with your current perceptions.

Then there are your personal characteristics. For me, I am the last of eight children. The first seven were born in a 12-year period, and I came along 6 years after child number 7. I know what you are thinking and everyone asks the same question; the answer is “yes.” My birth order, or really my cultural milieu, was drastically different than the others. Even my parents’ beliefs and behaviors had changed. My oldest sister told me when she got hurt, our parents were always right there, but by the time I came along, if I was not bleeding heavily enough to need a hospital visit, there was no rush. As much as I can remember, I have always enjoyed building things in the garage, so I obviously had pretty positive experiences and must have interpreted

---

**FIGURE 5.1** Abbreviated version of the expectancy value model.
Adapted from Eccles and Wigfield (2002).
them that way, because that is all I can remember (though we know our memories are not perfect [Loftus, 1975]). To this day, my “subjective task value” of building is quite high and I expect to succeed. Therefore, when I engage in a building activity and am successful, that feeds all the way back in the model to previous achievement-related experiences. This will eventually affect my self-schemata and self-efficacy of my abilities. Recently, the kids helped me build a Plinko-style game for their school fair. The fact that they both want to help is evidence that each child views this as a positive experience, in which he or she believes it is possible to be successful. I am also creating a space where each can be successful. Most important for my daughter, this reflects my beliefs about how to socialize her; I am trying to show her that she can build things she wants (another belief). But she also has her own beliefs; she has the goal of wanting a skateboard to ride and she believes she has the ability to help. There are also her interpretations of the events.

If I were to mention the word geometry to you, what would be your first response? Is it emotional? Is it calm and relaxed? Whenever I ask this question, I tend to get very negative responses, which makes me sad, but it highlights the effect of previous negative experience on the subjective task value and the subsequent disengagement from or avoidance of mathematics or mathematics-related topics. If I do not want to talk to anyone at a dinner party, I usually can just say I teach statistics to doctoral students and people avoid me.

A great deal of work and thought within the EV research area has been done with achievement motivation, as noted previously. Though there are many different types of experiments used in this research, self-report items you respond to based on your interpretation of the question are used to understand this phenomenon. For example, “Compared to your classmates, how well do you think you will perform in chemistry this year?” This is an expectancy belief statement, meaning the statement asks what your personal belief of success is in relation to a reference group. More specific task-related questions can be asked, such as, “How difficult is algebra for you?” Your perception of task difficulty interacts with your self-concept/efficacy levels of that task. Compared with your other classes, how good are you at English? You also have perceptions of your own competence, such as “I understand what I read the first time.”

95
CHAPTER 5

Personal goals are very important. But, in our day-to-day lives, many achievement goals are given to us by teachers, bosses, and others. There are two types of achievement goals: performance and mastery (Ames, 1992; Dweck, 1986; Nicholls, 1984). Mastery goals are great when you are in an achievement context, such as school, sports, work, or trades in which you need to master content and skills to be successful. This type of goal is associated with positive and productive thinking. The mastery-goals approach is also associated with a preference for a task that is challenging and that you can develop from engaging in. With challenge and opportunity for development, you tend to be more intrinsically motivated, and you are likely to ask for help if you need it. Because of this motivation, you work harder, persist longer, and perform better. Note that persistence is a major indicator of success. This is about the need for achieving. There is also the fear of failure, which is associated with performance-approach and performance-avoidance goals. Performance-approach goals are formed when you decide to engage in the activity for external reasons, such as doing better than classmates, or to demonstrate how good you are to your family and friends. Avoidance goals are associated with engaging to avoid failing or simply doing poorly (typically in comparison to others). Performance-approach goals are associated with higher grade performance and avoidance is associated with worse performance (Elliot & Church, 1997).

When there is discussion about performance and mastery, someone eventually brings up cheating. This is really interesting because of the research related to performance metrics and bad business behaviors. Within education, interestingly, there is research on performance beliefs and topics such as cheating. You might have a need for achievement, a desire to be successful, but how you get there and what you think is acceptable and are willing to do is a bit different. For example, students who thought their schools were very performance focused were the ones who also reported cheating (Anderman, Griesinger, & Westerfield, 1998). Bong (2008) observed that the more performance-based in approach a class was, the higher performance-avoidance behaviors were reported, along with more cheating. This is not to say that performance approach always leads to bad behaviors, but the general pattern is there. We
do not know how a performance approach may help some students. We do not have a good handle on the who, what, where, why, and how yet. One avenue might be the continuous improvement model in which the focus is on the development of skills and knowledge and not on gold stars, grades, awards, ranking, and so on (see Deming, 1994).

The task-value beliefs in this model are the ones I am really interested in, and maybe you are also. The importance of an activity to a person is really illuminating and determines whether someone engages in a task or not. Answer this question honestly: “How interested were/are you in getting good grades in school?” Over the past two decades, I have seen the answers to this question change radically in my students. There is almost no variability in response. Grades have a very high attainment value now. This was not the case for me in school, and definitely not when I started teaching. I show them my report cards from elementary and high school along with my university marks. The current generation of students is always stunned that my grades were as low as they were.

Within the task-value beliefs there are four components: attainment value, intrinsic (interest enjoyment) value, utility value, and cost. The focus of each has changed over the years. The original attainment value was the personal importance you placed on doing a task well, such as the personal need and value that completing the task would provide. Eccles has more recently viewed attainment value from the perspective of personal identity and the collective identities of groups in which you believe you are a member. Most important, this affects which tasks, activities, and goals you engage in. For example, many of my students identify with wanting to help people. They place a very high value on this and as such they engage in behaviors (i.e., college majors) that will lead to that type of long-term engagement. One of the questions I ask early in my classes is, “Why are you here?” The focus on identity in the model is important because it brings together many complex aspects of how we perceive a task. The focus becomes about my mastery and development or the focus becomes competitive performance because I am pitted against others. There is also the enjoyment component and how I perceive the level of enjoyment if I have to engage. The question becomes, “Will I enjoy this, or will I just grin and bear it?”
CHAPTER 5

Interest value is the level of interest and enjoyment you get from engaging in a task. You are reading a book on motivation, so you must have some interest in motivation. As you have noticed, I tend to write from my experiences, which interests many by making the topics concrete, but does not engage everyone. Motivation researchers expect that engagement in activities you enjoy, over time, will help you develop competence for the content, task, or skill. There is also the possibility that as engagement is sustained, the developed competence will become part of your self-concept, the ME. There are probably activities that you have engaged in over time that you enjoy and at which you are very competent. If you take a moment and think about them, are they part of your identity? Are they part of who you think you are? I know part of my identity is being a professor, and I believe that I am pretty competent in the three areas professors focus on: teaching, research, and service. And, I am interested enough and enjoy it enough to stay in the profession, even though I would probably double my salary if I went back to industry. But industry has other “costs” I am not prepared to pay, yet.

Originally, utility value was the value of an activity in relation to the current and future goals. Therefore, if a task I was going to engage in, such as writing this book, would assist me in meeting my current and future goals, then it had high utility value. Currently, Eccles views this as a value of a less central or important goal, somewhat of a grade below attainment value, where attainment has taken on much of the current and future goal values as part of identity. I think it is still valuable to think about utility in its original function. The goal or activity should have some current or future utility value for your overall goals and your expectation of success. How you make the judgment of value is yours—it is subjective. If you are involved in the same activity as someone else, your utility value (utils in economics research) will be different from that of the other person.

I like talking about cost a great deal because everyone initially assumes I mean money, but I really mean the relative cost of engaging in the activity, such as time, anxiety, fear of failure, and fear of the social costs of success. Let me take the last one first because fear and anxiety are discussed later. I had a student once whose after-school questions concerning the upcoming calculus exam I was answering.
EXPECTANCY VALUE

She asked great questions, showing a pretty deep understanding for the material. She tanked on the test. I called her into the office and asked, “What is this thing that you turned in?” I wrote a problem on a piece of paper and said, “Solve this.” She did in about 2 minutes. It was essentially the combination of three of the problems on the test. Why did she tank the test? Her response was that she was tired of being made fun of for being smart and for being the cheerleading captain and just needed a break. Fear of the consequences of success are real and negatively affect how and how much people engage in activities or how they behave during those activities.

All of these components feed into the expectation of success and eventually become part of your previous experiences. The model is easy to talk about, especially with the drawing shown in Figure 5.1, but you can easily forget how nuanced it is. The model does a nice job of trying to understand the complexity of engagement in an activity based on a wide inclusion of previous experiences, beliefs, goals, and expectations. Along with that wonderful nuance ability present in the model comes the price of being overwhelmed by its complexity. For you, the key may be to simply focus on one part at a time and determine how a specific activity you have engaged in does or does not fit into the model.

EMOTION—JUST A BIT

Talking about success and failure without discussing some emotion would be problematic, even though this book does not focus on emotion. To start, we have to have a bit of a heart-to-heart talk about the words emotion, affect, feelings, and mood. As two of my colleagues noted (Murphy & Alexander, 2000), in motivation research, there is a bit of a problem with consistent and agreed-upon definitions; this is true in much of social science research. I like to make overarching and subordinate categories, so affect to me is the overarching term. Subordinate to that are mood and affect. Mood is something that is low key; you can be in a good or bad mood without knowing what happened prior to the mood. Emotions are short term and intense and are linked to some sort of causal incident. For example,
I was extremely happy when the bank found an error in my favor; woohoo, free money (not really, but it felt great). There are emotional components to success and failure or even the expectancy of the two.

**Anxiety**

Earlier in the chapter, I discussed avoidance goals. In addition to the poor performance, people tend to try and avoid making a mistake, quit early (do not persist), and lose interest rapidly. This pattern, fear of failure leading to performance-avoidance goals, leads to poor adjustment skills (maladjusted coping) and anxiety. Therefore, individuals’ mental health and well-being are affected, as seen through measures of self-esteem, autonomy, and life satisfaction (Elliot & Sheldon, 1997). Imagine spending your whole career trying to avoid failure and how that strain would take a toll on your enjoyment of work, and life in general. It turns out that trying to avoid doing poorly is actually quite hard to do compared with just trying to do something (Elliot, Sheldon, & Church, 1997).

This is also directly related to anxiety. We all have some anxiety when we engage in an activity, new or old. How many times have you heard someone talk about “butterflies in the stomach?” Those butterflies are good because they remind you that you are still alive and excited. The focus on your thoughts is the key. Schmalt (1999) observed a basic difference in runners who think “I want to finish this race in under 10 minutes” versus those who think “I’m afraid I’ll finish in last place.” Those are two very different internal cognitions. I see this difference in young academics: “I am going to write and submit three articles on the data I have collected this summer!” and “I am afraid to send the manuscript to XYZ journal because it might get rejected.” You can’t have a long academic career and be constantly worried about rejection. We all get rejected; well, a few never do, but I do not know them. The top journals in my area receive hundreds of manuscripts a year and have a limited number of spots for them. I was the editor of a journal for 5 years and read over 2,000 manuscripts that were submitted. By the time I was done, I had actually published 165 of them, so getting rejected is actually pretty common.
**DWECK’S INTELLIGENCE MODEL**

Which statement feels more comfortable to you?

Your intelligence is something about you that you cannot change very much.

or

You can always greatly change how intelligent you are.

Take a moment to decide, which one feels like you?

Related to the performance and mastery concepts is an implicit theory of intelligence (Dweck, 1999). Entity theorists tend to believe that people have fixed qualities such as personality and intelligence. Have you ever said, “I am just naturally good at this, or that is just my personality”? These are entity comments. Incremental theorists believe these qualities are malleable over time. There is the advertising campaign about the more you earn, the more you learn. And obviously from Dr. Seuss, *I Can Read With My Eyes Shut!,* “The more that you read, the more things you will know. The more that you learn, the more places you’ll go” (1978, p. 27). Therefore, if you align with the first statement, then you are more of an entity theorist and if you are more in agreement with the second, you align with incremental theorists. This is important because it tends to affect the types of goals that we decide to go after (Dweck, Chiu, & Hong, 1995). When an achievement situation is occurring, entity theorists will focus on performance goals and will be concerned about looking smart in that situation, and on the flip side, not looking stupid. I hear from colleagues and students. The odd aspect of this is that the focus is not on the actual activity. Individuals focus on having the correct trait or the most of a quality such as intelligence or physical skill. I taught high school seniors, so I got over feeling dumb quickly; to them, I was always dumb. Incremental theorists adopt mastery goals and tend to focus on learning new skills and knowledge. To really understand some of the causal processes involved in this, an experiment was conducted in which participants in two different groups had to read a book about a famous person that was focused on either an entity or an incremental view. Participants who read the entity view were significantly more likely to choose a performance goal (Dweck & Leggett, 1988).
In just about every situation in which I have worked, I have seen the separation of these two types—incremental and fixed. As a student in the K–12 system, I watched friends worry about test scores and grades while I worried about liking the content and finding something interesting for me, the Scholastic Aptitude Test (SAT) being the be-all-and-end-all of this performance focus. “I have to do well on the SAT, so colleges won’t think I am dumb!!!” I will fully admit here, my SAT scores would not get me into the university where I am a professor. Not even close. The SAT was just a thing I had to do, but not part of my focus. I had been busy blowing up bottle rockets in the pool and measuring the change in water pressure. Yeah, a bit odd, but I almost missed my SATs. I see in my students an extreme focus on just the performance and I have to break them of it. I put them through an anthropological rite of passage as they move from a complete performance focus to a focus of incremental mastery and understanding. I watch colleagues on the tenure track worry about the “right” number of publications needed for tenure—a fixed focus. Interestingly, as a society we tend to create these competing views in situations and people choose which one to follow. Like every university, we have course evaluations that are completed by students. We tell the students the course evaluations are for developmental purposes (incremental) and then use them to decide whether a faculty member gets a pay raise or not (fixed). For me, it is amazing to watch the choices people make when the two options are in front of them. They do not realize they are choosing one option, such as a focus on just the performance indicator (fixed), and are missing the other choice, such as quality increases over time (incremental).

These topics of performance and incremental feedback into the large model influence our self-concept and, more important, how long we are willing to persist on a task. In motivation, we call this effort. Think about this phrase, “The more you try, the dumber you must be.” Do you agree with it? Does it upset you? This is equating high effort with low ability. And yes, at times if a task takes you a long time, your skill set is not as strong as someone else’s who completed it faster. Essentially, that extra effort provides evidence that the person does not have the skills or knowledge to be successful, yet. The fun part is the issue this creates for the entity theorist. If you do not have the skills, you must put forward a great deal of effort to be successful.
EXPECTANCY VALUE

People agree pretty easily with this statement. But this is what the entity theorists want to avoid. They do not think that effort will be useful because they already believe that these qualities are fixed. Now comes the fun; they usually start withholding effort, or do something that causes failure but keeps their self-esteem intact. These are called maladaptive behaviors in counseling and I have watched many colleagues and students engage in them. More specific, I have learned that I need to find out, when I can, which side of the fence a student is on before I give feedback on a paper or assignment. Entity theorists take it as an attack on their natural ability and this creates all kinds of problems, like not putting in the same or more effort the next time.

FINAL THOUGHTS

Your expectations about an event, task, activity, and so on, are based on your background and previous experiences and really do affect how much you will engage, even when your engagement is required. Therefore, you need to be more reflective and cognitively aware of how you are evaluating a new task and why you are giving it that evaluation. I am not asking you to “think about it.” I am asking you to learn to understand the whys of your engagement, disengagement, or avoidance of specific tasks or goals. If you do this carefully, you will find opportunities to grow and develop and be successful in new areas you never “expected.”

REFERENCES


EXPECTANCY VALUE


SUGGESTED READINGS

