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The Case for a Social Psychology of Creativity

It is nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wreck and ruin without fail. It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty.

Einstein, 1949, p. 19

In this surprisingly lyrical passage from his autobiography, Einstein sounds a theme that will be repeated throughout this book: largely because they affect motivation, social factors can have a powerful impact on creativity.

To understand creativity, two basic questions must be answered. How is creative performance different from ordinary performance? What conditions are most favorable to creative performance—what personal abilities and characteristics, what social environments? With this book, I hope to lay the foundation for a social psychology of creativity. In this endeavor, I will concentrate on the second question by considering the social conditions that are most conducive to creativity. In examining the impact of social factors on creative performance, however, it is also necessary to consider the ways in which creative performance is different from ordinary performance. Thus, throughout the book, both questions will be addressed.

A Gap in Creativity Research

There are two reasons for developing a social psychology of creativity. The first, obvious reason is simply that there has previously been no such discipline. There is little relevant theory, there is only a small research literature on the effects of specific social and environmental influences on creativity and, more importantly, there are virtually no experimental studies of the effects of such influences. Clearly, this is not because there are few creativity studies overall. In 1950, Psychological Abstracts had 11 listings under “Creativity,” less than .2% of the total number of articles abstracted. In 1960, this category represented .4% of the total; in 1966, it accounted for .8%, and by 1970 creativity articles made up fully 1% of
all publications listed. Few of these studies were experimental, though, and even fewer concerned social-psychological factors. Between 1976 and 1978, no articles on creativity were published in the *Journal of Experimental Psychology, Psychological Review* or the *Journal of Experimental Social Psychology*. One article that could be considered related to creativity appeared in *Cognitive Psychology*, one in *Psychological Bulletin*, and four in the *Journal of Personality and Social Psychology*. During that same period, however, over 600 creativity articles were published in less experimentally oriented journals.

If creativity researchers have not been doing experimental studies of social-psychological effects on creative performance (and clearly they have not), what have they been doing? The major emphasis in creativity research over the past three decades has been on personality studies of creative individuals. This emphasis was directly predicted—or, perhaps, initiated—by Guilford in 1950: “the psychologist's problem is that of creative personality” (p. 444).

This research has taken several different forms. One long-standing approach involves the study of biographies and autobiographies of well-known creative individuals, attempting to define their peculiar qualities of intellect and personality (Galton, 1870; Cox, 1926). A second approach to the examination of individual differences in creative ability is the intensive laboratory study of one or a few creative individuals. Research carried out by MacKinnon and Barron (MacKinnon, 1962) at the Institute of Personality Assessment and Research at Berkeley is typical of this approach. These researchers carried out "living-in" assessments of artists and scientists who had been reliably nominated as creative by their peers. Over a weekend, each subject would be formally interviewed by different individuals, and would complete a large battery of personality and intelligence tests. Finally, the most common variety of individual-difference research on creativity examines ordinary individuals. Typically, an average population is chosen and the members are given personality, intelligence, and creativity tests. Those who achieve high creativity scores are compared along the other assessment dimensions with those who score low (e.g., Wallach & Kogan, 1965).

Some creativity research has focused on issues other than individual differences. For example, Newell, Shaw, and Simon (1962) have considered the cognitive skills necessary for creativity. They describe an information-processing approach to the problem, one in which creative activity is seen as the application of particular set-breaking heuristics. Their relatively sophisticated description of the creative process is linked to computer-based notions of human intellectual abilities. In contrast to the approach of Newell et al. (1962), most other work on the cognitive skills involved in creativity is less theoretical, relying on common-sense notions of the creative process and, occasionally, empirical findings from industry and education. The most familiar work in this category, Osborn's (1963) "brain-storming" program, is prototypical: sets of rules or heuristics are taught as guidelines for the generation of creative solutions to problems. Subsequently, ideas generated by people who have been trained in the program are compared with those of people who have not.
Finally, there have been a modest number of studies examining the effects of particular social or physical environments on creativity. Some studies have compared two populations from different environments on creativity test performance. For example, open classrooms have been compared to traditional classrooms (e.g., Klein, 1975), and large-city classrooms have been compared to those from smaller cities (Torrance et al., 1960). Other studies have used biographical data to investigate the effects of home and religious influences on the creativity of eminent people (e.g., Roe, 1952), or historical data to uncover the social, political, and cultural environments that foster or inhibit creativity (e.g., Simonton, 1975a).

The most active area of creativity research, then, has been the description of the peculiar characteristics of famous or widely recognized creative people, living and dead, or the description of differences in personality and intellect between people who do well on creativity tests and people who do not. Implicit in much of this work is the assumption that the important characteristics of creative people are largely innate (or at least largely immalleable), and that these characteristics clearly and reliably separate creative people from noncreative people.

As a result of the focus on individual differences, some potentially important areas of inquiry into creativity have been virtually ignored. There has been a concentration on the creative person, to the exclusion of "creative situations"—i.e., circumstances conducive to creativity. There has been a narrow focus on internal determinants of creativity to the exclusion of external determinants. And, within studies of internal determinants, there has been an implicit concern with "genetic" factors to the exclusion of contributions from learning and the social environment.

Previous research on creativity has had fundamentally different aims, in most respects, from those of a social psychology of creativity. Studies on the personality characteristics of outstandingly creative individuals have been concerned with identifying particular clusters of traits that can accurately describe such individuals. To an extent, these studies have been successful in fulfilling that goal. Studies on the characteristics that distinguish people who do well on creativity tests from those who do not do well are also concerned with individual-level description and, perhaps, with prediction. Again, this research has met with some success. Cognitive psychologists studying the creative process have identified some operating procedures of the human cognitive system that seem to lead with a high probability to novel and useful solutions. In contrast to these research endeavors, a social psychology of creativity aims to identify particular social and environmental conditions that can positively or negatively influence the creativity of most individuals.

**Some Social Psychological Stories**

The second reason for developing a social psychology of creativity is more important than the simple dearth of studies in this area: Social and environmental

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1. When this symbol appears beside a paragraph, it means that the Update to this chapter contains substantially new theory or data on this point.
factors seem to play a crucial role in creative performance. There is considerable informal evidence that social-psychological factors have a significant impact on the productivity and creativity of outstanding individuals. Most of this evidence comes from autobiographies, letters, journals, and other first-person accounts by scientists, artists, writers, and others generally acknowledged for their creative achievements. Certainly, caution must be exercised in the use of such sources as evidence of actual psychological phenomena. One poet herself expressed doubt in the ability of creative persons to provide insight into their creativity:

In answering the question, How are poems made? my instinctive answer is a flat, "I don't know." It makes not the slightest difference that the question as asked me refers solely to my own poems, for I know as little about how they are made as I do of anyone else's. What I do know about them is only a millionth part of what there must be to know. I meet them where they touch consciousness, and that is already a considerable distance along the road of evolution. (Lowell, 1930, p. 24)

There are three reasons, however, for considering first-person reports as legitimate sources of background material for developing a social psychology of creativity. First, the main focus of interest is not on introspections about thinking processes (which, as Lowell noted, are bound to be inaccurate or at least incomplete). Rather, the main focus is on creative persons' reports of social factors that impinged on them and the apparent stimulation or inhibition of their work that followed. Second, these reports are used only as sources of hypotheses about social factors, and not as tests of those hypotheses. Finally, although particular creative persons might certainly have experienced idiosyncratic reactions to social and environmental influences, if certain factors are repeatedly cited as important by creative people, it is likely that a real phenomenon is being identified.

Several creative people have provided excellent accounts of their daily working lives, often affording insight into influential social forces. (Not surprisingly, the majority of such accounts—particularly the more richly descriptive ones—come from writers.) In many of these reports, social forces are cited as harmful to creativity. This creates a peculiar paradox: May we accept the notion that such forces are indeed detrimental to creativity, if we draw the evidence from persons who distinguished themselves for their highly creative work? It seems more appropriate to find such evidence in the working lives of individuals who were never able to achieve wide acclaim for their work. But these individuals, of course, are not to be found among the names catalogued in collections of autobiographies, journals, and personal letters. We are forced, then, to use as a preliminary data source the writings of creative individuals who experienced normal peaks and depressions in their creative productivity, and then to examine experimentally the social forces that appear to have covaried with those fluctuations.

First-person accounts of creative activity contain ample evidence on the major issue considered in this book: the creativity-enhancing effect of working on something for its own sake, and the creativity-undermining effect of working on something for the sake of meeting an external goal. This contrast between internal (or
intrinsic) and external (or extrinsic) motivation appears repeatedly in these accounts and, because of this obvious importance, it appears repeatedly in the social psychology of creativity developed in later chapters.

**Albert Einstein: From External to Internal Control**

Although Einstein wrote little of his life and work, what he did record contains a recurrent theme: His interest in science and, presumably, his creativity, were undermined by forces that exerted external control over his work. As a youth, he attended a regimented, militaristic school in Germany where the pressures of exam period so overwhelmed him that he temporarily lost his interest in science which was, even at that time, quite substantial. "This coercion had such a detering effect upon me that, after I had passed the final examination, I found the consideration of any scientific problems distasteful to me for an entire year" (1949, p. 18).

Partly in an attempt to escape from such a strictly regimented learning environment, Einstein left Munich for Zurich when he was 15, hoping to enroll in the Polytechnic Institute there. To his dismay, however, he failed the entrance examination and was required to enroll in a Swiss school for remedial coursework. According to one Einstein analyst (Holton, 1972), this episode represented a turning point in Einstein’s schooling and, perhaps, in his scientific thinking as well. In sharp contrast to what he had known, this school was humanistic in orientation, stressing the individual’s unencumbered search for knowledge. This social atmosphere was ideally suited to Einstein’s independent style of thinking and working. There was little emphasis on memorization, much emphasis on individual laboratory work and student-initiated investigation, and a concentration on the development of relaxed, democratic exchanges between students and teachers. To the end of his life, Einstein remembered this school fondly: “It made an unforgettable impression on me, thanks to its liberal spirit and the simple earnestness of the teachers who based themselves on no external authority” (Holton, 1972, p. 106). It was here that Einstein devised the first *Gedankenexperiment* that would lead him to the theory of relativity.

Other creators have resisted external attempts to control their behavior. For example, Woody Allen reports enjoying his work as a stand-up comedian and a writer far more than his work as a filmmaker precisely because other people have so much more control over various aspects of filmmaking; in his other pursuits, he alone is in complete control of the outcome (Lax, 1975). Like many highly creative individuals, Allen shuns tasks that he feels pressured to do but earnestly attacks work that meets his own interests. He regularly played hooky from school as a child, and flunked out of NYU after his first semester. (The courses he failed in college included film production.) Starting at an early age, with great consistency, he rejected the expectations that others had for his performance. Rather than attending school, he would wander around Manhattan observing people or visiting magic stores or watching movies. Rather than conforming to someone else’s notion of his proper education, he taught himself filmmaking, music, literature, phi-
losophy, history, and magic. On the night he was awarded an Oscar for *Annie Hall*, he was doing what he always did on Monday night, and what he clearly preferred to society’s recognition—playing clarinet with his jazz group in Manhattan.

The rejection of external constraints is evident in the writing of D.H. Lawrence, who wrote to a friend, “I always say, my motto is ‘Art for my sake.’ If I want to write, I write—and if I don’t want to, I won’t” (Allen, 1948, p. 225). Joyce Carol Oates suggests that her underlying reason for writing is the intrinsic pleasure that reading something good brings: “I write to discover what it is I will have written. A love of reading stimulates the wish to write—so that one can read, as a reader, the words one has written” (1982, p. 1). And Picasso said, “When we invented cubism, we had no intention of inventing cubism, but simply of expressing what was in us. Nobody drew up a program of action, and though our friends the poets followed our efforts attentively, they never dictated to us” (Zervos, 1952, p. 51).

Even the minor daily demands of relatives, friends, and colleagues can act as social constraints that undermine creativity. It appears that highly creative individuals must often resist those sources of external control, as well. Charles Dickens bluntly pointed this out in answer to a friend’s invitation:

“It is only half-an-hour”—“It is only an afternoon”—“It is only an evening,” people say to me over and over again; but they don’t know that it is impossible to command one’s self sometimes to any stipulated and set disposal of five minutes—or that the mere consciousness of an engagement will sometimes worry a whole day. These are the penalties paid for writing books. Who ever is devoted to an art must be content to deliver himself wholly up to it, and to find his recompense in it. I am grieved if you suspect me of not wanting to see you, but I can’t help it; I must go in my way whether or no. (Allen, 1948, p. 230)

Anne Sexton: Coping with External Constraint

In Anne Sexton’s letters to friends, colleagues, and relatives (Sexton & Ames, 1977), one attitude toward her writing is prominent: a consistently high level of intrinsic motivation, a motivation to write poetry primarily because it was something she loved to do. Perhaps this should be expected of someone who, as a housewife at the age of 28, watched an Educational Television program called “How to Write a Sonnet” and decided to give it a try. She enjoyed it so much that, for the rest of her 46 years, she never stopped writing poetry. It became first her passionate avocation and then her vocation, carried out over obstacles that included a traveling-salesman husband, two young children, a household to run, and repeated bouts with serious depression. In an introduction to Sexton’s letters, her daughter says, “Very quickly she established a working routine in a corner of the already crowded dining room. Piled high with worksheets and books, her desk constantly overflowed onto the dining room table; she wrote in every spare minute she could steal from childtending and housewifely duties” (p. 29).
Throughout her career as a writer, Sexton struggled (usually with success) against several types of external constraints, including evaluation, competition, and rewards. She once wrote to her psychiatrist, for example, that she had become a “cheap artist” since winning a Radcliffe grant, that success of this type was not good for her. At times, though, she was so obsessed with making as much money as possible that she would consider doing projects only for their commercial value:

About the little whiz-bang piece (book, whatever) on psychiatrists... a desperate attempt on my part to write something that will make me some money... it is supposed to be funny and awful and a little nutty, i.e., not literature but rather a cheap but possibly commercial thing, supplemented with cartoons and all. I don’t want my name on it. Not that my name isn’t good enough but the book isn’t good enough for my name... (Sexton & Ames, 1977, p. 241)

Sexton seemed to be generally aware, however, of the detrimental effects that excessive concern with reward could have on creativity. When her friend W. D. Snodgrass won the Pulitzer Prize for poetry, she cautioned him against losing his original intrinsic motivation for writing:

So okay. “Heart’s Needle” is a great poem. But you have better than that inside you. To hell with their prize and their fame. You’ve got to sit down now and write some more “real”... write me some blood. That is why you were great in the first place. Don’t let prizes stop you from your original courage, the courage of an alien. Be still, that alien, who wrote “real” when no one really wanted it. Because, that is the only thing that will save (and I do mean save) other people. Prizes won’t. Only you will. (Sexton & Ames, 1977, pp. 109–110).

Sexton’s cautious and ambiguous attitudes toward reward for creative work are captured well in this passage from a letter to her agent: “I am in love with money, so don’t be mistaken, but first I want to write good poems. After that I am anxious as hell to make money and fame and bring the stars all down” (pp. 287–288).

In addition to overcoming her concerns about money, Sexton also struggled to avoid an excessive focus on external evaluation. One of her earliest poetry mentors, Robert Lowell, told her once to “write ten more really good poems,” and she immediately found herself incapable of writing anything until she could decide that Lowell’s dictum was of no importance. Like other creative writers, Sexton saw publication and critical acclaim as a kind of addictive drug; pleasing at first, it is never enough and quickly becomes the misplaced focus of one’s work. She single-mindedly fought to remain her own critic, instead of allowing the outside world to dictate the worth and direction of her work. Indeed, she once facetiously suggested that poems be published anonymously to avoid this trap. Her advice to Erica Jong (after the publication of Jong’s second novel) captures the essence of Sexton’s ability to avoid the undermining effects of this social constraint:
Don’t dwell on the book’s reception. The point is to get on with it—you have a life’s work ahead of you—no point in dallying around waiting for approval. . . . You have the gift—and with it comes responsibility—you mustn’t neglect or be mean to that gift—you must let it do its work. It has more rights than the ego that wants approval. (Sexton & Ames, p. 414).

Despite her occasional focus on external praise and tangible reward, Sexton’s primary concentration on the intrinsic satisfaction of writing was evident in a letter she wrote to her mother shortly after her work in poetry had begun:

> Although there is nothing new in the manner in which I have written these, it seems new to most poet tasters. I do not write for them. Nor for you. Not even for the editors. I want to find something and I think at least “today” I think I will. Reaching people is mighty important, I know, but reaching the best of me is most important right now. (Sexton & Ames, pp. 32–33)

In keeping with this intrinsic orientation, Sexton often did succeed in functioning as her own worst critic. On more than one occasion, she sent poems to magazine editors virtually asking them not to print the poems because they did not meet her own high standards. “Now . . . the magazine acceptance ceased to work—now it’s got to be a Good Poem (worst critic Anne Sexton)” (p. 78). From time to time, when she struggled with a loss of intrinsic motivation brought about by a fear of external reactions to her work, she attempted to explicitly reject external goals: “my ambition to write good poems is going to stop me from daring to write bad ones. But I feel a new confidence somewhere, a new daring . . . to write for its own sake and give up the goal. I am going (I hope) to love my poems again and bring them forth like children . . . even if they are ugly” (p. 153).

**Sylvia Plath: A Losing Battle with External Constraint**

If Anne Sexton appears to have been primarily driven by intrinsic motivation, Sylvia Plath appears to have struggled unsuccessfully for most of her working life against some powerful extrinsic motivations. Her earliest attempts at publication of poetry and fiction met with marked success; by the time she graduated from Smith College, she had won various writing awards, published in national magazines, served as guest editor at Mademoiselle magazine, and won a Fulbright scholarship to study at Cambridge. A desire to regain this early success that seemed so effortless, however, bedeviled her through persistent writer’s blocks in later years: “Suddenly my life, which had always clearly defined immediate and long-range objectives—a Smith scholarship, a Smith degree, a won poetry or story contest, a Fulbright, a Europe trip, a lover, a husband—has or appears to have none” (Hughes & McCullough, 1982, p. 251).

Plath struggled with social constraints of many forms. Through her tortured adolescence and early adulthood, she repeatedly imagined the possible devastating effects that conventional marriage could have on her creativity: “I desire the
things which will destroy me in the end. . . . I wonder if art divorced from normal and conventional living is as vital as art combined with living; in a word, would marriage sap my creative energy and annihilate my desire for written and pictorial expression” (Hughes & McCullough, 1982, p. 23).

Clearly, though, the greatest burden that impeded Plath’s writing during her postcollege years is an extrinsic constraint that, perhaps more than any other specific social factor, appears to undermine the creativity of outstanding individuals: the expectation of external evaluation, and the attendant concern with external recognition. Plath’s excessive concern with recognition often resulted in jealousy and competitive rage. For example, after writing one poem of pure description, she felt disgusted with her effort because, unlike Adrienne Rich, she seemed incapable of “getting philosophy” into her poems: “Until I do I shall lag behind A. C. R.” (Hughes & McCullough, 1982, p. 296). Repeatedly, she was consumed by her desire to achieve more than others with whom she compared herself. “Yes, I want the world’s praise, money & love, and am furious with anyone, especially with anyone I know or who has had a similar experience, getting ahead of me” (p. 305). On many occasions, these concerns clearly interfered with Plath’s ability to work:

All I need now is to hear that G. S. [George Starbuck] or M. K. [Maxine Kumin] has won the Yale and get a rejection of my children’s book. A. S. [Anne Sexton] has her book accepted at Houghton Mifflin and this afternoon will be drinking champagne. Also an essay accepted by P/JHH, the copycat. But who’s to criticize a more successful copycat. Not to mention a poetry reading at McLean. . . . And now my essay, on Withens, will come back from P/JHH, and my green-eyed fury prevents me from working. (p. 304)

Plath was fully aware that her early success had led her to become dependent on—almost addicted to—positive evaluation from others.

I have been spoiled, so spoiled by my early success with Seventeen, with Harper’s, and Mademoiselle, I figured if I ever worked over a story and it didn’t sell, or wrote a piece for practice and couldn’t market it, something was wrong. I was gifted, talented—oh, all the editors said so—so why couldn’t I expect big returns for every minute of writing? (Hughes & McCullough, 1982, p. 250)

Repeatedly, Plath realized that she was obsessed with the idea of publication of her work, obsessed with a fear that she might not be admired and esteemed. Furthermore, she realized that this obsession was undermining her efforts to write creatively: “I dream too much of fame, posturings, a novel published, not people gesturing, speaking, growing and cracking into print” (p. 180)

Like Sexton, Plath tried consciously to adopt a more intrinsic orientation: “editors and publishers and critics and the World, . . . I want acceptance there, and to feel my work good and well-taken. Which ironically freezes me at my work, corrupts my nunnish labor of work-for-itself-as-its-own-reward” (Hughes & McCullough, 1982, p. 305). And, like Sexton, Plath attempted to distance herself from the constraint of external evaluation, to diminish its salience. She occasion-
ally resolved, for example, to avoid showing her creative efforts to her poet-husband. At other times, she resolved to shut out all thought of critics except herself and her husband: "So I will try to wean myself into doing daily poetic exercises with a hell-who-cares-if-they're-published feeling. That's my trouble. . . . The main problem is breaking open rich, real subjects to myself and forgetting there is any audience but me & Ted" (p. 170). In one particularly interesting example of self-deception, she wrote in her journal, "I must feel the pain of work a little more & have five stories pile up here, five or ten poems there, before I start even hoping to publish and then, not counting on it: write every story, not to publish, but to be a better writer—and ipso facto, closer to publishing" (p. 173). At another point, she summed up the heart of the problem: She had become trapped by the desire for the external world to label her "a writer."

Apparently, this problem is a common one among writers and, perhaps, among individuals in other domains of creative activity, as well. In discussing what she saw as the major problem with American writers, Gertrude Stein remarked, "The trouble is a simple one. They become writers. They cease being creative men and soon they find that they are novelists or critics or poets or biographers" (Preston, 1952, p. 167). Stein pointed to Sherwood Anderson as a contrary example, someone who "is really and truly great because he truly does not care what he is and has not thought what he is except a man, a man who can go away and be small in the world's eyes and yet perhaps be one of the few Americans who have achieved that perfect freshness of creation and passion" (p. 167).

**James Watson: A Race for Success**

Almost from the day James Watson entered the Cambridge laboratory where he met and began to collaborate with Francis Crick, one motive was clear in their pursuit of the correct descriptive model for DNA: "Imitate Linus Pauling and beat him at his own game" (Watson, 1968, p. 37). They knew that they would have to use methods and theories that had been devised by Pauling in his work on alpha-helices. They knew that Pauling, like many chemists and biochemists, was also working on the DNA problem. And, finally, they were certain that there was a Nobel prize waiting for whomever first published a correct description of the DNA molecule.

This knowledge, along with their overriding desire to win this competition, was a salient force in Watson and Crick's work on the problem. Few pages go by in Watson's account of the research without mention of their obsession with this competition: "But if I went back to pure biology, the advantage of our small headstart over Linus might suddenly vanish" (Watson, 1968, p. 92). "Fortunately, Linus did not look like an immediate threat on the DNA front" (p. 93). When it appeared that Pauling would pull ahead in the race, as it appeared from a letter he had written his son (who was living in Cambridge and knew Watson and Crick), they despaired:
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It was from his father. In addition to routine family gossip was the long-feared news that Linus now had a structure for DNA. No details were given of what he was up to, and so each time the letter passed between Francis and me the greater was our frustration. Francis then began pacing up and down the room thinking aloud, hoping that in a great intellectual fervor he could reconstruct what Linus might have done. As long as Linus had not told us the answer, we should get equal credit if we announced it at the same time. (p. 99)

And, when Pauling failed in his initial attempts, they were ecstatic:

Francis and I went over to the Eagle. The moment its doors opened for the evening we were there to drink a toast to the Pauling failure. Instead of sherry, I let Francis buy me a whiskey. Though the odds still appeared against us, Linus had not yet won his Nobel. (p. 104)

It is impossible to estimate the impact that this fierce competition had on Watson and Crick’s creativity. Obviously, they did eventually succeed in their task. It is possible, of course, that they would have made their discovery sooner and with fewer false starts if they had not been so caught up in trying to beat another researcher “at his own game.” Watson, however, gives no hint of this possibility; if anything, he seems to have viewed this competition as a spur to productivity at best and a simple fact of life in science at worst. In any case, it is clear from Watson’s account that competition must be considered a salient social factor in creative endeavor.

What are the effects of winning the rewards that many creative people appear to so earnestly desire? Although, certainly, in many cases their work would be impossible without the support of grants, prizes, stipends, and ordinary salaries, at least some creative individuals appear to have suffered from the receipt of salient tangible rewards. Apparently, T. S. Eliot believed that the Nobel Prize would destroy his creativity. He was actually somewhat dejected after receiving it, and when a friend congratulated him and said, “High time!”, Eliot replied, “Rather too soon. The Nobel is a ticket to one’s own funeral. No one has ever done anything after he got it” (Simpson, 1982, p. 11). And Dostoevsky appears to have been virtually paralyzed by a large monetary advance for writing a novel which he had not yet even conceived:

And as for me, this is my story: I worked and was tortured. You know what it means to compose? No, thank God, you do not! I believe you have never written to order, by the yard, and have never experienced that hellish torture. Having received in advance from the Russy Viestnik so much money (Horror! 4,500 roubles). I fully hoped in the beginning of the year that poesy would not desert me, that the poetical idea would flash out and develop artistically towards the end of the year, and that I should succeed in satisfying everyone. . . but on the 4th of December . . . I threw it all to the devil. I assure you that the novel might have been tolerable; but I got incredibly sick of it just because it was tolerable, and not positively good—I did not want that. (Allen, 1948, p. 231)
Thomas Wolfe: The Pressure of Success

In describing the horrendous doubt and confusion he experienced in attempting to write his second novel, Thomas Wolfe suggests that, ironically, the positive critical response to his first work was largely responsible:

I would read about myself, for example, as one of the "younger American writers." I was a person who, some of the critics said, was to be watched. They were looking forward to my future book with interest and with a certain amount of apprehension. . . . Now, indeed, I could hear myself discussed, and somehow the fact was far more formidable than I had dreamed that it could be. . . . I was a young American writer, and they had hopes and fears about my future, and what would I do, or would it be anything, nothing, much, or little? Would the faults which they had found in my work grow worse or would I conquer them? Was I another flash in the pan? Would I come through? What would happen to me? (1936, p. 14)

Not only did the positive critical reception of his first book serve to paralyze Wolfe, but many citizens of his hometown, in which the first novel had ostensibly been set, were outraged at what he had portrayed. In some ways, this form of external evaluation was even more difficult for him to put out of mind:

Month was passing into month; I had had a success. The way was opened to me. There was only one thing for me to do and that was work, and I was spending my time consuming myself with anger, grief, and useless passion about the reception the book had had in my native town, or wasting myself again in exuberant elation because of the critics and the readers' praise, or in anguish and bitterness because of their ridicule. (p. 25)

Time pressures became part of the burden success had laid on Wolfe; his "public"—especially his critics—were awaiting his second novel. Although no publisher had given him a deadline for completion of this second manuscript, he had a clear sense of the implicit expectations.

At any rate, while my life and energy were absorbed in the emotional vortex which my first book had created, I was getting almost no work done on the second. . . . A young writer without a public does not feel the sense of necessity, the pressure of time, as does a writer who has been published and who must now begin to think of time schedules, publishing seasons, the completion of his next book. I realized suddenly with a sense of definite shock that I had let six months go by since the publication of my first book and that, save for a great many notes and fragments, I had done nothing. (1936, p. 26)

Once the time pressure became explicit, Wolfe's despair and distraction only intensified:

Almost a year and a half had elapsed since the publication of my first book and already people had begun to ask that question which is so well meant, but which as year followed year was to become more intolerable to my ears than the most deliberate mockery: "Have you finished your next book yet?" "When is it going to be published?" . . . now, for
the first time, I was irrevocably committed so far as the publication of my book was concerned. I began to feel the sensation of pressure, and of naked desperation, which was to become almost maddeningly intolerable in the next three years. (pp. 49–50)

A Recurrent Theme: Intrinsic versus Extrinsic Motivation

The creative individuals whose first-person accounts of creative work I have reviewed here do not, of course, represent a random sample of writers, scientists, and artists. Nonetheless, their explicit and implicit statements about the influence of social factors on their work are in fact representative of the statements made by many others who have distinguished themselves for their creativity. Each of these factors appears regularly in first-person reports: a concern with evaluation expectation and actual evaluation; a desire for external recognition; a focus on competition and external reward; a reaction against time pressures; a deliberate rejection of society’s demands; and a preference for internal control and intrinsic motivation over external control and extrinsic motivation.

These influences can be considered together as illustrations of one general principle: Intrinsic motivation is conductive to creativity, but extrinsic motivation is detrimental. It appears that when people are primarily motivated to do some creative activity by their own interest in and enjoyment of that activity, they may be more creative than they are when primarily motivated by some goal imposed on them by others. Although this principle appears in some form in nearly all of the first-person accounts presented earlier, it is clear that there are large differences in the degree to which external goals undermined creativity. Sylvia Plath, for example, appeared to be crippled for long periods of time by a concern with evaluation and competition and the demands that others made on her. For Anne Sexton, on the other hand, these seem not to have been major issues. Why the difference? It is possible that the two writers differed in their fundamental abilities and temperaments. There are ways, however, in which social factors could also have played a part. Through early socialization, Sexton might have learned strategies for ignoring or overcoming external constraint. Or, perhaps, there were important differences in the levels of constraint in the working environments of these two writers. It is not possible, by simple examination of the introspective accounts, to arrive at any reliable conclusions to this issue; experimental research is required. In any case, however, it can be said that social psychological factors are important in creativity and, among these, the most crucial may be those that either lead people to concentrate on the intrinsically interesting aspects of a task or lead them to concentrate on some extrinsic goal.

The intrinsic motivation principle will be the cornerstone of the social psychology of creativity developed in this book. Before that principle is examined in detail, however, it will be necessary to lay a methodological and conceptual foundation. Chapter 2 deals with the meaning and measurement of creativity, and Chapter 3 presents in detail a consensual assessment technique used in much of
the research that appears in later chapters. Chapter 4 presents a working model of the creative process, highlighting the role of social-psychological factors. Chapters in the second section of the book include research evidence on several specific factors used in tests of the intrinsic motivation hypothesis: evaluation, reward, and task constraint of other types. In addition, these chapters present research on social factors that do not derive directly from the intrinsic motivation principle: social facilitation, modeling, and educational environments, among others. The final section of the book includes chapters on the application of social-psychological principles to creativity enhancement and on integrating a social psychology of creativity into a comprehensive theoretical framework.

Update

As of 1983, besides our own program of research there was only one other researcher who had produced a significant body of work on the social psychology of creativity: Dean Simonton. In the years since, many researchers and theorists have seriously turned their attention toward the impact of social factors on creativity. For example, Harrington and his colleagues conducted an empirical study of long-term parental influences on creativity (Harrington et al., 1987) and developed an “ecology of human creativity” theory that includes social influences (Harrington, 1990). Several other theorists have included social psychological factors in their recent conceptualizations—for example, Csikszentmihalyi (1988) in his “systems view of creativity,” Gardner (1988) in his “interdisciplinary perspective,” Gruber (1988) in his “evolving systems” approach to creativity, Sternberg and Lubart (1991) in their “investment theory” of creativity, and Woodman, Sawyer, and Griffin (1993) in their interactionist theory of organizational creativity.

Although creativity theorists had, several decades earlier, speculated on the importance of environmental “press” (Mooney, 1963), it is only in recent years that creativity conferences, edited books, and journals have explicitly focused attention on the issue (e.g., Gruskiewicz & Hills, 1992; Isaksen, Murdock, Firestien, & Treffinger, 1993). The field of creativity research has two major new journals, Creativity Research Journal and Creativity and Innovation Management, in addition to the long-standing Journal of Creative Behavior. Over the past few years, many of the conceptual and empirical articles in each of these journals have dealt explicitly or implicitly with social psychological variables. Moreover, though they are still rare, articles on creativity have appeared with increasing frequency in mainstream psychology journals.

Thus, it appears that the case for a social psychology of creativity has been made successfully. It also appears that the creativity field overall has enjoyed an increase of activity in both conceptual development and rigorous empirical research. But the social psychology of creativity is still in its early stages, and a focus on creative persons, creative personalities, and creativity skills still dominates the field. Even
considering the sizable advances reported in this update, there are still many unanswered questions about social influences on creativity.

The first edition of this chapter asserted that "largely because they affect motivation, social factors can have a powerful impact on creativity." With twelve more years of research behind us, we reaffirm that basic theme. Whatever an individual's talents, domain expertise, and creative thinking skills, that individual's social environment—the conditions under which he or she works—can significantly increase or decrease the level of creativity produced. It still appears that the primary mechanism (or at least a primary mechanism) of this influence is the individual's motivational state. Intrinsic motivation, which is the drive to engage in some activity because it is interesting and involving, appears to be essential for high levels of creativity. And intrinsic motivation can be significantly affected by the social environment.

In examining this proposition, we initially focused on individuals (both children and adults) in experimental studies where we carefully manipulated social factors and studied the effects on artistic and verbal creativity. The first edition of this book reported the results of these early experiments. We have since expanded our program of research to include problem-solving creativity and to add nonexperimental methods (surveys, interviews, and archival sources) for studying influences on the creativity of individuals, groups, and organizations. In so doing, we have moved beyond a focus on intrinsic and extrinsic motivation. Although the intrinsic motivation principle (formerly termed the intrinsic motivation hypothesis) is still crucial in our theory of creativity, we have paid more detailed attention to other aspects of social influence on creativity. And, as we shall make clear in the Update to Chapter 4, the intrinsic motivation principle itself has been revised.

Indeed, we have even expanded beyond our original concern with social psychological factors, in large part because the social psychological perspective has finally begun to find its way into mainstream research and theory. The first edition of this book presented the outline of a comprehensive theory of creativity, a theory in which social and motivational factors were highlighted. As will become evident in the updates of Chapters 2 through 10, in the years since, we have attempted to become more inclusive in the factors we studied and the theoretical perspectives we incorporated. We have also attempted to move toward a comprehensive systems view that includes interacting networks of factors influencing—and being influenced by—creativity. The social psychology of creativity as it was originally conceived grew largely from a desire to explore uncharted territories of the creativity question that stretched well beyond the personality psychology of creativity that was then overwhelmingly dominant in the field. Now we regularly include personality measures in our studies of social influences, and we have begun to use cognitive measures as well. We have, we hope, begun to practice the integration of disciplines we preached twelve years ago.