This series is jointly published by the Cambridge University Press and the Editions de la Maison des Sciences de l'Homme, as part of the joint publishing agreement established in 1977 between the Fondation de la Maison des Sciences de l'Homme and the Syndics of the Cambridge University Press.

Cette collection est publiée co-édition par Cambridge University Press et les Editions de la Maison des Sciences de l'Homme. Elle s'intègre dans le programme de co-édition établi en 1977 par la Fondation de la Maison des Sciences de l'Homme et les Syndics de Cambridge University Press.

Affect and social behavior

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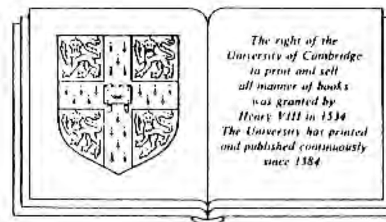

Cambridge University Press

Cambridge
New York Port Chester
Melbourne Sydney

Editions de la Maison des Sciences de l'Homme
Paris

6. Passionate love in intimate relationships

ELAINE HATFIELD AND RICHARD L. RAPSON

Social psychologists interested in emotion initially began their work by attempting to develop a taxonomy of the basic emotions and to describe their cognitive and neuroanatomical/neurophysiological characteristics. This research has been singularly productive (see Darwin, 1872; Davitz, 1969; Ekman, 1982; Izard, 1972; Kemper, 1978; Levi, 1975; Plutchik & Kellerman, 1980). Now social psychologists may well be ready to begin an even more difficult task: to acknowledge that the "basic" emotions – such as love and hate, joy and despair, anxiety and relief, anger and fear, and jealousy – are complicated phenomena with complicated interlinkages. Scientists must now set out to discover how such complex emotions interact. They must begin to determine how intimates can best deal with the complicated and contradictory feelings they experience in love relationships. In this paper, we will begin to do that.

6.1. Kinds of love: passionate and companionate

For most people, love is the sine qua non of an intimate relationship (Berscheid & Peplau, 1983). Love, however, comes in a variety of forms. Hatfield and Walster (1978) distinguish between two forms of love, passionate love and companionate love. They define passionate love, (sometimes labeled puppy love, a crush, lovesickness, obsessive love, infatuation, or being in love) as follows: "A state of intense longing for union with another. Reciprocated love (union with the other) is associated with fulfillment and ecstacy. Unrequited love (separation) with emptiness, anxiety, or despair. A state of profound physiological arousal" (p. 9).

The Passionate Love Scale (PLS) has been designed to measure this emotion (see Appendix). It assesses the following cognitive, emotional, and behavioral indicants of "longing for union":

Cognitive Components

1. Intrusive thoughts about or preoccupation with the partner. (In Appendix, items 5, 19, and 21 tap this component.)
2. Idealization of the other or of the relationship. (Items 7, 9, and 15 measure this component.)
3. Desire to know the other and be known. (Item 10 measures the desire to know. Item 22 measures the desire to be known.)

Emotional Components

1. Attraction to other, especially sexual attraction. Positive feelings when things go well. (See Items 16, 18, and 29.)
2. Negative feelings when things go awry. (See Items 1, 2, 8, 20, 28, and 30.)
3. Longing for reciprocity. Passionate lovers not only love but want to be loved in return. (Item 14.)
4. Desire for complete and permanent union. (Items 11, 12, 23, and 27.)
5. Physiological arousal. (Items 3, 13, 17, and 26.)

Behavioral Components

1. Actions toward determining the other's feelings. (Item 24.)
2. Studying the other person (Item 4.)
3. Service to the other (Items 6 and 25.)

The authors of the PLS had hoped to include some items designed to measure lovers' efforts to get physically close to the other, but the lovers did not endorse such items, and they were dropped from the final version of the scale. In sum, passionate love has cognitive, emotional, and behavioral components (see Hatfield & Sprecher, 1986; Easton, 1985; Hatfield and Rapson, 1987; and Sullivan, 1985, for information on the reliability and validity of the PLS).

Companionate love (sometimes called true love or conjugal love) is a far less intense emotion. It combines feelings of deep attachment and friendly affection. Hatfield & Walster (1978) define it as "the affection we feel for those with whom our lives are deeply entwined" (p. 9). Rubin (1970) argues that this type of love (which he terms romantic love) includes such elements as responsibility for the other, tenderness, self-disclosure, and exclusivity. Rubin has developed an excellent scale to measure companionate love. Other scientists who have distinguished between the various forms of love are Burgess (1926), Cunningham and Antill (1981), Kelley (1979), Lee (1977), Maslow (1954), and Sternberg (1985).

6.2. The nature of love

For centuries, theorists have bitterly disagreed over the nature of passionate love. Is it an intensely pleasurable experience, a painful one, or

...n? Early researchers took the position that passionate love is a thoroughly positive experience. Such a vision is often depicted in contemporary films. For example, in Diane Kurys's *Cocktail Molotov*, 17-year-old Anne falls head over heels in love with Frederic after he declares his love for her. Scenes of their wild, exhuberant, coltish love portray the delights of passion.

Theorists such as Kendrick and Cialdini (1977) have argued that passionate love can easily be explained by the reinforcement principle. They believe passionate feelings are fueled by positive reinforcements and dampened by negative ones. Byrne (1971) reported a series of carefully crafted studies demonstrating that people love/like those who reward them and hate/dislike those who punish them (see Berscheid & Hatfield, 1969, for a review of this research.)

Passionate love: a more complicated vision

In the 1980s, social psychologists began to develop a far more complicated concept of love. Sometimes passionate love *is* a joyously exciting experience, sparked by exciting fantasies and rewarding encounters with the loved one. But that is only part of the story.

Passionate love is like any other form of excitement. By its very nature, excitement involves a continuous interplay between elation and despair, thrills and terror. Think, for example, of the mixed and rushed feelings that novice skiers experience. Their hearts begin to pound as they wait to catch the ski lift. When they realize they have made it, they are elated. On the easy ride to the top, they are still a bit unnerved; their hands shake and their knees still tremble, but they begin to relax. Moments later they look ahead and realize it is time to jump off the lift. The landing looks icy. Their rush quickly turns to panic. They cannot turn back. They struggle to get their feelings under control. They jump off the lift, elated and panicky; it is hard to tell which. Then they start to ski downhill, experiencing as they go a wild jumble of powerful emotions. Eventually, they arrive at the bottom of the hill, elated, relieved. Perhaps they feel like crying. Sometimes, they are so tired they are flooded with a wave of depression, but usually they get up, ready to try again. Passionate lovers experience the same roller coaster of feelings – euphoria, happiness, vulnerability, anxiety, panic, despair. The risks of love merely add fuel to the fire.

Sometimes men and women become entangled in love affairs where the delight is brief, and pain, uncertainty, jealousy, misery, anxiety, and despair are abundant. Some instances that we encountered follow: One teenage girl we interviewed was a stunning actress in a local production company. She had a crush on her 18-year-old costar. She spent hours each day lying on her bed dreaming about him. She spent an equal amount of time obsessively worrying about what she should say to him; the more she obsessed, the more terrified she became that she would sound awkward and stupid. The whole process was so painful that eventually she came to wish fervently that he would move away, so that she could relax.

Another interviewee, a pilot, insisted on loving a woman who had no interest whatever in him. Despite trying every ploy imaginable, he failed to interest her in even talking to him on the phone. When it became clear that his suit was hopeless, he decided that one possibility remained: He tried to kill himself by carving her name on his wrist. If he did not die, he thought, surely she would recognize the depth of his love and come around. He did not die; she did not come around. We were surprised at how many years he could continue to remain desperately in love, enduring rejection after rejection. It was hard to see how his love had been "dampened by pain" or "muted by negative reinforcements."

Other men and women discover they love their mates, but their discovery comes too late. They realize their love when their partners have finally found someone else or after they have died. In the cases we have described, passionate love seems to be fueled by a sprinkling of hope and a large dollop of anxiety, loneliness, mourning, jealousy, and terror. In fact, in a few cases, it seems as if these men and women love others not in spite of the pain they experience, but because of it. Recent social psychological research explores how passionate love, which thrives on anxiety and excitement, may be linked to a variety of strong related emotions, both positive and negative (see Hatfield & Walster, 1978).

6.3. The genesis of passionate love

Evolutionary theorists such as Plutchik (1980) argue we can best understand all emotions – be it love, hate, anger or fear – if we think of them in their evolutionary context. (We agree.) The reason the primary, prototypic emotions developed in the first place, were shaped and reshaped over the millenea, and continued to survive, was because they were adaptive. Our prehistoric ancestors were forced to deal with certain situations again and again. They had to seek out prey and escape

predators. Adults had to mate and nurture their offspring. Infants had to cling tightly to their parent(s) until the infants were old enough to survive on their own. The basic emotions, then, are wired in. They are "neural packages" that predispose people to think, feel, and act in certain ways that were once adaptive, when in these prototypic situations. These emotional packages developed because they once helped the species survive and reproduce.

Rosenblum (1985) points out that primates, far below humankind on the phylogenetic scale, seem to experience something very much like passionate love. In infancy, primates are prewired to cling to their mothers. For an infant primate, separation can be deadly. If mother and child are separated, the infant is unlikely to find another caretaker. Therefore, to ensure survival, the "desire for union" is necessarily wired into all primates. As long as mother and child are in close proximity, all goes well. When a brief separation occurs, the primate quickly becomes desperate. He howls and rushes frantically about, searching for Mother. If she returns, the infant is joyous. He clings to his mother or jumps around in excitement. If she does not return, and his frantic efforts to find her fail, eventually he will abandon all hope of contact, despair, and probably die. The experience Rosenblum describes certainly sounds much like passionate love's "desire for union" – and its accompanying lows and highs. This, we thought, is the groundwork for passionate attachments.

Ainsworth and her colleagues (1978) and Bowlby (1973) describe a comparable experience of attachment, separation, and loss in children. Hatfield and her colleagues (1988 and 1989), too, find that children as young as four years old are capable of feeling passionate love. As you might expect, they find that anxious children and adolescents or children and adolescents under stress are particularly susceptible to falling passionately in love.

We see then that there is an evolutionary reason why passionate love might be tightly linked to both joy (when there is union) and anxiety (when people are especially anxious about themselves, their relationships, or the worlds they inhabit) as well as to a variety of other related emotions: jealousy, fear, depression, and so forth.

Scientists have collected a great deal of information as to the thoughts, physiological reactions, and behavioral reactions associated with passionate love. They make it clear that in passionate love, relief and anxiety, euphoria and pain, are often intermingled. These interact to produce the bittersweet experience that is passionate love.

Cognitive factors

The experience of passionate love is generally described as being a mixture of positive and negative emotions. Tennov (1979) interviewed more than 500 passionate lovers. Almost all the lovers took it for granted that passionate love (which Tennov labels "limerence") is a bittersweet experience. Liebowitz (1983) provides an almost lyrical description of the mixed nature of passionate love:

> Love and romance seems [*sic*] to be one, if not the most powerful activator of our pleasure centers. . . . Both tend to be very exciting emotionally. Being with the person or even just thinking of him or her is highly stimulating. . . . Love is, by definition, the strongest positive feeling we can have. . . . Other things – stimulant drugs, passionate causes, manic states – can induce powerful changes in our brains, but none so reliably, so enduringly, or so delightfully as that "right" other person. . . . If the relationship is not established or is uncertain, anxiety or other displeasure centers may be quite active as well, producing a situation of great emotional turmoil as the lover swings between hope and torment. [pp. 48–49]

It is clear, then, that people assume it is appropriate to use the term "passionate love" to label any "intense longing for union with another" regardless of whether that longing is reciprocated (and thus a source of fulfillment and ecstacy) or is uncertain or unrequited (and thus is a source of emptiness, anxiety, or despair).

The physiological component of love

Recently, psychologists have assembled information from neuroanatomical and neurophysiological investigations, ablation experiments, pharmacologic explorations, clinical investigations, and behavioral research as to the nature of love. This research, too, documents the contention that passionate love is a far more complicated phenomenon than it had at first seemed (see Kaplan's 1979 discussion of the neuroanatomy and neurophysiology of sexual desire and Liebowitz's 1983 discussion of the chemistry of passionate love, for a lengthy review of this research).

The anatomy of love

According to Kaplan (1979), the anatomy of passionate love and sexual desire is relatively well understood. The brain's sexual center consists of

...twork of neural centers and circuits. These are centered within the ...mbic system, with nuclei in the hypothalamus and in the preoptic region. The limbic system is located in the limbus or rim of the brain. In primitive vertebrates, this system controls emotion and motivation; it ensures that animals will act for their own survival and that of their species. In humans, this archaic system remains essentially unchanged. It is here that men's and women's most powerful emotions are generated, and that their behavior is most powerfully driven. In the sexual centers, scientists have identified both activating and inhibitory centers.

The sexual system has extensive neural connections with other parts of the brain. For example, it has significant connections, both neural and chemical, with the brain's pleasure and pain centers. All behavior is shaped by the seeking of pleasure (i.e., seeking stimulation of the pleasure center) and the avoidance of pain (i.e., avoiding stimulation of the pain center.)

The pleasure centers. Chemical receptor sites, located on the neurons of the pleasure centers, respond to a chemical that is produced by the brain cells. This has been tagged an "endorphin" because it resembles morphine chemically and physiologically (i.e., it causes euphoria and alleviates pain.) Kaplan (1979) observes: "It may be speculated that eating and sex and being in love, i.e., behaviors which are experienced as pleasurable, produce this sensation by stimulation of the pleasure centers, electrically, or by causing the release of endorphins, or by both mechanisms" (p. 11).

The pain centers. Sexual desire is also anatomically and/or chemically connected with the pain centers. If sexual partners or experiences are associated with pain, they will cease to evoke sexual desire. A chemical mediator for pain, analogous to endorphin, may exist. Our brains are organized so that pain takes priority over pleasure. This, of course, makes sense from an evolutionary point of view.

Kaplan acknowledges that cognitive factors have a profound impact on sexual desire. Thus, the cortex (that part of the brain that analyzes complex perceptions and stores and retrieves memories) must have extensive neural connections with the sexual center.

The chemistry of love

Psychologists are beginning to learn more about the chemistry of passionate love and a pot pourri of related emotions. They are also learning more about the way that various emotions, positive and negative, interact. Liebowitz (1983) has been the most willing to speculate about the chemistry of love. He argues that passionate love brings on a giddy feeling, comparable to an amphetamine high. It is phenylethylamine, an amphetamine-related compound, that produces the mood-lifting and energizing effects of romantic love. He observes that "love addicts" and drug addicts have a lot in common: The craving for romance is merely the craving for a particular kind of high. The fact that most romances lose some of their intensity with time may well be due to normal biological processes. The crash that follows a breakup is much like amphetamine withdrawal. Liebowitz speculates that there may be a chemical counteractant to lovesickness: Monoamine oxidase inhibitors may inhibit the breakdown of phenylethylamine, thereby "stabilizing" the lovesick.

Liebowitz also offers some speculations about the chemistry of the emotions that crisscross lovers' consciousness as they plunge from the highs to the lows of love. The highs include euphoria, excitement, relaxation, spiritual feelings, and relief. The lows include anxiety, terrifying panic attacks, the pain of separation, and the fear of punishment. His speculations are based on the assumption that nondrug and drug highs and lows operate via similar changes in brain chemistry.

Excitement. Liebowitz proposes that naturally occurring brain chemicals similar to stimulants such as amphetamine and cocaine produce the "rush" lovers feel. Passionate love is surely tightly tied to these chemical reactions.

A variety of other emotions, and other chemical reactions, may contribute to the subtle shadings of passionate love. Liebowitz articulates some of the chemical reactions that may be threaded through the passionate experience.

Relaxation. Chemicals related to the narcotics (such as heroin, opium, and morphine), tranquillizers (such as Librium and Valium), sedatives (such as barbiturates, Quaaludes, and other "downers"), alcohol (which acts chemically much like the sedatives), and marijuana and other cannabis derivatives, produce a mellow state and wipe out anxiety, loneliness, panic attacks, and depression.

Spiritual peak experiences. Chemicals similar to the psychedelics (such as lysergic acid diethylamide, mescaline, and psilocybin) produce a sense of beauty, meaningfulness, and timelessness.

Separation anxiety, panic attacks, and depression. Physiologists do not usually try to produce separation anxiety, panic attacks, or depression, but such painful feelings may arise from two sources: (1) withdrawal from the chemicals that produce the highs and (2) chemicals that in and of themselves produce anxiety, pain, or depression.

Research has not yet established whether or not Liebowitz's speculations as to the chemistry of love are correct.

Sexual desire. Kaplan (1979) provides some information as to the chemistry of sexual desire. In both men and women, testosterone (and perhaps LH-RF) are the libido hormones. Dopamine may act as a stimulant, serotonin or 5-HT as an inhibitor, to the sexual centers of the brain. Kaplan observes:

> When we are in love, libido is high. Every contact is sensuous, thoughts turn to Eros, and the sexual reflexes work rapidly and well. The presence of the beloved is an aphrodisiac; the smell, sight, sound, and touch of the love – especially when he/she is excited – are powerful stimuli to sexual desire. In physiologic terms, this may exert a direct physical effect on the neurophysiologic system in the brain which regulates sexual desire. . . . But again, there is no sexual stimulant so powerful, even love, that it cannot be inhibited by fear and pain [p. 14]

Kaplan ends by observing that a wide array of cognitive and physiological factors shape desire.

Similarity among emotions. Finally, although passionate love and the related emotions we have described may be associated with specific chemical neurotransmitters (or with chemicals that increase or decrease the receptors' sensitivity), most emotions have more similarities than differences. Finck (1891) made the interesting observation that "love can only be excited by strong and vivid emotion, and it is almost immaterial whether these emotions are agreeable or disagreeable" (p. 240). Negative emotions, he thought, could enhance, if not incite, the positive emotion of love. Chemically, intense emotions do have much in common. Kaplan reminds us that in chemical terms, love, joy, sexual desire, and excitement, as well as anger, fear, jealousy, and hate, have much in common: They are all intensely arousing. They all produce a sympathetic response in the nervous system. This is evidenced by the symptoms associated with all these emotions – a flushed face, sweaty palms, weak knees, butterflies in the stomach, dizziness, a pounding heart, trembling hands, and accelerated breathing. The exact *pattern* of reaction, however, aries from person to person (see Lacey, 1967).

Recent neuroanatomical/neurophysiological research suggests that the various emotions probably have tighter links than psychologists once thought. This is consistent with the recognition that in a passionately exciting encounter, people can move from elation, through terror, to the depths of despair, and back again in a matter of seconds. Excitement may be confusing, but at least its arousing. Such observations led Hatfield and Walster (1978) to conclude that passion can be ignited by pleasure and/or pain; by delight in the other's presence or pain at the other's loss. Recently, other researchers have begun to examine the exact nature of these interlinkages (see, for example, Zillman, 1984).

6.4 "Cross magnification" – what makes passionate love so powerful?

When people are passionately in love they often act in ways that sometimes seem insane to those of us who are not so besotted. People may know that an affair is not in their best interest, but when they are passionately in love, nothing else matters. They will not be deterred. How can we account for the passion of passionate love? Why should elation and anxiety add up to such a potent combination?

Hatfield (1971a and b; Hatfield & Carlson, in press) argued that the various emotions are more tightly linked than psychologists have thought. Generally, psychologists talk about emotions as if they usually exist in a pure form. People are happy *or* sad; passionately in love *or* angry. In fact, in real life, people's emotional lives are far more complex than that. In family life, mixed emotions are the norm.

Hatfield argued that sometimes people have trouble knowing just what they feel. Perhaps we feel vaguely neglected by our mates. Is the appropriate label for that feeling "love"? Resentment? Indignation? Embarrassment? Anger? Sometimes, it is difficult to unravel the tangle of one's emotions.

When we try to describe our physiological reactions, things get even muddier. Sometimes it is easy to identify an emotion with its accompanying physiological correlates. For example, certain emotions link up with very specific facial muscle movements. (We recognize that furrowed *corrugator* muscle, those squinting eyes. That is the look of self-righteous anger.) Sometimes, however, two or more emotions link up with the same physiological correlates. (Being startled, for example,

ces a shower of catacholamines. But so do anger, joy, passion, and er emotions.) Sometimes we don't know whether we want to laugh r cry. What about the feeling that we are about to cry – the heavy breathing, tight chest, shaking hands? Is that hurt or anger? It is hard to tell. Perhaps we are simply getting a cold!

When we move to the skeletal-muscular system, things are equally difficult. For example, either joy or fury may spark the same kind of outsize sweeping movements.

There is yet another problem in describing our inner lives. Many emotional reactions are nonconscious. Conscious awareness is a precious commodity. Miller (1956) has argued that people can be aware of only seven or so things at a time. Thus, much cognitive and emotional processing must be run off automatically in other parts of the brain. For example, if a given perceptual-behavioral sequence is replayed again and again, it will soon become automatic. We offer an opinion, our mother cries or gets angry, we get angry or frightened; in return, we apologize and comfort her; things return to normal. The same sequence runs off again and again. Soon the complex actions and reactions begin to happen automatically. We lose consciousness of our own feelings. Instead, as soon as we begin to speak, incipient anxiety, well below the level of consciousness, begins to stir. Without even thinking of it, our hand reaches out and pats our mother's shoulder. Our precious consciousness can be devoted entirely to the conversation; other parts of the brain can reel out the appropriate emotional coordination sequences.

If we try, often we can replay such sequences, and retrieve our feelings; at the very least we can focus attention on our feelings, and "catch" them the next time the inevitable sequence happens. Usually, however, such self-conscious regulation is unnecessary. Consciousness is too valuable to be wasted on the routine. If we are not even conscious then, of many of the emotions that flicker across our minds, it certainly makes it difficult to know just what emotions are interacting at a given time.

Of course, in real life things are even more complicated than that. Time does not stand still. Emotions are labile. People can move from elation, through terror, to the shoals of despair . . . and back again . . . in a matter of seconds. Passionate love often involves just such a complicated interplay. Joy and pain often crisscross consciousness.

These observations led Hatfield to argue that psychologists must study not just pure emotions, but must devote some attention to analyzing how emotions interact. Logically, emotions should be able to interact in three major ways: (1) Sometimes, when one is experiencing several emotions, one may be able to identify the ebb and flow of separate emotions. One would experience a series of distinct emotions, or emotional blends. (2) Sometimes, however, it should be possible for contradictory emotions to cancel each other out. (3) Generally, however, Hatfield proposed, one will get *emotional spillover* (sometimes called *cross magnification*) effects. A given emotional experience can be intensified by emotions that briefly precede, coexist, or follow the target emotion.

For example, once one of your authors was literally dancing with joy because her first article had been accepted by the *Journal of Personality and Social Psychology*. Just then, her cat, hurtling across the room after a smaller cat, knocked into her. Just in time she caught herself. In a matter of milliseconds, her joy had turned to fury. She was poised to smack the cat; something she would normally never be tempted to do. Somehow, her extravagant happiness had turned into equally extravagant anger. The two emotional states had somehow "summed." Once you become aware of the concept of "emotional spillover," you begin to notice examples of this process everywhere. We find ourselves responding rudely to a friend and remind ourselves to settle down, that we are simply overwrought from having to rush around all day. We dissolve in a fit of giggling when we trip on the stairs and barely save ourselves from hurtling down the stairs.

Hatfield argued that in life such emotional spillover effects can have powerful consequences. Most intense emotional experiences involve blends of emotions. Perhaps this is not a coincidence. Perhaps, emotions (especially positive emotions) have a better chance to rise to a fever pitch when several emotional units are activated.

There is considerable evidence that cross-magnification processes do exist. Let us now turn to her evidence that, under the right conditions, either pleasure or anxiety and pain (or a combination of both) can fuel passion.

6.5. Behavioral evidence that both pleasure and pain may fuel emotion

Passionate love is risky. Success sparks delight; failure invites despair. We get some indication of the strength of our passion by the intensity of our delight or despair. Of course, trying to calibrate emotions is an elusive business. Sometimes it is difficult to tell to what extent your lover is responsible for the delight you feel and to what extent the highs you are experiencing are due to the fact that you are ready for romance:

The day is a glorious one, and you are simply feeling good. It is also difficult to tell to what extent your lover's coolness is responsible for your misery. To what extent is it due to the fact that you are lonely? That you are afraid to go off on your own? Your period is about to begin? Or you are simply low? Often it is hard to tell. In any case, there is an abundance of evidence to support the contention that, under the right conditions, a variety of intensely positive experiences, intensely negative ones, or neutral but energizing experiences, can add to the passion of passion.

Passion and the positive emotions

In our definition of love we stated that *"reciprocated love (union with the other) is associated with fulfillment and ecstacy."* No one doubts that love is a delightful experience in its own right: It is such a "high" that the joys of love generally spill over and add sparkle to everything else in life. What *has* been of interest to psychologists is the converse of this proposition: that the "adrenalin" associated with a wide variety of highs can spill over and make passion more passionate.

A number of carefully crafted studies make it clear that a variety of positive emotions – listening to a comedy routine (White, Fishbein, & Rutstein, 1981), sexual fantasizing (Stephan, Berscheid, & Hatfield, 1971), erotic excitement (Istvan & Griffitt, 1978), or general excitement (Zuckerman, 1979) – can intensify passion. In one investigation, for example, Istvan, Griffitt, and Weider (1983) caused some men to become aroused by showing them pictures of men and women engaged in sexual activities. Other men were shown nonarousing, neutral fare. Then they asked the men to evaluate the appeal of beautiful and unappealing women. When the woman was pretty, the aroused men rated her as more attractive than did the nonaroused men. When the woman was unattractive, the aroused men rated her as less attractive than did the nonaroused men. It seems as if the men's sexual arousal spilled over and intensified whatever it was they would otherwise have felt for the woman – for good or ill. Similar results have been secured with women. Sexually aroused women find handsome men unusually appealing, homely men less appealing, than do nonaroused women.

Passion and the negative emotions

In defining passionate love we observed that *"unrequited love (separation) is associated with emptiness, anxiety, or despair."* Psychologists have long

understood that the failure to acquire or sustain love is an extraordinarily painful experience. Theorists such as Bowlby (1973), Peplau and Perlman (1982), and Weiss (1973) describe the panic, despair, and eventual detachment that both children and adults feel at the loss of someone they love.

Psychologists have amassed considerable evidence that people are especially vulnerable to love when their lives are turbulent. Passion can be intensified by the spillover of feeling from one realm to another. A variety of negative experiences have been found to deepen desire. For example, Dutton and Aron (1974), in a duo of studies, discovered a close link between fear and sexual attraction.

In one experiment, the researchers invited men and women to participate in a learning experiment. When the men showed up, they found that their partner was a strikingly beautiful woman. They also discovered that by signing up for the experiment they had gotten into more than they had bargained for. The experimenter was studying the effects of electric shock on learning. Sometimes the experimenter quickly went on to reassure the men that they had been assigned to a control group and would be receiving only a barely perceptible tingle of a shock. At other times, the experimenter tried to terrify the men: He warned them that they would be getting some quite painful electric shocks.

Before the supposed experiment was to begin, the experimenter approached each man privately and asked how he felt about the beautiful coed who "happened to be" his partner. He asked the men to tell him, in confidence, how attracted he was to her (e.g., how much he would like to ask her out for a date, how much he would like to kiss her). The investigators predicted that fear would facilitate attraction. And it did. The terrified men found the women a lot sexier than did the calm and cool men.

In another study, the investigators compared reactions of young men crossing two bridges in North Vancouver. The first bridge, the Capilano Canyon Suspension Bridge, is a 450-foot-long, 5-foot-wide span that tilts, sways, and wobbles over a 230-foot drop to rocks and shallow rapids below. The other bridge, a bit further upstream, is a solid, safe structure. As each young man crossed the bridge, a good-looking college woman approached him. She explained that she was doing a class project and asked if he would fill out a questionnaire for her. When the man had finished, the woman offered to explain her project in greater detail. She wrote her telephone number on a small piece of paper, so the man could call her if the wanted more information. Which men called?

One of the 33 men on the suspension bridge called her; only two of the men on the solid bridge called.

This single study could, of course, be interpreted several ways. Perhaps the men who called really were interested in ecology. Perhaps the adventurous men were most likely to cross dangerous bridges and call dangerous women. Perhaps it was not fear but relief at having survived the climb that stimulated desire. It is always possible to find alternative explanations for any one study.

But by now there is a great deal of experimental and correlational evidence for the more intriguing contention that, under the right conditions, a variety of awkward and painful experiences can deepen passion. Some of these are anxiety and fear (Aron, 1970; Brehm et al., 1978; Dienstbier, 1979; Dutton & Aron, 1974; Hoon, Wincze, & Hoon, 1977; Riordan & Tedeschi, 1983), embarrassment (Byrne, Przybyla, & Infantino, 1981), the discomfort of seeing others involved in conflict (Dutton, 1979), jealousy (Clanton & Smith, 1977), loneliness (Peplau & Perlman, 1982), anger (Barclay, 1969); anger at parental attempts to break up an affair (Driscoll, Davis, & Lipsetz, 1972), grisly stories of a mob mutilating and killing a missionary while his family watched (White et al., 1981), or even grief.

Passion and emotionally neutral arousal

In fact, recent laboratory research indicates that passion can be stirred by "excitation transfer" from such emotionally neutral but arousing experiences as riding an exercise bicycle (Cantor, Zillman, & Bryant, 1975) or jogging (White, Fishbein, & Rutstein, 1981).

White et al. (1981) conducted a series of elegant studies to demonstrate that passion can be intensified by any intense experience. In one experiment, some men (those in the high-arousal group) were required to engage in strenuous physical exercise (they ran in place for 120 seconds). Other men (those in the low-arousal group) ran in place for only 15 seconds. Although the men's moods were not effected by exertion, a variety of self-report questions and heart rate measures established that these two groups varied greatly in arousal.

Men then watched a videotaped interview with a woman they expected soon to meet. In half of the interviews, the woman was attractive; in half, unattractive. After the interview, the men gave their first impression of the woman; they estimated her attractiveness and sexiness. They also indicated how attracted they felt to her; how much they wanted to kiss and date her.

The authors predicted that exertion-induced arousal would intensify men's reactions to the woman – positively or negatively. Aroused subjects would be more attracted to the attractive confederate and more repulsed by the unattractive confederate than would subjects with lower levels of arousal. The authors found just that. If the woman was beautiful, the men who were aroused via exertion judged her to be unusually appealing. If the woman was unattractive, the men who were aroused via exertion judged her to be unusually unappealing. The effect of arousal, then, was to intensify a person's initial "intrinsic" attractiveness. Arousal enhanced the appeal of the pretty woman as much as it enhanced the lack of appeal of the homely one (see Zillman, 1984, for a review of this research on excitation transfer). The evidence suggests that adrenalin makes the heart grow fonder. Delight is one stimulant of passionate love, yet anxiety and fear, or simply high arousal, can often play a part.

Each new discovery, of course, generates more questions. What is needed now is a theoretical framework to guide us in predicting when powerful emotions such as anxiety, anger, and fear will stimulate passionate attraction and when they will destroy it. As yet, no one has begun to answer this important question.

6.6 Implications for intimate relationships

In the previous section, we traced the history of social psychological research on emotion. We discovered that basic laboratory research has led psychologists to recognize that passionate love is a far more complicated phenomenon than had originally been thought. At the same time, clinical psychologists have been conducting research on love and intimate relationships that has leaned heavily on clinical studies. They, too, by a very different route, have come to recognize that passionate, intimate relationships are far more complicated than they had originally believed. Clinicians started out thinking of family relationships as relatively straightforward, capable of rigorous control. They now recognize that relationships are as muddy and mixed as life itself. This recognition has caused marital and family therapists to devise new strategies for dealing with intimate encounters.

In the 1940s, the 1950s, and through the 1960s, clinicians, especially those with a behaviorist bent, tended to think of passionate love and intimate relationships in fairly simple ways. It was believed that love and intimacy would thrive best on a steady diet of pleasant interactions.

Unpleasantness was to be avoided at all costs. This vision shaped the advice early behaviorists gave couples.

The performing mode and the intimate mode

In social situations, people have a choice as to which of two very different strategies they will adopt. They can act as performers or as intimates. In some situations – when one is acting in a theatre company, interviewing for a job as a salesperson, or dealing with people whom one has little reason to trust – one must give a performance. One tries to look one's best (or worst), act confidently (or shyly), be rewarding (or punishing). Scales such as Christie's Mach II (see Christie & Geis, 1970) or Snyder's Self-Monitoring Scale (see Snyder, 1974; Lennox & Wolfe, 1984; or Gangestad & Snyder, 1985), measure such manipulative abilities.

In other situations, such as dealing with intimate lovers, family members, and friends, one wants to be as relaxed and honest as possible. Scales such as Schaefer and Olson's (1984) Intimacy Scale or Miller's Intimacy Measure (Miller & Lefocurt, 1982) measure such intimacy skills. In most real-life encounters, one engages in a balancing act between performing and intimacy.

In the 1950s, behavioristically oriented clinicians concentrated on teaching men and women how to reward their mates for acting as they wished them to (see Patterson, 1971; Jacobson & Margolin, 1949; Berscheid & Hatfield, 1969). Popular authors such as Andelin (1971) advised women to be at the door with a cold martini when their husbands came home. They should have the house spotlessly clean and the children snugly tucked in. Such advise had two shortcomings: (1) the husband may have been delighted with all the positive reinforcements he was receiving, but women were getting madder and madder at the inequity and (2) such relationships were singularly lacking in intimacy. Couples were giving a performance. (It is interesting in this regard that the reward Andelin promised wives in return for all their work was not intimacy, but a new stove and refrigerator.) Sometimes putting on a show is necessary. It is profitable to be able to hold your tongue, to slow things down when that is what is called for. But that is not enough. A relationship that is all acting is no relationship at all.

Recently, the pendulum has begun to shift. Cognitive psychologists (Tavris, 1982; Paolino & McCrady, 1978), family therapists (Guerin, 1976; Napier & Whitaker, 1978), existential humanists (Yalom, 1980),

gestalt therapists (Polster & Polster, 1973), eclectic therapists (Offit, 1977; Pope et al., 1980), and social psychologists (Brehm, 1985; Duck & Gilmour, 1980–84) have begun to shape the way people think about relationships. Clinicians now take it for granted that love and intimate relationships are extraordinarily complex phenomena. One person, the performer, just cannot manipulate a relationship into perfection. It takes two; and even then things are difficult. In relationships, there are rarely blacks and whites. Real existence inhabits the area between, the multifold shades of gray. One simply has to recognize that life is muddy, and to try to enjoy, as best as possible, slopping around in it. Increasingly, clinicians are involved in teaching their clients intimacy skills. These are fundamental to the relationship. Manipulation is a more limited talent, to be used when a special intractable problem arises.

Intimacy: what is it?

The word "intimacy" is derived from the Latin "intimus," meaning inner or inmost. In a wide variety of languages, the word intimate refers to a person's innermost qualities. For example, the French "*intime*" signifies secret, deep, fervent, and ardent. The Italian "*intimo*" conveys the sense of close in friendship. In Spanish, "*intimo*" means private, close, and innermost. To be intimate means to be close to another. Hatfield (1984) defines intimacy as a "process in which people attempt to get close to another; to explore similarities (and differences) in the way they think, feel, and behave" (p. 208). Intimate relationships can be described in terms of cognitive, emotional, and behavioral characteristics.

Cognitive. Intimates are willing to reveal themselves to one another. They disclose information about themselves and listen to their partner's confidences. In deeply intimate relationships, friends and lovers feel free to reveal most facets of themselves. They reveal their complexities and contradictions. As a result, intimates share profound information about one another's histories, values, strengths, weaknesses, idiosyncracies, hopes, and fears (Altman & Taylor, 1973; Huesmann & Levinger, 1976; Jourard, 1964).

Emotional. Intimates care deeply about one another. It is in intimate relationships that people feel most intensely. People generally feel more intense love for intimates than for anyone else. Yet because intimates

…so much about one another, they have the power to elicit intense …ain as well. The dark side of love is jealousy, loneliness, depression, and anger. It is this powerful interplay of conflicting emotions that gives vibrancy to the most intimate of relationships (see Berscheid, 1979, 1983; Hatfield & Walster, 1978). Basic to all intimate relationships, of course, is trust.

Behavioral. Intimates are comfortable in close physical proximity. They gaze at one another (Argyle, 1967), lean on one another (Galton, 1884; Hatfield, Roberts, & Schmidt, 1980), stand close to one another (Allgeier & Byrne, 1973), and perhaps touch.

A prescription for intimacy

Nearly everyone needs a warm, intimate relationship. At the same time, one must recognize that in every social encounter there are some risks. What, then, is the solution? Social psychological research and clinical experience give us some hints. A basic theoretical assumption provides the framework we use in teaching people how to be intimate with others. People must be capable of independence in order to be intimate with others. Independence and intimacy are not opposite personality traits but interrelated skills. People who lack the ability to be independent, can never really be intimate. Lovers who are dependent on their mates, who cannot get along in life without the other, are precisely those least likely to reveal their fears, irritations, and anxieties to the other lest the partner leave the relationship. They are walking on eggshells, anxious not to upset or anger their mate with their darker, interior concerns. They dare not risk intimacy. Independent persons, on the other hand, who know they can make it on their own, are in a position to be brave about insisting on intimacy. They are not willing to settle for mates who do not care and cannot listen. They can afford to be unusually brave about sharing their innermost lives with their mates.

American culture has come to recognize that most young college-educated women crave both careers and marriage. But the broader implications of that discovery, which are not yet widely understood, are that most men want exactly the same thing, and that many of them know that means they must be closer to their wives and their children than were their fathers. There may be an instinctive awareness among growing numbers of people that independence and intimacy are not only connected, but greatly to be desired.

What we set out to do in therapy, then, is to make people comfortable with the notion that they are separate people, with separate ideas and feelings, who can sometimes come profoundly close to others. According to theorists, one of the most difficult tasks people face is to learn how to maintain their own identity and integrity while engaging in deeply intimate relationships. (for a fuller discussion of this point, see Hatfield, 1984).

In a few situations in life, the only thing one can do is to play out a stereotyped role. In most situations, one has to be at least tactful. In a few situations, downright manipulation may be called for if one is to survive. But on those occasions when real intimacy is possible, independent men and women can recognize its promise, seize the opportunities, and take chances. As relationships and families decompose and recompose themselves in the years ahead, the goals for recomposition are likely to focus on the extent to which both independence and intimacy are reconcilable and may be maximized (see Rapson, 1978). Already we live in creatively explosive times in which there is a rapid emergence of new shapes in relationships and new kinds of families. In these new families, members both wish to be themselves and wish not to be alone; they are forming kinds of connections barely imaginable a generation ago. It is not unreasonable to expect that there will be a great deal more of this kind of experimentation in the years ahead (see Argyle, 1967, and Hatfield, 1984, for more detailed information on teaching people to be more intimate in their love relationships).

Appendix: passionate love scale

In this section of the questionnaire you will be asked to describe how you feel when you are passionately in love. Some common terms for this feeling are passionate love, infatuation, love sickness, or obsessive love.

Please think of the person whom you love most passionately *right now*. If you are not in love right now, please think of the last person you loved passionately. If you have never been in love, think of the person whom you came closest to caring for in that way. Keep this person in mind as you complete this section of the questionnaire. (The person you choose should be of the opposite sex if you are heterosexual or of the same sex if you are homosexual.) Try to tell us how you felt at the time when your feelings were the most intense.

All of your answers will be strictly confidential.

1. Since I've been involved with ____ , my emotions have been on a roller coaster.
* 2. I would feel deep despair if ____ left me.
3. Sometimes my body trembles with excitement at the sight of ____ .
4. I take delight in studying the movements and angles of ____ 's body.
* 5. Sometimes I feel I can't control my thoughts; they are obsessively on ____ .
* 6. I feel happy when I am doing something to make ____ happy.
* 7. I would rather be with ____ than anyone else.
* 8. I'd get jealous if I thought ____ were falling in love with some else.
9. No one else could love ____ like I do.
*10. I yearn to know all about ____ .
*11. I want ____ – physically, emotionally, mentally.
12. I will over ____ forever.
13. I melt when looking deeply into ____ 's eyes.
*14. I have an endless appetite for affection from ____ .
*15. For me, ____ is the perfect romantic partner.
16. ____ is the person who can make me feel the happiest.
*17. I sense my body responding when ____ touches me.
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*19. ____ always seems to be on my mind.
20. If I were separated from ____ for a long time, I would feel intensely lonely.
21. I sometimes find it difficult to concentrate on work because thoughts of ____ occupy my mind.
*22. I want ____ to know me – my thoughts, my fears, and my hopes.
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25. If ____ were going through a difficult time, I would put away my own concerns to help him/her out.
26. ____ can make me feel effervescent and bubbly.
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28. An existence without ____ would be dark and dismal.

*29. I possess a powerful attraction for ____ .
*30. I get extremely depressed when things don't go right in my relationship with ____ .

Possible responses to each item range from:

1	2	3	4	5	6	7	8	9
Not at all true				Moderately true				Definitely true

**Note:* The asterisk indicates items selected for a short version of the PLS.

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