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Love

Elaine Hatfield and Richard L. Rapson

University of Hawai'i

What is Love?

Social psychologists distinguish between two kinds of love: *passionate* love and *companionate* love. Passionate love, a potent emotion, is defined as an intense longing for union with the other. It is associated with a confusion of feelings: tenderness and sexuality, elation and pain, anxiety and relief, altruism and jealousy (Hatfield & Rapson, 1993.) Companionate love, a cooler emotion, is characterized by affection, intimacy, attachment, and a concern for the welfare of the other (Sternberg, 2006.)

Is Passionate Love a Cultural Universal?

Since Darwin's classic treatise on *The Descent of Man and Selection in Relation to Sex,* scientists have debated the universality of romantic love. Once, scientists assumed that passionate love was a Western phenomenon. Today, most assume it to be a cultural universal. In one study, anthropologists selected a sampling of tribal societies from the *Standard Cross-Cultural Sample*. They found that in far-flung societies, young lovers talked about passionate love, recounted tales of love, sang love songs, and talked about the longings and anguish of infatuation. When passionate affections clashed with parents' or elders' wishes, young

people often eloped. It appears that romantic love *is* a pan-human characteristic (see Jankowiak, 1997).

Does Culture Influence Men and Women's Views of Love?

Culture has been found to have a significant impact on how men and women view passionate love. In one study, for example, Researchers interviewed young people in America, Italy, and the People's Republic of China about their emotional experiences. They found that although almost all people were aware that passionate love is generally a bitter-sweet experience, Americans and Italians tended to equate love with joy and happiness while Chinese students had a darker view of passion, associating it with sadness, pain, and heartache.

What Do Men and Women Desire in Romantic Partners, Sexual Partners, and Mates?

Throughout the world, young men and women desire many of the same things in a mate. In one cross-cultural study, Buss and his colleagues asked 10,000 men and women from 37 countries to indicate what they valued in a mate. The cultures represented a tremendous diversity of geographic, cultural, political, ethnic, religious, racial, economic, and linguistic groups. Of utmost importance was love! High on the list of other things men and women cared about were character, emotional stability and maturity, a pleasing disposition, education and intelligence, health, sociability, a desire for home and children, refinement, good looks, and ambition (Buss, 1994).

Scientists have documented that a major determinant of sexual "chemistry" is physical attractiveness (Hatfield & Sprecher, 1986). People tend to fall in love with people who are similar to themselves in attitudes, religious affiliation, values, interests, education, and socioeconomic status (Hatfield & Rapson, 1995).

Do Men and Women Desire the Same Thing in Mates?

Evolutionary psychologists have argued that men and women should differ in what they desire in a mate. According to evolutionary biology, an animal's "fitness" depends on how successful it is in transmitting its genes to subsequent generations. It is to both men's and women's evolutionary advantage to produce as many progeny as possible. But men and women differ in one crucial respect—how much they must invest in their offspring if they are to survive and reproduce. Men need invest a trivial amount of energy in any one child. (One Saudi ruler claims to have fathered more than 5,000 children). Women, on the other hand, must invest a great deal in their offspring if they are to survive. In tribal societies, most women are lucky to produce even five surviving children.

On the basis of this logic, Buss (1994) proposed a "sexual strategies theory" of human mating. Men and women, he argues, are genetically programmed to desire different traits in potential mates. In order to maximize reproductive outcomes, men must seek quantity, women quality in a mate. Men ought to prefer women who are physically attractive, healthy, and young; they ought to desire sexual encounters with a variety of

partners. Women ought to seek out men who possess status, power, and money; who are willing to make a commitment, who are kind and considerate, and who like children.

Many anthropologists, historians, sociologists, and psychologists have sharply criticized the evolutionary approach. They point out that *Homo sapiens* possess an unrivaled ability to adapt—to change themselves and their worlds. Men and women possess different attitudes, these critics continue, not because they are propelled by ancient genetic codes, but because they are responding to different sociocultural realities. For most of human history, men and women who desired romantic and passionate liaisons and/or defied convention were likely to face very different consequences. Is it surprising then, that even today many women are more cautious about taking a chance on love (or engaging in casual sex) than are their male counterparts? (See Hatfield, Rapson, & Martel, 2007, for a summary of this research).

What does Passionate Love Look Like?

In 2000, two London neuroscientists, Andreas Bartels and Semir Zeki, attempted to identify the brain regions associated with passionate love and sexual desire. The scientists put up posters around London, advertising for men and women who were "truly, deeply, and madly in love." People who answered the advertisement were asked to complete the *Passionate Love Scale (PLS)*. Those who were most in love were selected for the study. Participants were then placed in an fMRI (functional magnetic imagery)

scanner. This high-tech scanner constructs an image of the brain such that changes in blood flow (induced by brain activity) are represented as color-coded pixels. The scientists gave each participant a color photograph of their beloved to gaze at, alternating the beloved's picture with pictures of casual friends. They then digitally compared the scans taken while the participants viewed their beloved's picture with those taken while they viewed a friend's picture, creating images that represented the brain regions that became more (or less) active in both conditions. These images, the researchers argued, revealed the brain regions involved when a person experiences passionate love and/or sexual desire.

Bartels and Zeki discovered that passion sparked activity in the brain areas associated with euphoria and reward, and decreased activity in the areas associated with sadness, anxiety, and fear. Activity seemed to be restricted to foci in the *medial insula* and the *anterior cingulated cortex* and, subcortically, in the *caudate nucleus,* and the *putamen,* all bilaterally. Most of the regions that were activated during the experience of romantic love were those that are active when people have taken euphoria-inducing drugs (such as cocaine). Apparently, both passionate love and those drugs activate a "joyous" circuit in the brain. The *anterior cingulated cortex* is also active when people are sexually aroused. This makes sense since passionate love and sexual desire are tightly linked constructs.

Among the regions where activity decreased during the experience of love were zones previously implicated in the areas of the brain controlling

critical thought. Such brain areas are also activated when people experience painful emotions such as sadness, anger and fear. The authors argue that once we fall in love with someone, we feel less need to assess critically their character and personality. (In that sense, love may indeed be “blind.”) Deactivations were also observed in the posterior cingulated gyrus and in the amygdala and were right-lateralized in the prefrontal, parietal, and middle temporal cortices. As before, the authors found passionate love and sexual arousal to be tightly linked. (See Fisher, 2004; Hatfield & Rapson, 2009 for a review of the literature on the neuroscience and neurobiology of passionate love and sexual desire.)

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Suggested Readings

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