

James-Lange Theory of Emotions

The James-Lange Theory states that emotions result from physiological reactions in the body.

There is a stimulus that causes a specific pattern of physiological arousal that causes an emotional response.

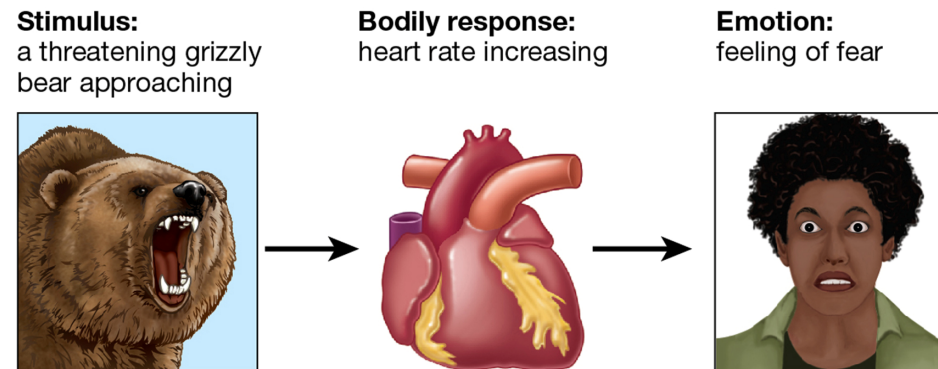


FIGURE 9.19

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The James-Lange theory suggests that different patterns of arousal lead to different emotions.

Body Maps of Emotions

For different emotions, participants reported areas of the body that are more active or less active indicate different physiological patterns for different emotions.

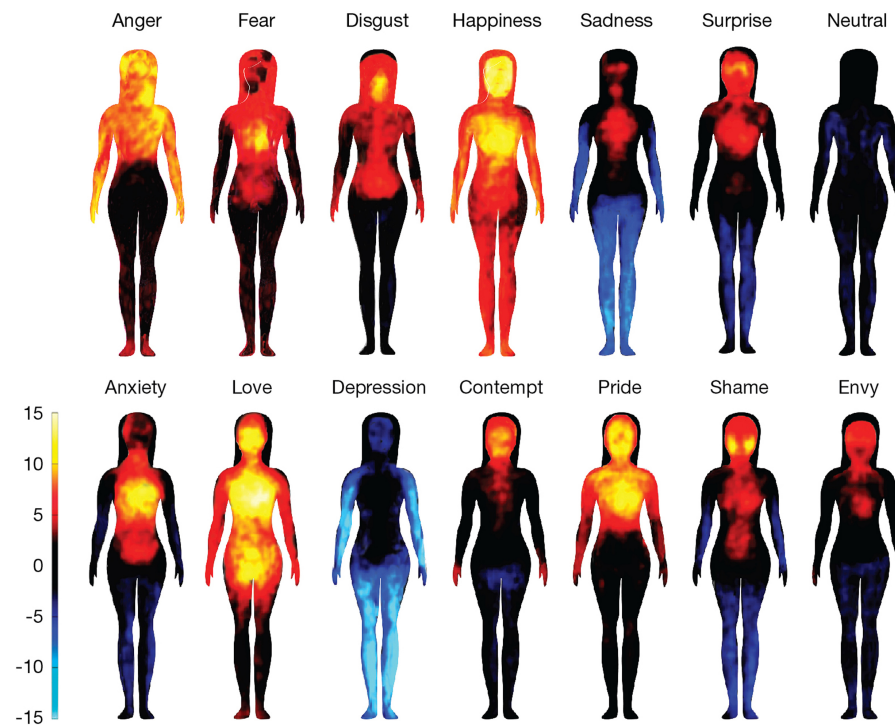
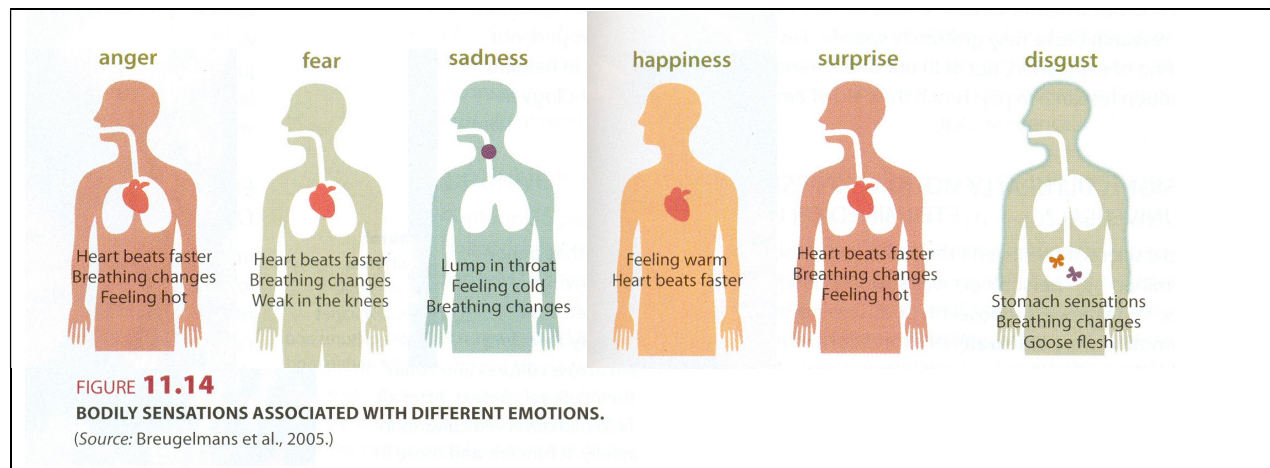
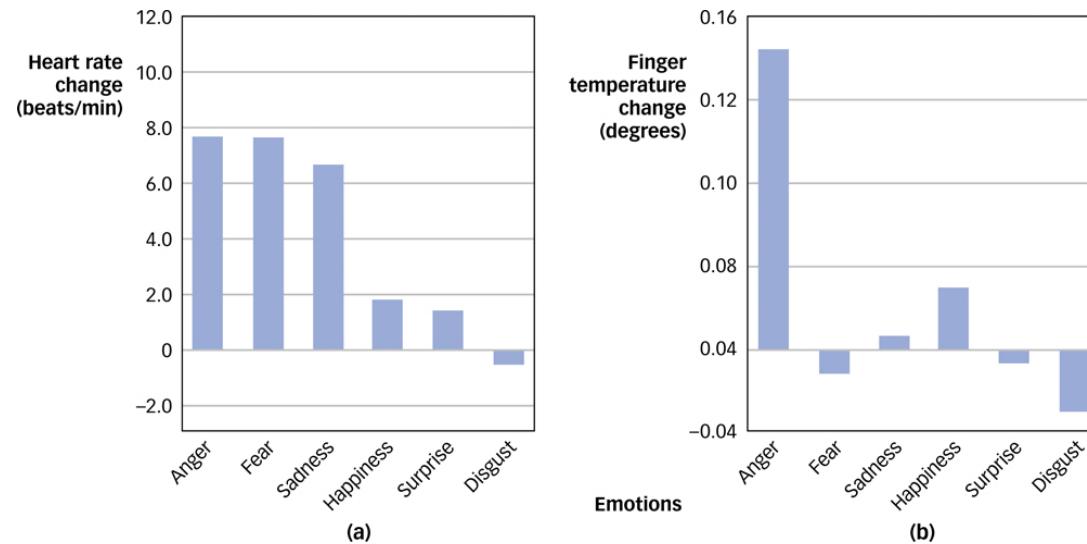


FIGURE 9.24

Physiological Change with Different Emotions

Different heart rates and finger temperatures were found for the primary emotions.



James-Lange Theory and the Facial Feedback Hypothesis

The James-Lange theory, predicts the facial feedback hypothesis--the muscles you use to create a facial expression triggers your experience of emotion (page 365)



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When you mimic a smile, people reported cartoons being funnier (left)

than those who mimicked a frown (right).

Cognitive Theories of Emotions: Two-Factor Theory

The two-factor theory of emotion states that how we experience an emotion is influenced by

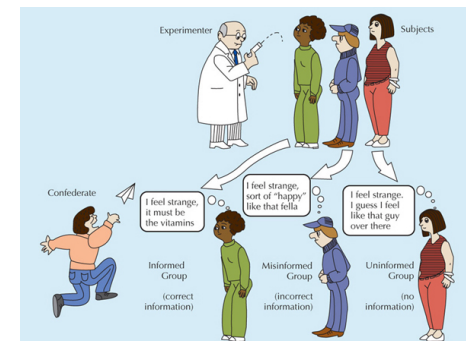
- (1) the cognitive label we apply to explain
- (2) the physiological changes we experience.

When you experience arousal, you search for its source so you can explain it. The two-factor theory proposes that whatever you believe caused the emotion will determine how you label the emotion ([page 366](#)).

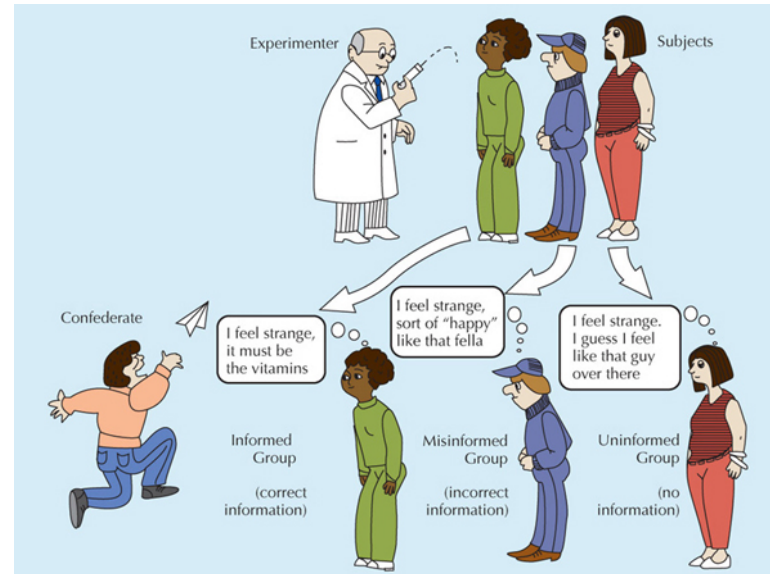
To demonstrate the two-factor theory, Schachter and Singer gave participants an injection of epinephrine to create physiological arousal. Epinephrine increases blood pressure, heart rate, blood flow to the brain, blood sugar levels and respiration.

Participants were given one of three explanations about the injection.

1. some were correctly informed of the effects, or
2. some were misinformed of the effects, or
3. some were not informed at all.



Cognitive Theories of Emotions: Two-Factor Theory



All participants had a change in physiological arousal due to the injection. How do people explain this arousal?

- Those who were **informed** about the injection would understand their physiological changes and wouldn't need an explanation for this arousal with an emotional response.
- Those who had no explanation (the **misinformed** and **uninformed** group) for their physiological changes would need an explanation for this arousal and use environmental cues to label their arousal and explain it with an emotional response (e.g., happiness)

Misattribution of Arousal

According to the Two-Factor theory, when we are physiologically aroused, we try to understand the arousal and label the emotion. This process is unconscious and automatic. In some instances, we misidentify the source and cause of our emotions.

When people are physiologically aroused while riding an exercise bike,

- They find attractive people more attractive
- Annoying people more annoying
- Funny cartoons funnier

When men walked over a scary bridge high above the ground and physiologically aroused, a female interviewer they encountered was rated as more attractive compared when men who walked over a not-so scary low bridge and were not physiologically aroused.

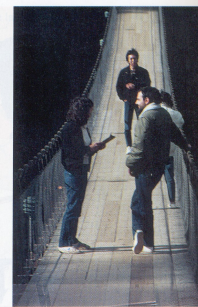


FIGURE 9.23

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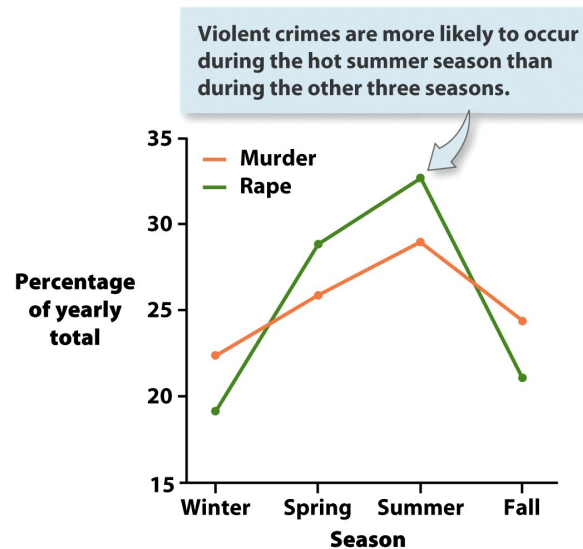
FIGURE 9.14 Capilano River Bridge Experiment (Left) The precarious Capilano River Bridge in British Columbia. (Right) The experiment is shown in progress. An attrac-



Situational Determinants of Aggression: Heat

In a sample of 260 cities, as the number of days above 90 degrees Fahrenheit increased, there were higher rates of violent crimes, but not non-violent crimes.

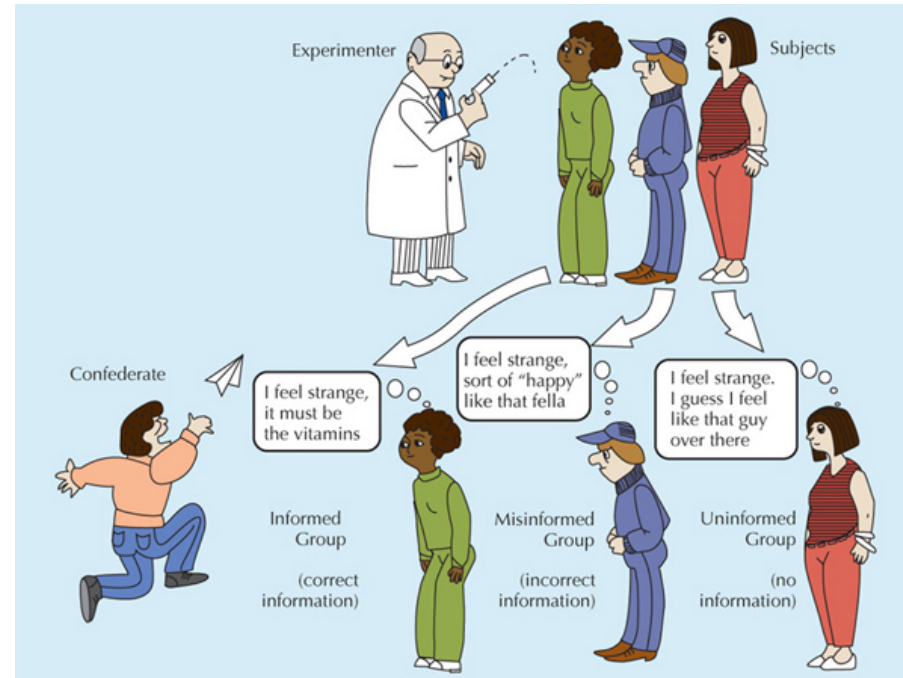
This relationship still held when you took into account unemployment rates, per capita income and average age of the residents.



Social Psychology, 2/e Figure 13.1
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As temperature increases physiological arousal, we can misattribute this arousal to feelings of anger.

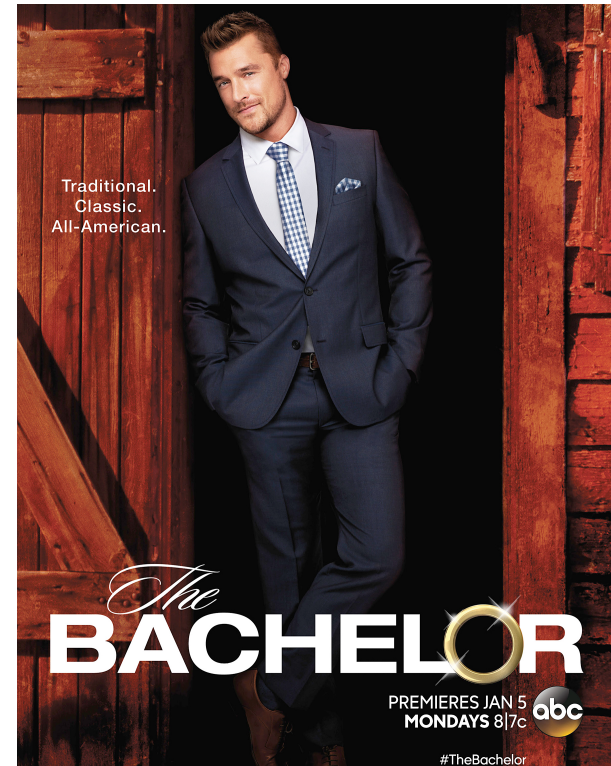
Misattribution of Emotional States



We may be biologically predisposed to be afraid of objects that pierce the skin (see biological preparedness from [Chapter 6](#)). When we get a shot, we may experience more fear, or mirror neurons may activate when we see someone afraid when receiving a shot from a needle.

We also have a desire for explanations—why are we having this emotional response? Those who may have a good understanding of their environment would be less likely to attribute it to the needle.

Misattribution of Emotional States



The Two-Factor theory can help explain why marriages from The Bachelorette and Bachelor have a lower-than-average success rate.

Sternberg's Theory of Love

According to Sternberg's theory, love has three components: intimacy, commitment and passion. Consummate love contains all three.

Passionate love, the biological aspect of love is what we are familiar with and observe on television and the movies.

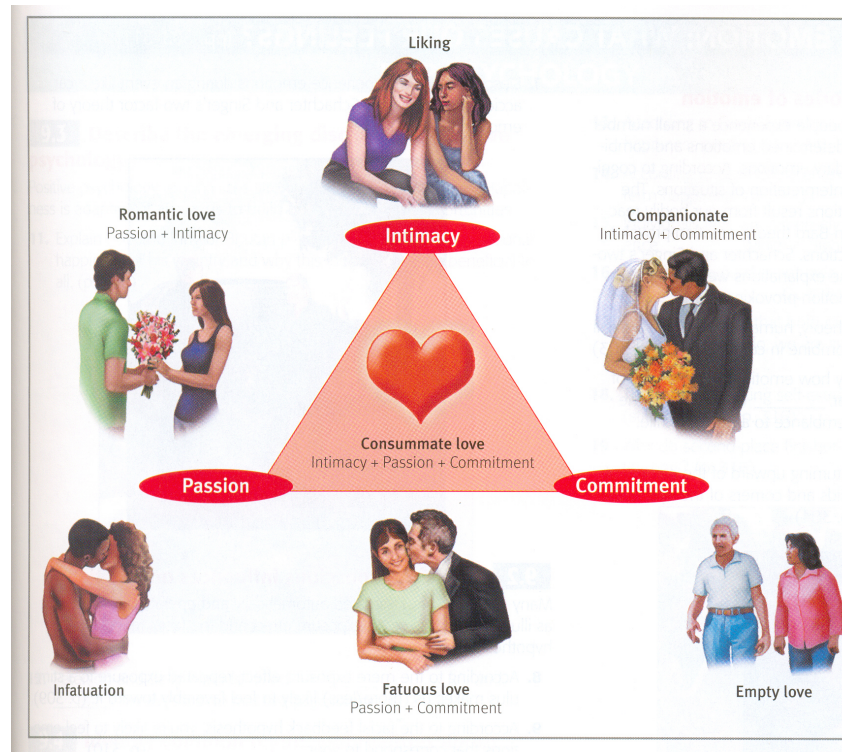


Figure 9.10 What Is Love?

According to Sternberg's triangular theory of love, intimacy, passion, and commitment combine to form seven varieties of love, with "consummate love" being the ultimate form of love marked by high levels of all three components.

Sternberg's Commitment Love



Scarcity principle

The subjective value of a commodity increases as its availability decreases.



Examples of Scarcity:

- When Dade County banned phosphate-based soaps, citizens smuggled phosphate soaps in from neighboring counties. They claimed that the phosphate-based soaps cleaned their laundry better, and made their clothes smell fresher.
- Music by Kurt Cobain, Elvis, The Doors is valued more after their deaths.
- Paintings by Van Gogh, Monet, Picasso are valuable because they are scarce.
- Fantastic Four #1, X-men #94 or Spider-Man #1 are more expensive comic books because there are very few copies of them compared to later issues.
- The subjective value of Cabbage Patch dolls, Tickle me Elmo, and Play Station 2, 3, 4, 5, were inflated when the demand was high and the availability is low.
- In the Scientific American Frontiers video Fat and Happy, children who have junk food restricted at home, are more likely to binge on junk food when they are provided the opportunity.
- A person who sells a used car, stereo, refrigerator, etc. can make the item appear “scarce” by scheduling people to view the item at the same time.
- When everyone around you is getting married, it seems like there are fewer partners available. That may make those remaining seem more desirable. See story by Meg Jay.

Excerpts from Why 30 is not the New 20 with Meg Jay

About 6:00-7:00

I know my boyfriend is no good for me, but this relationship doesn't count, I'm just killing time.

...Everyone says that if I get started on a career by 30' I'll be fine.

But then it starts to sound like this. My 20's are almost over and I've got nothing to show for myself...

And then it starts to sound like this. Dating in my 20's was like musical chairs—everyone was running around and having fun. But sometime around my 30's the music turned off and everyone was sitting down. I didn't want to be the only one left standing up.

Sometimes I think I married my husband because he was the closest chair at 30

...Do not do that. That sound a little flip, but make no mistake the stakes are very high in a much shorter period of time.

About 11:45 to 12:45

Emma believed that you can't pick your family, but you can pick your friends. This was true for her growing up. But as a 20 something, she would pick her family when she partnered with someone and created a family of her own. Meg Jay told Emma the time for picking your family is now.

...but grabbing whoever you are living with or sleeping when everyone on Facebook is walking down the isle is not progress. The best time to work on your marriage is before you have one. That means being as intentional with love as you are with work. Picking your family is about consciously choosing who and what you want rather than just making it work or killing time with whoever happens to be choosing you.

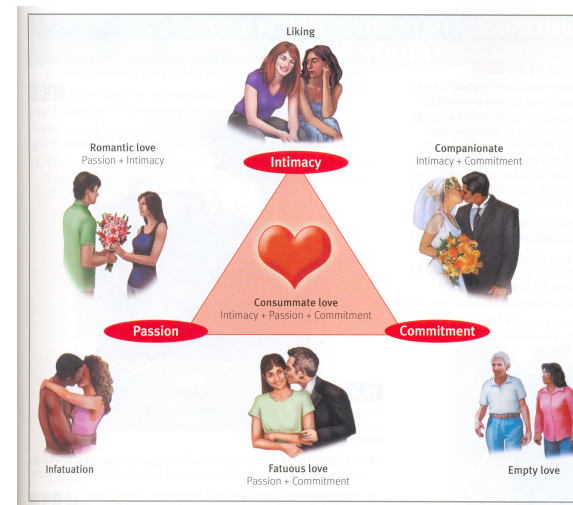
Student examples of Scarcity

I have a friend who finds he only wants to date women that are already married or have a serious boyfriend. It is like he becomes obsessed with trying to go out with them. Every once and a while a woman will break up with her boyfriend and start to date him, but then he finds them unappealing; there is no longer a challenge for him. They become too convenient.

Misattribution of Arousal

On the Bachelor/Bachelorette, there is a Rose Ceremony where the bachelor/bachelorette must pick who will continue, and who will go home. Those who will continue are given a rose. There are fewer roses than participants, which makes the roses a scarce commodity, increasing desire and physiological arousal for being selected to continue with the "dating process". This physiological arousal is due to the scarcity principle, and not "love".

The Two-Factor theory suggests that unsuspecting participants may misattribute the arousal due to scarcity as love. Because of this misattribution, it puts the couple at risk of being unsuccessful in the future.



Common Misattribution of Arousal



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Misattribution of Arousal

- A former student suffered from test anxiety. To reduce his test anxiety, he drank caffeinated drinks. This seems counter intuitive, but he attributed the anxiety to the caffeine instead of the test.
- A person goes out dancing and the exercise arouses the body. They meet another person and find them attractive. The next morning when they wake up, they are confused as to what they saw in that person.
- I have heard there are many good places to "fall in love". What is likely occurring is that these places stimulate the body (e.g., a 30-story building with balconies made of glass instead of steel). One can misattribute the stimulation of heights to the other person.
- Passionate love starts a relationship and fluctuates over time. Highs and lows of passionate love are normal. A hypothesis from the Two-Factor theory would be to have shared experiences with your partner to misattribute the experience as passion. As a cautionary note, this can also occur with friends and strangers.



Misattribution of Arousal

There are many aspects to our sense of self, self-concept, or social identity, such as gender, religious beliefs, political beliefs, family status/relation, occupation or possessions. When our sense of self, self-concept, or social identity is challenged or threatened, we may become physiologically aroused. This can be unconscious or automatic.

According to the Two-Factor theory, we seek to explain this arousal. It can be difficult to identify the source of the arousal and misattribute it to an incorrect target.