

### Further Readings

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## EGO SHOCK

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### Definition

Ego shock refers to feeling mentally paralyzed or frozen in response to severe self-esteem threats. Individuals in a state of ego shock have trouble thinking; they feel distant from themselves; the world seems distant or strange; they feel emotionally numb. The experience of ego shock is temporary, usually only lasting for seconds or minutes.

### Context and Importance

Ego shock typically occurs when individuals experience extreme blows to their self-esteem. One of the most common causes of ego shock is rejection by friends or romantic partners. For example, having a girlfriend or boyfriend unexpectedly say that you are worthless and ugly might lead to an experience of ego shock. There might be an immediate experience of mental paralysis or strangeness that comes over you. The ego shock then passes and other thoughts and feelings, such as anger, sadness or blame, may emerge. Other causes of ego shock include academic failure (such as being turned down for admission by a prestigious university), athletic failures (such as missing a free throw at the last second of a championship game and causing your team to lose), and moral failures (stealing something from a store and then being caught). Fortunately, these are rare experiences: Ego shock does not occur frequently.

Ego shock can have both negative and positive consequences for the person. In the short term, people who are in a state of ego shock have difficulty controlling themselves. Because of this, they are more easily

influenced by social circumstances. For example, if someone hands them a bottle of whiskey and says, “Drink this,” the person in a state of ego shock is more likely to do so. In the long term, the experience of ego shock can also have negative consequences. People may respond to ego shock by giving up on what had caused the blow to their self-esteem. For example, a person may swear off dating or quit playing basketball.

On the other hand, ego shock can have certain benefits. It is possible that the experience of ego shock actually protects the person psychologically in the short term following self-esteem threat. Rather than mentally disintegrating or behaving destructively, the person goes numb. In the longer term, individuals who experience ego shock often change their lives in positive ways. After the shock of a major academic failure wears off, for example, students may redouble their efforts to succeed and actually become better students than they were before.

No one knows the exact cause of ego shock. It may be an adaptive or protective feature that has evolved to help preserve the personality in the face of threatening information. Ego shock may also simply reflect a mechanical failure in the brain. When information comes in that is too extreme and negative to process effectively, the brain simply shuts or slows down temporarily.

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*See also* Rejection; Self; Self-Esteem; Self-Serving Bias

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## ELABORATION LIKELIHOOD MODEL

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### Definition

The elaboration likelihood model (ELM) of persuasion is a theory about how attitudes are formed and changed. This theory organizes the many different attitude change processes under a single conceptual umbrella. The ELM was created to provide a framework to help explain the many seemingly inconsistent

findings in the persuasion literature. Sometimes a variable (e.g., distracting the person reading a message or associating the message with an attractive source) would enhance persuasion, sometimes it would reduce persuasion, and sometimes it would have no effect. Furthermore, sometimes attitude change would last over time and would predict behavior, but sometimes it would not. The ELM provides a framework to help researchers understand the factors responsible for these conflicting findings.

### Elaboration Continuum

The extent to which people elaborate in response to a message is reflected in the extent to which they generate their own thoughts or reactions to the message. The generation and consideration of these thoughts will vary, depending on how much mental effort the person is willing and able to exert. That is, the ELM recognizes that sometimes people think a lot about an issue or message, and sometimes they hardly pay any attention to it at all. Depending on the extent of elaboration, different processes can be responsible for attitude change, often with different outcomes.

### Two Routes to Persuasion

The ELM also distinguishes between two routes to persuasion: the central route and the peripheral route. Central route processes are those that require a great deal of thought and therefore are likely to occur under conditions that promote high elaboration. Central route processes involve careful examination of a persuasive communication (e.g., a speech, an advertisement) to determine the merits of the evidence presented. Under these conditions, a person's thoughts in response to the communication and their confidence in these thoughts determine the persuasive outcome (i.e., the direction and amount of attitude change). The more positive thoughts people have to a message, such as a proposal to cut taxes (e.g., "I'll make more money if taxes are cut") and the more confidence they have in these thoughts, the more persuaded they will be by the message. On the other hand, the more negative thoughts that people have to a message (e.g., "the tax cut will hurt poor people") and the more confidence they have in these thoughts, the less persuaded they will be by the message.

Because people are carefully assessing the information in a persuasive communication for its merits under the central route, the perceived quality of this evidence

is a very important determinant of persuasion. If the evidence for some proposal is seen as strong, a person is more likely to have favorable thoughts about the position and is likely to form a proposal-consistent attitude. If the evidence is seen as weak, however, then the person is likely to have unfavorable thoughts with regard to the message position and may even form an attitude that is opposite to the advocated position. The thoughts that occur in the central route can be relatively objective (fairly evaluating each argument), or they can be biased by other factors (e.g., a sad mood). A number of factors will determine whether people have confidence in the thoughts that they generate, such as how quickly the thoughts come to mind (more easily accessible thoughts are held with more confidence) and the credibility of the person who presents the arguments (people have more confidence in thoughts generated to a credible source).

Peripheral route processes, on the other hand, require relatively little thought and therefore predominate under conditions that promote low elaboration. In the peripheral route, the strength of the evidence presented matters less. Instead, in peripheral route processes, people often rely on judgmental heuristics (e.g., "experts are always right") or cues taken from surface features of a message (e.g., the number of arguments presented), its source (e.g., their attractiveness), or other factors (e.g., being in a good or bad mood). That is, people might go along with a proposal just because they like the source and not because they have considered the merits of the issue. In addition, peripheral route processes can occur without awareness, such as in classical conditioning or mere exposure.

### Determinants of Elaboration

Which route a message recipient takes is determined by the extent of elaboration. When elaboration is high, central route processes will predominate, but when elaboration is low, peripheral route processes will predominate. Under conditions of moderate elaboration, a mixture of central and peripheral route processes will be responsible for attitudes. Both motivational and ability factors determine elaboration. Motivational factors include (among others) how personally relevant the message seems, how accountable the person feels for evaluating the evidence presented, and the person's need for cognition (i.e., his or her intrinsic enjoyment of thinking). Factors affecting one's ability to process a message include how much distraction is present, the time pressure to decide, and the amount of

issue-relevant knowledge one has regarding the proposal (e.g., when a message uses a lot of technical jargon that requires specific knowledge to understand).

### Consequences of Persuasion

Not only can the processes that occur under high and low elaboration be different, but the consequences of these processes also differ. Attitudes formed under high elaboration are stronger in that they are more predictive of behavior and information processing, more stable over time, and more resistant to future persuasion than those formed under low elaboration. This is because careful thought about an issue leads to the development of a more consistent, coherent, accessible (i.e., comes to mind readily), and confidently held representation of the attitude object.

### Multiple Roles for Persuasion Variables

One of the most important features of the ELM is the proposition that variables can serve multiple roles in a persuasive setting depending on other contextual factors. The variables that serve multiple roles can include any aspect of the persuasive communication, such as the message itself (e.g., number of arguments, complexity of language), its source (e.g., credibility, attractiveness), the recipient (e.g., their mood, preexisting attitudes), or other contextual variables (e.g., the color of paper on which the message is printed). For example, under high elaboration, a given variable (e.g., source attractiveness) will be processed as an argument and examined as to whether it provides compelling evidence for the position advocated (e.g., “If she looks that good after using that shampoo, maybe I will too”). In addition, the same variable can sometimes serve to bias the ongoing thinking. Some variables, like source attractiveness or a positive mood will typically bias the information processing in a positive way (e.g., “I really want to like her so I’ll see if I can agree with the message”), whereas others will introduce a negative bias. Among the latter variables are the knowledge that the message source is attempting to persuade you or a preexisting attitude toward the issue (e.g., if your original attitude disagrees with a speaker, you may defend your existing attitude and focus on finding the flaws in the speaker’s arguments). If, however, a person becomes aware that something may be biasing his or her thinking, and the person

wishes to correct for the bias, attitudes can be corrected. That is, people can adjust their attitude in the direction and magnitude opposite to the perceived direction and magnitude of the biasing factor. Thus, if one person thinks that an attractive source produces a huge bias, he or she will make a large adjustment to his or her attitude in a direction opposite the perceived bias. This correction process is likely to occur under high elaboration, because it requires both motivation and ability to perform.

A third role that variables can play under high elaboration is to affect a person’s confidence in the thoughts that were generated (e.g., “That model really knows about fashion so I can trust my thoughts”). Confidence is a metacognition because it is a thought about a thought. In this case, one thought is the thought in response to the message (e.g., “this product sounds very useful”), while the other thought is about the first thought (e.g., “I am confident that my thoughts about this product are valid”). Many variables have been shown to affect thought confidence. In one study, for example, students who were induced to nod their heads (as if saying “yes”) during the presentation of a message had more confidence in their thoughts than people who were induced to shake their heads (as if saying “no”) during the message. When the message contained strong arguments, nodding led to more persuasion than shaking because people had more confidence in their favorable thoughts to these strong arguments, but when the message contained weak arguments, nodding led to less persuasion than shaking because people had more confidence in their unfavorable thoughts. This confidence effect only occurred when elaboration was high.

Under conditions of low elaboration, the same variable that served as an argument, biased thoughts in response to the message, or affected thought confidence can act as a cue or heuristic (e.g., “if she likes the car, so do I”). Note that if an attractive person were processed as an argument for a car, it would not be a very compelling argument and might lead to no persuasion, whereas when this attractive person is processed as a simple cue, more persuasion would result.

Under conditions where elaboration is not constrained to be high or low, a given variable can serve to increase or decrease the extent of elaboration (e.g., “I am curious as to what this attractive person thinks, so I’ll pay careful attention”). When variables affect elaboration, they can increase or decrease persuasion, depending on the strength of the arguments presented.

For example, if a variable (e.g., source attractiveness) increases elaboration, persuasion will be enhanced when strong arguments are presented but decreased when weak arguments are presented. With the multiple roles postulate, the ELM explains how the same variable can bring about attitude change in different ways (e.g., serving as a cue, biasing processing) with different consequences.

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*See also* Attention; Attitude Change; Attitude Strength; Dual Process Theories; Motivated Cognition; Need for Cognition; Persuasion; Resisting Persuasion

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something that is vast and beyond current expectations. People experience awe in response to transcendent and vast objects in art, in nature, and for some, in religious experience. People experience elevation, in contrast, in response to the morally virtuous actions of others.

Jefferson's analysis points to other hypotheses that are beginning to be investigated. What is the physiological sensation of elevation? People report feelings of the opening and swelling in the chest. These sensations may trace back to the activity of the vagus nerve, which is a bundle of nerves originating in the top of the spinal cord. Research finds that when the vagus nerve is activated, shifts in breathing and heart rate occur, and people tend to feel prosocial sentiments, such as compassion, as well as engage in prosocial behavior aimed at attending to the needs of others.

Perhaps more intriguing is the question of whether the experience of elevation inspires morally virtuous action? For Jefferson, elevation was a source of charity and gratitude. Does witnessing another's selfless action inspire altruism and benevolence in the viewer? As yet there is no evidence to support this, but the answers to this question will have important implications for the study of how people learn to be moral actors and how cooperative communities form.

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## ELEVATION

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### Definition

Novels, films, religious texts, and popular books often provoke a feeling in the viewer of being moved by the moral excellence of another person. Drawing upon Thomas Jefferson's own analysis of this emotion, Jonathan Haidt has called this *emotion elevation*. According to Jefferson, *elevation* is the desire to perform acts of charity or gratitude when presented with same and, on the contrary, the sense of abhorrence when presented with an appalling deed.

### Usage and Analysis

Elevation is elicited by acts of charity, gratitude, fidelity, generosity, or any other strong display of virtue that runs counter to current expectations. In this way, elevation differs from a closely related emotion, awe, which occurs when the individual encounters

*See also* Awe; Emotion; Helping Behavior

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## EMBARRASSMENT

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### Definition

Embarrassment is the emotion that results when social predicaments increase the threat of unwanted evaluations from real or imagined audiences. It occurs when people realize that they are making undesired impressions on others, and it usually strikes without warning