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## Persuasion

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### Glossary

- dt0010 **Attitude** A global evaluation of a person, object, or issue indicating the extent to which it is liked or disliked.
- dt0015 **Attitude accessibility** How readily an attitude comes to mind in the presence of the attitude object.
- dt0020 **Attitude certainty** A belief held about an attitude that reflects the conviction with which the attitude is held, or an assessment of the correctness of the attitude.
- dt0025 **Attitude strength** The extent to which an attitude is persistent and resistant, and impacts thinking and behavior.

- dt0030 **Central route** Persuasion through effortful thought and extensive elaboration that involves generating cognitive responses.
- dt0035 **Peripheral route** Persuasion through less effortful mechanisms including mental shortcuts, simple associations, and impact of contextual cues.
- dt0040 **Persuasion** The process by which attitudes are changed.
- dt0045 **Resistance** The extent to which attitudes remain firm when confronted with an attempt to persuade.

p0010 Persuasion is the process by which attitudes are changed. Persuasion processes can change three aspects of an attitude: valence – whether the attitude is positive or negative, extremity – where the attitude falls within a given valence, and strength – whether the attitude is consequential or not. Persuasion processes can be broadly divided into those that require extensive thoughtful consideration of information relevant to the attitude object, and those that require comparatively little thought relevant to the attitude object. Situational and personal variables determine whether more thoughtful or less thoughtful processes are likely to occur. Variables that determine the extent of elaboration are important to understand, because thoughtful processes result in stronger, more consequential attitudes, whereas less thoughtful processes result in weaker attitudes. Understanding the variables that determine the type of processing that is likely to occur makes it possible to predict the likely consequences of any persuasion attempt. As attitudes are generally the best predictors of behavior, understanding the processes through which attitudes are changed is critical to understanding changes in behavior.

to look at source, message, and audience variables to identify elements that potentially impact persuasion, the type of processing that the recipient of a message engages in is the most critical determinant of what impact a persuasion variable has on attitude change. After describing high and low thought persuasion processes, we explain how any given variable (e.g., source credibility or a person's emotions) can produce attitude change under both high and low thinking conditions.

### s0010 Persuasive Communications

p0015 A persuasive communication refers to any efforts to produce attitude change. It is common to experience numerous persuasion attempts each day, from a car commercial portraying a drive on a gorgeous day with great friends or a famous actress advertising cell phones, to political candidates expressing positions on policy or a lawyer making closing arguments in a criminal trial. In each case, the goal is to persuade the audience to change their attitudes in order to produce changes in behavior (e.g., purchases, voting).

p0020 To help to identify all of the aspects of a message that might influence persuasion, it is helpful to look at three elements: the source, the message, and the audience. Persuasive communications contain a variety of attributes intended to enhance persuasion, which could include an attractive source, a message containing convincing arguments, or efforts to make the topic seem personally relevant to the audience. Although it is useful

### s0015 Two Routes to Persuasion

p0025 There is general agreement among those who study persuasion that it is critical to distinguish between attitude change that involves extensive thought, as you might expect from a conscientious jury member during a trial, and attitude change that involves little thought or cognitive effort, such as someone flipping aimlessly through ads in a magazine. The elaboration likelihood model (ELM), proposed by Petty and Cacioppo, places persuasion along a continuum from processes that require extensive thought (central route to persuasion) all the way to those that require hardly any thought at all (peripheral route to persuasion). Overall, the extent to which an individual is motivated and able to process issue relevant information determines whether the central or peripheral route to persuasion is taken. Understanding which route to persuasion is taken is important, because this determines whether the resulting attitude is likely to be a strong attitude that is stable, resistant, and consequential for behavior or a weak attitude that is not.

### s0020 Peripheral Route

p0030 Under circumstances when an individual does not have either the motivation or the ability to thoughtfully consider information that is relevant to the attitude object, it is likely that attitudes will reflect the influence of peripheral route processes. Low motivation to process information could occur because the attitude object is not relevant to that person, or the person is one who generally does not enjoy thinking (i.e., the person is

low in 'need for cognition'). Low ability to process could occur because of outside distractions or because the individual does not have the knowledge to understand the persuasive message.

p0035 When either motivation or ability to process information is low, a variety of peripheral route processes are more likely to be responsible for persuasion. When the peripheral route is taken, attitude change reflects elements of the persuasive communication that do not require extensive thoughtful processing, like attractiveness and credibility cues, classical conditioning, mere exposure, and various heuristics (e.g., more arguments are better). For example, someone who is uninterested in cars and who is just flipping through a magazine could form associations between a car in an ad and the beautiful scenery or an attractive endorser, or he or she might notice the large number of features the car has without reading them, and each of these could lead to attitude change about the car on the basis of the peripheral route. Although the peripheral route can produce attitude change, the resulting attitudes are relatively weak, because they are not based on the extensive elaboration of issue relevant information and so are not integrated into existing memories. These weak attitudes are less likely to persist over time, resist future persuasion attempts, or predict behavior.

### s0025 **Central Route**

p0040 Under circumstances when individuals are highly motivated and able to process information relevant to the attitude object, it is likely that attitudes will reflect the influence of central route processes. High motivation to process information could occur because the attitude object is personally relevant or the person enjoys thinking in general. High ability to process occurs when there are few distractions and the person has the knowledge to understand the information presented. Central route processes require extensive thought and elaboration on information relevant to the attitude object. For example, someone who has the time and is interested in buying the kind of car presented in an ad would carefully consider the attributes of the car that are enumerated in the ad, including the safety record, fuel mileage, and resale value and relate this information to their existing needs. High elaboration processing is typified by careful consideration of the presented information in which it is compared and integrated with existing information in memory.

p0045 Persuasion under high elaboration conditions is determined by the thoughts that are generated. If the thoughts are in the direction of the persuasion attempt (positive toward the car), then attitude change will move in that direction; however, if the thoughts are predominantly against the direction of the advertisement, then the attitude will change in direction opposite to the intended direction, referred to as a boomerang effect. This can occur when an individual successfully counterargues the presented arguments by using the information available in memory to undermine the persuasion attempt. Because elaborative thought reflects the integration of new information with existing memories, the resulting attitudes tend to be strong ones that persist over time, resist persuasion attempts, and predict behavior.

p0050 Under high elaboration conditions, attitude change reflects object-relevant thoughts that are generated, including whether they are positive or negative and the number of thoughts.

In addition, when thinking is high, people also consider the validity of their thoughts. The self-validation hypothesis holds that the confidence with which thoughts are held is critical because it determines the extent to which thoughts influence attitudes. When thoughts are held with confidence, they are more likely to impact attitudes, whereas when people have doubts in their thoughts, they are less likely to impact attitudes. A variety of circumstances can undermine thought confidence, including feedback indicating that the quality of thoughts is not good, body cues undermining thoughts such as sitting in a slumped posture or shaking one's head, or experiencing negative feelings for reasons unrelated to the persuasive message. Everyday experiences such as feeling sick, sleepy, or light-headed could also lead someone to doubt the thoughts he or she has at the moment, making these thoughts less likely to influence attitudes. On the other hand, when someone is feeling particularly mentally sharp and awake and the thoughts come to mind easily, the thoughts he or she generates are more likely to impact his or her attitudes because they are held with high confidence. In this way, confidence in thoughts, as opposed to doubt, leads to a closer relationship between the valence of thoughts generated and attitudes.

Researchers have developed techniques to assess whether p0055 message recipients are engaging in high as opposed to low elaboration processing. One commonly used approach is to develop two messages designed to persuade in the same direction on the same issue, where one message provides strong cogent arguments and the other message provides weak and specious arguments. The extent to which strong arguments lead to greater attitude change than weak arguments indicates the extent to which recipients of the message carefully considered the content of the message. On the other hand, if participants do not carefully consider the content of the message, then attitudes will be influenced less by the quality of the arguments presented. Manipulating argument quality allows researchers to assess the extent to which a variable, such as motivation or ability to process the message, can impact whether the central or peripheral route to persuasion is taken. Studies have shown that when a topic is personally relevant to the recipient, when the recipient is someone who likes to think, when there is little distraction in the environment, and when the recipient has the knowledge needed to process the message, the impact of argument quality on attitudes is greater than when each of these elements is not present. A second method of assessing the extent of elaborative processing is the relationship between the valence of the issue-relevant thoughts and the attitude. A closer relationship between the valence of thoughts and attitudes indicates attitudes that reflect high elaboration processing, whereas a weaker relationship indicates that attitudes reflect something other than thoughts, indicating low elaboration processing. Thus, using manipulations of argument quality and measurements of thoughts provide assessments of the extent of elaboration that is taking place.

### **Multiple Roles: The Case of Incidental Emotion**

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To this point, several ways that variables impact persuasion p0060 have been described: serving as cues under low elaboration conditions, serving as arguments or affecting the valence of thoughts or confidence in thoughts under high elaboration

conditions, and by influencing whether the central or peripheral route to persuasion is taken (i.e., whether people are placed under high or low elaboration conditions in the first place). Under the ELM, the same persuasion variable has the potential to impact persuasion in each of these ways depending on whether elaboration likelihood is constrained to be high, constrained to be low, or is not constrained. This potential for a single variable to play multiple roles is illustrated in the case of incidental emotions. Incidental emotions are emotions produced outside of the persuasive communication itself (e.g., emotion that comes from a television program in which an advertisement is embedded). Whether in the laboratory or in real life, incidental emotions can result from experiences that evoke an emotional response, including reading about or writing down events that evoke either positive (e.g., happiness) or negative (e.g., sadness) emotions, or simple events such as winning a monetary prize. The research presented next indicates that emotion that is elicited outside of the persuasive communication can serve multiple roles in persuasion.

### Low elaboration

When either the motivation or the ability to process issue-relevant information is lacking, incidental emotion serves as a peripheral cue, consistent with the peripheral route to persuasion. Therefore, incidental affect influences the resulting attitudes in the direction consistent with its valence, and so positive feelings produce more positive attitudes whereas negative feelings produce more negative attitudes.

Two processes have been identified that can produce this simple cue effect of emotion under low elaboration conditions, classical conditioning, and misattribution. With classical conditioning, a simple association is formed between an object and the stimuli that evoked positive or negative responses. A variety of research has shown that pairing an attitude object with positive or negative stimuli, such as receiving a free lunch as opposed to smelling a noxious odor, has a direct impact on the attitudes expressed towards unrelated objects. These conditioning effects occur even when the stimulus is presented so quickly that it falls outside of the awareness of the observer and little or no time is allowed for reflection, illustrating that no effortful thought is required for this process, consistent with low elaboration processes.

Emotion can also impact attitudes under low elaboration conditions when the emotional response is misattributed to the attitude object. For example, rather than evaluating the merits of a persuasive message, the recipients might misattribute their current emotional state to their response to a persuasive message. Therefore, with positive emotions, the attitude moves in the direction advocated by the message to a greater extent than with negative emotions. Incidental emotions can also be directly attributed to the attitude object in the absence of a persuasive message. In this case, an individual simply asks himself or herself how he or she feels about the attitude object, and if he or she is feeling good as opposed to bad, for example because of the weather, then this can lead to the expression of a more positive as opposed to a more negative attitude.

According to the ELM, these direct cue effects of emotion are expected particularly under low elaboration conditions, whereas other processes are expected to operate under high elaboration conditions. In a study directly testing this view,

some participants were told that they could choose an attitude object (a pen) to take home, leading to high personal involvement with the product, whereas others were told that they would choose another unrelated product, leading to low personal involvement when learning about the pen. They were then exposed to a television program that produced a positive or neutral mood, and this was followed by a set of commercials including one about the pen. In both high and low involvement conditions, positive mood led to more positive attitudes towards the pen, but through different processes. Under high involvement, the positive mood led to more positive thoughts about the pen than the neutral mood and this explained how mood influenced attitudes, whereas under low involvement, attitudes did not reflect the positivity of the thoughts. The absence of effects of thoughts suggests that mood had an impact on attitudes through low elaboration processes such as conditioning or misattribution which operate in the absence of thoughtful processing.

### High elaboration

Under high elaboration conditions, attitudes are a function of cognitive responses to a persuasion attempt. In the study reviewed above, when the attitude object (a pen) was highly personally relevant, mood biased attitudes because mood influenced whether thoughts were more positive or less positive. As thoughts did not play a role under low personal relevance, this shows that high elaboration conditions are necessary for thoughts to explain the biasing effect of mood on attitudes.

Evaluating persuasive arguments sometimes requires forming judgments of the likelihood of an event occurring. When events are associated with specific emotions, individuals already experiencing those emotions judge the likelihood of those events occurring to be higher. For example, feeling angry makes angering events seem more likely to occur, while feeling sad makes saddening events seem more likely to occur. As these likelihood judgments influence the assessment of the persuasive arguments presented, these changes in likelihood judgments impact attitudes. Taken together, evidence shows that incidental emotions can have an impact on evaluations through cognitive responses, in the form of thoughts in response to a message or likelihood judgments, which is consistent with high elaboration processing. Thus, when elaboration likelihood is constrained to be high, persuasion variables that have an impact on attitudes, such as incidental emotion, do so by influencing cognitive responses.

In addition to affecting the valence of the thoughts when thinking is high, emotions can also serve in other roles. For example, if the emotion is salient after a persuasive message has already been processed, then emotions can affect the confidence people have in the thoughts they have generated. More specifically, if people are made to feel happy after generating thoughts, they become more confident in these thoughts than if they are made to feel sad after thinking. This means that if the thoughts generated were largely favorable to the message, then placing people in a happy state after processing will enhance persuasion because people will be more confident in and rely more on their positive thoughts. However, if the thoughts generated were largely unfavorable, then placing people in a happy state after processing will reduce persuasion because people will have greater confidence in their negative

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thoughts and rely on them more. The opposite occurs if people are placed in any emotion associated with doubt following the message such as sadness.

#### s0045 *Unconstrained elaboration likelihood*

p0100 The discussion up to this point has focused on circumstances where elaboration likelihood is constrained to be either high or low because of variables related to the motivation and ability to thoughtfully process information. When this is not the case, persuasion variables can have their impact by influencing the extent of elaboration, determining whether high or low elaboration processes are likely to influence attitudes. The impact of traditional motivation and ability variables like personal relevance and distraction has already been discussed; however, other variables including incidental emotions can also impact extent of elaboration so long as elaboration is not already constrained to be either high or low by other variables (e.g., distraction). Two accounts for the impact of incidental emotion on extent of elaboration are discussed below.

p0105 According to the feelings-as-information account, moods and emotions provide information about the status of the current environment and through this can impact the motivation to engage in effortful processing. In particular, negative affect indicates that the environment is problematic, and this is associated with a higher level of effortful processing in order to address the issues in the environment. On the other hand, positive affect indicates that the environment is safe, and so is associated with less effortful processing. Indeed, a number of studies appear to show that experiencing positive mood makes engaging in effortful processing of a persuasive message less likely. However, a close review of the methods used by researchers showed that the persuasive communications used in this research are often counterattitudinal topics, such as nuclear waste and tuition increases, which are likely to elicit negative moods and emotions. This suggests that those experiencing positive affect were avoiding effortful processing of these messages as a way to maintain their good mood, rather than because they used a simple mood-as-information cue. According to this hedonic contingency viewpoint, those who are feeling happy are particularly sensitive to the hedonic consequences of a persuasive message, and so will choose to avoid extensive processing of persuasive messages that are likely to lead to negative feelings, but they will extensively process persuasive messages that appear likely to produce positive feelings. As those experiencing negative feelings are less concerned about maintaining their current state, their level of effortful processing is unrelated to whether the message is positive or negative. Evidence shows that when presented with proattitudinal messages, those in a positive mood engage in high elaboration processing, as illustrated by a strong effect of argument quality on attitudes. Thus, evidence suggests that incidental affect can also influence whether high or low elaboration processing takes place.

#### s0050 **Attitude Strength**

p0110 Strong attitudes are those that remain stable over time, resist future persuasion attempts, and are predictive of behavior. Weak attitudes are less consequential in these ways. Attitudes

that result from the central route tend to be stronger than those resulting from the peripheral route. A variety of indicators have been developed to assess whether an attitude is likely to be strong or weak, including the extremity, accessibility, importance, and certainty with which the attitude is held. In general, attitudes that are more extreme, those that are more likely to come to mind spontaneously, those that are more important, and those held with more certainty are more consequential than attitudes lacking these attributes.

Strength indicators can be divided into those that directly reflect structural aspects of the attitude, such as attitude accessibility, and metacognitive indicators of strength that reflect beliefs about the attitude, such as the certainty with which the attitude is held. Metacognitive indicators reflect secondary thought, meaning that they are thoughts that reflect on other thoughts, in this case the attitude itself. On the other hand, structural components indicate a component of the attitude itself, so attitude accessibility is proposed as a direct assessment of the link between the representation of the object in memory and its evaluation. Both structural and metacognitive strength indicators are associated with strength consequences. Attitude accessibility is the most widely studied structural strength indicator, and attitude certainty is the most widely studied metacognitive indicator.

#### **Attitude Accessibility**

The accessibility of an attitude is an indication of how readily the attitude comes to mind in the presence of the attitude object. Accessibility can be assessed simply by measuring how quickly an individual is able to respond when asked to express his or her attitude. Research shows that the more quickly an attitude comes to mind, the more likely it is to remain stable over time, resist future persuasion, and predict behavior. More accessible attitudes have been shown to better predict a variety of behaviors from voting in elections to preferences for games, and purchasing decisions. On the other hand, an attitude that does not come to mind at all in a given instance is unlikely to predict behavior.

A number of variables have been shown to influence the accessibility of an attitude, including expressing the attitude multiple times and having direct behavioral experience with the attitude object. For example, if a person is asked multiple times for his or her view on a new movie or a political candidate, or if he or she had direct experience watching the movie or meeting the candidate versus just hearing about it indirectly, the attitude will come to mind more quickly and easily. Of most relevance to persuasion is the finding that more extensive thought about the attitude object enhances attitude accessibility because more thought leads to greater integration of the new evaluation formed with existing memories, consistent with the high elaboration processes described in the ELM. There are two common accounts for the processes responsible for the consequences of attitude accessibility. The first account is that more accessible attitudes are simply more likely to come to mind directly making the attitude more consequential. However, a second account holds that individuals form impressions of how easy or difficult it is to bring an attitude to mind, and these metacognitive judgments of accessibility are responsible for the consequences of accessibility. Thus, there

remain interesting questions regarding what structural properties accessibility reflects as well as the mechanism for the consequences of accessibility. Regardless of the outcome of these alternatives, accessibility remains the most broadly supported structural indicator of attitude strength capable of producing each of the strength consequences.

### s0060 **Attitude Certainty**

p0130 Attitude certainty is a belief held about an attitude that reflects the conviction with which the attitude is held, or an assessment of the correctness of the attitude. Certainty is measured using questionnaire items that assess the extent to which the individual feels certain, confident, and sure about the attitude. Greater certainty is associated with attitudes that exhibit greater persistence, resistance, and prediction of behavior. As a metacognitive indicator of strength, attitude certainty consists of thoughts about the attitude.

p0135 According to the ELM, greater extent of elaboration is associated with stronger attitudes. Consistent with this, results show that antecedents of elaboration like distraction and whether or not someone likes to think influence attitude certainty. One process through which this occurs is that antecedents of elaboration produce an increased amount of thought and individuals form a perception of this amount of thought. If the perception is that a lot of thought has gone into an attitude, then it is held with greater certainty than if the perception is that little thought has gone into the attitude. The experience of resisting a persuasive attempt also has consequences for attitude certainty, but in this case the impact depends on an assessment of the resistance situation. If an individual believes that strong arguments were easily resisted, then higher attitude certainty results. However, if an individual believes that it was difficult to resist weak arguments, then lower certainty will result. In sum, attitude certainty reflects metacognitive perceptions people form about their responses to persuasion attempts including the amount of thought and the perceived ability to resist persuasion. Both accessibility and certainty provide indicators of which attitudes are likely to exhibit attitude strength.

### s0065 **Resistance**

p0140 Resistance is the extent to which an attitude remains firm when confronted with an attempt to persuade. That is, if attitude change is motion, then resistance is the friction that goes against attitude change. Resistance is achieved through a number of different processes, and can be triggered through environmental cues such as forewarning of persuasion, and enhanced practice in counterargument such as inoculation. In addition to these two topics, metacognitive perceptions that individuals form regarding how successful they were at counterarguing persuasion are also relevant to resistance, as reviewed earlier.

### s0070 **Forewarning**

p0145 The phrase, 'And now a word from our sponsors,' is an example of a forewarning, because it warns the audience of an upcoming persuasion attempt. Forewarning has different

impacts on persuasion processes prior to and after the actual message is received. Prior to the message, the impact of forewarning depends on whether processing is likely to be more or less thoughtful, consistent with the ELM. Being forewarned under high personal relevance leads individuals to bolster their attitudes prior to receiving the persuasive message, resulting in increased resistance. However, being forewarned under low personal relevance leads individuals to acquiesce or give in to the message, even before it is received, in order to maintain a more positive view of the self as someone who is not overly malleable. One way advertisers avoid forewarning effects is by placing product tie-ins directly into programming.

### **Inoculation**

Attitudes can be particularly susceptible to persuasion attempts when they lack an extensive cognitive foundation in memory. This can make it difficult to resist counterattitudinal persuasive messages. This lack of cognitive foundation is common in the case of cultural truisms, which are widely accepted but generally go unexamined during day to day life. Truisms include the value of 'freedom of speech,' and, 'brushing your teeth every day.' The notion of inoculation is that just as immunizations make people more resistant to disease, showing people arguments attacking their attitudes and training them to counterargue them increase resistance to future attempts to change these attitudes. The inoculation approach of training individuals to counterargue the persuasive message, is more effective at increasing resistance than providing individuals with additional support to bolster their existing attitude. Thus, inoculation provides an effective way to increase the resistance of attitudes, because it increases the ability and motivation to counterargue persuasive messages that are counterattitudinal.

### **Dissonance: Persuasion from Behavior**

Leon Festinger was the first to describe cognitive dissonance, which provides a striking example of how our own behaviors can lead to attitude change. According to cognitive dissonance theory, any two thoughts that are related to each other can either be consonant or dissonant. Dissonant cognitions occur when one thought does not follow from or fit with the other (e.g., I am an environmentalist; I drive an SUV) Holding two dissonant cognitions in the mind simultaneously leads to an aversive state of arousal that individuals are motivated to reduce. Dissonant cognitions often arise when an individual thinks about a past behavior and realizes that it was inconsistent with an attitude that he or she holds, such as holding a positive attitude towards safe sex, but failing to use a condom. Under these circumstances, as it is more difficult to change the behavior than to change the attitude, the most common way to resolve the inconsistency is to change the attitude to be in line with the behavior. While changing the attitude typically requires cognitive effort, the negative affective state associated with dissonance is a powerful motivator to engage in biased elaborative processing. The result of dissonance processes is that individuals persuade themselves to change their attitudes to be in line with their behaviors. In this way, the dissonance resulting from a failure to use condoms could most

readily be resolved by changing the attitude to be more negative towards condoms.

p0160 A number of experimental paradigms have been used to illustrate dissonance in the laboratory, and these provide explanations for some surprising phenomena in persuasion. Dissonance explains what happens to people who agonize over a difficult decision, whether it is a simple purchase or a major life decision, and then after the decision express more positive views of the chosen option, and more negative views of the nonchosen option. This is referred to as the ‘spreading of alternatives,’ and it occurs because the negative attributes of the chosen option and the positive attributes of the option not chosen are dissonant with the behavior of the choice that was made. Another example of dissonance occurs when people who are humiliated during an initiation to join a group like a fraternity or the armed forces, end up liking these groups more than if there was no hazing. As going through humiliation to join a group is dissonant with any negative aspects of the group, the attitude toward the group is changed to be more positive. This is referred to as ‘effort justification’ because the attitude change results from having to justify to the self the willingness to go through so much to join the group. These are just two examples of the paradoxical consequences of dissonance for persuasion (see the dissonance entry for more in-depth discussion).

### s0085 **Application: Problem of Sustainable Behavior Change in Health Communication**

p0165 With roughly half of all causes of mortality in the United States being due to factors directly influenced by behavior, including smoking, drug use, and sedentary lifestyle, the importance of developing effective health communications is clear. While it is common in a health campaign to focus only on increasing the factual knowledge of the audience, evidence shows that simply increasing knowledge does not result in behavior change. For example, knowing a lot about safe sex and condoms is not a good predictor of sustained increases in condom use. As attitudes are generally the best predictors of behavior, rather than knowledge, theories of persuasion like the ELM provide clear prescriptions on how to improve the effectiveness of health promotion campaigns so that they produce prohealth attitudes that are strong in that they resist future persuasion and predict behavior. Resistance is also critical as other sources of persuasion like old drinking buddies or a potential sexual partner can quickly overwhelm weaker attitudes.

p0170 According to the ELM, taking the central route to persuasion is the key to establishing strong attitudes to produce sustained behavior change. In particular, procedures that increase the formation of highly elaborated, accessible, and confidently held attitudes will be the most likely to result in actual and sustained behavior change. Messages that are tailored to the particular concerns of the recipients of the messages, such as whether they are using condoms to reduce the transmission of STDs or to prevent pregnancy, are effective at increasing the personal relevance of the messages, and as a consequence make it more likely that recipients will take the central route to persuasion. In general, anything that increases the

personal relevance of the communication will have this effect. In addition, it is important that messages are presented in a way that allows for thoughtful processing. As medical information is often technical, pretests should be conducted to assess whether a given population can understand the message before it is more widely distributed. Presenting the message in a medium that is self-paced, like a written flier, allows the audience to set a comfortable pace that allows for thoughtful processing, whereas audio and video media have a set presentation speed, and so do not allow for self-paced consideration. In addition, circumstances where there are few distractions and the information is presented at the correct knowledge level for the audience are likely to increase their ability to process the message extensively. Once the circumstances are established for high elaboration processing, attitudes will be influenced by whether the arguments are strong or weak. Therefore, it becomes critical under these circumstances to establish ahead of time that the arguments to be presented are seen as cogent and strong within the intended population. In this way, the basic understanding of persuasion processes and the distinction between the central and peripheral routes to persuasion and their distinct consequences can assist in the development of more effective health promotion campaigns in the future.

**See also:** Metacognition (00233); Prejudice, Discrimination and Stereotypes (Racial Bias) (00388); Cognitive Dissonance (00097); Attitude Formation (00041); Consumer Psychology (00107); AIDS and Sexual Behavior (00015); Political Psychology (00282); Motivation (00238).

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## Relevant Websites

<http://changingminds.org> – Changing minds and persuasion.