4.5: Examples of Social Science Theories

In this section, we present brief overviews of a few illustrative theories from different social science disciplines. These theories explain different types of social behaviors, using a set of constructs, propositions, boundary conditions, assumptions, and underlying logic. Note that the following represents just a simplistic introduction to these theories; readers are advised to consult the original sources of these theories for more details and insights on each theory.

**Agency Theory.** Agency theory (also called principal-agent theory), a classic theory in the organizational economics literature, was originally proposed by Ross (1973)4 to explain two-party relationships (such as those between an employer and its employees, between organizational executives and shareholders, and between buyers and sellers) whose goals are not congruent with each other. The goal of agency theory is to specify optimal contracts and the conditions under which such contracts may help minimize the effect of goal incongruence. The core assumptions of this theory are that human beings are self-interested individuals, boundedly rational, and risk-averse, and the theory can be applied at the individual or organizational level.

The two parties in this theory are the principal and the agent; the principal employs the agent to perform certain tasks on its behalf. While the principal’s goal is quick and effective completion of the assigned task, the agent’s goal may be working at its own pace, avoiding risks, and seeking self-interest (such as personal pay) over corporate interests. Hence, the goal incongruence. Compounding the nature of the problem may be information asymmetry problems caused by the principal’s inability to adequately observe the agent’s behavior or accurately evaluate the agent’s skill sets. Such asymmetry may lead to agency problems where the agent may not put forth the effort needed to get the task done (the *moral hazard* problem) or may misrepresent its expertise or skills to get the job but not perform as expected (the *adverse selection* problem). Typical contracts that are behavior-based, such as a monthly salary, cannot overcome these problems. Hence, agency theory recommends using outcome-based contracts, such as a commissions or a fee payable upon task completion, or mixed contracts that combine behavior-based and outcome-based incentives. An employee stock option plans are an example of an outcome-based contract while employee pay is a behavior-based...
contract. Agency theory also recommends tools that principals may employ to improve the efficacy of behavior-based contracts, such as investing in monitoring mechanisms (such as hiring supervisors) to counter the information asymmetry caused by moral hazard, designing renewable contracts contingent on agent’s performance (performance assessment makes the contract partially outcome-based), or by improving the structure of the assigned task to make it more programmable and therefore more observable.

**Theory of Planned Behavior.** Postulated by Azjen (1991), the theory of planned behavior (TPB) is a generalized theory of human behavior in the social psychology literature that can be used to study a wide range of individual behaviors. It presumes that individual behavior represents conscious reasoned choice, and is shaped by cognitive thinking and social pressures. The theory postulates that behaviors are based on one’s intention regarding that behavior, which in turn is a function of the person’s attitude toward the behavior, subjective norm regarding that behavior, and perception of control over that behavior (see Figure 4.2). Attitude is defined as the individual’s overall positive or negative feelings about performing the behavior in question, which may be assessed as a summation of one’s beliefs regarding the different consequences of that behavior, weighted by the desirability of those consequences. Subjective norm refers to one’s perception of whether people important to that person expect the person to perform the intended behavior, and represented as a weighted combination of the expected norms of different referent groups such as friends, colleagues, or supervisors at work. Behavioral control is one’s perception of internal or external controls constraining the behavior in question. Internal controls may include the person’s ability to perform the intended behavior (self-efficacy), while external control refers to the availability of external resources needed to perform that behavior (facilitating conditions). TPB also suggests that sometimes people may intend to perform a given behavior but lack the resources needed to do so, and therefore suggests that posits that behavioral control can have a direct effect on behavior, in addition to the indirect effect mediated by intention.

TPB is an extension of an earlier theory called the theory of reasoned action, which included attitude and subjective norm as key drivers of intention, but not behavioral control. The latter construct was added by Ajzen in TPB to account for circumstances when people may have incomplete control over their own behaviors (such as not having high-speed Internet access for web surfing).

![Figure 4.2. Theory of planned behavior](https://socialsci.libretexts.org/Bookshelves/Social_Work_and_Human_Services/Book%3A_Social_Science_Research_-_Princ...)
people in a social system learn about a new innovation and its potential benefits through communication channels (such as mass media or prior adopters) and are persuaded to adopt it. Diffusion is a temporal process; the diffusion process starts off slow among a few early adopters, then picks up speed as the innovation is adopted by the mainstream population, and finally slows down as the adopter population reaches saturation. The cumulative adoption pattern therefore an S-shaped curve, as shown in Figure 4.3, and the adopter distribution represents a normal distribution. All adopters are not identical, and adopters can be classified into innovators, early adopters, early majority, late majority, and laggards based on their time of their adoption. The rate of diffusion also depends on characteristics of the social system such as the presence of opinion leaders (experts whose opinions are valued by others) and change agents (people who influence others’ behaviors).

At the micro (adopter) level, Rogers (1995) suggests that innovation adoption is a process consisting of five stages: (1) knowledge: when adopters first learn about an innovation from mass-media or interpersonal channels, (2) persuasion: when they are persuaded by prior adopters to try the innovation, (3) decision: their decision to accept or reject the innovation, (4) implementation: their initial utilization of the innovation, and (5) confirmation: their decision to continue using it to its fullest potential (see Figure 4.4). Five innovation characteristics are presumed to shape adopters’ innovation adoption decisions: (1) relative advantage: the expected benefits of an innovation relative to prior innovations, (2) compatibility: the extent to which the innovation fits with the adopter’s work habits, beliefs, and values, (3) complexity: the extent to which the innovation is difficult to learn and use, (4) trialability: the extent to which the innovation can be tested on a trial basis, and (5) observability: the extent to which the results of using the innovation can be clearly observed. The last two characteristics have since been dropped from many innovation studies. Complexity is negatively correlated to innovation adoption, while the other four factors are positively correlated. Innovation adoption also depends on personal factors such as the adopter’s risk-taking propensity, education level, cosmopolitanism, and communication influence. Early adopters are venturesome, well educated, and rely more on mass media for information about the innovation, while later adopters rely more on interpersonal sources (such as friends and family) as their primary source of information. IDT has been criticized for having a “pro-innovation bias,” that is for presuming that all innovations are beneficial and will be eventually diffused across the entire population, and because it does not allow for inefficient innovations such as fads or fashions to die off quickly without being adopted by the entire population or being replaced by better innovations.

Figure 4.3. S-shaped diffusion curve
Elaboration Likelihood Model. Developed by Petty and Cacioppo (1986)\(^7\), the elaboration likelihood model (ELM) is a dual-process theory of attitude formation or change in the psychology literature. It explains how individuals can be influenced to change their attitude toward a certain object, events, or behavior and the relative efficacy of such change strategies. The ELM posits that one’s attitude may be shaped by two “routes” of influence, the central route and the peripheral route, which differ in the amount of thoughtful information processing or “elaboration” required of people (see Figure 4.5). The central route requires a person to think about issue-related arguments in an informational message and carefully scrutinize the merits and relevance of those arguments, before forming an informed judgment about the target object. In the peripheral route, subjects rely on external “cues” such as number of prior users, endorsements from experts, or likeability of the endorser, rather than on the quality of arguments, in framing their attitude towards the target object. The latter route is less cognitively demanding, and the routes of attitude change are typically operationalized in the ELM using the argument quality and peripheral cues constructs respectively.

![Figure 4.5. Elaboration likelihood model](https://socialsci.libretexts.org/Bookshelves/Social_Work_and_Human_Services/Book%3A_Social_Science_Research_-_Princ…)

Whether people will be influenced by the central or peripheral routes depends upon their ability and motivation to elaborate the central merits of an argument. This ability and motivation to elaborate is called elaboration likelihood. People in a state of high elaboration likelihood (high ability and high motivation) are more likely to thoughtfully process the information presented and are therefore more influenced by argument quality, while those in the low elaboration likelihood state are more motivated by peripheral cues. Elaboration likelihood is a situational characteristic and not a personal trait. For instance, a doctor may employ the central route for diagnosing and treating a medical ailment (by virtue of his or her expertise of the subject), but may rely on peripheral cues from auto mechanics to understand the problems with his car. As such, the theory has widespread implications about how to enact attitude change toward new products or ideas and even social change.

General Deterrence Theory. Two utilitarian philosophers of the eighteenth century, Cesare Beccaria and Jeremy Bentham, formulated General Deterrence Theory (GDT) as both an explanation of crime and a method for reducing it. GDT examines why certain individuals engage in deviant, anti-social, or criminal behaviors. This theory holds that people are fundamentally rational (for both conforming and deviant behaviors), and that they freely choose deviant behaviors based on a rational cost-benefit calculation. Because people naturally choose utility-maximizing behaviors, deviant choices that engender personal gain or pleasure can be controlled by increasing the costs of such behaviors in the form of punishments (countermeasures) as well as increasing the probability of apprehension. Swiftness, severity, and certainty of punishments are the key constructs in GDT.
While classical positivist research in criminology seeks generalized causes of criminal behaviors, such as poverty, lack of education, psychological conditions, and recommends strategies to rehabilitate criminals, such as by providing them job training and medical treatment, GDT focuses on the criminal decision making process and situational factors that influence that process. Hence, a criminal’s personal situation (such as his personal values, his affluence, and his need for money) and the environmental context (such as how protected is the target, how efficient is the local police, how likely are criminals to be apprehended) play key roles in this decision making process. The focus of GDT is not how to rehabilitate criminals and avert future criminal behaviors, but how to make criminal activities less attractive and therefore prevent crimes. To that end, “target hardening” such as installing deadbolts and building self-defense skills, legal deterrents such as eliminating parole for certain crimes, “three strikes law” (mandatory incarceration for three offenses, even if the offenses are minor and not worth imprisonment), and the death penalty, increasing the chances of apprehension using means such as neighborhood watch programs, special task forces on drugs or gang-related crimes, and increased police patrols, and educational programs such as highly visible notices such as “Trespassers will be prosecuted” are effective in preventing crimes. This theory has interesting implications not only for traditional crimes, but also for contemporary white-collar crimes such as insider trading, software piracy, and illegal sharing of music.