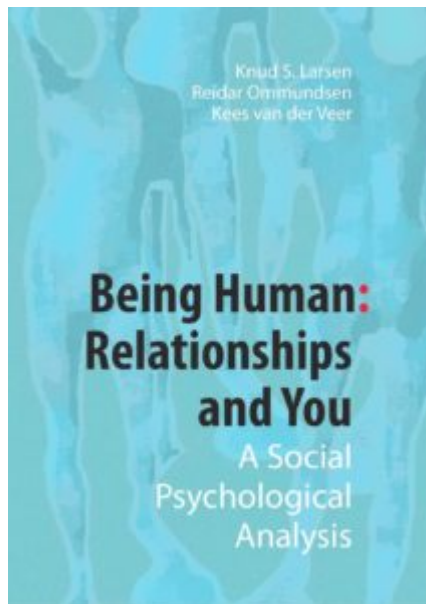


# Being Human. Chapter 5: Attitude Formation And Behavior



There are many social issues that provoke public debate and engage people attitudes. Around these issues we can observe three components (beliefs, emotion, and behavior) of attitudes are activated. Global warming is an issue with profound implications for our survival and indeed the survival of all species and the planet. Recently former presidential candidate Al Gore received the Nobel Peace Prize for drawing the world's attention to the dire prospects of our future unless we take decisive action. More and more public opinion (beliefs) is coming around and people are beginning to take

serious the warning of the overwhelming majority of the world's scientists. The beliefs of many common citizens are being modified to recognizing that things cannot go on as they have in the past, and that we must change. Some people have fully engaged their emotions as can be seen in letters to the editors of many newspapers and journals. These citizens feel the warnings at a very personal level and are not just willing to write letters, but also go on marches (behavior) in protest. Environmental beliefs are integrated for many people resulting in changed behavior where they take greater efforts to recycle, install energy saving devices in their homes, and drive more energy efficient cars. The world is changing, but is the rate of change sufficient to avoid future disasters. Only history will tell.

In the above vignette we can see various elements of attitudes and their effect on subsequent behavior, the important topics of this chapter. How did people form attitudes which brought them to the opposing sides of the global warming issue? Were their positions just fleeting opinions? Does the behavior of environmentalists who dissented from the indifference of politicians express more deeply held attitudes reflecting central values in their lives? Do those who express indifference toward environmental disaster hold more conformist attitudes that change with shifting popularity of viewpoints?

For people whose attitudes do not reflect deeply held values, attitude change can indeed occur rapidly. The popularity of president Bush has risen or fallen with dizzying speed. In the time before September 11, 2001, about 50 percent of the American people approved of his administration and leadership. This rose to 82 percent immediately following the attacks. However, by September of 2003 as the war continued to bring casualties, Bush's popularity dropped back down again to 52 percent. As we write now in 2007, Bush's popularity has fallen to an all time low. Obviously many who liked Bush in the past were "fair weather" supporters who have changed their views as the casualties and destruction have mounted in the months following the initial attack.

This vignette shows the importance of understanding the formation and structure of attitudes, and how attitudes may be changed. Attitude research is a central topic in social psychology from both the perspective of being salient to our concerns, and a topic we social psychologists started working on early in our history.

### *1. The structure and components*

There is a common agreement among most social psychologists about the presence of three components in attitudes. The affective or emotional component we saw exhibited in the aforementioned vignette by manifestations of anger and contempt for the opposing sides. The second component, the cognitive factor refers to the beliefs that accompany the emotions, for example the newly discovered beliefs about the fragility of the environment. The third component, the behavioral, refers to the behaviors elicited by the affective and cognitive components. In our example attitudes may produce demonstrations for or against environmental policies, but may also be manifested in other behaviors such as participating in election campaigns, or in signing petitions.

Any attitude is composed of these three elements, and is always oriented positively or negatively toward some attitude object. Practically anything you can imagine might be an attitude object. You can have attitudes toward persons, ideas, or things. For example you may be positive or negative toward the leader of your country, a person, toward his policies (ideas), or toward inanimate objects (like posters or flags which symbolize viewpoints). In fact you can have an attitude toward the classroom in which you study. Look around and see if that is not true (Eagly & Chaiken, 1998; Fazio, 2000; McGuire, 1985)!

In general the three components are consistent with each other. A person, who has a positive attitude toward the environment, is also likely to have a set of beliefs that sustain this position, and may behave in a consistent manner. At election time the supporter may vote for environmental candidates, write letters to newspaper editors, or donate money to a favored candidate. Affect, cognition and behavior tend to move in the same direction toward the attitude object.

People may hold complex beliefs with respect to the attitude object, but the overall evaluation tends to be simple. One consequence of this apparent contradiction is that people may easily change certain beliefs, while still maintaining their basic evaluations. Many attitudes are like that, cognitively complex, but simple in terms of overall evaluations. These overall evaluations (positive or negative feelings) are more difficult to change than aspects of the supporting belief system. In the functional psychological economy of the individual, attitudes serve as primers. They make decision making more rapid by allowing for more or less automatic responses. Rapid decision-making is possible because the salient information is held in memory storage and is easily accessible to the person (Judd, Drake, Downing, & Krosnick, 1991; Sanbonmatsu & Fazio, 1990).

## *2. The formation of attitudes*

Some researchers think attitudes have a genetic basis. Preston & De Waal (2002) found attitudes activating a certain branch of the motor cortex, which in turn supports certain behaviors. In other words our attitudes prepare us for action, and are in memory associated with other relevant emotions, beliefs, and behaviors. Tesser (1993) believed that at least some attitudes are linked to our genes. His study investigated identical twins that were raised in different environments and had no personal acquaintance with one another. These identical twins still had more attitudes in common than fraternal twins raised in the same home. In another study identical twins had more similar attitudes toward several attitude objects like the death penalty and music. How can that be? Are there gene behavior pathways that can be identified? These genetic pathways will probably not be discovered, as behavior is the consequence of many genes interacting with the environment. It would also appear more likely that genes affect broader personality characteristics like a person's temperament, and these in turn affect more specific attitudes. However, while we must recognize a role for genes, the vast amount of attitude research in social psychology focuses

on the social environment as primarily responsible for the formation of specific attitudes.

### *3. Which component dominates?*

Some attitudes are formed primarily by cognitive experiences. A person's attitude toward smoking may be a result of careful contemplations of convincing research that smoking causes cancer and death. Although the statistics for smoking behavior are dropping in some countries, they are alarmingly high in developing parts of the world like Asia. The World Health Organization expects that smoking may eventually kill 25 percent of all teenagers who start smoking in Asia, and a billion people will die from tobacco related diseases in the remaining 96 years of this century (Teeves, 2002). In just the United States smoking causes somewhere around 500,000 deaths each year. In addition to cancer, smoking may also cause impotence in males, and fertility problems in females. Some of these data have affected the cognitive component of attitudes toward smoking as half of the population in the United States smoked in 1950, whereas only 30 percent do so today. The cognitive component of attitudes includes all that we know about the attitude object, our beliefs, our memories, and images of the past. The cognitive component was predominant in affecting behavior for those who stopped smoking because they knew the research literature, and the effect of smoking on health

Some attitudes are predominantly affectively based, i.e. they involve emotional reactions to the object (Breckler, 1984; Zanna & Rempel, 1988; Bargh, Chaiken, Raymond, & Hymes, 1996). How much do we like smoking? Is it associated with pleasant images of friends or family, a ritual smoking session after dinner, and/or does nicotine produce pleasure associated with smoking. The fact that 30 percent of Americans still smoke would suggest that their attitudes are associated with emotional reactions to tobacco, along with cognitive defenses against the research that shows the negative effects.

For many people emotion is the primary determinant in attitudes toward a variety of objects. We have already noted how the popularity of political candidates is not stable, but frequently changes as a result of happenings in the larger world. How people feel toward a candidate is sometimes more important than what we think of his policies. In the US and probably other countries, people often vote as directed by their feelings, and often opt for policies which are contrary to their personal interests (Granberg & Brown, 1989). People still vote, although in decreasing numbers in the US, even when they know little about a party of choice

or its policies. Political preferences are often based on some intuitive liking of the candidate or party, or based on family tradition.

Many attitudes simply express our basic value system, and have little to do with reason or facts (Maio & Olson, 1995; Schwartz, 1992). Some people have deep-seated values about the rights of the individual to self-destruct, and would reflexively vote against the control of cigarette smoking, or to place additional taxes on its sale. We could marshal much information about the negative effect of second hand smoke, and the need for additional taxes to cover the health hazards to smokers and others, but it would for some have no impact. This picture of intellectual indifference is not encouraging for those who believe in the advantages of democracy.

Some attitudes are based on our observation of our own behavior (Bem, 1972). Since we continue to smoke, so we reason, we must have a positive attitude toward smoking. This idea suggests that many people do not know how they feel or think about things until they have engaged in relevant behavior. You go to a beach for the first time, and come away feeling good, you observe this transformation in yourself and think "I have positive attitudes toward the coast".

In the formation of our attitudes, different experiences may be more or less salient, and therefore some more easily accessible in memory. Some of these attitudes are cognitively related, and our memory therefore contains the necessary facts and experiences that sustain our predispositions. For other attitudes it is association with emotion that is significant. The pleasure of smoking, and the reinforcing role of peers and family, may provide rich emotional schemas that are difficult to change or remove. Finally, some attitudes are based on behavior. We have perhaps had direct experience with the consequence of smoking, lost a father or son, or we have personal health issues. These behavioral experiences may predominate in our attitudes toward smoking.

While a general consistency is present between the components of attitudes, there is no one-to-one relationship. In particular the relationship between attitudes and behavior is complex, as we shall see in a later section of this chapter.

#### *4. Theories of attitude formation*

Assuming that most attitudes are formed by experience, learning theory must play

an important role in attitude formation. From this perspective attitudes are learned just like other habits (Hovland, Janis, & Kelley, 1953). We learn the information associated with an attitude object, and we likewise learn our feelings.

The most basic principle is learning by mere association. This idea emerged from classical conditioning theory. Two objects are presented together; one associated with affect the other neutral. Learning theory suggests that we learn our attitudes from similar associations over time. A young person tries his first cigarette and feels acceptance from his peers. Smoking therefore becomes associated with approval and acceptance from others (though not necessarily from family). Reinforcement theory has also been applied to the learning of attitudes. If a behavior is followed by some reinforcement, other similar behaviors are likely to follow. In operant conditioning we are free to choose the behavior, but whether it sticks or not depends on whether it is followed by some reward (reinforcement). Is our smoking behavior followed by peer approval? Then it is likely to become a habit, as the drug nicotine also has very addictive properties.

Social learning theory suggests that we can also learn attitudes by mere imitation of behaviors. People tend to imitate the behavior of models (see e.g., Larsen, Coleman, Forbes, & Johnson, 1972). When the models are deemed authorities with legal status or admired, we often imitate their attitudes. Children are likely to imitate the political attitudes of parents if the relationship is good (Abramson, Baker, & Caspi, 2002). However, if we seek to dominate the opinions of others, reactance theory may come into play, and children may adopt attitudes that are opposite to those of their parents. In adolescence children are more likely to look to their peers as role models, and react in opposition to parental admonitions. We will come back to this more extensively in chapter 7 on conformity.

The different theories of learning, whether classical conditioning, reinforcement or social learning, all have a role to play in the formation of attitudes. In the case of attitudes what do we learn? We learn a message about the attitude object. Is the message from peers that smoking is cool and acceptable? Then positive attitudes may develop toward smoking and the behavior will follow. The whole field on persuasion deals with whether and under what conditions messages will be accepted and acted upon (McGuire, 1985; Moser, 1992).

In addition we also learn from the association with objects toward which we already have feelings. This is called the transfer effect (Krosnick, Jussim, & Lynn,

1992). Many times we just transfer our feelings from one object to another. We like Al Gore, and therefore like his environmental policies and agree that his work should be honored with the Nobel Peace Prize. What is called transfer effect is just another example of classical conditioning, where a stimulus that initiates an emotional response is paired with one that is neutral. Eventually the neutral response elicits the same or similar emotional responses (Olson & Fazio, 2001). Attitudes, based on classical or operant conditioning, are for the most part not rational. Logic does not play a role, other than helping select from memory the information that supports the attitude. Behavioral based attitudes on the other hand do require reflection. "I see my behavior" so I must have an attitude as self-perception theory reasons do require some cognitive integration and evaluation.

### *5. Functional and social influence theories of attitude formation and change*

Katz (1960), and Katz & Stotland (1959) proposed a functional theory of attitude formation. Attitudes are formed and expressed because they serve certain functions and respond to specific needs in the individual. The functional theory addresses the why of attitudes, why we develop these psychological constructs? Functional theory also has implications for attitude change. By understanding the underlying needs addressed by attitudes our messages can be persuasive.

#### *5.1 The Instrumental-utilitarian, ego-defensive, value-expressive, and knowledge functions*

According to the instrumental function we develop attitudes because they serve us in some practical way. Workers develop positive attitudes toward labor unions because they believe that the unions will promote their welfare and their rights. Some attitudes have a very practical basis. The utilitarian function suggests that we learn early which attitudes are likely to bring rewards, and which attitudes are followed by punishment. Hence, sometimes we choose to express attitudes because they are social desirable or "politically correct". As practical creatures we seek to maximize our gains, and develop those attitudes that have assisted us in social adjustment.

The second function is ego defensive. This function explains that many attitudes are developed in response to our personal insecurities and in order to maintain a positive self-image. Ego defenses serve to suppress unpleasant reality. Some think that our personal insecurities motivate all forms of prejudice (see e.g. Katz, 1960; Adams, Wright, & Lohr, 1996). White males may develop negative attitudes toward minorities or women because these groups are perceived to threaten them

at some level, and prejudice helps the bigoted person feel better about him or herself by not having to confront personal weak spots. The ego defensive function serves in a similar manner, by keeping away from awareness those unpleasant realities that cause anxiety.

The value-expressive function suggests that our attitudes give expression to our more deeply held values. The peace activists value peace, and therefore develop specific negative attitudes toward war. Values reflect our basic orientation toward the world. We can value justice and that might determine our specific attitudes toward labor unions working for fairness in the workplace, or civil rights organizations seeking to reduce prejudice in society. Finally, the knowledge function is used to organize our reality and speed our decision-making. If we did not have an attitude toward products, we might spend endless time trying to decide which tooth paste to buy. Our knowledge based consumer attitudes derive from advertising in contemporary society. Consumer attitudes speed up the process of choice selection although the decision still might be mindless. Attitudes are formed because they serve basic functions as suggested by Katz (1960). Let us examine some of the research using his model as an outline. More contemporary researchers also recognize that attitudes serve basic psychological functions (Pratkanis, Breckler, & Greenwald, 1989).

### *5.2 Research on the instrumental-utilitarian function*

Many attitudes are formed by our desire to obtain rewards and avoid punishments. We learn early that some aspects of our environment are rewarding and useful to us. We are likely to want to approach these objects with positive feelings. The teacher who rewards our efforts with excellent grades is more likely to be the object of our positive attitude, than those teachers who punish us for slovenly behavior. We are more likely to seek out a rewarding professor, use his assistance, and try to cultivate a relationship that may be beneficial in the long run.

Advertising employs similar means in utilizing persons and objects that have positive connotations, like using sexually alluring women to sell cars, or other consumer products. These advertising campaigns seek to associate a positively valued object with what is initially a neutral object. An attractive young lady (the positive object) is associated with a particular car. Car dealers hope that this association will also produce more positive attitudes toward the car, and therefore more sales.



Many other utilitarian attitudes are formed in a similar manner (Petty & Wegener, 1998; Pratkanis & Aronson, 2000). We learn to avoid objects because it helps in our survival. For example, we learn to avoid certain foods that contain toxins because often these foods leave a bitter taste. So our attitudes toward these foods also serve a utilitarian function (Profet, 1992). There are those who would maintain that even our preference for certain environments serve a utilitarian function. Most people have a preference for landscapes that include water, open space, with some uneven ground. These types of landscapes allowed our ancestors to hunt animals, obtain food and shelter, and avoid predators. Perhaps this nearly universal preference has served utilitarian functions in our distant past and may now be rooted in genetic based preferences (Orians & Heerwagen, 1999).

### *5.3 Research on the ego defensive function*

Many attitudes are formed in response to personal insecurities and our need to avoid unpleasant facts about life and ourselves. The aim of ego defensive attitudes is to maintain a positive self-image and control our anxieties. Authoritarian attitudes were developed in response to fundamental insecurities in the individual, and therefore the willingness to submit to and value powerful significant others. Authoritarianism is of two kinds. Adorno, Frenkel-Brunswik, Levinson, & Sanford (1950) developed their theory of rightwing authoritarianism in an attempt to understand the holocaust. They believed that authoritarianism is a syndrome of attitudes and beliefs based largely on the content of rightwing worldviews as measured by the F (for fascism) scale. More recently Altemeyer (1988) has shown the continuous utility of the concept of right wing authoritarianism in the development of negative attitudes toward a bewildering set of victims including minorities. Rokeach (1960) developed his theory of dogmatism, in which closed mindedness and cognitive rigidity were essential components. Authoritarianism in Rokeach's theory was independent of the content of beliefs, and is manifested in both right and leftwing politics. Dogmatism is also found in religion and other important social ideologies. For Rokeach, authoritarianism is a matter of either having a closed or open mind, and the rejection of others is based on belief incongruence. Both types of authoritarianism are thought to emerge out of personal insecurities (Larsen, 1969; Schwendiman & Larsen, 1970).

Research established links between authoritarianism and many forms of

insecurity (Larsen, 1969). In one study (Schwendiman & Larsen (1970) birth order was found to be a factor in the authoritarian personality. Authoritarian traits were also predictive of the preference for presidential candidates in the 1968 election (Larsen, 1970) and the 1976 presidential election (Brant, Larsen, & Langenberg, 1978). Authoritarian attitudes also favored mandatory sterilization (Larsen, 1976). Likewise authoritarianism was related to negative white attitudes toward Aborigines in Australia (Larsen, 1978; Larsen, 1981), and found to be a component in general theories of prejudice and social judgment (Larsen, 1970a; Larsen, 1971c).

One interesting thought about the development of ego defensive attitudes is contained in the studies done on terror management (Arndt, Greenberg, & Cook, 2002; Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, & Kirkland, 1990; Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). These researchers suggest that all people face the existential dilemma of mortality. We all die, a thought you probably do not dwell on a great length. On the one hand, we seem to have a great desire for self-preservation, on the other hand we are aware of the certainty of death. This existential dilemma causes overwhelming anxiety that is expressed in a variety of attitudes. These attitudes function to protect us from the terror brought on by our unpleasant reality. Many attitudes are formed, these researchers think, to allow us some escape from our mortality. Some people believe that they will live after death, which in turn motivates attitudes toward a variety of religions. Religions, as we know, are supposed to reserve a place for us in the afterlife provided we follow certain prescriptions.

The main idea is that we are searching for something larger than our individual lives. Some feelings of permanence may also come from being part of groups or traditions with a long history. Traditions that are helpful in terror management include those of family, culture, and those found in the major religions. In contributing to these we may feel there is something that survives our individual lives, and makes our existence meaningful. Other people create literature or write books (like this book) in the search for some permanence or symbolic immortality. According to the theory of terror management, we manage our anxiety through a variety of attitudes that all serve the function of pushing out the thoughts of the impending doom. Our attitudes toward religion, culture, and literature, and our creative work, are all attempts to push away the fears associated with mortality. Perhaps drug and alcohol abuse, and reliance on recreational diversions serve

similar functions. Sartre once said, “there is no escape” as we either face the existential anxiety associated with our mortality, or neurotic anxiety associated with our feeble attempts at escape. Many attitudes are undoubtedly formed as a result of the grand dilemma of life.

#### *5.4 Research on the value function*

Often attitudes are formed because they give expression to our underlying and deeply held values. Many attitudes are expressed in our support for our reference groups. Whether of a political, cultural, or religious nature, these groups matter to us, and help us identify our values and therefore are fundamental to specific attitudes. Parents obviously matter in the development of values, and therefore it should not surprise us that many children support the same political party as that of their parents (Niemi & Jennings, 1991). In general, conservative groups attract those who are committed to free enterprise, whereas liberal groups are more motivated by the values of equality (Hunter, 1991). The pioneering project that demonstrated the changing role of reference groups in attitude formation was the historical Bennington College study of student attitudes (Newcomb, 1958). The students’ parents were generally conservative in political beliefs and values, but the college was more left leaning. The question was which reference group’s values would prevail in developing the students lasting political attitudes?

As it turned out it was the college experience that was the more influential in forming lasting attitudes. The students’ initial conservative views changed over the course of staying in the college environment. A follow up study showed that these liberal attitudes held for the long run. Even 25 years later the majority continued to hold liberal views. Obviously parents were still a reference group, but as could be expected peers and the college environment had a powerful influence in the formation of more liberal attitudes. Perhaps this knowledge is the basis for the creation of many religious universities where students will not be confronted with ideas different from those of their parents.

#### *5.5 Research on the knowledge function*

As already mentioned our attitudes guide our behavior and thereby make our decisions more efficient. On the whole we tend to remember information that is consistent with our attitudes (Eagly & Chaiken, 1998). This has very broad implications for information processing. Our attitudes promote the selective use of memory and perception, and help us sort out the information which is consistent with our attitudes. We tend to think more highly of information that

supports our attitudes. In a sense therefore, for many significant attitudes, our knowledge is highly selective and reflects mainly information that will not contradict our cherished views. We maintain positive self-images by remembering only those events that support this image (Greenwald, 1980). For example, we selectively interpret the behavior of minority groups to support our preexisting prejudices (Hamilton & Trolie, 1986). Many of our attitudes are formed in response to our need to cognitively organize the world in accordance with our worldviews and values.

#### *6. The measurement of attitudes*

Much of the preceding would make no sense unless we have ways of measuring attitudes formed in a variety of ways, and serving many functions. It would also be impossible to understand attitude change, except in some behavioral sense, unless we could use instruments to calculate any change over time. Although some attempts have been made at developing multidimensional scales, unidimensional scales are still the primary vehicles through which to study attitudes. Each of the four methods described below were invented to answer specific measurement problems.

One important issue in attitude measurement is unidimensionality. Does the attitude scale measure a single dimension and include statements that cover the range from very positive to very negative toward the attitude object? In other words out of the attitude universe of all possible statements about an attitude object, which items are “related” to one another, and fall along such a single dimension. Generally item analysis, correlating each item to the total test score, is used to find those items that correlate highest, and therefore contribute most to the attitude measured. Other methods can also be applied to determine unidimensionality, including assessments of overall reliability using alpha coefficients and factor analysis to examine the underlying structure of the scale items.

Reliability is another essential issue in scale construction. This concept addresses the issue of consistency. Will the results obtained by the scale be the same a month from now as in the original administration (test-retest method). Other forms of reliability are internal split-half reliability where we correlate the sum of the odd numbered items with the even numbered items of our survey. If reliability were high we would expect high correlations between the two halves of the scale. Split-half reliability employs the Spearman Brown prophecy formula to

compensate for using only half of the items in the scale, as test reliability is related to the length of the test. In more recent years we have employed an estimate of overall intercorrelations of the items called the alpha coefficient.

Validity is a concept that refers to whether the scale measures what it purports to measure. If we are measuring attitudes toward nuclear weapons, is that what we really are measuring and not some other peripheral object? Validity can be measured by construct relationships asking whether the scale correlates in predictable ways with already established measures? It is also possible to use the scale in known group procedures. Can the scale discriminate the attitudes of two or more groups that are known a priori to have different attitudes? Are the mean differences significant and in the predicted direction?

Reproducibility is related to unidimensionality. It concerns the ability to reproduce responses on the scale knowing a respondent's overall attitude score. If a person agrees with say a negative item, he should also agree with all the items that are less negative. The reproducibility coefficient is therefore also a measure of the unidimensionality of the scale.

### *6.1 The first start: the Bogardus scale*

Bogardus (1925) can be credited with the first attempt to objectively determine attitudes by means of his social distance scale. In this scale he would ask the following: According to my first feeling-reaction, I would willingly admit members of each race (as a class, and not the best I have known, nor the worst members), to one or more of the classifications that I have circled.

This would then be followed with a listing of a variety of national and ethnic groups along the vertical axis, and the following descriptions along the horizontal: To close kinship by marriage (1); to my club as personal chums (2); to my street as neighbors (3); to employment in my occupation (4); to citizenship in my country (5); as visitors to my country (6); and would exclude from my country (7).

Essentially Bogardus sought to measure prejudice by examining the relative social distance the individual felt toward various groups. As can be observed it is a unidimensional scale of social distance, and therefore is useful in obtaining some overall idea of stereotypical prejudice in various populations. On the other hand we have no evidence of the scale's reliability, nor does it assess the content of people's attitudes. The social distance scale is useful in ordering groups of

people. Social distance can be found for ethnic minorities in terms of their acceptability to the majority. The acceptability of the majority to the minority may also be determined by including it among several national groups.

## *6.2 Thurstone scaling*

Thurstone and Chave (1929) responded to some of the measurement challenges by developing a scale of “equal appearing intervals”. This method requires first the development of a large number of statements representing different points along the unidimensional scale. Some items are formulated extremely positive, others moderately positive, some moderately negative, and some extremely negative. From this initial item pool Thurstone constructed the attitude universe by developing a scale of items with 11 points ranging from extremely positive to extremely negative toward the attitude object. A large pool perhaps 200 statements was edited in order to remove ambiguity (Edwards & Kenney, 1946; Edwards, 1957). Each of the 200 participants would go through a so-called judgment procedure. They read each individual item and placed it on the 11-point continuum according to its direction and intensity. From these judgments the experimenter determined where each item belonged on the continuum. First he calculated the median of responses for each item. The median is the point that divides the total number of judgments in half. Each item with a scale (median) value was subsequently placed at equidistant points along the continuum. Some statements were judged at point 1 on the scale, others 2, etc. Those items that did not fall at or close to one of the points on the scale were eliminated. At the end this resulted in about 80 plus items and so each point on the scale was represented by 7 or 8 items.

The remaining statements were subjected to a q-value analysis (see e.g. Blalock, 2006: 72-78). Q-values are the 75<sup>th</sup> percentile minus the 25<sup>th</sup> percentile, and are therefore a measure of the spread of the middle 50 percent of the judgments. Only the middle of the range of judgments is used, as the extremes are considered careless assessments. For example for an item having a scale value of 6, those who placed the item in categories 1 or 2, or 10 or 11, were either unable to do the judging task, or were careless judges. The larger the q-value result found, the less agreement among the judges on where to place the statement. Clearly, therefore, the q value is a measure of the ambiguity of the item, and the less ambiguous the better the agreement.

During the next step, the items within each of the 11 groups are then ordered according to the size of the q value, and two alternative items are defined from those with the lowest q values. To assess the reliability of the scale, we correlate the alternative forms. For validity we can use construct validity correlating our scale with established scales with known validity. Are the correlations significant and in the predicted direction? Criterion groups can also be used to see if the mean differences between groups known to have different attitudes are significant and in the predicted direction. If we are developing a scale on attitudes toward e.g. homosexuality, we might administer the scale to a gay rights group, and a conservative religious group. If the scale was valid, the gay rights group would be found to have significantly more positive attitudes when compared to the conservative group. Commonly, each form of the scale would have 22 statements, two for each point of the scale.

The scale is then ready for use. The respondents would indicate agreement with those items that correspond to their attitude, and the attitude score would be the summation of the scale values of all the items with which they agree. Although the Thurstone scale provides us with a unidimensional scale, and may have satisfactory reliability and validity, it is also a very time consuming method. Would it be possible to develop a scaling method that has comparable reliability and validity, but is less cumbersome?

### *6.3 The Likert scale*

The Likert (1932) method responds to this concern and has been found to correlate highly with Thurstone scales suggesting they measure the same domains (Oppenheim, 1966). At the same time the Likert method is much less laborious in development. Recall that in Thurstone we asked the respondents to judge each item according to its place on the 11-point continuum. In the Likert method we ask people to base their judgments on their own attitudes. For Thurstone we asked for objective judgments as to where the item belonged whereas for the Likert method we ask for agreement or disagreement with the item presented.

As with Thurstone, we start with a large number of statements that reflect the attitude universe of interest. These statements are then edited according to Edwards' (1957) a priori criteria to remove ambiguity. These criteria demand that statements should be simple not complex, should be short rarely exceeding 20 words, should refer to a single object not several, and so forth. After editing the

statements they are placed in a survey in random order. Since about half are written as negative toward the object, and the other half as positive, it is important to maintain random order to avoid response biases. The response categories are typically five from agree strongly (5), agree (4), uncertain (3), disagree (2), and disagree strongly (1). Each of the weights are then summed up across the item pool but only after the weights for the negatively keyed items are reversed to ensure that the overall score is representative of the item pool and all the items are scored in the same direction.

A further effort to eliminate items that are ambiguous or do not contribute to the attitude is carried out by means of item analysis (part-whole correlations), or alpha coefficients. The resulting scale may have 20 to 30 items, approximately half of which are positive, and half negative. The scale is then submitted to a sample, and split-half and/or alpha correlations are calculated to ascertain scale reliability. Assessing validity is done with either construct coefficients, or by using known groups to predict mean differences.

The advantage of both Thurstone and the Likert methods over Bogardus is that both tell us something about the content of peoples' attitudes. The advantage of the Likert method over Thurstone is that it is much easier to develop. Neither method, however, addresses the problem of reproducibility. The same overall score can be obtained in several ways, and so we do not have a direct way to assess unidimensionality. This was the contribution of Guttman & Suchman (1947).

#### *6.4 Guttman and Mokken scaling*

The Guttman scale was developed to address the problem of reproducibility and unidimensionality. Does the scale you have developed represent an ordinal set of items that fall along a single dimension? Do these items form a cumulative scale, so if we know the respondent's overall score we also know all the items to which he would agree on a perfect scale? Given that scales are not perfect Guttman developed a coefficient of reproducibility to determine whether the scale meets minimal criteria, usually a coefficient of .90. If the Guttman procedure is applied to a Thurstone scale, we will know exactly from the respondent's scale score, with which items the respondent has agreed, and with which items he/she has disagreed. The coefficient of reproducibility is an estimate of how close the scale comes to reproducibility in an imperfect scale, and is found with the following formula:  $R = 1 - \text{Number of errors} / \text{number of responses}$ , where the number of



errors is deviations away from perfect reproducibility.

The Mokken Scale Procedure (MSP) computes a measure of scalability (Loevinger's H) for each single item and for a set of items. In general, an item is considered a part of a cumulative scale if it reaches or surpasses a value of .30. The analysis can be employed to dichotomous scales like Thurstone's agree or disagree format (Mokken, 1991), or to polychotomous items like the five point Likert scale (Sijtsma & Molenaar, 1996) and is essentially a probabilistic version of Guttman scale analysis (Dunn-Rankin, Knezek, Wallace, & Zhang, 2004). As a result of MSP the resulting scale items are ranked according to their 'difficulty' (the average percentage of agreement with the item). The lower the average agreement, the more 'difficult' the item, and the more amount of the attitude is needed to agree with it.

### *7. Some contemporary examples of measures and attitudes*

Attitude scales have been developed in order to study a variety of social topics. For example, attributed power (Larsen & Minton, 1971); integration (Larsen, 1974); women's liberation (Larsen, Cary, Chaplin, Deane, Green, Hyde, & Zuleger, 1976); attitudes toward homosexuality (Larsen, Reed, & Hoffman, 1980); toward rape (Larsen, 1988); toward aids victims (Larsen, 1990); and toward illegal immigration (Ommundsen & Larsen, 1997; Ommundsen & Larsen, 1999; Ommundsen, Hak, Mørch, Larsen, & Van der Veer, 2002; Van der Veer, Ommundsen, Larsen, Van Le, Krumov, Pernice, & Romans, 2004; Van der Veer, Ommundsen, Larsen, Krumov, & Van Le, 2007; Ommundsen, Van der Veer, Larsen, Krumov, & Van Le, 2007). Scales offer an opportunity to establish the reliability, the validity, and the content of attitudes. These are the major advantages of scales over single item surveys. Single item surveys are furthermore often confounded by the wording of a statement. Slight changes in the wording can create widely discrepant results, and confound the evaluation and significance of the attitude. Where possible, therefore, the researcher should use the Likert method for developing a scale, and check its unidimensionality by applying e.g. the Mokken analysis to the results.

### *8. Explicit and implicit attitudes*

Attitudes can be present either explicitly or implicitly. Explicit attitudes are those we know exist within ourselves, of which we are conscious, and about which we can report. Explicit attitudes produce rapid responses to the attitude object. We could ask a question like "what do you think about women's liberation", and most

women would have an explicit attitude toward that topic.

Some attitudes are implicit, we are hardly aware of them (Fazio & Olson, 2003; Wilson, Lindsey, & Schooler, 2000). We might endorse very progressive views on tolerance toward other groups in our society while maintaining feelings of discomfort toward these groups. The former is our explicit attitude that we present to the world, the latter are our implicit predispositions (Dovidio, Kawakami, & Gaertner, 2002). We are only now beginning to understand the conceptual difference between explicit and implicit attitudes, but it is important to know that psychologically speaking our attitudes can be split. At one level they are explicit and conscious, but at another more unconscious level, we may hold attitudes that are very different (Greenwald, McGhee, & Schwartz, 1998; Greenwald & Nosek, 2001). We should keep this difference in mind since the research reviewed in this chapter is based on explicit attitudes.

### *9. Attitudes as predictors of behavior*

In the early history of social psychology, scholars were confronted with a study that caused great concern. It showed that attitudes had apparently little to do with behavior. LaPiere (1934) spent two years traveling around the U.S. with a young Chinese couple visiting hotels, camping grounds and restaurants. Out of the 251 establishments they visited, they were only denied service at one establishment. This surprised LaPiere, as there were strong negative prejudices toward Asians and Chinese in the U.S. Many of these negative views were based on stereotypes of Chinese laborers brought in to build the railroads or to run laundry services in the cities. Most people in fact had not had any personal experience with Chinese so as to form affect-based attitudes.

After these visits, LaPiere wrote to all 251 establishments and asked for their policies with regard to "Orientals". Of the 128 that replied, 92 percent wrote back to say it was against their policy to serve people from Asia, a result totally opposite to what LaPiere had actually experienced. As only one establishment said to welcome Asians, LaPiere's study suggested that while negative stereotypes were strong, evidently they did not predict behavior. This study is always cited to indicate the lack of correspondence between behavior and attitudes. Other studies in the following decades came up with similar discrepancies, and led some to believe that there were no stable underlying attitudes which determined verbal reactions or behavior (Wicker, 1969).

During the last decades there have been done several meta-analyses concerning the relationship between attitudes and behavior (see Glasman & Albarracin, 2006 for an overview). Eckes and Six (1994) examined the influence of measurement correspondence, time interval between attitude and behavior measures, number of behavior alternatives, and behavioral domain. They investigated the results of 501 studies, published in 59 journals between 1920 and 1990. They found the highest mean correlation between behavior and behavioral intention was ( $r=.54$ ) and the lowest between attitude and behavior ( $r=.49$ ). Hence they found some moderators in the relationship between attitude and behavior. The number of behavior alternatives (in case of two alternatives the correlation is obviously higher than in case more alternatives are available) and the way of measuring behavior (in case of self-report the correlation is much higher than with objective measurement) are examples of such moderators. Also the domain matters very much. The correlation between attitude and behavior (objectively measured) is high when it concerns the domain of political participation ( $r=.68$ ) and low when it concerns the domain of altruism ( $r=.20$ ). However, these results still leave much open about what might cause discrepancies between attitude and behavior.

These attitude-behavior inconsistency results came at a time when researchers also found that personality traits failed to predict behavior. Many asked whether there was a total disconnection between what people said and what they did, and if attitudes really did not determine anything?

To assess this question it is important to understand what really took place in the LaPiere study. LaPiere traveled through the country with a well dressed, and attractive Chinese couple. The couple did not fit the stereotype of the white prejudicial mind. Therefore, when faced with this couple, most establishments could not react stereotypically when confronted with this situation. In responding to the request for service the immediate situation overpowered any stereotypes guiding their thinking. In fact, LaPiere did not study affect-based attitudes, but rather stereotypes that only elicit behavior in combination with social support. Behavior is not only determined by attitudes, and attitudes can hence not predict behavior.

#### *10. Other influences that compete with attitudes and cause attitude behavior inconsistency*

Human beings are complex and our behavior, our attitude, and the relationship between behavior and attitude are the result of many factors. Social psychologists

have counted up to 40 different factors that may influence the relationship between attitudes and behavior (Triandis, 1982; Kraus, 1991). A major determinant of inconsistency between the two is social desirability. We often hide our views from others for fear that they will not be acceptable. Our fear of rejection or experiencing other forms of punishment cause us to moderate our responses. We do not always tell truth to power, because power may not like to hear what we have to say, and consequences can be painful. We may not tell others of our alcohol or drug use, because of the shame associated with these behaviors, so researchers have to use alternative ways to get to the truth (Roesse & Jamieson, 1991).

### *10.1 Attitudes may compete with other determinants of behavior*

Any behavior is a consequence of many competing factors, including what we saw as situational pressures in the LaPiere study. As we face decisions in any given situation, we must remember both our explicit attitudes and the situation confronting us. For example, religious attitudes are poor predictors of church attendance. What are the competing factors that affect people who are religious so they do not attend religious services? Perhaps they are religious, but their family or friends are not, and pressure you to not attend. Maybe they have to work when religious services are performed. For any behavior, we can think of similar reasons for the lack of attitude-behavior consistency. At least at the short-term, when we examine religious behaviors over time, then attitudes predict behaviors quite well. Therefore we have to examine long-term effects, and average behaviors, rather than individual acts to determine attitude-behavior consistency (Fishbein & Ajzen, 1974; Kahle & Berman, 1979).

### *10.2 Attitudes specific to the behavior*

Many of the early studies tried to establish relationships between general attitudes, and very specific behaviors. For example, in LaPiere's study the request for service involved a very specific decision regarding a well-dressed Chinese couple that did not fit the prejudicial stereotype. The question measuring "attitudes" in the post meeting survey was a very general question referring to "Orientals". Indeed where studied, general attitudes do not predict specific behaviors (Ajzen & Fishbein, 1977; Ajzen, 1982). However, where the measured attitude is directly relevant to the situation, attitudes do predict behavior. For example, general attitudes toward the environment do not predict recycling behavior, but attitudes toward recycling do (Oskamp, 1991). To establish the true

relationship of attitudes to behavior we must measure attitudes that are specific to the behavior being studied. In one study women were asked about their attitudes toward birth control (Davidson & Jaccard, 1979). The survey included both very general questions like what they thought in general about birth control, but also specific questions such as what they thought about using birth control pills. The researchers waited two years before again contacting the women. The results showed that the general questions did not relate to behavior. Again this result most likely occurred because the general attitude question measured only stereotypic responses to which the individual had little emotional commitment. On the other hand specific questions about birth control pills did strongly predict their subsequent use. The lesson learned: we must measure attitudes toward specific behaviors to obtain good behavior-attitude consistency.

Broader social attitude studies are also useful as they provide information on widespread beliefs serving as the social context of behavior (Fraser & Gaskell, 1990). Broad social attitudes provide a framework that identifies the content of beliefs and feelings, without which we cannot ask the specific questions, or determine need for attitude change. Attitude scales that broadly define attitudes are also important for the development of theories in social psychology. They describe how variables correlate, and in what direction. These attitude and behavioral relationships can help us understand the stereotypic norms of society that control behaviors that are not obvious. We suspect that voting behavior in the US and the Western world is often just based on feelings of liking in turn produced by stereotypical advertisement by political parties. As we can see, broad or general attitudes can be of great significance with consequences for both the individual and society. However, broad attitude measurement must show fidelity to the object being measured and demonstrate validity at least from the point of construct assurance. General attitudes predict general behaviors. There must be a match between the attitude measured and the predicted behavior.

So, regardless whether the attitude measured is considered broad or specific, attitudes predict best when both the attitude scale and behavior are at the same level of specificity. Scales that are highly specific do a better job at predicting highly specific behavior; those that are general or broad do a better job in predicting broad behaviors (Ajzen, 1987). Remember, in the survey on attitudes toward birth control only those questions that asked specifically about attitudes toward the use of birth control pills (not birth control in general) predicted the

use of pills subsequently (Davidson & Jaccard, 1979). In the LaPiere study, if the respondents had been asked, “will you serve a well dressed Chinese couple that is fluent in English”, perhaps the results would have been very different.

### *10.3 Other sources for behavior-attitude inconsistency*

Not all attitude components are consistent. It happens at times that we have feelings of dislike and yet think positively about the target person or issue. In several studies, students rated their attitudes toward participating in psychological experiments. Some felt positive, but did not think it would help them in any way; others felt positive and thought it might help their grades or their other academic goals. Those who had consistent attitudes and were positive in both feelings and thought were more likely to participate in the experiments (Chaiken & Baldwin, 1981).

Some attitudes we learn second hand from our educational system or other cultural institutions. Remember the inconsistency in the LaPiere study! This might well have occurred because the stereotypes then prominent in American society were not based on actual encounters with Asian people, but learned second hand through the biased widespread beliefs in society. It should therefore be no surprise that attitudes based on real life encounters are more salient and powerful predictors of a person’s behavior. The effect of personal experience has been demonstrated in several experiments. Regan & Fazio (1977) compared student attitudes toward university housing shortage. One group consisted of those who were made personally uncomfortable as a consequence of the crisis by having to stay in emergency or temporary housing. Another group consisted of those who had read or otherwise heard about the crisis. Students who had actually experienced the crisis first hand were more likely to engage in relevant behaviors such as signing petitions, when compared to those whose attitudes were second hand. These results have been confirmed in other studies (Fazio & Zanna, 1978; Davidson, Yantis, Norwood, & Montana, 1985).

### *10.4 Accessible attitudes*

Sometimes we are asked to respond immediately to a situation, and if our attitude is accessible, we can make rapid responses. Recently the first author was approached to sign a petition to put on the next election ballot a proposal for universal health care in the state of Oregon. This is an issue toward which he is very sympathetic, and it took him little time to agree and sign the petition. Some salient attitudes produce very rapid and spontaneous responses; they are very

accessible in our minds. Other issues are of less concern. He had few opinions on the make or models of cars to buy. Only after buying a car did he develop an attitude toward the purchased car, but previous to his purchase his attitudes were not readily accessible. A study on consumer behavior demonstrated this effect (Fazio, Powell, & Williams, 1989; Fazio, 2000). The participants rated various consumer products, and accessibility was determined by the time it took to respond to a particular product. In this study only if attitudes came quickly to mind were they related to actual behavior.

### *10.5 Automatic attitudes*

Some attitudes function more or less automatically (remember the discussion on automatic thinking in chapter 4). Sometimes a word or image may activate an attitude and make it accessible. In that situation we do not take the time to evaluate the positive or negative of the proposed behavior, we simply act. Support for the presence of automatic attitudes is found in several studies (Bargh, Chen, & Burrows, 1996; Dijksterhuis & Van Knippenberg, 1998). In a sense these behaviors are so automatic that they bypass our conscious attitudes.

### *10.6 How do attitudes predict behavior?*

As we can see from the previous discussion, attitudes compete with many influences in determining behavior. Many of us do not act purely on our attitudes, but are influenced by what we think is appropriate or normative behavior. Ajzen & Fishbein (1980) proposed a theory of reasoned action. It assumes that people consciously choose to behave in certain ways depending on both their attitudes plus their understanding of the norms regarding appropriate behavior, or what the researchers called subjective norms. Attitudes together with relevant subjective norms produce behavioral intentions that in turn predict behavior. In a study on breast-feeding, attitudes together with subjective norms (e.g. what the mother-in-law thought of breast feeding) best predicted the actual behavior (Manstead, Profitt, & Smart, 1983).

Later Ajzen (1985, 1996) proposed a theory of planned behavior. In addition to attitudes and subjective norms, Ajzen proposed the variable of perceived behavioral control. Did the participant believe they could perform the behavior? If not, the attitude and norms would have little effect. Several studies have found support for this expanded theory in a variety of behaviors including dieting (Ajzen & Madden, 1986; Sheeran & Taylor, 1999).

### *10.7 Some conclusions on behavior-attitude consistency*

The aforementioned research supports several conclusions. If we are dealing with specific behaviors, then attitudes toward these behaviors, subjective norms, and perceived behavioral control, may increase our ability to predict the behavior. Examples of predictable behaviors include the use of seat belts in cars, and the use of condoms when having sex (Albarracin, Johnson, Fishbein, & Muellerleile, 2001; Armitage & Conner, 2001). Prompting people's attitudes may also increase consistency (Zanna, Olson, & Fazio, 1981), and anything that increases self-awareness of attitudes may also contribute the predictability of attitudes (Gibbons, 1978; Diener & Wallbom, 1976).

### *11. Why do attitudes follow behavior?*

We know that sales people change customer attitudes by the foot-in-the-door technique. If people agree to perform behaviors that are not too demanding, they are more likely to consent to the larger requests that follow. In the Freedman & Fraser (1966) study, the researchers initially asked for a small favor, placing a three-inch sign about traffic safety in their windows. When these participants were approached three weeks later and asked to place a crudely made and ugly sign on their front lawns, 76 percent agreed, as compared to 17 percent from a group that had not been previously approached. What happened? Apparently, behaving in a small way favoring traffic safety changed their attitudes in more significant ways. So attitudes do follow behavior!

Other studies showed similar patterns. People willing to wear a small pin to support cancer research were compared to another group not asked to wear the pin. The group that agreed to wear the pin were later more likely to contribute money to cancer research. Voters who said yes when asked if they intended to vote were 41 percent more likely to actually vote compared to a control group not asked the question (Greenwald, Carnot, Beach, & Young, 1987). These studies show that responding to a small request, behaving in small and apparently insignificant ways, causes broader changes in attitudes. After the initial non-demanding behavior the individual responds to larger requests. The individual would not have agreed to the demanding request without the prior behavioral commitment.

The roles people play affect their attitudes. Individuals raised to supervisory status change their attitudes substantially as a consequence. Research shows that these previous workers become more sympathetic to management positions in



their new roles. Called upon to perform a new role, attitudes changed to be consistent with new expectations (Lieberman, 1956). When people act in their roles, attitudes follow. We seem to believe our behavior. Military people quickly adopt military attitudes. Although they are the ones who suffer most in wartime, they typically hold the most pro war attitudes, because how else can they justify the risks that they and their comrades take. Attitudes are formed as a result of the roles we play in society. Whether we are students or teachers, we develop attitudes consistent with our roles. Eventually the individual becomes incapable of distinguishing between his role and his personal behaviors as they become one and the same.

In a similar way, when our roles or social situations compel us to say something, we eventually come to believe what we say. Most of us are aware of common attitudes, social taboos, and norms, and we adjust our speech accordingly. We try to speak in ways that please the listener (Tetlock, 1981), and tend to adjust our communications toward what we believe is the listener's position (Manis, Cornell, & Moore, 1974; Tetlock, 1984). Eventually, saying something becomes believing, and our attitudes become consistent with our talk. We form our language toward our listener's perceived position and come subsequently to believe the new message. Inconsistency between talk and attitudes would create too much dissonance for most people.

We can observe appalling consequences in wartime. Aided by official propaganda, soldiers often develop callous and inhuman attitudes toward their supposed enemy. Normal people justify immoral acts by devaluing the supposed enemy, and by increasing social distance. Those who commit genocide are often normal decent human beings in civilian life, but come out of war theaters with cynical attitudes toward human life. During slavery, common people accepted the morality of other people being held in involuntary bondage. During the American war on Vietnam, soldiers described the Vietnamese as "gooks" thereby dehumanizing the "enemy", and justifying their behavior.

This inconsistency-reduction does not always last. Veterans in the United States have since the war dealt with issues of delayed stress syndrome. One theory is that soldiers participated in horrible events, but these were inconsistent with more deeply held values. The inconsistency was suppressed for many years, but typically at great psychological cost to the individual. For some at least, the evil acts produced more cynical attitudes, and their conscience came back to haunt

the individual many years after the behavior.

That attitude follows behavior can also be observed in political movements in their manipulations of populations. In Nazi Germany we saw the people participating in a variety of behaviors supporting the regime. Mass rallies with hypnotic martial music, parades using flags and other national symbols, the German salute of the raised arm, all of these behaviors were powerful conditioning devices. The seductive behavior changed German attitudes to the point that only few opposed, and even fewer spoke out against the Nazi's. Probably all societies have similar conditioning rituals, and politicians use these to win support for policies and political goals. That is certainly true in the Western world. For example in the U.S., school children are often required to say a pledge of allegiance to the state, sing the national anthem, and salute the flag at all school events. Other countries like the Netherlands and Norway may use different and less strong conditioning to obtain compliance with minimal social objectives. These are all attempts to use public conformity to inculcate broader attitudes toward "patriotism".

Although many say, "you cannot legislate morals", in fact the evidence shows the opposite. We can encourage normative behavior, and often attitude change follows. If we, for example, examine attitude changes in the southern United States toward Blacks we see huge changes as a result of legislative and other legitimate action enforcing laws on racial equality (Larsen, 1971). Tolerance seems to follow laws that enforce tolerance and equal treatment. We also have evidence that when we act positively toward someone it increases liking of that person. Further, if we do a favor for someone it increases liking for the person we have benefited (Blanchards & Cook, 1976).

### *12. Theories of why attitudes follow behavior*

In the previous discussion we have alluded to why attitudes follow behavior. Let us now discuss the major theories developed in social psychology to explain the behavior-attitude consistence. These include Cognitive Dissonance theory which suggests that consistency derives from psychological discomfort of dissonance; Self-perception theory which states that we look to our behavior to understand our attitudes; Self-presentation-theory proposing that attitudes reflect image management and our desire to appear consistent to others; and Expectancy-value theory which indicates that attitudes are formed in a process of weighing the pro's and con's of our predispositions.

### *Theories of cognitive consistency*

What explanations can we offer for why, over time, our outward behavior gives way to deeply felt convictions. How is it that people try to make their attitudes consistent with their behaviors? As will be seen, the following theories are essentially theories of rationalizations as the individual tries to understand his attitudes by the experiences that follow from situations and the environment.

#### *Balance theory*

Heider (1946) was the first to develop a psychological balance theory. He contended that people seek to maintain a balance between their beliefs, "sentiments", and other people. Heider posited that balance existed in triads consisting of the person (P), another person (O), and some object (X). For each of the three components of the triad it is possible to envision a positive or negative relationship. The two people may like each other, be friends, but they may like the object or not. If John likes Peter, but does not like Peter's political views, something has to give. John can, for example, change his opinion of Peter and like him less then the relationship is in balance since John's negative views of Peter correspond to his negative views of Peter's political opinions. John can also evaluate his political opinions, and come to realize that Peter is right in holding these. Now we are, according to Heider, in balance again as the positive attitude toward Peter corresponds to the new positive attitude toward Peter's political opinion. Some researchers have supported balance theory in that people are more favorable toward and remember balance relationships better than those not balanced (Hummert, Crockett, & Kemper, 1990; Insko, 1984).

#### *Cognitive dissonance theory*

Heider's theory was seen by many as too limiting in evaluating the complexity of behavior, since it dealt with only triads. Festinger (1957) followed with his theory of cognitive dissonance that dealt with cognitive balance within one person. In a way similar to Heider, Festinger argued that people do not like imbalance in thought or relationships, and will behave in ways to restore balance. He contended that people in dissonance experienced unpleasant feelings that in turn motivated the change of either beliefs or behavior to remove the dissonance. The unpleasant feelings motivate us to change something in ourselves or in the environment. Although vague, Festinger maintained that dissonance occurs when a person experiences the "opposite" of a given belief or cognition. Put in another way, we feel unpleasant tension occur when two beliefs or thoughts are not

psychologically consistent. They somehow do not fit or are incompatible.

You like smoking and feel positive toward this social habit, but you have learned you might die early if you continue. What to do? You could stop smoking, and then your behavior would be in consonant with your beliefs. Smoking causes addiction though, so some may find quitting difficult. Dissonance theory would suggest that when we feel the inconsistency we would also feel the pressure to change our beliefs and /or feelings. In a British survey (Eiser, Sutton, & Wober, 1979) smokers were in denial. They resolved the dissonance between desire and health by disagreeing with the assertion that smoking is dangerous. The dangers of smoking had been exaggerated the addicted seemed to say. Some smokers would argue that they knew people who smoked every day of their adult lives and yet lived to see a hundred years. Smoker's rationalized their behavior and tried to find good reasons to continue the habit. Rationalizations reduce dissonance if they are sincerely believed. Do you think many smokers truly believe in their dissonance reduction efforts?

### *12.1 Reducing dissonance in our lives*

We often reduce dissonance after making important decisions by selectively finding reasons to support our choice. In similar ways we find reasons to downgrade the not chosen alternative. We constantly try to assure ourselves that we have displayed wisdom in our choices. Any decision that is important creates some dissonance (Brehm, 1956), and we therefore usually change some cognition. For example, you bought a new car, but had doubts about the wisdom of the purchase. To remove the dissonance, you looked for information that permitted you to rationalize your decision. Some advertising, for example, showed that the car is highly ranked in consumer satisfaction. In addition the car has many surprising and delightful features that pleases you, so now you are a happy costumer and your dissonance is removed.

Many experiments show this tendency for customers to rationalize their decisions (Knox & Inkster, 1968). The aforementioned study showed that people's confidence in a horse bet on at the racetrack increased after the purchase of a betting ticket. On the way to the betting counter gamblers were unsure, feeling the dissonance of the impending decision: would the horse run as they hoped? However, after the purchase the bettors expressed great confidence in their choice. Making difficult decisions triggers uncertainty, produces dissonance and activates the rationalization process. This includes also behavior before and after

voting (Regan & Kilduff, 1988). Recent research shows that the rationalization process may even begin before the decision is taken to minimize any resulting dissonance (Wilson, Wheatley, Kurtz, Dunn, & Gilbert, 2004). Dissonance reduction does not necessarily occur at a conscious level. As soon as we have subconsciously made a decision, we selectively evaluate and seek out supporting information in order to justify our decision (Brownstein, 2003; Simon, Krawczyk, & Holyoak, 2004).

In many cases, we make decisions that involve substantial effort, but are nevertheless disappointing in their outcomes. We can reduce the dissonance by justifying to ourselves that the effort was after all worthwhile. For example, students participating in an experiment were led to believe that it would be exciting and deal with sexual topics. Some had to go through a severe screening test, whereas the control group only listened to a few suggestive words about sexual behavior. What followed was a boring discussion on the sex life of invertebrates. The experimental group (who had to endure the screening to participate) experienced a large amount of dissonance between expectations and the actual event. What did the students do? Those in the dissonance group spent a great deal of time convincing themselves that the session was not so boring after all, that much useful information was imparted (Aronson & Mills, 1959). Useless bogus therapy brought about a similar dissonance reduction effort (Cooper, 1980).

Reevaluation pressures are especially strong when we choose between alternatives that seem more or less equally attractive (Brehm, 1956). The tendency to favor the chosen alternative increases when people are at the point of implementing the decision. This pattern indicates that the favorable reevaluation is a part of the decision making process (Harmon-Jones & Harmon-Jones, 2002). Some of the most dramatic reevaluations have occurred in cases where prophecy fails (Festinger, Riecken, & Schachter, 1956). A doomsday group had predicted the end of the world on a specific day. When the day arrived without the expected destruction, the group was initially chagrined. Soon, however, they responded to the dissonance with renewed energy as they busily engaged in recruiting new supporters. Did the attempt to convert others help reduce their own dissonance? Common sense would tell us that the group would just pack it in, and accept that their beliefs were absurd. Instead they performed as dissonance theory would predict and reduced dissonance by new explanations and active recruitment of

new believers.

### *12.2 Counter attitudinal acts and dissonance*

Many people have had the unpleasant experience of acting contrary to their attitudes. Perhaps the boss asked you to work on holy days when it would be against your beliefs or plans for the weekend to work. When a person engages in such attitude discrepant behavior, it is predictably followed by dissonance. Most people resolve these unpleasant feelings by readjusting the attitude. Perhaps it was not so bad to work on the proscribed days! After all I was paid to do it, and my standing with the company improved, they may reason. Similar rationalizations can be found for practically any behavior that runs contrary to a person's original attitudes. Those who do not believe in premarital sex, but engage in the behavior, justify it by saying they are really in love, or it feels good so how could it be wrong? Any dissonance produced can be reduced by an overwhelming new array of beliefs that support the behavior.

If called upon to perform a counter attitudinal act, dissonance depends on the level of the incentive for the behavior. There has to be some justification or minimal incentive to engage in the behavior. The true believer who works on holy days because he wants the extra pay might feel dissonance. However, if the boss pays triple wages, gives alternative days off, and promotes the individual as a consequence, dissonance theory would predict little tension. We minimize dissonance when we have many good reasons for discrepant behavior. Dissonance was created in a study on whether communist speakers should be permitted at U.S. university campuses. Those who were paid little to participate in the study, changed their attitudes more compared to those paid more (Linder, Cooper, & Jones, 1967). For real attitude change there has to be some incentive, but not too much so the individual feels sufficiently compensated by the incentive.

Dissonance depends on whether we feel we have a choice. When we behave in ways contrary to our beliefs, but we feel we have little choice, the resulting behavior should cause little tension. If employment is necessary for survival, then working on days contrary to beliefs would probably be justified by most people. Along with feelings of choice, the commitment to the decision also matters. If we feel commitment to working on holy days despite our moral objection, and when we feel our behavior will not be altered, then less dissonance is experienced (Jonas, Schulz-Hardt, Dieter, & Thelen, 2001).

Some dissonant behaviors do not require much effort. Driving faster than the law allows may be contrary to a person's better sense, but it only requires a heavy foot and is not likely to produce much dissonance. However, if you are stopped by the police and have to pay a heavy fine, that is likely to produce dissonance. When people can foresee the possible negative consequences of the decisions, dissonance is increased. If you also had to work very hard, expend a great deal of effort to pay the fine, you are likely to experience even more dissonance. If a decision is felt as important, we feel more personal responsibility for the outcome. Therefore, if the outcome is negative, we feel more dissonance. We feel bound to reevaluate our attitudes when outcomes are negative, and we feel responsible (Scher & Cooper, 1989).

Other findings suggest that the dissonance increases when the behavior is relevant to our self-conception. If the behavior undermines our feelings of competence or morality, dissonance follows as attitudes change (Steele, 1988). This is especially true for people with high self-esteem as for these people a threat to competence will be felt as more dissonant requiring attitude change (Stone, 2003).

The conclusion is that dissonance and therefore attitude change results from a number of factors. These include limited incentives for the behavior (one cannot excuse it by the many rewards that come from performing it). We also have to feel we have some choice in the matter, and an unchanging commitment to the inconsistent behavior. We also experience more dissonance when we can foresee the consequences, and put great effort into the self-relevant behavior. Under these conditions, dissonance is likely to occur and attitude change follows.

### *12.3 Attitude change following compliance*

When people are seduced or compelled to behave in ways that are inconsistent with their beliefs and values, dissonance follows. One could repent and give up the inconsistent behavior. However, the easier and therefore more likely path is to change or readjust attitudes. Festinger & Carlsmith (1959) demonstrated this effect when they asked the participants to engage in what can only be called experimental drudgery in a psychological experiment. Those who participated were sent directly for debriefing, and of course reported being bored by the experiment. In the experimental conditions the participants were told that the experiment was about how people's performance was influenced by their prior expectations. As part of the deception, these true experimental participants were

informed that they were in the “control” condition, and they were asked to tell the next participants (confederates of the experimenter) about the experiment. Since the experimenter’s confederate was absent would they (the true participants) tell the next subject how exciting the experiment was? Some of the participants were offered a dollar to participate in the study, other subjects were offered 20 dollars. This experiment was carried out in the days when a dollar would pay for the admission to a movie, but one dollar was not enough to make participants willing to lie, the experimenter reasoned. Being given \$20 was, however, a significant amount, and therefore the individual would feel less dissonance in lying as he/she would feel some compensation and justification by telling the next person that the experiment was great. Later when asked about their experience, those in the one-dollar condition rated the experience more favorable than those in the \$20 condition. Being seduced to lie for one dollar brought about more attitude change, whereas those in the control, and \$20 conditions, rated the experiment negatively.

It follows that if we want to induce change we have to offer some incentive to arouse interest, but not so much that the person will feel justified in the compelled behavior. This has implications for childrearing as was shown in the experiment by Aronson & Carlsmith (1963). The experimenters showed nursery school children a set of five toys and asked how much they liked each. The children were then told that the experimenter had to leave the room, but they were free to play with all the toys except the second favored toy. In the mild threat condition, the child was told that the experimenter would be “annoyed”. In the severe threat instruction, that he would be “very angry”, and that all the toys would be taken away.

When the experimenter left the room, none of the children played with the forbidden toy. However, dissonance theory predicted that only the children in the mild threat condition would feel tension between their desire to play and their behavior. They therefore reasoned that these children would resolve the feelings of dissonance by downplaying the value of the toy. The children in the severe threat condition should feel little dissonance since the threat justified in the child’s mind why they should not play with the toy. As expected from dissonance theory, children in the severe threat condition continued to evaluate the toy favorably, they had not changed their minds. On the other hand, those in the mild condition changed their attitudes to less favorable or at least neutral. The



compliance was enduring as even six weeks later the children from the mild threat condition were still derogating the toy (Freedman, 1965). Thus it would appear that mild threats is the way to go if a parent wants to encourage attitude change. Would that also work for adults?

#### *12.4 Culture and dissonance*

When working with the Aborigines of Australia in a variety of capacities, many years ago, we observed that they were not particularly bothered about many things that bothered European descended people. If they showed up late for a meeting, that would not require an apology. Something just changed on the road to the circus, and we should understand that. Cognitively inconsistent thoughts may be a culturally bound effect, a result of societies that value consistency. Support for this idea has been found in several studies. In one study (Heine & Lehman, 1997) Japanese students displayed less dissonance when compared to Canadian participants.

Sakai (1981) in his study, however, found dissonance effects for his Japanese students if they were led to believe that other students were observing their behavior. We know from other studies that Asian people are more aware of others, and are more oriented toward the community and the reactions of other people. Hence if you can prime such awareness in Japanese participants, it should produce larger dissonance effects. This priming procedure produced dissonance effect in the study by Kitayama, Snibbe, Markus, and Suzuki (2004). For those cultures that are community oriented, dissonance effects may mainly have to do with social approval or disapproval whereas for western societies dissonance occurs more in connection with the ability to make good choices.

All cultures find some behaviors dissonant, but under very different circumstances. Those living in Asia express attitudes depending on the situation they find themselves in, because social harmony is an important value. Those in the west are also developing more tolerance for inconsistency, and often hold ambiguous attitudes. Some may favor the death penalty for certain reasons, but abhor it for other causes. Consistency may therefore be more in the nature of a culturally expressed value, rather than a cognitive way of organizing our world (Priester & Petty, 2001).

#### *13. Self-perception theory*

Suppose someone asked you “do you like to go to the movies?” You think for a

moment and then say “well I go twice a week, so I must like movies!” This is an example of Bem’s (1972) self-perception theory. We do not really consciously know our attitudes; we look at our behavior and infer our attitudes from how we act and the situations in which our behavior occurs. Self-perception theory makes the same predictions as dissonance theory, but for very different reasons. For example in the experiment where the participant was paid a dollar or 20 dollars to tell someone that a very boring experiment was enjoyable, the individual in the one dollar situation is in dissonance when he lies. However, self-perception theory can also explain the results. The participant was paid only a dollar to lie, and that is not enough to justify a lie, therefore the participants think they must really have enjoyed the experiment. In other words, alternatively, the participants examined their behavior to determine their attitudes as self-perception theory predicted.

Self-perception theory is a social perception theory. People come to an understanding of their own attitudes and that of others by means of observation. Bem would argue that people often have no attitudes to report. People who live socially isolated lives, who are uninvolved in the happenings in society, and that is most of the people in the world, have no attitudes based on direct experiences. They observe when people stand up for the national anthem and infer patriotic attitudes. We see people say the pledge of allegiance in the US and we infer their attitudes toward the state. Those who say the pledge infer the same patriotic attitudes because saying is believing!

We watch other people act in a variety of circumstances, and infer from the behaviors their attitudes. We see people go to Church and infer religious attitudes, we read of people in the drugs scene and infer indifference to laws and social convention, we see people laugh and think they must be happy. Likewise we look at ourselves, because the behaviors we engage in are self-revealing, and tell us about our attitudes. We hear ourselves say something, and from that understand our attitudes. In one study, people who were anxious about an upcoming test were led to believe that the anxiety came from white noise delivered by their headphones. Those who were given this information were subsequently more calm and confident (Savitsky, Medvec, Charlton, & Gilovich, 1998).

James (1890) drew similar conclusions a century earlier when he said that we infer our emotions by how our bodies function. We take an examination important

to our future and feel our heart pump, our hands get wet, and conclude from these physical symptoms our psychological state of anxiety. Often our emotions fall into line after our physical expressions. It is difficult to smile and still feel grumpy you could try it yourself. If you put a pen in your mouth holding it with your smiling muscles, will you not find the cartoons in the paper more funny? (see Strack, Martin, & Stepper, 1988). Now try for the opposite effect by holding the pen with pursed lips, how does that influence your feelings about the cartoons?

Other researchers have been able to elicit similar emotions from facial expressions (Laird, 1974, 1984; Duclos, Laird, Schneider, Sexter, Stern, & Van Lighten, 1989). From our observations of other's facial expressions we develop empathy, especially if we synchronize our movements, voice, and bodily postures with others (Hatfield, Cacioppo, & Rapson, 1992). Feeling the same as others (empathy) may explain our attraction to happy people and our desire to avoid those who are depressed.

#### *14. Evaluating the dissonance theory and the self-perception theory*

People adopt attitudes or change for entirely different reasons in dissonance and self-perception theory. Festinger would say that attitudes are very enduring predispositions to act a certain way. When people behave in ways that are inconsistent, it produces unpleasant feelings that cause the individual to reevaluate his attitude. Bem, on the other hand, thinks of attitudes as somewhat causal in nature. We often do not know our likes or dislikes, but we infer these as we reflect on our behavior. We know that many people do not really have affect-based attitudes, but possess stereotypes passed on by socialization. Consequently, when people have few experiences with the attitude object, or when people are not involved in the issue and it has little importance, the individual may infer their attitudes from how they behave (Albarracin & Wyer, 2000). This is as Bem would predict. However, when attitudes reflect more enduring issues that involve the person at a basic level, dissonance theory would better explain attitude change.

The process of attitude development and change is also different in the two theories. Dissonance theory hypothesizes that inconsistency between behavior and prior attitudes produces an unpleasant feeling in the individual, which is resolved by attitude change or adjustment. The unpleasant tension motivates change in our attitudes. Self-perception theory on the other hand would suggest that the process is rational, not emotional, as we examine our attitudes based on our behavior and the situation. Studies generally support the idea of arousal and

therefore dissonance theory, when people act contrary to their true beliefs (Elkin & Leippe, 1986; Elliot & Devine, 1994; Harmon-Jones, 2000; Norton, Monin, Cooper, & Hogg, 2003).

How can we then reconcile the findings of the two theories? The studies on dissonance theory do indeed create emotional arousal as predicted. However, the dissonance results are also based on self report as explained by self-perception theory. Are both theories right? Today we see a consensus among social psychologists that dissonance theory applies when the inconsistent behavior is clear to the individual, and is important to him. Self-perception theory applies more to attitudes that for lack of experience are vague to the individual, and of little importance. Human behavior is complex, but sometimes people are simple, and have few experiences upon which to base their attitudes. Under these conditions they naturally look to others and their own behavior for explanations. Research has shown that a surprising number of people have weak or ambiguous attitudes suggesting the importance of self-perception theory. Furthermore, self-perception theory has shown that important social attitudes can be changed through self-awareness including the desire to contribute to the common welfare (Freedman & Fraser, 1966), and an awareness of how strong we feel about topics (Tice, 1993). Therefore, self-perception theory deals with more than the trivial, and engages also important topics. How do we change behaviors like smoking? It may prove more complex than just creating dissonant feelings. Self-perception theory would recommend self-awareness. At other times dissonance theory is important. Poignant experiences have left the individual with enduring predispositions to act. Those who experience war first hand develop very enduring attitudes toward violence as a means of solving conflict. We can conclude that dissonance and self-perception theories are both needed to explain attitudes.

It is important to remember that self-deception always plays a role in perception. You may think that only others behave in irrational ways, while that is not true of your own thinking. It is therefore likely that you believe that dissonance rationalizations are just something that others do since your attitudes are rational (Pronin, Gilovich, & Ross, 2004). However, we all rationalize to some degree about important social issues like war or global warming. We need to counteract both dissonance, and in the process also become more self-aware.

### *15. Self-presentation theory*

One basic fact of human existence is our interrelationships with others. As a consequence of this interdependence, we care what other people think, and we work hard on developing an acceptable social identity. Self-presentation theory asserts that making a good impression is the primary basis for attitude development. We are motivated by our desire for acceptance by our peers and reference groups. By displaying consistent attitudes we seek to become more secure in acceptable social identities (Leary & Kowalski, 1990). In the pursuit of social acceptability we will say what it takes to win others over to our side, often with hypocrisy and insincerity.

Self-presentation theory suggests that many of our behaviors are shallow, and are often expressed as a means of managing the impression we make. It follows that our attitude expressions are motivated by a desire to avoid offense. We do not like to be the bearers of bad news, since that too may form a bad impression (Bond & Anderson, 1987).

According to self-presentation theory we never truly know others, because people are chameleons who change their attitudes to fit the environment. Likewise people change their attitude-based behaviors to fit the expectations of others. In this theory, attitude formation and change come about. We are social antennas attuned to acceptable attitudes, and our role is one of articulating these as we change our social environment. Some attitudes may be appropriate at home, others at the job, still others in cultural or political institutions. Attitudes therefore serve primarily an adjustment function helping us adjust to the demand of the social environment. In the process we often express attitudes in which we do not believe (Snyder, 1987; Zana & Olson, 1982; Snyder & DeBono, 1989; Snyder & Copeland, 1989).

As we have noted elsewhere, the desire for approval is also a personality trait, and people vary in how important it is to make desired impressions (Larsen, Martin, Ettinger, & Nelson, 1976). Those who care less what others may think are more internally motivated, and are therefore more likely to express sincere attitudes that they truly feel and believe (McCann & Hancock, 1983). People low in need for approval spend less time self-monitoring or worrying about what others think as they do what they think is right. Are most people anxious to fit into society, or do they express sincere self-relevant attitudes? How about you, do you use impression management so you can get good grades or make a good impression with parents and significant others?

Part of a good social image, at least in western societies is to “appear” consistent. Consistency reflects for many a person’s integrity. In expressing our attitudes, we try to have people see us at our ideal self. However, this too may be based on our desire to be acceptable to those that matter in our lives. In self-perception theory, we are consistent in our behavior, not because we feel dissonance, but because consistency is a cultural value.

### *16. Expectancy-value theory*

We have already discussed the functional value of attitudes. The Self-presentation theory promotes the idea that attitudes are held because they help us in social adjustment. Social-expectancy theory reflects more the direct benefits of attitudes in bringing us rewards, and helping us to avoid punishment. It is a theory that logically follows from the capitalist system where the profit motive predominates. Attitudes are formed as a result of a rational process where the individual examines all the cost and benefits associated with a given attitude position. Which attitude alternative brings the highest rewards (Edwards, 1954).

In more formal terms, Edwards suggested that people seek to maximize outcomes in society by assessing the value of the particular outcome, and the likelihood that the attitudes will produce the outcome. You are very anxious to achieve a job promotion, the increase in income is highly valued. Do you believe that expressing agreement with your boss on particular issues will make it more likely that he will support your promotion? Then expectancy theory suggests you adopt his attitudes with that expectancy in mind. On the other hand, maybe you will lose the esteem of your fellow workers if you brown nose the boss. We humans look at the balance of incentives where goals may be in conflict and adopt the course that is likely to maximize gains. Expectancy theory describes people as rational and calculating decision makers. We can see many examples from history where people manipulate others in order to obtain high office and personal gain.

### *Summary*

Attitude theory is a central topic in social psychology, and a field that is studied from the beginning of the history of our discipline. The structure or components are defined in this chapter. Each attitude has an affective, a belief, and a behavioral component. Attitudes are oriented toward specific objects that can be other people, ideas, or things. We expect a consistency between the components. Generally an attitude is manifested by some positive or negative feeling toward the object, a supporting set of beliefs, and expressed by certain behaviors. The

chapter also discussed when that does not occur, when attitude-behavior inconsistency is apparent.

There are those who think, based on identical twin studies, that attitudes have a genetic basis. However, most of our research has researched a social basis for attitude formation. One or another component may dominate in attitude development. For some people attitudes are based on what they know. Affect, however, plays the dominant role for many attitudes also affecting important cognitive issues such as which candidate to support in elections. Some attitudes express a person's underlying value system, and are based on reason and memory. Other attitudes are formed from direct experience. People can also develop attitudes toward a variety of objects without any personal experience as we see in prejudicial behavior.

Theories of attitude formation rest on the classical viewpoints of learning theory including conditioning, reinforcement, and social learning. Functional theory has made major contributions by suggesting that attitudes are formed in response to the basic needs of the individual. Functional theory responds to the why of attitude development, but also suggests the how of attitude change. We must appeal to the functions if we hope to change these in a more desirable direction. Research is described for the several functions. In the utilitarian function, attitudes serve to maximize rewards and minimize punishment. The ego defensive function suggests that many attitudes are developed in order to maintain a positive self-image and control our anxieties. The research on terror management shows that this function may have very broad implications, not only for philosophy, but also for creativity as we search for some permanence in our temporary existence. Attitudes may also give expression to our underlying values that we have obtained in the socialization process from parents and reference groups. For example, children often manifest similar political and religious attitudes to that of their parents. Attitude functions are based on selective memory and perception in organizing our world. We tend to value information supporting our viewpoints more highly, and it is also more assessable in memory.

We cannot evaluate the literature unless we understand something about how attitudes are measured. The various attitude scales have been developed to address several measurement problems. These include issues of unidimensionality asking does the scale measure a single dimension. Other measurement issues include the reliability or consistency of the results over time or within the scale.

Validity asks the question: does the scale measure what it purports to measure? Researchers have developed several techniques to address these issues. Reproducibility refers to whether we can reproduce a person's individual responses on a scale given that we know his total score. It is just another way of saying do the statements fall along a single dimension. Both Guttman and Mokken have developed methods to assess this issue.

Bogardus initiated the study of attitudes by means of his social distance scale. It gave the researchers a rough estimate of stereotypes toward various social groups. This was followed by Thurstone's method of equal appearing intervals, which supplied information about the content of attitudes, and responded also to measurement problems of reliability and validity. Likert developed a method with equivalent utility, but much easier to construct. Guttman and Mokken addressed the issue of reproducibility and unidimensionality.

Contemporary research shows activity on a variety of attitude objects from attributed power to illegal immigration. These topics can also be addressed by single item surveys, but the advantage of scales is the assessments of reliability and validity. Also the results of survey depend greatly on the exact wording. Even apparently minor changes in words used can produce dramatic differences in responses. It is important to remember that we are discussing explicit attitudes in this chapter. We can only measure that which is assessable to the mind, but people may have opposing implicit attitudes of which they have little awareness.

Are attitudes useful predictors of behavior? The LaPiere study caused consternation as social psychologists observed an apparent inconsistency between initial behavior and subsequent attitudes. We should remember that LaPiere probably did not study attitudes, but rather stereotypic responses derived from a prejudicial society. Other causes for attitude-behavior inconsistency are the many different factors that compete for attention. The social desirability of attitudes causes some people to refrain from expressing these in order not to offend those with influence. To evaluate research, we need to have the long view in examining attitude change, and ensure a good fit between measurement and behavior. It does not matter much to predictability whether the attitude measured is specific and narrow, or general and broad. What is required is that measurement and behavior must be at the same level of specificity. Broad attitudes are important in understanding the framework for more specific attitudes and the supporting norms. Other sources of attitude-behavior



inconsistency derives from having no direct experience with the attitude object, no accessibility which allows for spontaneous expression, and the presence of automatic attitudes which require little thought and therefore produce no dissonance. Theories suggest prediction is improved if we know a person's attitudes, subjective norms, and perceived behavioral control.

At times we can observe that attitude development follows expressed behavior. From studies on counter attitudinal acts, results show that dissonance depends on the level of incentives, our feelings of choice, the effort required, and if the attitude is self relevant. Attitudes also follow compliance in several studies.

The self-perception theory of Bem states that we look to our behavior to determine our attitudes. Dissonance and self-perception theories predict similar behaviors, but for very different reasons. Dissonance theory is more useful in understanding attitudes that the individual considers important and self-relevant whereas for self-perception theory the primary purpose of attitudes is to make a good impression and attitudes therefore serve primarily adjustment functions. In self-presentation theory, attitudes are an expression of our desire for social acceptance. The chapter concludes with a discussion of expectancy-value theory that states that attitudes are developed or changed by the desire to obtain rewards and avoid punishment.