

The Psychology of Prejudice, Stereotyping and Discrimination: An Overview

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The killing of Americans and their civilian and military allies is a religious duty for each and every Muslim....We -- with God's help -- call on every Muslim who believes in God and wishes to be rewarded to comply with God's order to kill Americans and plunder their money whenever and wherever they find it.

[The September 11th attack] gave a harsh lesson to these arrogant peoples, for whom freedom is but for the white race...God willing, America's end is near.

--Osama Bin Laden, in a February, 1998, appeal to Muslims, and a videotaped statement in the fall of 2001¹

To Begin, a Few Definitions

It is hard to imagine more classic examples of prejudice than the statements of Osama Bin Laden. Although social scientists often differ in the precise way they define "prejudice," most agree that it involves a prejudgment, usually negative, about a group or its members (Fiske, 1998; Jones, 1997; Nelson, 2002). As commonly used in psychology, prejudice is not merely a statement of opinion or belief, but an attitude that includes feelings such as contempt, dislike, or loathing. For Osama Bin Laden, non-Muslim Americans are the main target of prejudice, and his hatred is so great that he would like to see them die.

Where prejudices lurk, stereotypes are seldom far behind. The term "stereotype," coined in 1798 by the French printer Didot, originally referred to a printing process used to create reproductions (Ashmore & Del Boca, 1981). Journalist Walter Lippmann (1922) later likened stereotypes to "pictures in the head," or mental reproductions of reality, and from there, the term gradually came to mean generalizations -- or, quite often, overgeneralizations -- about the members of a group. As with prejudice, these generalizations can at times be positive (e.g., women are nurturing, Japanese excel at math), but for the most part, they tend to be negative and resistant to change. For example, until the 1960s the *Encyclopædia Britannica* entry for "Races of Mankind" relied on centuries-old pseudoscientific stereotypes of Black people as unevolved and childlike. In its 1964 edition, the encyclopedia described "woolly-haired groups" as having:

dark skin sometimes almost black, broad noses, usually a rather small brain in relation to their size, especially among the taller members of the group, with forearms and shins proportionately long. In the skeleton there is a smoothness of contour which even in adults often recalls the bony form of a child, and among some members of the group the forehead has that prominent and smooth form which is so characteristic of the infant of our own race. (Buxton, 1964, p. 864A)

¹ The first quote comes from "Britain's bill" (2001, p. B4), and the second from "God willing" (2001). The September 11, 2001, terrorist attack involved the hijacking of four U.S. commercial airplanes and resulted in the death of more than three thousand people.

Today it would be shocking for a respected encyclopedia to print a stereotype such as this, yet other stereotypes concerning race, gender, religion, and sexual orientation remain widespread.

Stereotypes are not only harmful in their own right; they do damage by fostering prejudice and discrimination. After all, if encyclopedia readers are led to believe that Black people have intellectual limitations, why spend time and money educating Black children? As used here, "discrimination" involves putting group members at a disadvantage or treating them unfairly as a result of their group membership. More specifically, "personal discrimination" refers to acts of discrimination committed by individuals (e.g., a manager who refuses to hire Jewish employees), whereas "institutional discrimination" refers to discriminatory policies or practices carried out by organizations and other institutions (e.g., an anti-Semitic immigration policy).

Prejudice, stereotyping, and discrimination often go hand-in-hand, but it is also possible to have one without the others. When an ethnic group is stereotyped with a neutral or positive attribute such as "family-oriented," prejudice and discrimination may not be involved. Similarly, a generalized prejudice against "foreigners" or "amputees" may not include specific stereotypes or acts of discrimination. There are even times when discrimination takes place without prejudice or stereotyping, either intentionally or unintentionally. For an illustration of how this can occur, consider the following hypothetical problem:

Suppose your school or organization is accused of sex discrimination because the overall percentage of female job candidates offered a position in the last five years is less than the overall percentage for male candidates. To get to the bottom of this problem, you launch an investigation to see which departments are discriminating against women. Surprisingly, however, the investigation finds that within each department, the percentage of female job applicants who are offered a position is identical to the percentage of male applicants who are offered a position. Is this possible? Can each department practice nondiscrimination, while the organization as a whole hires more men than women?

This problem is a variant of Simpson's Paradox (a well-known paradox in statistics), and the answer to it is *yes* -- nondiscriminatory conditions at the departmental level can result in hiring differences at the organizational level. To see how this might happen, imagine a simplified organization with two equally important departments, Department A and Department B, each of which receive the same number of job applications. As shown in Table 1, if Department A were to offer a position to 10% of its job applicants (female as well as male), and Department B were to offer a position to 5% of its job applicants (female as well as male), neither department would be discriminating on the basis of sex. At the level of the organization, however, more positions would be going to men than to women, because of the higher number of jobs offered by Department A than Department B. Unless there is a good reason for this difference in hiring, the pattern may represent a form of institutionalized sex discrimination.

Table 1

A Hypothetical Example of Sex Discrimination

	Number of Applicants	Number of Job Offers	Percentage Offered Jobs
Department A			
Women	500	50	10%
Men	1000	100	10%
Department B			
Women	1000	50	5%
Men	500	25	5%
Combined Total			
Women	1500	100	6.67%
Men	1500	125	8.33%

As these examples show, prejudice, stereotyping, and discrimination are distinct from one another, even though in daily life they often occur together. Consequently, this overview will discuss each one separately, beginning with research on prejudice.

Prejudice

Throughout the past century, research on prejudice has closely reflected the ideological trends, telling us as much about the personal biases of the scientific community as about prejudice itself. According to John Duckitt (1992), psychological research on prejudice first emerged in the 1920s and was based upon American and European race theories that attempted to prove White superiority. For instance, after reviewing 73 studies on race and intelligence, an influential 1925 *Psychological Bulletin* article concluded that the "studies taken all together seem to indicate the mental superiority of the white race" (Garth, 1925, p. 359). In light of medical, anthropological, and psychological studies purporting to demonstrate the superiority of White people, many social scientists viewed prejudice as a natural response to "backward" races.

This perspective changed in the 1930s and 1940s with progress in civil rights, successful challenges to colonialism, and the rise of anti-Semitism. Following the Holocaust, several influential theorists came to regard prejudice as pathological, and they searched for personality syndromes associated with racism, anti-Semitism, and other forms of prejudice. The most prominent of these theorists was Theodor Adorno, who had fled Nazi Germany and concluded that the key to prejudice lay in what he called an "authoritarian personality." In their book *The Authoritarian Personality*, Adorno and his coauthors (1950) described authoritarians as rigid thinkers who obeyed authority, saw the world as black and white, and enforced strict adherence to social rules and hierarchies. Authoritarian people, they argued, were more likely than others to harbor prejudices against low-status groups.

Later researchers criticized Adorno's work, contending that authoritarianism had not been measured properly, that it did not account for cultural and regional differences in prejudice, and

that the theory's psychoanalytic assumptions lacked research support (Altemeyer, 1981; Martin, 2001; Pettigrew, 1958). Yet Adorno and his colleagues were right in at least three respects. First, a politically conservative form of authoritarianism, known as "right-wing authoritarianism," does correlate with prejudice. Well-designed studies in South Africa, Russia, Canada, the U.S., and elsewhere have found that right-wing authoritarianism is associated with a variety of prejudices (Altemeyer, 1996; Duckitt & Farre, 1994; McFarland, Ageyev, & Abalakina, 1993). Second, people who view the social world hierarchically are more likely than others to hold prejudices toward low-status groups. This is especially true of people who want their own group to dominate and be superior to other groups -- a characteristic known as "social dominance orientation" (Pratto, Sidanius, Stallworth, & Malle, 1994). Social dominance orientation tends to correlate with prejudice even more strongly than does right-wing authoritarianism, and studies have linked it to anti-Black and anti-Arab prejudice, sexism, nationalism, opposition to gay rights, and other attitudes concerning social hierarchies (Altemeyer, 1998; Sidanius, Levin, Liu, & Pratto, 2000; Sidanius & Pratto, 1999). Finally, Adorno and his coauthors were correct in pointing out that rigid categorical thinking is a central ingredient in prejudice.

Categorical Thinking

The relationship between prejudice and categorical thinking was first systematically explored by Gordon Allport (1954) in his classic book *The Nature of Prejudice*. Although Allport recognized the emotional, social, economic, and historic dimensions of prejudice, he also proposed that prejudice is partly an outgrowth of normal human functioning. In a much-quoted passage of the book, Allport wrote that:

The human mind must think with the aid of categories....Once formed, categories are the basis for normal judgment. We cannot possibly avoid this process. Orderly living depends upon it. (p. 20)

The natural tendency to categorize is easy to see in Figure 1. The shape on the far left is a square, and the shape on the far right is a diamond. The intermediate shapes, however, do not fit into a recognized category, and as a result, they are simply assimilated to one of the preexisting categories (e.g., as a "rotated square" or an "off-centered diamond"). In the realm of social perception, the same thing happens with biracial people, bisexual people, and others who are not easily categorized.

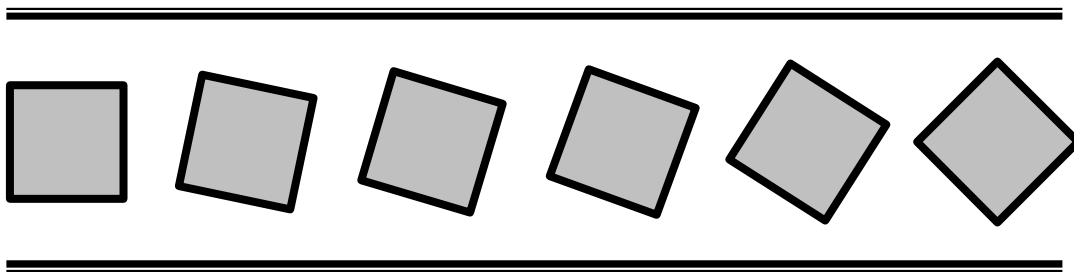


Figure 1. A continuum of shapes ranging from a square to a diamond.

Social categories form an indispensable part of human thought, but because attributes such as race, sex, and age lie along a continuum, social labels are never more than approximations. In fact, it is surprisingly difficult to think of two categories that do not overlap with each other (that is, two categories with a fixed boundary that cleanly separates each side). At first, you might think of well known opposites such as night and day, earth and sea, or alive and dead. Upon reflection, though, it becomes apparent that there is no fixed point separating these categories. Night and day form a continuum rather than two discrete categories. The boundary between earth and sea changes with the tides and is impossible to mark. Even the line between life and death is a fuzzy one. Does life cease with the last breath? With the last heart beat? When the brain stops all activity?

You might think of categories such as women and men, or people and the environment, but these divisions are also blurrier than they might seem. For example, many people cannot be easily categorized as female or male; they are, instead, "intersexuals" born with ambiguous genitalia (Angier, 1996). And what about the boundary between ourselves and the outside world? Most directly, of course, each of us breathes the immediate environment into our lungs and releases molecules back into the environment. But in a global economy, our connection with the environment reaches further than that; our blood may contain elements from rainwater that nourished crops in distant lands, and our tissues may hold minerals from the soil of a dozen or more countries. Thus, the idea that people constitute a category separate from the environment is really not accurate -- categories such as "people" and "environment" represent useful linguistic conventions, nothing more.

Despite the usefulness of categories in everyday life, they can be devastating when people falsely isolate themselves from the environment, from animals and nature, or from each other. For a vivid illustration of this point, we need only look at the social construction of racial categories. In the United States, for example, at least 75% of African Americans have White ancestry, and 1-5% of the genes carried by American Whites are from African ancestors (Davis, 1991). From a biological point of view, then, Blacks and Whites comprise a continuum rather than a dichotomy. Nonetheless, a false belief in the purity of racial categories has enabled Whites to mistreat Blacks for centuries without realizing that in many cases, they are harming the descendant of a White person.

Assimilation and Contrast

An intriguing and important consequence of categorical thinking is its tendency to distort perceptions. Typically, these distortions take the form of minimizing differences within categories ("assimilation") and exaggerating differences between categories ("contrast"). For example, when Joachim Krueger and Russell Clement (1994) asked people to estimate several daily temperatures for a nearby city, they found a smaller gap between temperature estimates for November 15th and November 23rd (dates within the category "November") than between November 30th and December 8th (dates from two different months). Both time intervals spanned eight days, and in reality the city's temperature change was not greater in the latter case than the former -- it simply *seemed* greater because December temperatures are, on average, different than November temperatures.

In this connection, Myron Rothbart and his colleagues (1997) tell an old Yiddish story of a peasant whose farm was located near the border of Poland and Russia, where boundary markers shifted with every international dispute:

The peasant did not know from one year to the next whether his farm was in Russia or Poland, and eventually hired a surveyor to resolve the uncertainty. After weeks of painstaking assessment, the surveyor finally announced that the farm was just inside the Polish border. "Thank God," the peasant cried with relief, "now I won't have to endure any more Russian winters!" (Rothbart, Davis-Stitt, & Hill, 1997, p. 123).

Humor aside, assimilation and contrast effects have been observed in a wide variety of domains, including estimates of line length, judgments of speech sounds, impressions of faces, and evaluations of attitudes (Brown, 1995; Tajfel & Wilkes, 1963). Robert Goldstone (1995) even found an assimilation effect in color perception. In this study, students were shown a random series of letters and numbers that ranged in color from very red to very violet. Results showed that even when a letter and number had exactly the same hue, students rated the letter as being similar in color to other letters, and the number as being similar in color to other numbers (e.g., in the diagram below, they saw the "L" as redder than the identically-colored "8").



Figure 2. In a study on color perception, Robert Goldstone (1995) found that the "L" above was perceived as more red than the "8," even though the "L" and "8" were actually identical in hue. Figure reprinted with permission of the American Psychological Society.

With respect to prejudice, the implication of this research is that differences within groups will tend to be minimized and differences between groups will tend to be exaggerated. Moreover, if these differences are consistent with well-known stereotypes, the distortion in perception may be highly resistant to change. In one study, for example, participants were unable to break free of gender stereotypes even when encouraged to do so (Nelson, Biernat, & Manis, 1990). In this experiment, people were asked to judge the height of various men and women from a series of photographs. Each photograph showed only one person, and participants were told:

In this booklet, the men and women are actually of equal height. We have taken care to match the heights of the men and women pictured. That is, for every woman of a particular height, somewhere in the booklet there is also a man of that same height. Therefore, in order to make as accurate a height judgment as possible, try to judge each photograph as an individual case; do not rely on the person's sex. (p. 669)

Despite these instructions and a \$50 cash prize for the person who made the most accurate judgments, people perceived the males to be, on average, a few inches taller than the females. In other words, they were either unable or unwilling to disregard the categories "male" and "female," and the perception of men as taller than women prevailed.

Outgroup Homogeneity

A close cousin of assimilation is the "outgroup homogeneity effect." In the language of social psychology, an "ingroup" is a group to which someone belongs, and an "outgroup" is a group to which the person does not belong (hence, one person's ingroup may be another person's outgroup, and vice versa). Research on the outgroup homogeneity effect has found that when it comes to attitudes, values, personality traits, and other characteristics, people tend to see outgroup members as more alike than ingroup members. As a result, outgroup members are at risk of being seen as interchangeable or expendable, and they are more likely to be stereotyped. This perception of sameness holds true regardless of whether the outgroup is another race, religion, nationality, college major, or other naturally occurring group (Linville, 1998).

In one of the first studies to document the outgroup homogeneity effect, Princeton University researchers asked students in four different "eating clubs" to rate members of their own group and members of three other groups on personality dimensions such as *introverted-extroverted* and *arrogant-humble* (Jones, Wood, & Quattrone, 1981). The results showed that students tended to rate members of their own group as more varied in personality than members of the outgroup -- regardless of which group students were in. Later research on outgroup homogeneity found that the effect is strongest when the ingroup and outgroup are enduring, real-life groups (rather than groups created artificially in laboratory experiments), and when the ingroup is large (Mullen & Hu, 1989). If the ingroup is small and the attributes in question are important to its identity, the outgroup homogeneity effect may disappear or even reverse (Simon, 1992; Simon & Pettigrew, 1990).

Why are outgroups generally seen as more homogeneous than ingroups? One possible reason is that people usually have less contact with outgroup members than ingroup members, and indeed, there is good evidence for this explanation (Islam & Hewstone, 1993; Linville & Fischer, 1993). But contact alone cannot explain the outgroup homogeneity effect, because some studies have found that the effect is unrelated to the number of ingroup or outgroup members a person knows (e.g., Jones, Wood, & Quattrone, 1981). Furthermore, perceptions of outgroup homogeneity are sometimes found among groups that have extensive contact with each other, such as females and males (Park & Rothbart, 1982; Park & Judd, 1990). When men complain that "women are all alike" and women complain that "men are all alike," their charges rarely stem from a lack of contact.

The best explanation is that a variety of factors produce the outgroup homogeneity effect. In addition to the fact that people usually have more contact with ingroup members, they tend to

organize and recall information about ingroups in terms of persons rather than abstract characteristics (Ostrom, Carpenter, Sedikides, & Li, 1993; Park & Judd, 1990). In many cases, people are also more motivated to make distinctions among ingroup members with whom they will have future contact (Linville, 1998). When these factors operate together, the end result is often an ingroup that appears to have a diverse assortment of individuals, and an outgroup that appears relatively homogeneous and undifferentiated.

Ingroup Bias, Social Identity, and the Role of Self-Esteem

When most people think of racism and other forms of bias, they picture one group having negative feelings toward another group. Although this dynamic certainly takes place, research since the 1970s has found that many group biases are more a function of favoritism toward one's own group than negative feelings toward other groups. As Marilyn Brewer (1999, p. 438) put it in her summary of the evidence, "Ultimately, many forms of discrimination and bias may develop not because outgroups are hated, but because positive emotions such as admiration, sympathy, and trust are reserved for the ingroup." The tendency of people to favor their own group, known as "ingroup bias," has been found in cultures around the world (Aberson, Healy, & Romero, 2000; Brewer, 1979, 1999).

One of the most startling aspects of ingroup bias is how easily it is triggered. This finding was documented in a series of experiments in Bristol, England, by Henri Tajfel (1970, 1981). Tajfel and his colleagues invented what is now known as the "minimal group procedure" -- an experimental technique in which people who have never met before are divided into groups on the basis of minimal information (e.g., a preference for one type of painting versus another, or even just the toss of a coin). What Tajfel discovered is that groups formed on the basis of almost any distinction are prone to ingroup bias. Within minutes of being divided into groups, people tend to see their own group as superior to other groups, and they will frequently seek to maintain an advantage over other groups. One study even found that when participants were given the reward matrix in Table 2, they preferred an ingroup/outgroup award distribution of 7/1 points rather than 12/11 points, denying members of their own group 5 points (7 instead of 12) in order to maintain a high relative advantage over the outgroup (Allen & Wilder, 1975; Wilder, 1981).

Table 2

Sample Reward Matrix Used in Minimal Group Research

Member no. _____ of _____ group	7	8	9	10	11	12	13	14	15	16	17	18	19
Member no. _____ of _____ group	1	3	5	7	9	11	13	15	17	19	21	23	25

Note: Participants in a study by Allen and Wilder (1975) were given a matrix with points that corresponded to money. Their task was to allocate points to someone in their group (top row) and someone in the outgroup (bottom row) by choosing one of the 13 options above (e.g., 7 points for the ingroup member and 1 point for the outgroup member).

While it may seem odd that group favoritism develops so easily, these findings are consistent with research showing that social bonds and attraction can readily form on the basis of

seemingly minor characteristics. For instance, one study found that people are more likely to cooperate with another person when they learn that the person shares their birthday (Miller, Downs, & Prentice, 1998). Even major life decisions -- such as whom to love, where to live, and what occupation to pursue -- can be influenced by relatively minor similarities. In a well-crafted set of studies, Brett Pelham and his colleagues (Pelham, Jones, Mirenberg, & Carvallo, 2002; Pelham, Mirenberg, & Jones, 2002) found that when compared with the percentage expected by chance:

- Women are more likely to marry men who share the first letter of their (pre-marriage) last name.
- People are more likely to live in cities that include their birthday number (e.g., people born on March 3rd are more likely than others to live in Three Rivers, Michigan).
- People named Louis are more likely to live in St. Louis, people named Paul to live in St. Paul, people named Helen to live in St. Helen, and people named Mary to live in St. Mary.

Pelham and his colleagues explain these results in terms of "implicit egotism," or an unconscious preference for things associated with the self. According to Pelham, even though letter and number preferences may seem trivial, such preferences are psychologically meaningful because of their connection to people's self-concept and identity. In keeping with this account, laboratory research on implicit egotism has found that when people high in self-esteem are dealt a blow to their self-concept, they display an increased preference for the letters in their name and the numbers in their birthdate, as if to restore their sense of worth (Jones, Pelham, Mirenberg, & Hetts, 2002).

Returning to the topic of prejudice, Tajfel hypothesized that ingroup biases arise from similar dynamics concerning the need for self-esteem. In the view of Tajfel and his colleagues, people maintain their self-esteem in part by identifying with groups and believing that the groups they belong to are better than other groups (Tajfel, 1981; Tajfel & Turner, 1986). Consequently, even experimentally created minimal groups give people a chance to bolster their self-esteem through ingroup biases. Tajfel's theory, known as "social identity theory," is supported by both laboratory and field studies. For example, research shows that after university football teams win a game, students are more likely to (1) wear clothes that identify the school, and (2) use the word "we" when describing the game's outcome, especially if their self-esteem has recently been challenged by a personal failure (Cialdini, Borden, Thorne, Walker, Freeman, & Sloan, 1976). In addition, a review of 34 separate studies found that people who are high in self-esteem -- and who therefore have the most to lose if their self-esteem is undercut -- exhibit more ingroup bias than do people low in self-esteem (Aberson, Healy, & Romero, 2000).

Research also indicates that when people experience a drop in self-esteem, they become more likely to express prejudice. This tendency was demonstrated in an experiment that altered students' self-esteem by giving them bogus feedback after an intelligence test (Fein & Spencer, 1997). On a random basis, half the students were told they scored in the top 10 percent for their university, and half were told that they scored below average. Then, in what appeared to be an unrelated study, students were asked to evaluate a job candidate who was presented as either Jewish or Italian. The results showed that students who suffered a blow to their self-esteem later evaluated the candidate more negatively when she seemed Jewish than when she seemed Italian, whereas no difference was found among students who were given positive feedback about their

intelligence. Moreover, students who received negative feedback about their intelligence showed a rebound in self-esteem after devaluing the Jewish candidate; that is, by putting down the Jewish candidate, they increased their self-esteem.

An unfortunate implication of this research is that for some people, prejudice represents a way of maintaining their self-esteem. At the same time, the link between prejudice and self-esteem suggests a hopeful message: it may be possible to reduce prejudice with something as simple as a boost in self-esteem. Fein and Spencer (1997) found this to be the case in a follow-up experiment similar to the one above. In the second experiment, anti-Jewish prejudice was eliminated after students increased their self-esteem by writing a few paragraphs about something they valued. Thus, at least one effective means of decreasing prejudice may be to address the sources of insecurity that underlie it.

Causal Attributions

Prejudice is also closely connected to the way that ingroup and outgroup members explain each other's behavior. These explanations, known in psychology as "causal attributions," are both a symptom and source of prejudice. If, for example, a single mother's homelessness is attributed to dispositional factors such as personal laziness, poor character, or lack of ability, prejudice toward single mothers is likely to persist. In contrast, if her homelessness is attributed to situational factors such as job layoffs or domestic partner violence, prejudice toward single mothers may not come into play or may even be reduced. The problem, when it comes to prejudice, is that people often make uncharitable attributions for the behavior of outgroup members. They do this in at least three ways:

1. *Just-world attributions in an unjust world.* In many situations, causal attributions implicitly follow a "just world" ideology that assumes people get what they deserve and deserve what they get (Lerner, 1980; Montada & Lerner, 1998). For example, people who hold just-world beliefs are more likely than others to blame poor people for being impoverished and, to some extent, are more likely to blame women for being battered or raped (Cowan & Curtis, 1994; Cozzarelli, Wilkinson, & Tagler, 2001; Schuller, Smith, & Olson, 1994). The difficulty with such attributions is that the world is not always just; people often find themselves in unfair circumstances, whether by birth, happenstance, or other factors beyond their control. In such cases, a just-world ideology downplays the role of situational factors and says, in essence, that the problem of social injustice lies not in society but in the victims of prejudice.

2. *The fundamental attribution error.* In addition to just-world beliefs, people have a more general tendency to attribute behavior to dispositional causes. Even when behaviors are undeniably caused by situational factors, people will sometimes favor dispositional explanations -- a misjudgment known as the "fundamental attribution error" (Ross, 1977). For example, in one of the earliest studies published on this topic, participants were presented with an essay written by someone who was either explicitly forced to take a particular position or someone who had free choice in selecting a position (Jones & Harris, 1967). Even when participants were expressly told that the essay's author was forced to take a certain position, they tended to believe that the author truly held that position. In the realm of prejudice, Elliot Aronson, Timothy Wilson, and Robin Akert (2002, p. 481) offer a textbook illustration of the fundamental attribution error in action:

When the Jews were first forced to flee their homeland during the third Diaspora, some 2,500 years ago, they were not allowed to own land or become artisans in the new regions in which they settled. Needing a livelihood, some took to lending money -- one of the few professions to which they were allowed easy access. Although this choice of occupation was an accidental byproduct of restrictive laws, it led to a dispositional attribution about Jews: that they were interested only in dealing with money and not in honest labor, like farming....This dispositional stereotype contributed greatly to the barbarous consequences of anti-Semitism in Europe during the 1930s and 1940s and has persisted even in the face of clear, disconfirming evidence such as that produced by the birth of the state of Israel, where Jews tilled the soil and made the desert bloom.

3. *The ultimate attribution error.* Taking the fundamental attribution error one step further, Thomas Pettigrew (1979) suggested that an "ultimate attribution error" occurs when ingroup members (1) attribute negative outgroup behavior to dispositional causes (more than they would for identical ingroup behavior), and (2) attribute positive outgroup behavior to one or more of the following causes: (a) a fluke or exceptional case, (b) luck or special advantage, (c) high motivation and effort, and (d) situational factors. This attributional double standard makes it virtually impossible for outgroup members to break free of prejudice against them, because their positive actions are explained away while their failures and shortcomings are used against them. Although the research record is somewhat mixed, studies generally support Pettigrew's analysis (Hewstone, 1990). One study found, for example, that White students were more likely to interpret a shove as violent -- and more likely to explain it dispositionally -- when the shove came from a Black person than a White person (Duncan, 1976). Another study found that Hindu participants were more likely to make dispositional attributions for negative behaviors than positive behaviors when the actor was Muslim, but showed the opposite pattern when the actor was Hindu (Taylor & Jaggi, 1974). And a review of 58 different experiments found that on traditionally masculine tasks, male successes were more likely than female successes to be attributed to ability, whereas male failures were more likely than female failures to be attributed to bad luck or lack of effort (Swim & Sanna, 1996).

Subtle Forms of Prejudice

As this brief overview shows, the roots of prejudice are many and varied. Some of the deepest and most intensively studied roots include personality factors such as right-wing authoritarianism and social dominance orientation, cognitive factors such as the human tendency to think categorically, motivational factors such as the need for self-esteem, and social factors such as uncharitable ingroup attributions for outgroup behavior. Research on these factors suggests that prejudiced attitudes are not limited to a few pathological or misguided individuals; instead, prejudice is an outgrowth of normal human functioning, and all people are susceptible to one extent or another.

Yet there is also reason for optimism; when viewed historically, there is no doubt that many virulent strains of prejudice and discrimination are on the decline. Gone are the days of Nazi Germany and the Holocaust, of legalized slavery, of lynchings by the Ku Klux Klan. Gone are the days when most women worldwide could not vote or hold political office. In many

countries multiculturalism and diversity are more widely embraced than ever before, as evident from the soaring popularity of world music and international cuisine; of cultural history and heritage celebrations; and of greater civil rights for historically stigmatized populations such as people with disabilities, indigenous and aboriginal groups, and gay, lesbian, bisexual, and transgender people.

In response to these changes, psychological researchers have increasingly turned their attention from blatant forms of prejudice to more subtle manifestations (Crosby, Bromley, & Saxe, 1980; Page, 1997). This shift in focus does not imply that traditional displays of prejudice have disappeared, but rather, that contemporary forms of prejudice are often difficult to detect and may even be unknown to the prejudice holders.

Subtle racism. Since the 1970s, researchers have studied several interrelated forms of subtle racism (see Table 3 for an overview). The central focus of this research has been on White prejudice toward Black people, and even though each form of subtle racism has distinct features, the results have consistently pointed in the same direction: White people are most likely to express anti-Black prejudice when it can plausibly be denied (both to themselves and to others). Studies have found, for example, that Black job candidates and Black college applicants are likely to face prejudice when their qualifications are ambiguous but not when their qualifications are clearly strong or weak (Dovidio & Gaertner, 2000; Hodson, Dovidio, & Gaertner, 2002). Similarly, a study on obedience to authority found that White participants discriminated when selecting job applicants for an interview, but only when instructed to do so by someone in authority -- a situation that allowed them to deny personal responsibility and prejudice (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000). In this rather disturbing study, roughly half the participants received a fictitious letter from the company's president saying:

Our organization attempts to match the characteristics of our representatives with the characteristics of the population to which they will be assigned. The particular territory to which your selected representative will be assigned contains relatively few minority group members. Therefore, in this particular situation, I feel that it is important that you do not hire anyone that is a member of a minority group. (p. 80)

Participants who received this statement selected fewer than half as many Black applicants for an interview as did participants who received no such statement. The bottom line: under conditions of attributional ambiguity that allow people to appear unprejudiced, even "subtle" forms of racism can exact an enormous toll on racial minorities.

Subtle sexism. Just as there is subtle racism, research shows there is subtle sexism. For example, Janet Swim and her colleagues (1995) have documented the presence of "modern sexism," a form of prejudice analogous to the "modern racism" listed in Table 3. In contrast to old-fashioned sexism -- which portrays women as unintelligent and incompetent -- modern sexism is characterized by a denial that sex discrimination continues to be a problem, antagonism toward women's groups, and a belief that the government and news media show too much concern about the treatment of women. Studies also suggest that sexism is marked by an ambivalence similar to what Irwin Katz (1981) described in his theory of "ambivalent racism." According to Peter Glick and Susan Fiske (1996, 2001), "ambivalent sexism" includes two separate but interrelated components: (1) *hostile sexism*, which involves negative feelings toward women, and (2) *benevolent sexism*, a chivalrous ideology that offers protection and affection to

women who adopt conventional gender roles. Because benevolent sexism may superficially seem like positive regard rather than prejudice, it can go unnoticed or even be perpetuated by women themselves (Glick et al., 2000). As in the case of positive stereotypes, however, benevolent sexism is far from benign. Not only does it restrict women's freedom and encourage dependence upon men, but the presence of benevolent sexism among females means that women often act as prisoner and guard at the same time.

Table 3

Forms of Subtle Racism

Name	Primary Citations	Description of Main Features
Symbolic racism	Kinder & Sears (1981); McConahay & Hough (1976); Sears (1988)	Symbolic racists reject old-style racism but still express prejudice indirectly (e.g., as opposition to policies that help racial minorities)
Ambivalent racism	Katz (1981)	Ambivalent racists experience an emotional conflict between positive and negative feelings toward stigmatized racial groups
Modern racism	McConahay (1986)	Modern racists see racism as wrong but view racial minorities as making unfair demands or receiving too many resources
Aversive racism	Gaertner & Dovidio (1986)	Aversive racists believe in egalitarian principles such as racial equality but have a personal aversion toward racial minorities

Stereotyping

Consistent with research on prejudice, psychological studies have found that stereotyping is a natural and common process in cultures around the world. Stereotypes, like other generalizations, frequently serve as mental shortcuts and are especially likely to be applied when people are busy or distracted (Gilbert & Hixon, 1991). One study found, for example, that when college students were distracted for 25 seconds with a request to remember an 8-digit number, they were later more likely to remember stereotypic attributes about another person (Pendry & Macrae, 1994). As discussed below, stereotypes can even be activated outside conscious awareness by a fleeting image or word related to the stereotyped group, and once activated, can influence attitudes and behavior (Greenwald & Banaji, 1995).

Explicit and Implicit Biases

The origins of stereotype research date back to a study by Daniel Katz and Kenneth Braly (1933) in which one hundred university students were asked to indicate the traits most characteristic of ten different social groups. Students displayed a high level of agreement about the traits of certain racial and ethnic groups, such as Negroes (described as superstitious by 84

percent of the students, and as lazy by 75 percent), and Jews (described as shrewd by 79 percent). Since the time of Katz and Braly's study, researchers have developed a wide range of techniques to measure stereotypes, yet with the rise of subtle racism, it is hard to say whether racial stereotypes have decreased over the years or whether they have simply become less likely to be expressed (Devine & Elliot, 1995; Lee, Jussim, & McCauley, 1995; Macrae, Stangor, & Hewstone, 1996). Public opinion polls have generally shown a decline in racial stereotyping, but one study found that when survey questions were worded to avoid implying a politically correct answer, many people expressed agreement with racial stereotypes (Plous & Williams, 1995). In this study, a majority of respondents endorsed at least one stereotypic Black-White difference in inborn ability (e.g., Blacks have greater rhythmic ability than Whites), and nearly half endorsed at least one stereotypic difference in anatomy (e.g., Blacks have thicker skulls than Whites).

In part because of the difficulty in assessing people's endorsement of stereotypes, researchers have increasingly relied on indirect methods of assessment. Borrowing heavily from cognitive psychology, these indirect methods have allowed researchers to find out what people think under conditions that prevent the management of outward impressions. Results from this research suggest that in addition to the explicit stereotypes that Katz and Braly measured, people harbor "implicit" biases outside of their awareness -- that is, they hold prejudiced attitudes and stereotypic associations about certain groups even without realizing it (Banaji, Hardin, & Rothman, 1993; Fazio, Jackson, Dunton, & Williams 1995; Gaertner & McLaughlin, 1983). Although implicit biases are often correlated with explicit biases -- meaning that they tend to go together -- the two are not the same. For instance, when White students in one study were observed during interracial interactions, their explicit attitudes predicted later racial biases in verbal behavior, whereas their implicit attitudes predicted biases in nonverbal behavior (Dovidio, Kawakami, & Gaertner, 2002).

How is it possible to measure implicit attitudes and beliefs when people may not even know that they have them? One of the most common ways is with an experimental technique known as "priming" (Wheeler & Petty, 2001; Wittenbrink, Judd, & Park, 1997). Typically, participants in these studies are exposed to a word or image that brings to mind thematically related ideas or associations concerning a target of prejudice (e.g., an ethnic minority group). Then, once an implicit prejudice or stereotype has been activated, researchers can assess its strength, content, and effect on other attitudes, beliefs, and behavior.

In an early experiment using this technique, Patricia Devine (1989) had White college students watch a screen capable of displaying words so rapidly as to be undetected. In one experimental condition, participants were shown a subliminal series in which 80% of the words were stereotypically associated with African Americans (e.g., *jazz*, *rhythm*, *athletic*, *basketball*, *slavery*). In another condition, only 20% of the words were associated with African Americans. Next, people were asked to read a brief scenario and judge the actions of a person it described. Devine found that people in the 80% condition -- who, unbeknownst to them, had been heavily primed with stereotypic words -- later judged the person as relatively more hostile (in keeping with the general activation of a stereotype concerning African Americans). Furthermore, this activation occurred regardless of how high or low participants had scored on explicit measures of racism, suggesting that even when people do not believe in racial stereotypes, merely *knowing* about the stereotypes may be enough to trigger discrimination.

One of the most popular techniques for probing implicit biases is the Implicit Association Test, or IAT (Greenwald, Banaji, Rudman, Farnham, Nosek, & Mellott, 2002; Greenwald, McGhee, & Schwartz, 1998). The IAT is a computer-based test that measures how rapidly

people are able to categorize various words and images, and it capitalizes on the fact that most of us identify words and images more rapidly when they come from closely related categories than when they come from unrelated categories. For instance, if you associate librarians with intelligence and bullfighters with violence, you can probably tell in a split-second that synonyms for intelligence like *smart* and *brainy* relate to the dual category "librarians or intelligence," and synonyms for violence like *aggression* and *brutality* relate to the dual category "bullfighters or violence." But what if we switch the elements around, and you are asked whether *smart* and *brainy* relate to the dual category "librarians or violence" or to the dual category "bullfighters or intelligence"? In this case it will probably take you longer to match *smart* and *brainy* with the category containing "intelligence," because these dual categories contain elements that are not stereotypically related to each other. Thus, by comparing the speed with which people categorize words or images, the IAT indirectly assesses how closely people associate certain elements with each other. To examine racial stereotypes, for example, the test might replace librarians and bullfighters with Whites and Blacks. With this version of the IAT, faster responses to "Whites or intelligence" and "Blacks or violence" (compared with "Whites or violence" and "Blacks or intelligence") could indicate the presence of an implicit stereotype.

The Implicit Association Test has been used to measure a variety of hidden associations, such as implicit racial and gender stereotypes, attitudes toward elderly people, and preferences for particular political candidates (Greenwald, McGhee, & Schwartz, 1998; Nosek, Banaji, & Greenwald, 2002). Implicit associations have even been detected in minimal group research, when people have no prior group experience yet display positive associations with ingroup member names and negative associations with outgroup member names (Ashburn-Nardo, Voils, & Monteith, 2001). As with other measures of implicit stereotyping, IAT scores have also been linked to behavioral measures of discrimination. For instance, one study found that White students with pro-White IAT scores later treated a White conversation partner better than a Black conversation partner, as judged by independent raters who watched videotapes of the conversations (McConnell & Leibold, 2001).

Consequences of Stereotyping

Once activated, stereotypes can powerfully affect social perceptions and behavior. For instance, studies on priming have found that when college students are exposed to stereotypic words and images relating to old age, they later walk more slowly and perform more slowly on a word recognition task (Bargh, Chen, & Burrows, 1996; Kawakami, Young, & Dovidio, 2002). Likewise, students primed with "soccer hooligan" stereotypes answer fewer general knowledge questions correctly, whereas students primed with professor stereotypes show improved performance (Dijksterhuis & van Knippenberg, 1998). Although the reason for these effects is not entirely clear, it appears that when stereotypic representations of behavior are activated, relevant behavior also becomes activated (Wheeler & Petty, 2001).

In addition to the effects of priming, people who are stereotyped face a second burden: the threat that their behavior will confirm a negative stereotype. Claude Steele and his colleagues have shown that this burden, known as "stereotype threat," can create anxiety and hamper performance on a variety of tasks (Steele, 1997). For example, female math students taking a difficult test show a drop in performance when told that the test reveals gender differences in math ability (Spencer, Steele, & Quinn, 1999). An especially interesting study along these lines found that when Asian women were made aware of their ethnicity, their math performance

improved (in keeping with the stereotype of Asians as good at math), but when they were made aware of their gender, their math performance declined (Shih, Pittinsky, & Ambady, 1999). And the same pattern occurred with young children: When Asian girls were made aware of their ethnicity (by coloring a picture of Asian children eating with chopsticks), their math performance improved, but when they were made aware of their gender (by coloring a picture of a girl with a doll), their math performance declined (Ambady, Shih, Kim, & Pittinsky, 2001).

Stereotyping Among Children

The vulnerability of children to stereotype threat implies that stereotypes are learned early in life. How early is early? Several studies have observed ingroup biases by age 3 or 4 and the development of racial and gender stereotyping soon after (Aboud, 1988; Cameron, Alvarez, Ruble, & Fuligni, 2001; Martin, Wood, & Little, 1990). One Israeli investigation even documented anti-Arab prejudice in children as young as 2½ years of age (Bar-Tal, 1996). Although it may seem hard to believe that children can distinguish among social groups at such an early age, research on gender recognition has found that children typically begin to form social categories within the first year of life. Infants are often able to discriminate between female and male faces by the age of 9 months, and sometimes as early as 5 months (Leinbach & Fagot, 1993).

There are also direct parallels in the content of stereotypes held by children and adults. Barbara Morrongiello and her colleagues convincingly illustrated this point with a pair of studies on gender stereotyping (one study with adult participants and the other with children). In the first study, mothers watched videotapes of a child engaged in risk-taking behaviors and were asked to (1) stop the videotape when they would normally intervene, and (2) say whatever they would normally say to their own child in such a situation (Morrongiello & Dawber, 2000). In keeping with gender stereotypes of girls as needing to be protected, the results indicated that mothers of daughters stopped the tape sooner and more frequently than did mothers of sons. Moreover, mothers of daughters were more likely to verbalize warnings about the risk of injury, whereas mothers of sons were more likely to encourage risk-taking behavior. This gender bias is similar to the finding that mothers underestimate the crawling ability of female infants and overestimate the crawling ability of male infants, even when no actual differences exist (Mondschein, Adolph, & Tamis-LeMonda, 2000).

As disconcerting as these results are for mothers, there is no reason to suppose that fathers would fare differently; decades of research have documented gender stereotypes among both men and women (Swann, Langlois, & Gilbert, 1999; Tavis, 1992). But what about children? In a second study, Morrongiello and her colleagues found that children 6-10 years of age mirror adults by displaying the same stereotype of girls as vulnerable to injury (Morrongiello, Midgett, & Stanton, 2000). In this experiment, children were presented with drawings of a girl or boy engaged in one of four play activities. Half of the drawings depicted a child smiling confidently, and half showed the child looking wary. In addition, each activity was presented in one of four ways: as having no risk, low risk, moderate risk, or high risk (see Figure 3). For example, in one series a child was pictured sitting safely on a swing (no risk), sitting on a swing while holding a can of soda (low risk), crouching with feet on the swing (moderate risk), or standing on the swing with shoes untied (high risk). In all, each participant in the study was shown a set of 64 drawings (4 activities × 4 levels of risk × 2 facial expressions × 2 genders of the child depicted = 64 drawings) and asked to sort the drawings by how much risk of injury

there was. The results: Girls and boys both tended to rate the risk of injury as greater for girls than boys, even though in reality boys routinely experience more injuries than do girls.

Stereotypes in the Media

One of the main places that children and adults learn stereotypes is the mass media. Content analyses have found that advertisements, television programs, movies, and other media are saturated with racial and gender stereotypes (Entman & Rojecki, 2000; Furnham & Mak, 1999; Plous & Neptune, 1997). Although the cumulative effect of these stereotypes is hard to assess, the sheer volume of advertising suggests that many people are exposed to stereotypes on a daily basis. Advertisements occupy almost 60% of newspaper space, 52% of magazine pages, 18% of radio time, and 17% of television prime time (Collins & Skover, 1993).

Studies indicate that these advertisements profoundly influence how people perceive and relate to one another. For example, one experiment found that, compared with members of a control group, male interviewers who had watched sexist television commercials later judged a female job applicant as less competent, remembered less biographical information about her, and remembered more about her physical appearance (Rudman & Borgida, 1995). Another study found that children who were raised in a community without television had less sex-typed perceptions than did children who were raised in comparable communities with television, and that sex-typed attitudes increased once television was introduced (Kimball, 1986). In still another investigation, women who were exposed to sex-role-reversed advertisements later became more self-confident and independent in their judgments (Jennings, Geis, & Brown, 1980). These studies and many more document the influence of advertisements on social perception and behavior.

Beyond advertising, other media-based stereotypes wield considerable influence. For instance, research has shown that:

- White television viewers who watch a stereotyped comic portrayal of Black people are later more likely to judge a Black defendant guilty of an assault (Ford, 1997).
- Males who view movie scenes objectifying women are later more likely to believe that a date rape victim experienced pleasure and "got what she wanted" (Milburn, Mather, & Conrad, 2000).

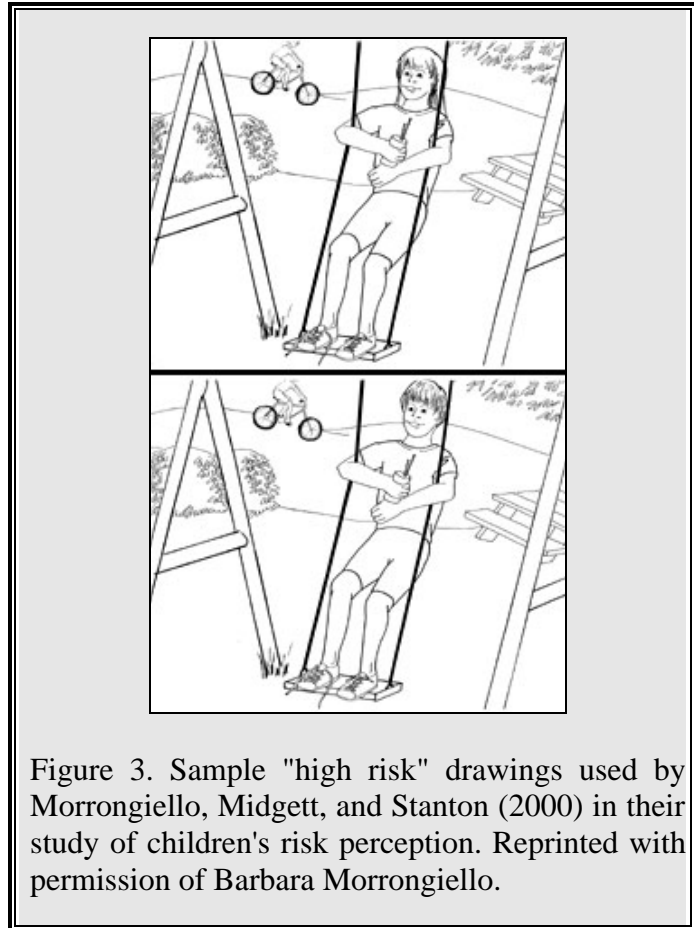


Figure 3. Sample "high risk" drawings used by Morrongiello, Midgett, and Stanton (2000) in their study of children's risk perception. Reprinted with permission of Barbara Morrongiello.

- People who watch a music video objectifying women later rate a woman as more sexual and submissive when she returns a man's advances (Hansen & Hansen, 1988).
- Heterosexual men who look at attractive women in magazine erotica later rate their romantic partners as less attractive (Kenrick, Gutierrez, & Goldberg, 1989).

In many cases the immediate effects of stereotype activation fade after a few minutes, but regardless of their duration, each activation reinforces stereotypic thinking in the long run. Additionally, evidence suggests that once a stereotype is activated, it can be reactivated by something as simple as a disagreement with someone in the stereotyped group, and if brought to mind frequently enough, can become chronically accessible (Ford, 1997; Kunda, Davies, Adams, & Spencer, 2002). Thus, even though media-based stereotypes may seem harmless when considered individually, their cumulative effect over time can be substantial.

Stereotypes from Direct Experience

Stereotypes are learned not only from the mass media, but from direct experience as well. Although some stereotypes are grounded in truth (e.g., it is true that men are, on average, more aggressive than women), many are distortions that arise from otherwise adaptive modes of thought. To illustrate, try the following exercise: Look around you for 5 or 10 seconds and make a note of what is in your environment. Then, after you have carefully observed your surroundings, close your eyes and recall everything that you noticed. Do not read further until you have taken a few moments to give this exercise a try.

What did you recall seeing? If you are like most people, the items you noticed were the most salient things in the environment -- objects that were prominent, large, colorful, or attention-getting in some way. When we observe the environment, we do not give equal weight to every element; instead, we are highly selective. Without even being aware of it, we automatically filter what we see in a way that gives greatest weight to whatever is most salient.

Normally, this kind of automatic filtering is highly beneficial. After all, which is more important to notice -- an oncoming car or a pebble along the side of the road? Just as with categorical thinking, our focus on salient stimuli allows us to process a large amount of information efficiently. Yet also like categorical thinking, our focus on salient stimuli can lead to systematic distortions in perception, and, at times, to prejudice and stereotyping.

An experiment by Loren Chapman (1967) shows how salience can distort the judgments people make. Chapman projected a series of word pairs, such as *bacon-tiger*, onto a screen in front of the participants in his study. For example, in a typical series, the word on the left side of the screen was *bacon*, *lion*, *blossoms*, or *boat*, and the word on the right side was *eggs*, *tiger*, or *notebook*. Chapman balanced the word pairs so that each left-side word appeared an equal number of times with each right-side word, yet he found that when participants were asked to estimate the frequency of various word pairs, they reported seeing illusory correlations. For instance, people estimated that when *bacon* appeared on the left, *eggs* was paired with it an average of 47% of the time. Similarly, participants thought that when *lion* was on the left, *tiger* was the word that appeared with it most often.

Although illusory correlations can occur for a variety of reasons, one key element is that distinctive pairings are better remembered than other pairings (Hamilton, Dugan, & Trolier, 1985; Mullen & Johnson, 1990). In the case of Chapman's research, certain word pairs stood out because the two words were thematically related. Yet distinctiveness also increases when rare

events or attributes are paired with one another -- a result that can sometimes lead to stereotyping.

This connection was illustrated in an experiment that presented people with brief statements describing the behavior of individuals from one of two groups: "Group A" or "Group B" (Hamilton & Gifford, 1976). Group A had twice as many members as Group B, but the proportion of desirable and undesirable behaviors represented in the statements was the same within each group. Roughly 70% of the time the statements described a desirable behavior (e.g., "visited a sick friend in the hospital"), and roughly 30% of the time the statements described an undesirable behavior (e.g., "always talks about himself and his problems"). In other words, the most infrequent -- and hence, most distinctive -- statements described undesirable behaviors on the part of the minority group (Group B).

Under these conditions, people significantly overestimated the frequency of undesirable minority behaviors. As shown by the bolded entries in Table 4, participants recalled 52% of undesirable behaviors as coming from Group B, even though the actual percentage was only 33%. Furthermore, subsequent research has shown that this kind of illusory correlation is especially pronounced when the distinctive pairings involve negative behavior and are consistent with preexisting stereotypes (Hamilton & Rose, 1980; Mullen & Johnson, 1990). In such instances, the salience of unusual pairings can strongly reinforce minority stereotypes.

Table 4

An Example of Illusory Correlation

Statement Content	Group A	Group B	Total
	Actual Distribution of Statements		
Desirable Behaviors	18 (67%)	9 (33%)	27 (100%)
Undesirable Behaviors	8 (67%)	4 (33%)	12 (100%)
	Perceived Distribution of Statements		
Desirable Behaviors	17.5 (65%)	9.5 (35%)	27 (100%)
Undesirable Behaviors	5.8 (48%)	6.2 (52%)	12 (100%)

Note: This table is based on data from a study by Hamilton and Gifford (1976). Even though only 4 out of 12 undesirable behavior statements involved Group B (the minority group), participants later recalled more of the undesirable behaviors coming from Group B (average = 6.2) than Group A (average = 5.8).

Self-Perpetuating Stereotypes

Once stereotypes are learned -- whether from the media, family members, direct experience, or elsewhere -- they sometimes take on a life of their own and become "self-perpetuating stereotypes" (Skrypnek & Snyder, 1980). As discussed earlier, one way this can happen is by people experiencing a stereotype threat that lowers their performance. Stereotypes can also become self-perpetuating when stereotyped individuals are made to feel self-conscious

or inadequate. For example, research on self-objectification has found that when women take a difficult math test while wearing a swimsuit, they perform more poorly than do women wearing regular clothes, whereas men show no such decline in performance (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998). Even subliminal priming can lead to self-perpetuating stereotypes. For instance, when people over 60 years old are subliminally exposed to words such as *senile*, *incompetent*, and *alzheimer's*, they show signs of memory loss (Levy, 1996).

In a dramatic demonstration of how priming can lead to self-perpetuating stereotypes, Mark Chen and John Bargh (1997) subliminally exposed White students to either White or Black male faces taken from popular magazines. Then, once racial stereotypes were implicitly activated, students were paired with another White student who had not been exposed to any faces, and the pair was asked to play a game together. The results showed that: (1) compared to students primed with White faces, students primed with Black faces later displayed more hostility during the game (consistent with racial stereotypes concerning Black hostility), and (2) this hostility in turn led the unexposed partner to respond with an increase in hostility. The unsettling conclusion: Simply by looking at Black faces, White people may be primed to behave in ways that elicit hostility from Black people.

Self-perpetuating dynamics have also been documented in interactions between women and men. Perhaps the best known experiment on this point was published by Mark Snyder, Elizabeth Tanke, and Ellen Berscheid (1977). In this study, male-female pairs were audiotaped for ten minutes while they got acquainted with each other via the telephone (the male and female soundtracks were recorded separately for later analysis). Unbeknownst to the women, though, the men were first given one of eight randomly assigned snapshots of a woman -- ostensibly their partner -- so they could have "a mental picture of the person they're talking to." In reality, four snapshots were of women previously rated as highly attractive, and four were of women rated as unattractive. Thus, some of the men were led to believe that their conversation partner was physically attractive, and others were led to believe that their partner was unattractive.

Not surprisingly, when independent raters later listened to the male soundtrack of these conversations, men who thought they were talking with an attractive woman were judged as more sociable, sexually warm and permissive, outgoing, and humorous than men who thought they were talking with an unattractive woman. Of greater interest were ratings of the female soundtrack. Presumably in response to differences in male behavior, women who were initially perceived as attractive actually *sounded* more stereotypically attractive than did women who were originally thought to be unattractive, even though their male partner's preconceptions were induced at random and had nothing to do with how physically attractive the women actually were. What makes these results remarkable is that male beliefs affected female behavior so strongly that outside listeners -- who knew nothing of the experimental hypotheses or attractiveness of the women -- could hear the difference.

Reducing Stereotypes

As the foregoing review suggests, stereotypes are learned at an early age and can be stubbornly resistant to change. Even when people encounter a stereotyped group member who violates the group stereotype, they often continue to maintain the stereotype by splitting it into subtypes (Judd, Park, & Wolsko, 2001; Kunda & Oleson, 1995; Richards & Hewstone, 2001; Weber & Crocker, 1983). For example, when encountering a Jewish philanthropist, people with anti-Semitic stereotypes may distinguish philanthropic Jews from "money-hungry Jews" by

creating a subtype for "good Jews." As a result of subtyping, stereotypes become impervious to disconfirming evidence.

Yet all is not lost. Studies indicate that stereotypes can be successfully reduced and social perceptions made more accurate when people are motivated to do so (Fiske, 2000; Neuberg, 1989; Sinclair & Kunda, 1999). One of the most effective ways to do this is with empathy. Simply by taking the perspective of outgroup members and "looking at the world through their eyes," ingroup bias and stereotype accessibility can be significantly reduced (Galinsky & Moskowitz, 2000). Research also suggests that stereotype threat can be lessened with a change in orientation. For instance, one promising experiment found that when African-American college students were encouraged to think of intelligence as malleable rather than fixed, their grades increased and they reported greater enjoyment of the educational process (Aronson, Fried, & Good, 2002).

Even implicit stereotypes can be modified (Blair, 2002). In a study on the effects of counter-stereotypic imagery, for example, Irene Blair and her colleagues found that implicit gender stereotypes declined after people spent a few minutes imagining a strong woman (Blair, Ma, & Lenton, 2001). Likewise, Nilanjana Dasgupta and Anthony Greenwald (2001) found that pro-White biases on the Implicit Association Test declined after people were exposed to pictures of admired Black Americans and disliked White Americans (e.g., Bill Cosby and Timothy McVeigh). Still another study found that implicit and explicit anti-Black biases were reduced after students took a semester-long course on prejudice and conflict (Rudman, Ashmore, & Gary, 2001). As these findings show, stereotypes may be widespread and persistent, but they are also amenable to change when people make an effort to reduce them.

Discrimination

Although many countries have passed civil rights legislation over the past 50 years, discrimination continues to be a serious problem throughout the world -- even in democratic countries that publicly affirm the ideal of equality. For instance, here are just a few documented examples of discrimination in the United States:

- According to a review of more than 100 studies by the U.S. Institute of Medicine, discrimination contributes to racial disparities in health care and higher death rates among minorities from cancer, heart disease, diabetes, and H.I.V. infection (Smedley, Stith, & Nelson, 2002).
- Hispanics and Blacks spend an average of over \$3,000 more than Whites to locate and buy the same house (Yinger, 1995), often receive harsher criminal sentences than Whites for the same offense (Mauer, 1999), and are generally less likely to be hired than comparable White job applicants (Turner, Fix, & Struyk, 1991).
- Women earn an average of \$.76 for every male dollar (Bowler, 1999) and face employment discrimination of such magnitude that recent settlements have run into the hundreds of millions of dollars (Molotsky, 2000; Truell, 1997).
- A U.S. Justice Department study found that handicap-access provisions for disabled people were violated in 98% of the housing developments investigated (Belluck, 1997).

Despite the prevalence of discrimination, however, one of the greatest barriers to its removal is, strangely enough, the difficulty people have detecting it at the individual level. Why

should this be? First, individuals cannot serve as their own control group and test whether they would have received better treatment as a member of more privileged groups (Fiske, 1998). Second, discrimination is easier to detect with aggregated evidence than single cases, because single cases are easy to explain away (Crosby, 1984). Third, individuals may deny discrimination to avoid feeling that they are being mistreated by others or that they do not have control over their situation (Ruggerio & Taylor, 1997; Taylor, Wright, Moghaddam, & Lalonde, 1990). As a result of these and other reasons, women and minorities are more likely to perceive discrimination against their group than against themselves personally (Crosby, 1984; Taylor, Wright, & Porter, 1994).

Prejudice and Discrimination from the Target's Perspective

Traditionally, psychological research on prejudice and discrimination has focused on the attitudes and behavior of majority group members. When women, minority members, or other targets of discrimination have been involved, their role has often been peripheral -- either as the object of prejudice (e.g., an experimental assistant who elicits prejudiced responses), or as someone who reacts to other people's prejudices (Shelton, 2000). Beginning in the 1990s, however, researchers began paying greater attention to women and minorities as active agents who choose and influence the situations they are in (Crocker, Major, & Steele, 1998; Feagin, 1994; Swim & Stangor, 1998). Results from this research have already enriched and broadened the field in a number of ways.

One obvious benefit of including the target's perspective is that it offers a more complete understanding of the interpersonal and intergroup aspects of prejudice, stereotyping, and discrimination. For instance, when Joachim Krueger (1996) studied the personal beliefs of Blacks as well as Whites, he uncovered a mutually held misperception: members of both groups underestimated how favorably they were viewed by the other side. In effect, Krueger found that Blacks and Whites each thought, "We like them, but they don't like us," a belief that set the stage for misunderstanding, suspicion, and conflict. Similarly, when Charles Judd and his colleagues studied the racial attitudes of Black and White students in the United States, they found a key difference that could lead to intergroup conflict. Whereas Black students tended to regard race as an important and positive part of their identity, White students tended to view race-related classes and programs as reinforcing separatism (Judd, Park, Ryan, Brauer, & Kraus, 1995). To bridge this divide, each side must recognize these differences in perspective when balancing the goals of multiculturalism and color-blindness.

Another benefit of studying the target's perspective is that it yields information about the psychological and health consequences of exposure to prejudice and discrimination (Clark, Anderson, Clark, & Williams, 1999). Research suggests, for example, that the discrimination Black people experience is associated with self-reported ill health, lower psychological well-being, and the number of bed-days away from work during the previous month (Williams, Yu, Jackson, & Anderson, 1997). Studies have also found that the blood pressure of Black people rises when they are under stereotype threat (Blascovich, Spencer, Quinn, & Steele, 2001) or are exposed to racist incidents or attitudes (Armstead, Lawler, Gorden, Cross, & Gibbons, 1989; McNeilly, 1995), and that elevations in blood pressure are especially high among working-class Black people who report accepting unfair treatment rather than challenging it (Krieger & Sidney, 1996). In the latter study, blood pressure differences were in some cases equal to or larger than those associated with lack of exercise, smoking, and an unhealthy diet.

One additional benefit of considering the target's perspective is that it can suggest effective ways to reduce prejudice, stereotyping, and discrimination. Although researchers have been reluctant to explore this topic for fear of shifting the burden of prejudice reduction from perpetrators to targets, there is a growing appreciation of the ability targets have to shape interactions with majority group members (Major, Quinton, McCoy, & Schmader, 2000). For instance, Jennifer Eberhardt and Susan Fiske (1996) recommend the following tactics for employees who want to reduce the amount of discrimination they encounter at work:

- Given the human tendency to think categorically, try to prime other people to categorize you in desirable ways (e.g., by increasing the salience of positive categories such as "educated" or "manager").
- Emphasize joint goals, common fate, and other areas of similarity with majority group members so that they identify with you and see you as an individual rather than simply as a stereotypic outgroup member.
- In conversations, meetings, and policy statements, remind majority group members of the values you share, such as a sense of fairness, so that people are encouraged to act in accord with these values.
- Praise majority group members when they behave in a fair-minded and egalitarian way, both to reinforce their behavior and to establish positive standards of conduct.
- If possible, try to avoid interacting with majority group members who are at high risk of prejudice and stereotyping: people who are stressed or distracted, who have recently suffered a blow to their self-esteem, who feel threatened or insecure, or who show signs of rigid thinking or high social dominance orientation.

As Janet Swim and Charles Stangor (1998, p. 6) wrote in their book *Prejudice: The Target's Perspective*, a consideration of target experiences not only improves the quality of research on prejudice, but it "gives a voice to target groups, validates their experiences, helps pinpoint their unique strengths and weaknesses, and can potentially increase empathy for the targets of prejudice in today's society."

Reducing Prejudice and Discrimination

On September 24, 1973, an Indian chief from California, dressed in full regalia, landed in Rome and claimed possession of Italy "by right of discovery" just as Christopher Columbus had claimed America nearly 500 years earlier. "I proclaim this day the day of the discovery of Italy," he said.

"What right," asked the chief, "did Columbus have to discover America when it had already been inhabited for thousands of years? The same right that I have to come now to Italy and proclaim the discovery of your country."

Although the *New York Times* referred to this claim as "bizarre" (Krebs, 1973), the newspaper's criticism only helped illustrate the chief's point: it is bizarre to claim possession of a country "by right of discovery" when the country has long been occupied by other people. What the chief did in making his claim was to reverse people's perspective and invite them to see the world from an American Indian point of view.

Research on empathy and role-playing suggests that this type of reversal in perspective can reduce prejudice, stereotyping, and discrimination (Batson et al., 1997; Galinsky &

Moskowitz, 2000; McGregor, 1993; Stephan & Finlay, 1999). Indeed, empathy training programs appear to reduce prejudice regardless of the age, sex, and race of participants (Aboud & Levy, 2000). In addition, empathy has the practical advantage of being relatively easy to apply in a wide range of situations. To become more empathic toward the targets of prejudice, all one needs to do is to consider questions such as *How would I feel in that situation?*, *How are they feeling right now?*, or *Why are they behaving that way?* Role-playing exercises have also been used to practice responding effectively to prejudiced comments (Plous, 2000).

Another powerful method of reducing prejudice and discrimination is to establish laws, regulations, and social norms mandating fair treatment (Oskamp, 2000). In psychology, "norms" are expectations or rules for acceptable behavior in a given situation, and research suggests that even one person's public support for anti-prejudice norms is enough to move other people in that direction (Blanchard, Lilly, & Vaughn, 1991). Moreover, experiments on antigay and anti-Black prejudice have found that an individual's support for anti-prejudice norms can sway the opinions of highly prejudiced people as well as those medium or low in prejudice (Monteith, Deneen, & Tooman, 1996). Normative information is especially potent and enduring when it concerns ingroup members. For example, when White students in one study were told that their fellow students held less racist views than they had thought, this normative information continued to exert a prejudice-lowering effect one week later (Stangor, Sechrist, & Jost, 2001).

Even longer-lasting reductions in prejudice are possible when people are made aware of inconsistencies in their values, attitudes, and behaviors. Milton Rokeach (1971) demonstrated, for instance, that when students spent roughly half an hour considering how their values, attitudes, and behaviors were inconsistent with the ideal of social equality, they showed significantly greater support for civil rights more than a year later. These results are consistent with cognitive dissonance theory, which postulates that (1) the act of holding psychologically incompatible thoughts creates a sense of internal discomfort, or *dissonance*, and (2) people try to avoid or reduce these feelings of dissonance whenever possible (Festinger, 1957). According to this analysis, students in Rokeach's study held incompatible thoughts such as "I support social equality" and "I've never contributed time or money to a civil rights group," and sought to reduce feelings of dissonance by increasing their support for civil rights. Other researchers have used dissonance-related techniques to reduce antigay, anti-Asian, and anti-Black prejudice (Hing, Li, & Zanna, 2002; Leippe & Eisenstadt, 1994; Monteith, 1993).

One of the most heavily studied techniques for prejudice reduction is intergroup contact (Hewstone & Brown, 1986). In *The Nature of Prejudice*, Gordon Allport (1954, p. 281) hypothesized that:

Prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom or local atmosphere), and provided it is of a sort that leads to the perception of common interests and common humanity between members of the two groups.

This contention, now widely known as the "contact hypothesis," has received broad research support. In a review of 203 studies from 25 countries -- involving 90,000 participants -- Thomas Pettigrew and Linda Tropp (2000) found that 94% of studies supported the contact hypothesis (that is, 94% of the time, prejudice diminished as intergroup contact increased).

With this level of support, why hasn't intergroup contact eliminated prejudice from society? The problem with using contact to reduce prejudice is not that the contact hypothesis is wrong, but that it is so difficult to meet the conditions Allport outlined. In many real-world environments the fires of prejudice are fueled by conflict and competition between groups that are unequal in status, such as Israelis and Palestinians, Whites and Blacks, or long-time citizens and recent immigrants (Esses, 1998; Levine & Campbell, 1972). Under conditions of competition and unequal status, contact can even increase prejudice rather than decrease it. For example, in a review of studies conducted during and after school desegregation in U.S., Walter Stephan (1986) found that 46% of studies reported an increase in prejudice among White students, 17% report a decline in prejudice, and the remainder reported no change.

The key is to craft situations that will lead to cooperative and interdependent interactions in pursuit of common goals, shifting people to recategorize from "us and them" to "we" (Desforges et al., 1991; Dovidio & Gaertner, 1999; Sherif, Harvey, White, Hood, & Sherif, 1988). Classroom research has found that cooperative learning techniques increase the self-esteem, morale, and empathy of students across racial and ethnic divisions, and also improve the academic performance of minority students without compromising the performance of majority group students (Aronson & Bridgeman, 1979). One of the earliest of these techniques to be studied, the "jigsaw classroom," divides students into small, racially diverse work groups in which each student is given a vital piece of information about the assigned topic (thereby making each group member indispensable to the others). The jigsaw technique was originally developed specifically to reduce racial prejudice, and decades of research suggest that it is highly effective at promoting positive interracial contact (Aronson & Patnoe, 1997).

A Concluding Note

This overview began with unambiguously prejudiced statements made by Osama bin Laden. As discouraging as it is to read these statements, it is worth noting that they do not represent the most common forms of prejudice in daily life. Abundant evidence suggests that fewer and fewer people embrace overt forms of bigotry, and that public expressions of prejudice are more likely than ever to be condemned. Thus, although terrorism, hate crimes, and other forms of fanaticism constitute serious social problems, most forms of contemporary prejudice are manifest more subtly.

At the same time, subtle prejudices present considerable challenges of their own. At a societal level, it may be even more difficult to reduce subtle forms of prejudice than extreme forms of prejudice, not only because they are more widespread, but because they arise from normal thought processes, tend to be more ambiguous, and frequently take place outside of awareness. As the research in this review makes clear, our species might aptly be described as *Homo Stereotypus* -- an animal predisposed to prejudice, stereotyping, and discrimination, but one that also possesses the capacity to overcome these biases if motivated to do so (Blair, 2002; Fiske, 2000; Monteith & Voils, 2001). Indeed, perhaps the most important conclusions to emerge from prejudice research are these: (1) no one capable of human thought and speech is immune from harboring prejudice, (2) it often takes deliberate effort and awareness to reduce prejudice, and (3) with sufficient motivation, it can be done.