

PERSONALITY

Reading 25 ARE YOU THE MASTER OF YOUR FATE?

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If you ask yourself the question “Who am I?” you are asking the same basic question posed by personality psychologists. Personality psychologists seek to reveal the human characteristics that combine to make each person unique and to determine the origins of those characteristics. When behavioral scientists speak of personality, they are usually referring to human qualities that are relatively stable across situations and consistent over time. Who you are does not change each day, each week, or, usually, even each year or decade. Instead, certain basic characteristics about you are constant and predictable. Psychologists have proposed hundreds of personality theories over psychology’s history. Most of these models have been debated and argued so much that it is often unclear whether they truly measure meaningful differences among individuals. However, a few factors have been repeatedly shown to predict specific behaviors reliably. These are the focus of this section.

The first reading discusses Julian Rotter’s famous research into how people view the location of “control” in their lives. Some believe that their lives are controlled by external factors, such as fate or luck, but others feel the control is internal—in their own hands. This quality of a person’s belief in external versus internal control has been shown to be a consistent and important factor in defining who you are. Second, you will read about research from the 1970s by Sandra Bem, who literally revolutionized the way we view a fundamental and powerful component of personal identity: gender. Third is the highly influential study that first identified what many of you now know as Type A and Type B personalities and how these two types of people are fundamentally different. These differences are not minor or unimportant for many reasons, not the least of which is that Type A individuals may be more prone to heart attacks. You’ll also read about a study that has influenced virtually all branches of psychology by reminding us that human behavior must always be considered within a cultural context. This reading discusses the work of Harry Triandis, who, over the past 30 years, has carefully and convincingly developed his theory that most human societies fall within one of

two overarching categories: *collectivist* cultures and *individualistic* cultures. This single (though certainly not simple) dimension may explain a great deal about how the culture in which you are raised has a profound effect on who you are.

Reading 25: ARE YOU THE MASTER OF YOUR FATE?

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1–28.

Are the consequences of your behavior under your personal control or are they determined by forces outside of yourself? Think about it for a moment: When something good happens to you, do you take credit for it or do you think how lucky you were? When something negative occurs, is it usually due to your actions or do you chalk it up to fate? The same question may be posed in more formal psychological language: Do you believe that a causal relationship exists between your behavioral choices and their consequences?

Julian Rotter, one of the most influential behaviorists in psychology's history, proposed that individuals differ a great deal in terms of where they place the responsibility for what happens to them. When people interpret the consequences of their behavior to be controlled by luck, fate, or powerful others, this indicates a belief in what Rotter called an *external locus of control* (locus meaning location). Conversely, he maintained that if people interpret their own choices and personality as responsible for their behavioral consequences, they believe in an *internal locus of control*. In his 1966 article, Rotter explained that a person's tendency to view events from an internal, versus an external, locus of control is fundamental to who we are and can be explained from a social learning theory perspective.

In this view, as a person develops from infancy through childhood, behaviors in a given situation are learned because they are followed by some form of reward, or *reinforcement*. This reinforcement increases the child's expectation that a particular behavior will produce the desired reward. Once this expectancy is established, the removal of reinforcement will cause the expectancy of such a relationship between behavior and reinforcement to fade. Therefore, reinforcement is sometimes seen as contingent upon behavior, and sometimes it is not (see the discussion of contingencies in Reading 11 on the work of B. F. Skinner). As children develop, some will have frequent experiences in which their behavior directly influences consequences, while for others, reinforcement will appear to result from actions outside of themselves. Rotter claimed that the totality of your individual learning experiences creates in you a generalized expectancy about whether reinforcement is internally or externally controlled.

"These generalized expectancies," Rotter wrote, "will result in characteristic differences in behavior in a situation culturally categorized as chance-determined versus skill-determined, and may act to produce individual

differences within a specific condition" (p. 2). In other words, you have developed an internal or external interpretation of the consequences for your behavior that will influence your future behavior in almost all situations. Rotter believed that your locus of control, whether internal or external, is an important part of your personality.

Look back at the questions posed at the beginning of this chapter. Which do you think you are, an internal or an external locus-of-control person? Rotter wanted to study differences among people on this dimension and, rather than simply ask them, he developed a test that measured a person's locus of control. Once he was able to measure this characteristic in people, he could then study how it influenced their behavior.

THEORETICAL PROPOSITIONS

Rotter proposed to demonstrate two main points in his research. First, he predicted that a test could be developed to measure reliably the extent to which individuals possess an internal or an external locus-of-control orientation toward life. Second, he hypothesized that people will display stable individual differences in their interpretations of the causes of reinforcement in the same situations. He proposed to demonstrate his hypothesis by presenting research comparing behavior of "internals" with that of "externals" in various contexts.

METHOD

Rotter designed a scale containing a series of many pairs of statements. Each pair consisted of one statement reflecting an internal locus of control and one reflecting an external locus of control. Those taking the test were instructed to select "the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: Obviously there are no right or wrong answers" (p. 26). The test was designed so that participants had to choose one statement or the other and could not designate *neither* or *both*.

Rotter's measuring device endured many revisions and alterations. In its earliest form, it contained 60 pairs of statements, but by using various tests for reliability and validity, it was eventually refined and streamlined down to 23 items. Added to these were 6 "filler items," which were designed to disguise the true purpose of the test. Such filler items are often used in psychological tests because if participants were able to guess what the test is trying to measure, they might alter their answers in some way in an attempt to "perform better."

Rotter called his test the *I-E Scale* ("I" for Internal and "E" for External), which is the name it is known by today. Table 25-1 includes examples of typical items from the I-E Scale, plus samples of the filler items. If you examine the items, you can see quite clearly which statements reflect an internal or external orientation. Rotter contended that his test was a measure of the extent to which a person possesses the personality characteristic of internal or external locus of control.

TABLE 25-1 Sample Items and Filler Items from Rotter's I-E Scale

ITEM #	STATEMENTS
2a.	Many of the unhappy things in people's lives are partly due to bad luck.
2b.	People's misfortunes result from the mistakes they make.
11a.	Becoming a success is a matter of hard work; luck has little or nothing to do with it.
11b.	Getting a good job depends mainly on being in the right place at the right time.
18a.	Most people don't realize the extent to which their lives are controlled by accidental happenings.
18b.	There is really no such thing as "luck."
23a.	Sometimes I can't understand how teachers arrive at the grades I get.
23b.	There is a direct connection between how hard I study and the grades I get.
FILLER ITEMS	
1a.	Children get into trouble because their parents punish them too much.
1b.	The trouble with most children nowadays is that their parents are too easy with them.
14a.	There are certain people who are just no good.
14b.	There is some good in everybody.

(Adapted from pp. 13-14.)

Rotter's next, and most important, step was to demonstrate that he could actually use this characteristic to predict people's behavior in specific situations. To do this he reported on several studies (conducted by himself and others) in which scores on the I-E Scale were examined in relation to individuals' interactions with various events in their lives. These studies revealed significant correlations between I-E scores and people's behavior in many diverse situations, such as gambling, political activism, persuasion, smoking, achievement motivation, and conformity.

RESULTS

Following is a brief summary of the findings reported by Rotter of his research in the areas mentioned in the previous paragraph. (See pp. 19-24 of the original study for a complete discussion and citation of specific references.)

Gambling

Rotter reported on studies that looked at betting behavior in relation to locus of control. These studies found that individuals identified as internals by the I-E Scale tended to prefer betting on "sure things" and liked moderate odds over the long shots. Externals, on the other hand, would wager more money on risky bets. In addition, externals would tend to engage in more unusual shifts in betting, called the "gambler's fallacy" (such as betting more on a number that has not come up for a while on the basis that it is "due," when the true odds of it occurring are unchanged).

Persuasion

An interesting study cited by Rotter used the I-E Scale to select two groups of students, one highly internal and the other highly external. Both groups shared similar attitudes, on average, about the fraternity and sorority system on campus. Both groups were asked to try to persuade other students to change their attitudes about these organizations. The internals were found to be significantly more successful than externals in altering the attitudes of others. Conversely, other studies demonstrated that internals were more resistant to manipulation of their attitudes by others.

Smoking

An internal locus of control appeared to relate to self-control as well. Two studies discussed by Rotter found that (a) smokers tended to be significantly more external than nonsmokers and (b) individuals who were able to quit smoking after the original surgeon general's warning appeared on cigarette packs in 1966 were more internally oriented, even though both internals and externals believed the warning was true.

Achievement Motivation

If you believe your own actions are responsible for your successes, it is logical to assume that you would be more motivated to achieve success than someone who believes success is more a matter of fate. Rotter pointed to a study of 1,000 high school students that found a positive relationship between a high internal score on the I-E Scale and achievement motivation. The indicators of achievement included plans to attend college, amount of time spent on homework, and how interested the parents were in the students' school work. Each of these achievement-oriented factors was more likely to be found in those students who demonstrated an internal locus of control.

Conformity

One study was cited that exposed participants to the conformity test developed by Solomon Asch, in which a participant's willingness to agree with a majority's incorrect judgment was evidence for conforming behavior (see Reading 38 on Asch's conformity study). Participants were allowed to bet (with money provided by the experimenters) on the correctness of their judgments. Under this betting condition, those found to be internals conformed significantly less to the majority opinion and bet more money on themselves when making contrary judgments than did the externals.

DISCUSSION

As part of his discussion, Rotter posed possible sources for the individual differences he found on the dimension of internal-external locus of control. Citing various studies, he suggested three potential sources for the development of an internal or external orientation: cultural differences, socioeconomic differences, and variations in styles of parenting.

One study he cited found differences in locus of control among various cultures. In one rather isolated community in the United States, three distinct groups could be compared: Ute Indians, Mexican Americans, and Caucasians. The researchers found that those individuals of Ute heritage were, on average, the most external, while Caucasians were the most internal. The Mexican Americans scored between the other two groups on the I-E Scale. These findings, which appeared to be independent of socioeconomic level, suggested ethnic differences in locus of control.

Rotter also referred to some early and tentative findings indicating that socioeconomic levels within a particular culture may relate to locus of control. These studies suggested that a lower socioeconomic position predicts greater externality.

Styles of parenting were implicated by Rotter as an obvious source for our learning to be internal or external. Although he did not offer supportive research evidence at the time, he suggested that parents who administer rewards and punishments to their children in ways that are unpredictable and inconsistent would likely encourage the development of an external locus of control (this is discussed in greater detail shortly).

Rotter summarized his findings by pointing out that the consistency of the results leads to the conclusion that locus of control is a defining characteristic of individuals that operates fairly consistently across various situations. Furthermore, the influences on behavior produced by the internal-external dimension are such that it will influence different people to behave differently when faced with the same situation. In addition, Rotter contended that locus of control can be measured, and that the I-E Scale is an effective tool for doing so.

Rotter hypothesized that those with an internal locus of control (i.e., those who have a strong belief that they can control their own destiny) are more likely than externals to (a) gain information from the situations in their life in order to improve their future behavior in similar situations, (b) take the initiative to change and improve their condition in life, (c) place greater value on inner skill and achievement of goals, and (d) be more able to resist manipulation by others.

SUBSEQUENT RESEARCH

Since Rotter developed his I-E Scale, hundreds of studies have examined the relationship between locus of control and various behaviors. Following is a brief sampling of a few of those as they relate to rather diverse human behaviors.

In his 1966 article, Rotter touched on how locus of control might relate to health behaviors. Since then, other studies have examined the same relationship. In a review of locus-of-control research, Strickland (1977) found that individuals with an internal focus generally take more responsibility for their own health. They are more likely to engage in more healthy behaviors (such as not smoking and adopting better nutritional habits) and practice greater care in avoiding accidents. In addition, studies have found that internals generally have lower levels of stress and are less likely to suffer from stress-related illnesses.

Rotter's hypotheses regarding the relationship between parenting styles and locus of control have been at least partially confirmed. Research has shown that parents of children who are internals tend to be more affectionate, more consistent and fair with discipline, and more concerned with teaching children to take responsibility for their actions. Parents of externally oriented children have been found to be more authoritarian and restrictive and do not allow their children much opportunity for personal control (see Davis & Phares, 1969, for a discussion of those findings).

A fascinating study demonstrated how the concept of locus of control may have sociological and even catastrophic implications. Sims and Baumann (1972) applied Rotter's theory to explain why more people have died in tornados in Alabama than in Illinois. These researchers noticed that the death rate from tornados was five times greater in the South than in the Midwest, and they set out to determine the reason for this. One by one they eliminated all the explanations related to the physical locations, such as storm strength and severity (the storms are actually stronger in Illinois), time of day of the storms (an equal number occur at night in both regions), type of business and residence construction (both areas used similar construction techniques), and the quality of warning systems (even before warning systems existed in either area, Alabama had a higher death rate).

With all the obvious environmental reasons ruled out, Sims and Baumann suggested that the difference might be due to psychological variables and proposed the locus-of-control concept as a likely possibility. Questionnaires containing a modified version of Rotter's I-E Scale were administered to residents of four counties in Illinois and Alabama that had experienced a similar incidence of tornado-caused deaths. They found that the respondents from Alabama demonstrated a significantly greater external locus of control than did those from Illinois. From this finding, as well as from responses to other items on the questionnaire relating to tornado behavior, the researchers concluded that an internal orientation promotes behaviors that are more likely to save lives in the event of a tornado (such as paying attention to the news media or alerting others). This stems directly from the internals' belief that their behavior will be effective in changing the outcome of the event. In this study, Alabamians were seen as "less confident in themselves as causal agents; less convinced of their ability to engage in effective action. . . . The data constitute a suggestive illustration of how man's personality is active in determining the quality of his interaction with nature" (Sims & Baumann, 1972, p. 1391).

RECENT APPLICATIONS

To say that hundreds of studies have incorporated Rotter's locus-of-control theory since his article appeared in 1966 may have been a serious understatement. In reality, there may have been thousands! Such a great reliance on Rotter's theory speaks clearly to the broad acceptance of the impact and validity of the internal-external personality dimension. Following are a few representative examples from the great variety of recent studies citing his pioneering work.

Do you tend to feel sorry for yourself when you are stressed and things don't go your way? Psychologists (and others) call such a response "self-pity." A study by Stober (2003) examined how self-pity is linked to such other personality characteristics as anger, loneliness, and internal-external control beliefs. One of the study's strongest findings was a connection between self-pity and locus of control. "With respect to control beliefs, individuals high in self-pity showed generalized externality beliefs, seeing themselves as controlled by both chance and powerful others" (p. 183). In addition, self-pity was shown to be associated with depression, which is linked, in turn, to an external locus of control (Yang & Chum, 2000). This connection is addressed in greater detail in in Reading 31 on Seligman's *learned helplessness* study.

When people discuss Rotter's research on locus of control, the subject of religious faith often arises. Many devoutly religious people believe that it is desirable and proper at times to place their fate in God's hands, yet within Rotter's theory, this would indicate an external locus of control and its potential negative connotations. A fascinating study in the *Journal of Psychology and Religion* addressed this very issue (Welton, et al., 1996). Using various locus-of-control scales and subscales, participants were assessed on their degree of internal locus of control, perceived control by powerful others, belief in chance, and belief in "God control." The advantages associated with an internal locus of control were also found in the participants scoring high on the God-control dimension. The authors contend that if a person has an external locus of control, as measured by Rotter's scale, but the external power is perceived as a strong faith in a supreme being, he or she will be less subject to the typical problems associated with externals (e.g., powerlessness, depression, low achievement, and low motivation for change).

A great deal of important cross-cultural research has relied heavily on Rotter's conceptualization of the internal-external locus of control dimension of personality. For example, one study from Russian researchers examined locus-of-control and right-wing authoritarian attitudes in Russian and American college students (D'yakonova & Yurtaikin, 2000). Results indicated that among the U.S. students, greater internal locus of control was correlated with higher levels of authoritarianism, while no such connection was found for the Russian participants. Another cross-cultural study relied on Rotter's I-E Scale to examine the psychological adjustment to the diagnosis of cancer in a highly superstitious, collectivist culture (Sun & Stewart, 2000). Interestingly, findings from this study indicated that "even in a culture where supernatural beliefs are widespread, an [internal locus of control] relates positively and 'chance' beliefs relate negatively with adjustment" to a serious illness such as cancer (p. 177).

Research areas other than those discussed previously that have cited Rotter's study include posttraumatic stress disorder, issues of control and aging, childbirth methods, coping with anticipatory stress, the effects of environmental noise, academic performance, white-collar crime, adult children of alcoholics, child molestation, mental health following natural disasters, contraceptive use, and HIV and AIDS prevention research.

CONCLUSION

The dimension of internal–external locus of control has been generally accepted as a relatively stable aspect of human personality that has meaningful implications for predicting behavior across a wide variety of situations. The descriptor *relatively stable* is used because a person's locus of control can change under certain circumstances. Those who are externally oriented often will become more internal when their profession places them in positions of greater authority and responsibility. People who are highly internally oriented may shift toward a more external focus during times of extreme stress and uncertainty. Moreover, it is possible for individuals to learn to be more internal, if given the opportunity.

Implicit in Rotter's concept of locus of control is the assumption that internals are better adjusted and more effective in life. Although most of the research confirms this assumption, Rotter, in his later writings, sounded a note of caution (see Rotter, 1975). Everyone, especially internals, must be attentive to the environment around them. If a person sets out to change a situation that is not changeable, frustration, disappointment, and depression are the potential outcomes. When forces outside of the individual are *actually* in control of behavioral consequences, the most realistic and healthy approach to take is probably one of an external orientation.

- Davis, W., & Phares, E. (1969). Parental antecedents of internal-external control of reinforcement. *Psychological Reports, 24*, 427–436.
- D'yakonova, N., & Yurtaikin, V. (2000). An authoritarian personality in Russia and in the USA: Value orientation and locus of control. *Voprosy Psikhologii, 4*, 51–61.
- Rotter, J. (1975). Some problems and misconceptions related to the construct of internal versus external reinforcement. *Journal of Consulting and Clinical Psychology, 43*, 56–67.
- Sims, J., & Baumann, D. (1972). The tornado threat: Coping styles in the North and South. *Science, 176*, 1386–1392.
- Stober, J. (2003). Self-pity: Exploring the links to personality, control beliefs, and anger. *Journal of Personality, 71*, 183–220.
- Strickland, B. (1977). Internal-external control of reinforcement. In T. Blass (Ed.), *Personality variables in social behavior*. Hillsdale, NJ: Erlbaum.
- Sun, L., & Stewart, S. (2000). Psychological adjustment to cancer in a collective culture. *International Journal of Psychology, 35*(5), 177–185.
- Welton, G., Adkins, A., Ingle, S., & Dixon, W. (1996). God control—The 4th dimension. *Journal of Psychology and Theology, 24*(1), 13–25.
- Yang, B., & Clum, G. (2000). Childhood stress leads to later suicidality via its effects on cognitive functioning. *Suicide and Life-Threatening Behavior, 30*(3), 183–198.

Reading 26: MASCULINE OR FEMININE . . . OR BOTH?

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155–162.

Are you male or female? Are you a man or a woman? Are you masculine or feminine? These are three seemingly similar questions, yet the range of possible answers may surprise you. As for the first question, the answer is usually fairly

clear: it is a biological answer based on a person's chromosomes, hormones, and sexual anatomical structures. Most people also have little trouble answering the second question with confidence. Virtually all of you are quite sure about which sex you perceive yourself to be, and you've been sure since you were about 4 years old. Odds are good you did not have to stop for even a split second to think about whether you perceive yourself to be a man or a woman.

However, the third question might not be quite so easy to answer. Different people possess varying amounts of "maleness" and "femaleness," or masculinity and femininity. If you think about people you know, you can probably place some on the extremely feminine side of this dimension (they are *more likely* to be women); others fit best on the extremely masculine side (they are *more likely* to be men); and still others seem to fall somewhere between the two, possessing both masculine and feminine characteristics (they may be *either* men or women). These "categories" are not intended to be judgmental; they simply define variations in one important characteristic among people. This masculinity-femininity dimension forms the basis of what psychologists usually refer to as *gender*, and your perception of your own maleness and femaleness is your *gender identity*. Your gender identity is one of the most basic and most powerful components comprising your personality: yours and others' perceptions about who you are.

Prior to the 1970s, behavioral scientists (and most nonscientists as well) usually assumed a mutually exclusive view of gender: that people's gender identity was either primarily masculine or primarily feminine. Masculinity and femininity were seen as opposite ends of a one-dimensional gender scale. If you were to complete a test measuring your gender identity based on this view, your score would place you somewhere along a single scale; either more toward the masculine or more toward the feminine side of the scale. Furthermore, researchers and clinicians presumed that psychological adjustment was, in part, related to how well a person "fit" into one gender category or the other, based on their biological sex. In other words, the thinking was that for optimal psychological health, men should be as masculine as possible and women should be as feminine as possible.

Then, in the early 1970s this one-dimensional view of gender was challenged in an article by Anne Constantinople (1973) claiming that masculinity and femininity are not two ends of a single scale but, rather, are best described as two *separate* dimensions on which individuals could be measured. In other words, a person could be high or low in masculinity and high or low in femininity *at the same time*. Figure 26-1 illustrates the comparison of a one-dimensional and a two-dimensional concept of gender.

This idea may not seem particularly surprising to you, but it was revolutionary when first presented. The two-dimensional view of gender was seized upon at the time by Sandra Bem of Stanford University. Bem challenged the prevailing notion that healthy gender identity is represented by behaving predominantly according to society's expectations for one's biological sex. She proposed that a more balanced person, who is able to incorporate both masculine

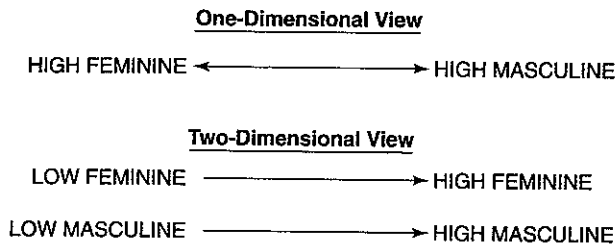


FIGURE 26-1 Comparison of the traditional one-dimensional and the more recent two-dimensional models of gender.

and feminine behaviors, may actually be happier and better adjusted than someone who is strongly sex-typed as either masculine or feminine. Bem took the research a step further and set out to develop a method for measuring gender on a two-dimensional scale. In the article that forms the basis for this chapter, Bem coined the term *androgynous* (from *andro* meaning “male” and *gyn* referring to “female”) to describe individuals who embrace both masculine and feminine characteristics, depending on which behaviors best fit a particular situation. Moreover, Bem contended that not only are some people androgynous, but androgyny offers an *advantage* of greater behavioral flexibility as a person moves from situation to situation in life. Bem explained it in this way:

The highly sex-typed individual is motivated to keep [his or her] behavior consistent with an internalized sex-role standard, a goal that [he or she] presumably accomplishes by suppressing any behavior that might be considered undesirable or inappropriate for [his or her] sex. Thus, whereas a narrowly masculine self-concept might inhibit behaviors that are stereotyped as feminine, and a narrowly feminine self-concept might inhibit behaviors that are stereotyped as masculine, a mixed, or androgynous, self-concept might allow an individual to engage freely in both “masculine” and “feminine” behaviors. (p. 155)

For example, you may know a woman who is gentle, sensitive, and soft-spoken (traditional feminine characteristics), but she is also ambitious, self-reliant, and athletic (traditional masculine characteristics). On the other hand, a male friend of yours may be competitive, dominant, and a risk taker (masculine traits), but he displays traditional feminine characteristics as well, such as affection, sympathy, and cheerfulness. Bem would describe such individuals as *androgynous*. This article explains the theories and processes Bem used to develop a scale for assessing gender, the *Bem Sex-Role Inventory* (BSRI).

THEORETICAL PROPOSITIONS

Whenever scientists propose new and novel theories that challenge the prevailing views of the time, they must bear the responsibility of demonstrating the validity of their revolutionary ideas. If Bem wanted to explore the notion of androgyny and demonstrate differences between androgynous people and those who are highly masculine or feminine, she needed to find a way to

establish the existence of androgynous individuals. In other words, she had to *measure it*.

Bem contended that measuring androgyny would require a scale that was fundamentally different from masculinity–femininity scales that had been used previously. With this goal in mind, her scale contained the following innovations:

1. Bem's first concern was to develop a gender scale that did not assume a one-dimensional view: that masculinity and femininity were opposite ends of a single dimension. Her test incorporated two separate scales, one measuring masculinity and another measuring femininity (see Table 26-1).
2. Her scale was based on masculine and feminine traits that were *perceived* as desirable for men and women respectively. Previous gender scales were based on the behaviors most commonly *observed* in men and women, rather than those judged by U.S. society to be more desirable.

A characteristic qualified as masculine if it was judged to be more desirable for a man than for a woman, and it qualified as feminine if it was judged to be more desirable for a woman than for a man (pp. 155–156).

3. The BSRI was designed to differentiate among masculine, feminine, and androgynous individuals by looking at the *difference* in the score on the feminine section of the scale and the score on the masculine section. In other words, when a person's feminine trait score is subtracted from his or her masculine trait score, the difference would determine the degree of masculinity, femininity, or androgyny.

Bem decided that her scale would be comprised of a list of personality characteristics or traits. To arrive at a gender score, each characteristic could simply be rated on a scale of 1 to 7 indicating the degree to which respondents perceived that a particular trait described them. Let's take a look at how the scale was developed.

METHOD

Item Selection

Remember, Bem's idea was to use masculine and feminine characteristics that are seen by society as desirable in one sex or the other. To arrive at her final scale, she began with long lists of positively valued characteristics that seemed to her and several of her psychology students to be either masculine, feminine, or neither masculine nor feminine. Each of these three lists of traits contained about 200 items. She then asked 100 undergraduate students (half male and half female) at Stanford University to serve as judges and rate whether the characteristics were more desirable for a man or for a woman on a 7-point scale from 1 ("not at all desirable") to 7 ("extremely desirable") in U.S. society.

Using these ratings from the student judges, Bem selected the "top 20" highest-rated characteristics for the masculinity scale and for the femininity scale. She also selected items that were rated no more desirable for men than for women but were equally desirable for *anyone* to possess regardless of sex (these are not androgynous items but simply gender neutral). She selected 10 positive items and 10 negative gender-neutral items. These items were included in the final scale to ensure that respondents would not be overly influenced by seeing all masculine and feminine descriptors or all desirable items. The final scale consisted of 60 items. A sampling of the final selection of traits on the BSRI is shown in Table 26-1. Note that in the actual scale, the items are not divided according to sex-type but are mixed up in random order.

TABLE 26-1 Modified Sex Role Inventory

RATING	FEMININE ITEMS	RATING	MASCULINE ITEMS	RATING	NEUTRAL ITEMS
_____	Affectionate	_____	Acts as a leader	_____	Adaptable
_____	Yielding	_____	Willing to take risks	_____	Conceited
_____	Cheerful	_____	Ambitious	_____	Unpredictable
_____	Flatterable	_____	Willing to take a stand	_____	Truthful
_____	Compassionate	_____	Analytical	_____	Inefficient
_____	Understanding	_____	Strong Personality	_____	Tactful
_____	Gentle	_____	Assertive	_____	Jealous
_____	Feminine	_____	Self-sufficient	_____	Sincere
_____	Loves children	_____	Masculine	_____	Moody
_____	Soft spoken	_____	Independent	_____	Reliable

Modified, based on Table 1, p. 156

Rate items using the following scale as they apply to you:

- 1 = Never or almost never true
- 2 = Usually not true
- 3 = Sometimes but infrequently true
- 4 = Occasionally true
- 5 = Often true
- 6 = Usually true
- 7 = Always or almost always true

Scoring Key

Femininity Score: Total of Feminine ratings ÷ 10 = _____

Masculinity Score: Total of Masculine ratings ÷ 10 = _____

Androgyny Score: Subtract Masculine from Feminine = _____

Interpretation:

- Feminine = 1.00 or greater
- Near Feminine = .50 to .99
- Androgynous = -.50 to .49
- Near Masculine = -1.00 to -.49
- Masculine = less than -1.00

Scoring

As mentioned previously, a person completing the BSRI simply needs to respond to each item using a 7-point scale indicating how well the descriptor describes him- or herself. The response scale is as follows: 1 = Never or almost never true; 2 = Usually not true; 3 = Sometimes, but infrequently, true; 4 = Occasionally true; 5 = Often true; 6 = Usually true; 7 = Always or almost always true. After respondents complete the scale, they receive three scores: a masculinity score, a femininity score, and, most important for this article, an androgyny score. The masculinity score is determined by adding up all the scores on the masculine items and dividing by 20 to obtain the average rating on those items. The femininity score is likewise determined. The average score on each of these scales may be anywhere from 1.0 to 7.0. Have you figured out how an androgyny score might be calculated from these averages? Remember, the scale taps into masculinity and femininity independently, but it does not contain androgynous items per se. If you are thinking androgyny could be determined by looking at the degree of *difference* between a person's masculine and feminine scores, you are right: that is exactly what Bem did. Androgyny was determined by subtracting the masculinity score from the femininity score. Androgyny scores, then, could range from -6 to +6. It's simple, really. Following are three rather extreme examples to illustrate a masculine sex-typed person, a feminine sex-typed person, and an androgynous person.

Jennifer's masculinity score is 1.5, and her femininity score is 6.4. Subtracting 1.5 from 6.4 gives Jennifer an androgyny score of 4.9. Richard's masculinity score is 5.8, and his femininity score is 2.1. So, Richard's androgyny score is -3.7. Dana receives a masculinity score of 3.9 and a femininity score of 4.3. Dana's androgyny score, then, is 0.4.

$$\begin{array}{r} \text{Jennifer: Femininity Score} = 6.4 \\ \text{Minus Masculinity score} = -1.5 \\ \hline \text{Androgyny score} = 4.90 \end{array}$$

$$\begin{array}{r} \text{Richard: Femininity Score} = 2.1 \\ \text{Minus Masculinity score} = -5.8 \\ \hline \text{Androgyny score} = -3.70 \end{array}$$

$$\begin{array}{r} \text{Dana: Femininity Score} = 4.3 \\ \text{Minus Masculinity score} = -3.9 \\ \hline \text{Androgyny score} = 0.40 \end{array}$$

Looking at the numbers, which of our three examples scored the *highest* in androgyny? The answer is Dana because Dana's scores for masculine and feminine characteristics were about the same (the score was closest to zero) and did not show much bias in either direction, unlike Jennifer and Richard. Therefore, Dana's score reflected a *lack* of sex-typed self-perception and more of a balance between masculine and feminine, which is the *definition* of androgyny.

The scoring on the BSRI is interpreted like this: scores closest to zero (whether positive or negative) indicate androgyny. As scores move farther away from zero in the plus direction, greater femininity is indicated; as scores move farther away from zero in the minus direction, greater masculinity is indicated.

You may want to try completing the scale for yourself. Of course, at this point you are *not* the ideal respondent, because you now know too much about how the scale works! Also, you will be rating feminine, masculine, and neutral traits separately, rather than all mixed up as they would be in the actual scale. Nevertheless, with those cautions in mind, you should feel free to give it a try. Table 26-1 provides simplified scoring and interpretation guidelines.

RESULTS

Any measuring device must be both reliable and valid. *Reliability* refers to a scale's consistency of measurement—that is, how well the various items tap into the same characteristic being measured, and the scale's ability to produce similar results over repeated administrations. *Validity* refers to how well the scale truly measures what it is intended to measure—in the case of the BSRI, that is masculinity and femininity.

Reliability of the BSRI

Statistical analyses on the scores from the student samples demonstrated that the internal consistency of the BSRI was very high for both scales. This implies that the 20 masculine items were all measuring a single trait (presumably masculinity), and the 20 feminine items were measuring a single trait (presumably femininity). To determine the scale's consistency of measurement over time, Bem administered the BSRI a second time to about 60 of the original respondents 4 weeks later. Their scores for the first and second administrations correlated very highly, thereby suggesting a high level of "test-retest" reliability.

Validity of the BSRI

To ensure that the BSRI was valid, the masculinity and femininity scales must be analyzed to ensure that they are not measuring the *same* trait. This was important because a basic theoretical proposition of Bem's study was that masculinity and femininity are *independent* dimensions of gender and should be able to be measured separately. Bem demonstrated this by correlating scores on the masculine scale and the feminine scale of the BSRI. The correlations showed that the scales were clearly *unrelated* and functioned independently from each other.

Next, Bem needed to verify that the scale was indeed measuring masculine and feminine gender characteristics. To confirm this, Bem analyzed average scores on the masculine and feminine scales for men and women separately. You would expect such an analysis should show that men scored higher on the masculine items and women scored higher on the feminine items. This is exactly what Bem found for respondents from both colleges, and the difference was highly statistically significant.

TABLE 26-2 Percentages of Feminine, Masculine, and Androgynous Respondents

CATEGORY	MALES	FEMALES
Feminine	7%	35%
Near Feminine	6%	17%
Androgynous	35%	29%
Near Masculine	19%	11%
Masculine	33%	8%

Number of respondents = 917

(Adapted from Table 7, p. 161, samples combined).

Bem divided her sample of respondents into the gender categories listed previously in this discussion: masculine, feminine, and androgynous. She found a large number of people who had very small differences in their feminine and masculine scores. In other words, they were androgynous. Table 26-2 shows the percentages of masculine, feminine, and androgynous respondents in Bem's study.

DISCUSSION

The discussion section of Bem's article is short, succinct, and cogent. The best way to represent it is to quote it here:

It is hoped that the development of the BSRI will encourage investigators in the areas of sex differences and sex roles to question the traditional assumption that it is the sex-typed individual who typifies mental health and to begin focusing on the behavioral and societal consequences of the more flexible sex-role concepts. In a society where rigid sex-role differentiation has already outlived its utility, perhaps the androgynous person will come to define a more human standard of psychological health. (p. 162)

This statement from Bem illustrates how this study changed psychology. Over the decades since Bem's article, Western cultures have become increasingly accepting of the idea that some people are more androgynous than others, and that possessing some characteristics of both traditionally masculine and feminine characteristics is not only acceptable, but may provide certain advantages. More men and women than ever before are choosing to engage in vocations, avocations, sports activities, and family activities that have traditionally been seen as "limited" to their opposite gender. From women corporate executives to stay-at-home dads, from female firefighters and soldiers to male nurses and schoolteachers, and from women taking charge to men exploring their sensitive sides, the social changes in gender roles and expectations are everywhere you look.

This is not to say, by any means, that the culture has become "gender-blind." On the contrary, sex-role expectations still exert powerful influences over our choices of behaviors and attitudes, and discrimination based on gender continues to be a significant social problem. In general, males are still expected to be

more assertive and women more emotionally expressive; the vast majority of airline pilots still are men (96%), and nearly all dental hygienists still are women (98%); but the degree of *cultural* differentiation along gender lines has decreased and is continuing to do so.

A great deal of research was generated by Bem's new conceptualization of gender. As discussed previously, prior to the 1970s the prevailing belief was that people would be most well adjusted in life if their "gender matched their sex"—that is, boys and men should display masculine attitudes and behaviors, and girls and women should display feminine attitudes and behaviors. However, the "discovery" of androgyny shifted this focus, and studies began to explore gender differences among masculine, feminine, *and* androgynous individuals.

CRITICISMS AND SUBSEQUENT RESEARCH

Research has shown that androgynous children and adults tend to have higher levels of self-esteem and are more adaptable in diverse settings (Taylor & Hall, 1982). Other research has suggested that androgynous individuals have greater success in heterosexual intimate relationships, probably due to their greater ability to understand and accept each other's differences (Coleman & Ganong, 1985). More recent research has even revealed that people with the most positive traits of androgyny are psychologically healthier and happier (Woodhill & Samuels, 2003). However, the basic theory of androgyny as developed by Bem and others has undergone various changes and refinements over the years.

Numerous researchers have suggested that the psychological advantages experienced by people who score high in androgyny may be due more to the presence of masculine traits rather than a balance between male and female characteristics (Whitley, 1983). If you think about it, this makes sense. Clearly, many traditional feminine traits, such as those termed dependent, self-critical, and overly emotional, are seen by society as undesirable. So it stands to reason that people who possess more masculine than feminine characteristics will receive more favorable treatment by others, which in turn creates greater levels of self-confidence and self-esteem in the individual. However, not all masculine qualities are positive, and not all feminine qualities are negative. Positive and negative traits exist for both genders.

This has led researchers to propose a further refinement of the androgyny concept to include *four* dimensions: desirable femininity, undesirable femininity, desirable masculinity, and undesirable masculinity (see Ricciardelli & Williams, 1995). Qualities such as firm, confident, and strong are seen as desirable masculine traits, while bossy, noisy, and sarcastic are undesirable masculine traits. On the feminine side, patient, sensitive, and responsible are desirable traits, and nervous, timid, and weak are undesirable traits. Depending on how someone's set of personality traits lines up, a person could be seen as *positive masculine, negative masculine, positive feminine, negative feminine, positive androgynous, or negative androgynous*.

When gender characteristics are more carefully defined to consider both positive and negative traits, the advantages for positive androgynous individuals become even more pronounced (i.e., Woodhill & Samuels, 2003). People who possess the best of male and female gender qualities are more likely to be more well-rounded, happier, more popular, better liked, more flexible and adaptable, and more self-loving than those who are able to draw on only one set of gender traits or than those who combine negative aspects of both genders. Just imagine someone (male or female) who is patient, sensitive, responsible, firm, confident, and strong (positive androgyny) compared to someone who is nervous, timid, weak, bossy, noisy, and sarcastic (negative androgyny) to get the idea behind this enhancement of Bem's theory.

Bem continues to be a leading researcher in the field of gender roles. She has applied her theories and research to the ongoing debates about gender inequality, which she discusses in detail in her 1994 book, *The Lenses of Gender*. More recently, she has mapped her ideas onto the complexities of marriage, family, and child rearing in her book *An Unconventional Family* (1998). In this book, Bem drew from her own experiences with her former husband, Daryl Bem (the noted Cornell psychologist), to explore how a couple might attempt to avoid gender-stereotyped expectations, function as two truly equal partners, and raise their children as "gender-liberated," positive-androgynous individuals.

RECENT APPLICATIONS

One question that may have occurred to you as you read this chapter was whether or not the items used to measure masculinity and femininity are still valid—that is, do they still discriminate accurately between people who are masculine and feminine? In fact, you may have disagreed with some or many of them. After all, this study is several decades old and society's expectations of sex-typed behaviors are bound to change over time, right? The answer to that question is a resounding "Maybe!" One study from the late 1990s reexamined all the items on the BSRI with a sample of students from a midsize U.S. university in the South. The researchers were able to demonstrate that all but two items from Bem's scale still distinguished masculinity and femininity to a statistically significant degree (Holt & Ellis, 1998). The two exceptions—"childlike" and "loyal"—were both feminine descriptors on the BSRI but were not rated as more desirable for women than for men in the 1998 study.

Another study, however, found strikingly conflicting results. When students from an urban U.S. university in the Northeast were asked to validate the BSRI's descriptors, results were quite different (Konrad & Harris, 2002). These researchers found that (a) women rated only *one* masculine item out of 20 ("masculine") more desirable for men than for women; (b) men rated only 13 out of the 20 masculine items more desirable for men than for women; (c) women rated only 2 of the feminine items more desirable for women than for men ("feminine" and "soft spoken"); and (d) men rated just 7 feminine items more desirable for women than for men.

How can we reconcile these discrepancies? One possibility is that people's views of gender vary significantly according to geographic region. Holt and Ellis's data were from the southern United States (and a relatively small town), while Konrad and Harris's participants were from the northeastern United States (and a large city). Alternatively, the authors acknowledge that the participants in their study may have "guessed" the purpose of the study and slanted their answers accordingly:

Specifically, despite the fact that respondents were asked to rate only one sex or the other, merely specifying the sex of the target could have cued respondents to the study's purpose. Given this possibility, respondents might have provided more egalitarian responses than they actually had in order to present a positive self-image. (Konrad and Harris, 2002, p. 270)

The BSRI continues to exert a powerful influence in studies involving sexuality and gender. In fact, it has formed the basis for gender assessment in hundreds of studies on a wide range of topics. For example, the BSRI has been used in studies on the effects of men's attitudes toward women after viewing sexually explicit films (Mulac, Jansma, & Linz, 2002); how people change their gender behaviors depending on the sex of the person with whom they are interacting (Pickard & Strough, 2003); cross-cultural variations in gender roles (Sugihara & Katsurada, 2000); and how gender identity affects eating disorders such as bulimia and anorexia nervosa (Klingenspor, 2002).

CONCLUSION

This study by Sandra Bem changed psychology because it altered the way psychologists, individuals, and entire societies view one of the most basic human characteristics: gender identity. Bem's research has played a pivotal role in broadening our view of what is truly meant to be male or female, masculine or feminine and, in doing so, has allowed everyone the opportunity to expand their range of activities, choices, and life goals.

- Bem, S. L. (1993). *The Lenses of Gender: Transforming the Debate on Sexual Inequality*. New Haven, CT: Yale University Press.
- Bem, S. L. (1998). *An Unconventional Family*. New Haven, CT: Yale University Press.
- Coleman, M., & Ganong, L. (1985). Love and sex role stereotypes: Do macho men and feminine women make better lovers? *Journal of Personality and Social Psychology*, 49, 170–176.
- Constantinople, A. (1973). Masculinity-femininity: An exception to a famous dictum? *Psychological Bulletin*, 80, 389–407.
- Holt, C., & Ellis, J. (1998). Assessing the current validity of the Bem Sex Role Inventory. *Sex Roles: A Journal of Research*, 39, 929–941.
- Klingenspor, B. (2002). Gender-related self-discrepancies and bulimic eating behavior. *Sex Roles: A Journal of Research*, 24, 51–64.
- Konrad, A., & Harris, C. (2002). Desirability of the Bem Sex-Role Inventory for women and men: A comparison between African Americans and European Americans. *Sex Roles: A Journal of Research*, 47, 259–271.
- Mulac, A., Jansma, L., & Linz, D. (2002). Men's behavior toward women after viewing sexually-explicit films: Degradation makes a difference. *Communication Monographs*, 69, 311–328.
- Pickard, J., & Strough, J. (2003). The effects of same-sex and other-sex contexts on masculinity and femininity. *Sex Roles: A Journal of Research*, 48, 421–432.

- Ricciardelli, L., & Williams, R. (1995). Desirable and undesirable gender traits in three behavioral domains. *Sex Roles, 33*, 637-655.
- Sugihara, Y., & Katsurada, E. (2000). Gender-role personality traits in Japanese culture. *Psychology of Women Quarterly, 24*, 309-318.
- Taylor, M., & Hall, J. (1982). Psychological androgyny: Theories, methods and conclusions. *Psychological Bulletin, 92*, 347-366.
- Whitley, B. (1983). Sex role orientation and self esteem: A critical meta-analytic review. *Journal of Personality and Social Psychology, 44*, 773-786.
- Woodhill, B., & Samuels, C. (2003). Positive and negative androgyny and their relationship with psychological health and well-being. *Sex Roles, 48*, 555-565.

Reading 27: RACING AGAINST YOUR HEART

Friedman, M., & Rosenman, R. H. (1959). Association of specific overt behavior pattern with blood and cardiovascular findings. *Journal of the American Medical Association, 169*, 1286-1296.

Who are you? If someone were to ask you that question, you would probably respond by describing some of your more obvious or dominant characteristics. Such characteristics, often referred to as traits, are important in making you the unique person that you are. Traits are assumed to be consistent across situations and over time. Psychologists who have supported the trait theory of personality (and not all have) have proposed that personality consists of various groups of traits, such as androgyny or locus of control, that exist in varying amounts in all of us. Most interesting to psychologists (and everyone, really) is the ability of a person's traits to predict his or her behavior in given situations and over time. In other words, trait theorists believe that insight into your unique profile of traits will allow us to predict various behavioral outcomes for you now and in the future. Therefore, it is easy to imagine how dramatically this interest would increase if certain personality characteristics were found to predict how healthy you will be or even your chances of dying from a heart attack.

You are probably aware of one group of personality characteristics related to health, popularly known as the *Type A personality*. To be precise, *Type A* refers to a specific *pattern* of behaviors rather than the overall personality of an individual. This behavior pattern was first reported in the late 1950s by two cardiologists, Meyer Friedman (1911-2001) and Ray Rosenman. Their theory and findings have exerted a huge influence on linking psychology and health and on our understanding of the role of personality in the development and prevention of illness.

THEORETICAL PROPOSITIONS

The story about how these doctors first realized the idea for their research demonstrates how careful observation of small, seemingly unimportant details can lead to major scientific breakthroughs. Dr. Friedman was having the furniture in his office waiting room reupholstered. The upholsterer pointed out how the material on the couches and chairs had worn out in an odd way.

The front edges of the seat cushions had worn away faster than the rest. It was as if Dr. Friedman's cardiac patients were literally "sitting on the edge of their seats." This observation prompted Friedman to wonder if his patients (people with heart disease) were different in some important characteristic, compared to those of doctors in other specialties.

Through surveys of executives and physicians, Friedman and Rosenman found a common belief that people exposed over long periods of time to chronic stress stemming from excessive drive, pressure to meet deadlines, competitive situations, and economic frustration are more likely to develop heart disease. They decided to put these ideas to a scientific test.

METHOD

Using their earlier research and clinical observations, the two cardiologists developed a *model*, or set of characteristics, for a specific overt (observable) behavior pattern that they believed was related to increased levels of cholesterol and consequently to coronary heart disease (CHD). This pattern, labeled *pattern A*, consisted of the following characteristics: (1) an intense, sustained drive to achieve one's personal goals; (2) a profound tendency and eagerness to compete in all situations; (3) a persistent desire for recognition and advancement; (4) continuous involvement in multiple activities that are constantly subject to deadlines; (5) habitual tendency to rush to finish activities; and (6) extraordinary mental and physical alertness (p. 1286).

The researchers then developed a second set of overt behaviors, labeled *pattern B*. Pattern B was described as essentially the opposite of pattern A and was characterized by a relative absence of the following: drive, ambition, sense of time urgency, desire to compete, or involvement in deadlines.

Friedman and Rosenman next needed to find participants for their research who fit the descriptions of patterns A and B. To do this they contacted managers and supervisors of various large companies and corporations. They explained the behavior patterns and asked the managers to select from among their associates those who most closely fit the particular patterns. The groups that were finally selected consisted of various levels of executives and nonexecutives, all males. Each group consisted of 83 men, with an average age of 45 years in group A and 43 years in group B. All participants were given several tests relating to the goals of the study.

First, the researchers designed interviews to assess the history of CHD in the participants' parents; the participants' own history of heart trouble; the number of hours of work, sleep, and exercise each week; and smoking, alcohol, and dietary habits. Also during these interviews, the researchers determined if a participant had a fully or only partially developed behavior pattern in his group (either A or B), based on body movements, tone of conversation, teeth clenching, gesturing, general air of impatience, and the participants' own admission of drive, competitiveness, and time urgency. It was determined that 69 of the 83 men in group A exhibited this fully developed pattern, while 58 of the 83 participants in group B were judged to be of the fully developed Type B.

Second, all participants were asked to keep a diary of everything they ate or drank over one week's time. Code numbers were assigned to the participants so that they would not feel reluctant to report alcohol consumption honestly. The diets of the participants were then broken down and analyzed by a hospital dietitian who was not aware of the participants' identities or to which group they belonged.

Third, research assistants took blood samples from all participants to measure cholesterol levels and clotting time. Instances of coronary heart disease were determined through careful questioning of the participants about past coronary health and through standard electrocardiogram readings. Rosenman and a cardiologist not involved in the study interpreted these findings independently (to avoid bias). With one exception, their interpretations agreed for all participants. The researchers also determined the number of participants with *arcus senilis* (the formation of an opaque ring around the cornea of the eye caused by the breakdown of fatty deposits in the bloodstream) through illuminated inspection of the participants' eyes.

Now, let's sum up Friedman and Rosenman's data and see what they found.

RESULTS

The interviews indicated that the men chosen for each group fit the profiles developed by the researchers. Group A participants were found to be chronically harassed by commitments, ambitions, and drives. Also, they were clearly eager to compete in all their activities, both professional and recreational. In addition, they also admitted a strong desire to win. The men in group B were found to be strikingly different from those in group A, especially in their lack of the sense of time urgency. The men in group B appeared to be satisfied with their present positions in life and avoided pursuing multiple goals and competitive situations. They were much less concerned about advancement and typically spent more time with their families and in noncompetitive recreational activities.

Table 27-1 is a summary of the most relevant comparisons for the two groups on the characteristics from the tests and surveys. Table 27-2 summarizes the outcome measurements relating to blood levels and illnesses. In Table 27-1 you can see that the two groups were similar on every measured characteristic. Although the men in group A tended to be a little higher on most of the measurements, the only differences that were statistically significant were the number of cigarettes smoked each day and the percentage of men whose parents had a history of coronary heart disease.

However, if you take a look at the cholesterol and illness levels in Table 27-2, some very convincing differences emerge. First, though, considering the overall results in the table, it appears that no meaningful difference in blood clotting time was found for the two groups. The speed at which your blood coagulates relates to your potential for heart disease and other vascular illness. The slower your clotting time, the less your risk. To examine this statistic more

TABLE 27-1 Comparison of Characteristics for Group A and Group B (Averages)

	WEIGHT	WORK HOURS/ WEEK	EXERCISE HOURS/ WEEK	NUMBER OF SMOKERS	CIGARETTES/ DAY	ALCOHOL CALORIES/ DAY	TOTAL CALORIES	FAT CALORIES	PARENTS WITH CHILDREN
Group A	176	51	10	67	23	194	2,049	944	36
Group B	172	45	7	56	15	149	2,134	978	27

(Compiled from data on pp. 1289-1293.)

TABLE 27-2 Comparisons of Blood and Illness for Group A and Group B

	AVERAGE CLOTTING TIME (MINUTES)	AVERAGE SERUM CHOLESTEROL	ARCUS SENILIS (PERCENT)	CORONARY HEART DISEASE (PERCENT)
Group A	6.9	253	38	28
Group B	7.0	215	11	4

(Compiled from data on p. 1293.)

closely, Friedman and Rosenman compared the clotting times for those participants who exhibited a *fully developed* Type A pattern (6.8 minutes) with those judged as *fully developed* Type Bs (7.2 minutes). This difference in clotting time was statistically significant.

The other findings in Table 27-2 are unambiguous. Cholesterol levels were clearly and significantly higher for group A participants. This difference was even greater if the participants with the fully developed patterns were compared. The incidence of arcus senilis was three times greater for group A and five times greater in the fully developed comparison groups.

The key finding of the entire study, and the one that secured its place in history, was the striking difference in the incidence of clinical CHD found in the two groups. In group A, 23 of the participants (28%) exhibited clear evidence of CHD, compared with three men (4%) in group B. When the researchers examined these findings in terms of the fully developed subgroups, the evidence became even stronger. All 23 of the CHD cases in group A came from those men with the fully developed Type A pattern. For group B, all three of the cases were from those participants exhibiting the incomplete Type B pattern.

DISCUSSION OF FINDINGS

The conclusion implied by the authors was that the Type A behavior pattern was a major cause of CHD and related blood abnormalities. However, if you carefully examine the data in the tables, you will notice a couple of possible alternative explanations for those results. One was that group A men reported a greater incidence of CHD in their parents. Therefore, maybe something *genetic* rather than the behavior pattern accounted for the differences found. The other rather glaring difference was the greater number of cigarettes smoked per day by group A participants. Today we *know* that smoking contributes to CHD. Perhaps it was not the Type A behavior pattern that produced the results but rather the heavier smoking.

Friedman and Rosenman responded to both of those potential criticisms in their discussion of the findings. First, they found that an equal number of light smokers (10 cigarettes or fewer per day) within group A had CHD as did heavy smokers (more than 10 cigarettes per day). Second, group B included 46 men who smoked heavily, yet only two exhibited CHD. These findings led the authors to suggest that cigarette smoking may have been a characteristic of the Type A behavior pattern but not a direct cause of the CHD that was found. It is important to remember that this study was done *over 40 years ago*, before the link between smoking and CHD was as firmly established as it is today.

As for the possibility of parental history creating the differences, "The data also revealed that of the 30 group A men having a positive parental history, only eight (27%) had heart disease and of 53 men without a parental history, 15 (28%) had heart disease. None of the 23 group B men with a positive parental history exhibited clinical heart disease" (p. 1293). Again, more recent research

that controlled carefully for this factor has demonstrated a family link in CHD. However, it is not clear whether it is a tendency toward heart disease or toward a certain behavior pattern (such as Type A) that is inherited.

SIGNIFICANCE OF THE RESEARCH AND SUBSEQUENT FINDINGS

This study by Friedman and Rosenman was of crucial importance to the history of psychological research for three basic reasons. First, this was one of the earliest systematic studies to establish clearly that specific behavior patterns characteristic of some individuals can contribute in dramatic ways to serious illness. This sent a message to physicians that to consider only the physiological aspects of illnesses may be wholly inadequate for successful prognosis, treatment, intervention, and prevention. Second, this study began a new line of scientific inquiry into the relationship between behavior and CHD that has produced scores of research articles. The concept of the *Type A personality* and its connection to CHD has been refined to the point that it may be possible to prevent heart attacks in high-risk individuals before the first one occurs.

The third long-range outcome of Friedman and Rosenman's research is that it has played an important role in the creation and growth of *health psychology*, a relatively new branch of the behavioral sciences. Health psychologists study all aspects of health and medicine in terms of the psychological influences that exist in health promotion and maintenance, the prevention and treatment of illness, the causes of illness, and the health care system.

One subsequent study is especially important to report here. In 1976, Rosenman and Friedman published the results of a major 8-year study of over 3,000 men who were diagnosed at the beginning of the study as being free of heart disease and who fit the Type A behavior pattern. Compared with the participants with the Type B behavior pattern, these men were twice as likely to develop CHD, suffered significantly more fatal heart attacks, and they reported five times more coronary problems. What was perhaps even more important, however, was that the Type A pattern predicted who would develop CHD independently of such other predictors as age, cholesterol level, blood pressure, or smoking habits (Rosenman et al., 1976).

One question you might be asking yourself by now is *why*? What is it about this Type A pattern that causes CHD? The most widely accepted theory answers that Type As respond to stressful events with far greater physiological arousal than do non-Type As. This extreme arousal causes the body to produce more hormones, such as adrenaline, and also increases heart rate and blood pressure. Over time these exaggerated reactions to stress damage the arteries which, in turn, leads to heart disease (Matthews, 1982).

RECENT APPLICATIONS

Both Friedman and Rosenman, together and separately, have continued in their roles as leading researchers in the field of personality and behavioral variables in CHD. Their research along with many others' has spawned a new

research niche referred to as *cardiopsychology*, which focuses on the psychological factors involved in the development, course, rehabilitation, and coping mechanisms of CHD (Jordan, Barde, & Zeiher, 2001). Their original article, discussed here, as well as more recent research, is cited in a broad range of studies published in many countries. The Type A concept has been refined, strengthened, and applied to numerous research areas, some of which follow quite logically, while others might surprise you.

For example, one study examined the relationship between Type A behavior and driving (Perry & Baldwin, 2000). The results left little doubt that "Friends should not let Type A friends drive!" The study found a clear association between Type A personality and an increase in driving-related incidents: more traffic accidents, more tickets, greater impatience on the road, more displays of road rage, and overall riskier driving behaviors. You might want to respond to the Type A assessment items at the end of this reading before you get behind the wheel next time.

A study from the field of health psychology applied the Type A concept in exploring the link between stress and burnout to coronary heart disease in working women (Hallman et al., 2003). As you are probably aware, as women have entered the professional workforce in increasing numbers over the past 40 years, they have also become more prone to many stress-related health problems previously found mainly in men. This study confirms that women with CHD did indeed report higher levels of burnout and lesser coping abilities. The authors suggest that "to optimize the outcome of rehabilitation and prevention, we need more research on women, of women, and especially from women's point of view" (p. 433).

Friedman and Rosenman's 1959 article was incorporated into a study of the relationships between parents and their adolescent children (Forgays, 1996). In this study, Type A characteristics and family environments of over 900 participants were analyzed. Results indicated that teenage children of Type A parents tend to be Type As themselves. That is not surprising, but, once again, it brings up the nature-nurture question. Do kids inherit a genetic tendency toward Type A behavior, or do they learn it from being raised by Type A parents? Forgays addressed this in his study: "Further analyses indicated an *independent* contribution of perceived family environment to the development of TABP [Type A Behavior Pattern] in adolescents" (p. 841, emphasis added). However, it would not be particularly surprising in light of recent research trends, if adoption and twin studies reveal a significant inherited, genetic influence on the Type A and Type B personality dimension (see the study by Bouchard in Reading 3 for a discussion of genetic influences on personality).

CONCLUSION

Do you have a Type A personality? How would you know? As with your level of introversion or extroversion, mentioned at the beginning of this chapter, your *Type A-ness* versus your *Type B-ness* is a part of who you are. Tests have been de-

veloped to assess people's Type A or Type B behavior patterns. You can get a rough idea by examining the list of Type A characteristics below to see how many apply to you:

1. Frequently doing more than one thing at a time
2. Urging others to hurry up and finish what they are saying
3. Becoming very irritated when traffic is blocked or when you are waiting in line
4. Gesturing a lot while talking
5. Having a hard time sitting with nothing to do
6. Speaking explosively and using obscenities often
7. Playing to win all the time, even in games with children
8. Becoming impatient when watching others carry out a task

If you suspect that you are a Type A, you may want to consider a more careful evaluation by a trained physician or a psychologist. Several successful programs to intervene in the connection between Type A behavior and serious illness have been developed, largely in response to the work of Friedman and Rosenman (e.g., George et al., 1998).

- Forgays, D. (1996). The relationship between Type-A parenting and adolescent perceptions of family environment. *Adolescence*, 34(124), 841-862.
- George, I., Prasadaro, P., Kumaraiah, V., & Yavagal, S. (1998). Modification of Type A behavior pattern in coronary heart disease: A cognitive-behavioral intervention program. *NIMHANS Journal*, 16(1), 29-35.
- Hallman, T., Thomsson, H., Burell, G., Lissers, J., & Setterlind, S. (2003). Stress, burnout, and coping: Differences between women with coronary heart disease and healthy matched women. *Journal of Health Psychology*, 8, 433-445.
- Jordan, J., Barde, B., & Zeiher, A. (2001). Cardiopsychology today. *Herz*, 26, 335-344.
- Matthews, K. A. (1982). Psychological perspectives on the Type A behavior pattern. *Psychological Bulletin*, 91, 293-323.
- Perry, A., & Baldwin, D. (2000). Further evidence of associations of Type A personality scores and driving-related attitudes and behaviors. *Perceptual and Motor Skills*, 91(1), 147-154.
- Rosenman, R. H., Brond, R., Sholtz, R., & Friedman, M. (1976). Multivariate prediction of CHD during 8.5-year follow-up in the Western Collaborative Group Study. *American Journal of Cardiology*, 37, 903-910.

Reading 28: THE ONE, THE MANY

Triandis, H., Bontempo, R., Villareal, M., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54, 323-338.

If one characteristic of human nature could be agreed upon by virtually all psychologists, it is that *behavior never occurs in a vacuum*. Even those who place the greatest emphasis on internal motivations, dispositional demands, and genetic drives make allowances for various external, environmental forces to enter the equation that ultimately leads to what you do and who you are. Over

the past 30 to 40 years, the field of psychology has increasingly embraced the belief that one very powerful environmental influence on humans is the culture in which they grow up. In fact, researchers *rarely* find observable patterns of human behavior that are consistent and stable in all, or even most, cultures (see the discussion of Ekman's research on facial expressions in Reading 22 for an extended analysis of cross-cultural consistency). This is especially true of behaviors relating to human interactions and relationships. Interpersonal attraction, sex, touching, personal space, friendship, family dynamics, parenting styles, childhood behavior expectations, courtship rituals, marriage, divorce, cooperation versus competition, crime, love, and hate are all subject to profound cultural influences. We can say with confidence that an individual cannot be understood with any degree of completeness or precision, without careful consideration of the impact of his or her culture.

Conceptually, that's all well and good, but in practice, culture is a tough nut. Think about it. How would you go about unraveling all the cultural factors that have combined to influence who you have become? Most cultures are far too complex to draw many valid conclusions. For example, colon cancer rates in Japan are a fraction of rates in the United States. Japan and the United States are diverse cultures, so what cultural factors might account for this difference? Differences in amount of fish consumed? Amount of rice? Amount of alcohol? What about differences in stress levels and the pace of life? Perhaps differences in religious practices of the two countries have effects on health? Could variations in the support of family relations and friendships contribute to health and wellness? Or, as is more likely, does the answer lie in a combination of two or three or all these factors, plus many others? The point is that you will need reliable and valid ways of defining cultural differences if you are going to include culture in a complete understanding of human nature. This is where Harry Triandis enters psychology's recent history.

Since the 1960s, and throughout his career in the psychology department at the University of Chicago, Urbana-Champaign, Triandis has worked to develop and refine fundamental attributes of cultures and their members that allow them to be differentiated and studied in meaningful ways. The article referenced here, published in 1988, explains and demonstrates his most influential contribution to cross-cultural psychology: the delineation of *individualistic* versus *collectivist* cultures. Today, this dimension of fundamental cultural variation forms the basis for literally hundreds of studies each year in psychology, sociology, anthropology, and several other fields. In this article, Triandis proposes that the degree to which a particular culture can be defined as individualistic or collectivist determines the behavior and personalities of its members in complex and pervasive ways.

In very basic terms, a collectivist culture is one in which the individual's needs, desires, and outcomes are *secondary* to the needs, desires, and goals of the *ingroup*, the larger group to which the individual belongs. Ingroups may include a family, a tribe, a village, a professional organization, or even an entire country, depending on the situation. In these cultures, a great deal of the

behavior of individuals is motivated by what is good for the larger group as a whole, rather than that which provides maximum personal achievement for the individual. The ingroups to which people belong tend to remain stable over time, and individual commitment to the group is often extremely high even when a person's role in the group becomes difficult or unpleasant for him or her. Individuals look to their ingroup to help meet their emotional, psychological, and practical needs.

Individualistic cultures, on the other hand, place a higher value on the welfare and accomplishments of the individual than on the needs and goals of the larger ingroups. In these cultures, the influence of the ingroup on a member's individual behavior is likely to be small. Individuals feel less emotional attachment to the group and are willing to leave an ingroup if it becomes too demanding and to join or form a new ingroup. Because of this minimal commitment of individuals to groups in individualistic cultures, it is quite common for a person to assume membership in numerous ingroups, while no single group exerts more than a little influence on his or her behavior. In this article, Triandis, and his associates from several diverse cultures, describe a multitude of distinguishing characteristics of collectivist and individualistic cultures. These are summarized in Table 28-1. Such distinctions are, of course, broad generalizations, and exceptions are always found in any culture, whether individualistic or collectivist.

In general, according to Triandis, individualistic cultures tend to be in northern and western Europe and in those countries that historically have been influenced by northern Europeans. In addition, highly individualistic cultures appear to share several characteristics: possessing a frontier, large numbers of immigrants, and rapid social and geographical mobility, "all of which tend to make the control of ingroups less certain. The high levels of individualism . . . in the United States, Australia, and Canada are consistent with this point" (p. 324). Most other regions of the world, he maintains, are collectivistic cultures.

THEORETICAL PROPOSITIONS

Triandis stated at the beginning of this article:

Culture is a fuzzy construct. If we are to understand the way culture relates to social psychological phenomena, we must analyze it by determining dimensions of cultural variation. One of the most promising such dimensions is individualism-collectivism. (p. 323)

His assumption underlying this and many of his studies and publications is that when cultures are defined and interpreted according to the individualism-collectivism model, we can explain a large portion of the variation we see in human behavior, social interaction, and personality. In this article, Triandis was attempting to summarize the extensive potential uses of his theory (see Table 28-1) and to report on three scientific studies he undertook to test and demonstrate his individualism-collectivism theory.

TABLE 28-1 Differences Between Collectivist and Individualistic Cultures

COLLECTIVIST CULTURES	INDIVIDUALISTIC CULTURES
<ul style="list-style-type: none"> • Sacrifice: emphasize personal goals over ingroup goals • Interpret self as extension of group • Concern for group is paramount • Rewards for achievement of group • Less personal and cultural affluence • Greater conformity to clear group norms • Greater value on love, status, and service • Greater cooperation with in group, but less with outgroup members • Higher value on "vertical relationships" (child–parent, employer–employee) • Parenting through frequent consultation and intrusion into child's private life • More people oriented in reaching goals • Prefer to hide interpersonal conflicts • Many individual obligations to the ingroup, but high level of social support, resources, and security in return • Fewer friends, but deeper and lifelong friendships with many obligations • Few ingroups, and everyone else is perceived as one large outgroup • Great harmony within groups, but potential for major conflict with members of outgroups • Shame (external) used more as punishment • Slower economic development and industrialization • Less social pathology (crime, suicide, child abuse, domestic violence, mental illness) • Less illness • Happier marriages, lower divorce rate • Less competition • Focus on family group rather than larger public good 	<ul style="list-style-type: none"> • Hedonism: focus on personally satisfying goals over ingroup goals • Interpret self as distinct from group • Self-reliance is paramount • Rewards for personal achievement • Greater personal and cultural affluence • Less conformity to group norms • Greater value on money and possessions • Greater cooperation with members of ingroup and members of various outgroups • Higher value on "horizontal relationships" (friend–friend, husband–wife) • Parenting through detachment, independence, and privacy for the child • More task oriented in reaching goals • Prefer to confront interpersonal conflicts • Many individual rights with few obligations to the group, but less support, resources, and security from the group in return • Make friends easily, but friends are less intimate acquaintances • Many ingroups, but less perception of all others as outgroup members • Ingroups tend to be larger, and interpersonal conflicts more likely to occur within the ingroup • Guilt (internal) used more as punishment • Faster economic development and industrialization • Greater levels of all categories of social pathology • Higher illness rates • Less happy marriages, higher divorce rate • More competition • Greater concern for greater public good

Summarized from Triandis, 1988, pp. 323–335.

METHOD

As mentioned previously, this article reported on three separate studies. The first study employed only participants from the United States and was designed to define the concept of individualism more clearly as it applies to the United States. The second study's goal was to begin to compare an individualistic culture, the United States, with cultures assumed to be fundamentally collectivist, specifically Japan and Puerto Rico. In Study 2, the focus was on comparing the relationships of individuals to their ingroups in the two types of cultures. The third study was undertaken to test the hypothesis that members of collectivist cultures perceive that they receive better social support and enjoy more consistently satisfying relationships with others, whereas those in individualistic cultures report that they are often lonely. All the studies gathered data from participants through the use of questionnaires. Each study and its findings is summarized briefly here.

Study 1

Participants in Study 1 were 300 undergraduate psychology students at the University of Chicago, where Triandis is a professor of psychology. Each student was given a questionnaire consisting of 158 items structured to measure his or her tendency toward collectivist versus individualistic behaviors and beliefs. Agreement with a statement such as "Only those who depend on themselves get ahead in life" represented an individualistic stance, while support for an item such as "When my colleagues tell me personal things about themselves, we are drawn closer together" was evidence for a more collectivist perspective. Also included in the questionnaire were five scenarios that placed participants in hypothetical social situations and asked them to predict their behavior. The example provided in the article was for the participants to imagine they wanted to go on a long trip that various ingroups opposed. The participants were asked how likely they were to consider the opinions and wishes of parents, spouses, close relations, close friends, acquaintances, neighbors, and coworkers in deciding whether to take the trip.

When the response data were analyzed, nearly 50% of the variation in the participants' responses could be explained by three factors: "self-reliance," "competition," and "distance from ingroups." Only 14% of the variation was explained by the factor called "concern for ingroup." More specifically, Triandis summed up the results of Study 1 as follows:

These data suggest that U.S. [individualism] is a multifaceted concept. The ingredients include more concern for one's own goals than the ingroup goals, less attention to the views of ingroups, self-reliance combined with competition, detachment from ingroups, deciding on one's own rather than asking for the views of others, and less general concern for the ingroup. (p. 331)

He also suggested that the items comprising the questionnaire and the scenarios are effective measures for determining the degree of individualism in one individualistic culture, the United States, but that this scale may or may not produce equally valid results in other cultural settings.

Study 2

The question asked in this study was "Do people in collectivist cultures indicate more willingness to subordinate their personal needs to the needs of the group?" The participants were 91 University of Chicago students, 97 Puerto Rican and 150 Japanese university students, and 106 older Japanese individuals. A 144-item questionnaire designed to measure collectivist characteristics was translated into Spanish and Japanese and completed by all participants. Items from the scale had been shown in previous research to tap into three collectivist-related tendencies: "concern for ingroup," "closeness of self to ingroup," and "subordination of own goals to ingroup goals."

In this study, the findings were a fascinating mixed bag, with some results supporting the individualistic-collectivist theory and others seeming to refute it. For example, the Japanese students were significantly more concerned with the views of coworkers and friends than were the Illinois students, but this difference was not observed for the Puerto Rican students. Also, the Japanese participants expressed feeling personally honored when their ingroups are honored, but they paid attention to the views of and sacrificed their personal goals to only *some* ingroups in their lives and not others. And, while conformity is a common attribute of collectivist cultures, very little conformity was found among the Japanese participants—less, in fact, than among the U.S. students. One finding suggested that as collectivist cultures become more affluent and westernized, they may undergo a shift to greater individualism. As evidence of this, the older Japanese participants perceived themselves to be more similar to their ingroups than did the Japanese university students.

At this point you might be asking how the findings of the second study figure into Triandis's theory. Triandis interpreted them as a warning that conclusions about collectivist and individualistic cultures should not be overly sweeping and must be carefully applied to selective, specific behaviors, situations, and cultures. He stated this idea as follows:

The data of this study tell us to restrict and sharpen our definition of collectivism . . . that we must consider each domain of social behavior separately, and collectivism, defined as subordination to the ingroup's norms, needs, views, and emotional closeness to ingroups is very specific to ingroup and to domain. . . . Collectivism takes different forms . . . that are specific to each culture. (p. 334)

Study 3

The third reported study attempted to do exactly what Triandis suggested in the preceding quote: restrict and sharpen the research focus. This study extended previous findings that collectivist societies provide high levels of social support to their members, while those in individualistic cultures tend to experience greater loneliness. Here a 72-item collectivist-individualist questionnaire was completed by 100 participants, equally divided by sex, at the University of Chicago and at the University of Puerto Rico. Participants also filled out questionnaires measuring their perceived degree of social support and perceived amount of loneliness.

The results of this study clearly indicated that collectivism correlated positively with social support, meaning that as the degree of collectivism increased, the level of social support also increased. Moreover, collectivism was negatively associated with loneliness, implying that as the effect of collectivism increased, participants' perceived level of loneliness diminished. As further evidence for Triandis's model, the most important factor in this study for the U.S. students (accounting for the most variance) was "self-reliance with competition," while the most influential factor for the Puerto Rican students was "affiliation" (interacting with others). These results are exactly what you would expect from the individualistic-collectivist theory.

DISCUSSION

Overall, Triandis explained, the studies described in this article supported, but also modified, his definitions of collectivism and individualism. Looking back at the characteristics of each type of culture in Table 28-1, the picture that emerges is one of opposition—that is, individualistic and collectivist cultures appear to be nearly exact opposites of each other. This article, however, seems to demonstrate that these cultural descriptions fall at two ends of a continuum and that a particular society will be best described as falling somewhere between the two but usually clearly closer to one end than the other. In addition, within any single culture will be found specific individuals, groups, subcultures, and situations that may violate that culture's overall placement on the continuum by fitting better toward the opposite end. A graphical, hypothetical representation of this interpretation is shown in Figure 28-1. "In short," Triandis states, "The empirical studies suggest that we need to consider individualism and collectivism as multidimensional constructs . . . [each of which] depends very much on which ingroup is present, in what context, and what behavior was studied" (p. 336).

SIGNIFICANCE OF THE FINDINGS AND RELATED RESEARCH

Over a relatively short period of historical time, Triandis's work has found its way into the fundamental core of how psychologists view human behavior. You would be hard pressed, for example, to open any recent text in most subfields of psychology—introductory psychology, social psychology, developmental psychology, personality psychology, human sexuality, abnormal psychology,

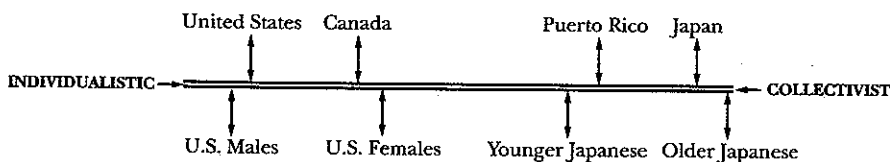


FIGURE 28-1 Collectivist-individualistic cultural continuum (culture and subculture placements are approximate).

cognitive psychology, to name a few—without finding multiple references to this and many other of his individualism–collectivism studies. Arguably, the individualistic–collectivistic cultural dimension, as articulated, clarified, and refined by Triandis, is the most reliable, valid, and influential factor seen in current studies on the role culture plays in determining the personalities and social behaviors of humans. Moreover, the range of research areas to which this dimension has been applied is remarkably broad. Following are just two examples.

In the article that is the subject of this discussion, Triandis offers evidence that the psychosocial concepts of collectivism and individualism may play a significant part in the physical health of the members of a given culture. A case in point relates to coronary heart disease. In general, heart attack rates tend to be lower in collectivist societies than in individualistic ones. Triandis suggests that unpleasant and stressful life events often related to heart disease are more common in individualistic cultures where pressures are intense on solitary individuals to compete and achieve on their own. Along with these negative life events, individualistic social structures inherently offer less social cohesion and social support, which have been clearly demonstrated to reduce the effects of stress on health. Of course, many factors might account for cultural differences in heart attack rates or any other disease, as discussed at the beginning of this reading. However, numerous studies have shown that members of collectivist cultures who move to countries that are individualistic become increasingly prone to various illnesses, including heart disease.

Perhaps, even more convincing, are studies of two different subgroups within the same culture. As Triandis points out (p. 327), one study of 3,000 Japanese Americans compared those who had acculturated—that is, had adapted their lifestyle and attitudes to U.S. norms—to those who still maintained a traditional Japanese way of life *within* the United States. Heart attack rates among the acculturated participants were *five times greater* than among the nonacculturated participants even when cholesterol levels, exercise, cigarette smoking, and weight were statistically equalized for the two groups.

Of course, you would expect that the individualism–collectivism dimension would affect how children are raised in a particular culture and, indeed, it does. Parents in collectivist societies place a great deal of emphasis on developing the child's "collective self" characterized by conformity to group norms, obedience to those in authority within the group, and reliability or consistency of behavior over time and across situations. Children are rewarded in both overt and subtle ways for behavior patterns and attitudes that support and correspond to the goals of the ingroup (Triandis, 1989). In this context, refusing to do something that the group expects of you, just because you don't enjoy doing it, is unacceptable and rarely seen. Yet in highly individualistic cultures, such as the United States, such refusal is a very common response and is often valued and respected! That happens because parenting practices in individualistic cultures emphasize development of the child's "private self." This focus rewards children for behaviors

and attitudes leading to self-reliance, independence, self-knowledge, and reaching their maximum potential as an individual. Another way to look at this distinction is that rebellion (within certain socially acceptable limits) and an independent streak in individualistic cultures are seen as personality *assets*, whereas in collectivist societies they are seen as *liabilities*. The messages from the culture to the children, via the parents, about these assets or liabilities are loud and clear and exert a potent influence upon the kids' development into adulthood.

RECENT APPLICATIONS

Triandis's work has impacted a wide variety of research fields. One article applied Triandis's ideas to a study about the attitudes of college football fans in two cultures (Snibbe et al., 2003). Students at important football games in the United States (Rose Bowl) and in Japan (Flash Bowl) were asked to rate their own and their opponent's universities and students before and after the big game. In both games, the university with the better academic reputation lost the game. However, the reactions of the students in the two cultures were markedly different: "American students from both universities evaluated their in-groups more positively than out-groups on all measures before and after the game. In contrast, Japanese students' ratings offered *no evidence* of in-group bias. . . . Instead, Japanese students' ratings reflected each university's status in the larger society and the students' status in the immediate situation" (p. 581).

Another study employed Triandis's model to examine the experience of loneliness across cultures (Rokach et al., 2002). Over 1000 participants from North America and Spain completed questionnaires about the various causes of their loneliness, including personal inadequacies, developmental difficulties, unfulfilling intimate relationships, relocations and separations, and feeling marginalized by society. "Results indicated that cultural background indeed affects the causes of loneliness. North Americans scored higher on *all five factors*" (p. 70, emphasis added).

One study highlighted a particularly important aspect of Triandis's work. When collectivist and individualistic cultures are studied and compared, this is not, by any means, limited to comparisons *between* countries. Many countries contain *within* their borders pockets of widely varying levels of collectivism and individualism. Nowhere on earth is this truer than in the United States. An engaging study by Vandello and Cohen (1999) charted the United States on the basis of Triandis's model. Before you read the following, stop and think for a moment about which states you would predict to find the strongest collectivist and individualistic tendencies. The researchers reported that states in the Deep South were most collectivist and those in the Plains and Rocky Mountain regions were highest on individualism. However, even within these divergent areas of the United States, smaller, subcultural groups of individualistic and collectivist individuals may be found.

CONCLUSION

Triandis has provided all the social sciences a new lens through which we can view fundamental cultural differences. The diversity we all experience first hand as the world becomes smaller and societies increasingly intertwine often creates the potential for misunderstandings, breakdowns in communication, friction, and frustration. Perhaps an awareness and appreciation of collectivist and individualistic cultural differences provides us with a small, yet meaningful, step forward toward the positive goal of easing intercultural discord and enhancing world harmony.

- Rokach, A., Orzeck, T., Moya, M., & Exposito, F. (2002). Causes of loneliness in North America and Spain. *European Psychologist, 7*, 70-79. harmony
- Snibbe, A., Kitayama, S., Markus, H., & Suzuki, T. (2003). They saw a game: A Japanese and American (football) field study. *Journal of Cross-Cultural Psychology, 34*, 581-595.
- Triandis, H. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506-520.
- Vandello, J., & Cohen, D. (1999). Patterns of individualism and collectivism across the United States. *Journal of Personality and Social Psychology, 77*(2), 279-292.