Texts of the early 1980s reflected the negative biases of both popular and professional opinion of the 1950s and 1960s (Scarr, 1998). In the 1970s, the so-called first wave of child-care research generally failed to document negative consequences of maternal employment and day care and revealed some positive effects (Clarke-Stewart & Fein, 1983; Ennsch, 1980; Scarr, 1984; see also Belsky, 1986). These more favorable outcomes appeared in late 1980s to early 1990s introductory texts. A second wave of child-care research in the 1980s examined variables that mediate the effects of day care and maternal employment (e.g., quality and variety of child-care arrangements and child characteristics such as age, gender, and ethnicity). These studies (e.g., Clarke-Stewart, 1989; Ennsch, 1993; Scarr & Eisenberg, 1993) led to a more balanced picture of the effects of particular child-care settings on individual children. The introductory texts of the mid-1990s, reflecting these views, focused less on whether day care and maternal employment are good or bad and more on mediating variables. These texts were more balanced in their coverage than the late 1980s to early 1990s texts (47% vs. 35%) and more often concluded that day care and maternal employment per se have no effects on children (28% vs. 0%).

The third wave of child-care research currently underway includes the broader influence of family attitudes and interactions as these intertwine with child-care and maternal employment variables to affect children’s development (e.g., Clarke-Stewart, Alfuson, & Clements, 1998; Scarr, 1998). The outcomes of this latest research no doubt will appear in the next generation of introductory psychology texts.

It is troubling to note that even in the mid-1990s, one third of introductory texts failed to mention either maternal employment or the norm in this country, or day care, increasingly a fact of life for families. Because many college students have access to an introductory psychology textbook, authors, editors, publishers of these texts, and instructors of introductory psychology courses must provide students with current information about the complex issues of day care and maternal employment.

References


Notes

1. Parts of this article were presented at the 1993 meeting of the Soci- ety for Research in Child Development in New Orleans, LA and the 1997 meeting of the American Psychological Association in Chicago.

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Students Do Not Overestimate Their Life Expectancy: An Alternative Demonstration of Unique Invulnerability

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Snyder (1997) offered a demonstration of unique invulnerability (i.e., optimistic bias) in which subjects overestimated their life expectancy. However, comparison of Snyder’s data with actual data for his participants reveals no evidence of an optimis- tic bias. In this study, students are asked to estimate their life expectancy after being provided with no information, the information Snyder’s students were given, or the actual average life expectancy. Students are consistently accurate in their life expectancy esti- mates. I describe an alternative classroom demonstration of unique invulnerability.

The optimistic bias (also called unrealistic optimism or unique invulnerability) refers to people’s tendency to think their risk

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Snyder (1997) suggested a class demonstration of this phenomenon. In his study, graduate students estimated their expected life span and then compared the average estimates with the actuarial life span (75 years old). He concluded that students significantly overestimated their life expectancy. However, for this exercise to demonstrate an optimistic bias, one must compare the estimates with the actual average life span for this particular group. Demographic factors heavily influence life expectancy (Wilkinson, 1986). First, socioeconomic status, as measured by level of education, income, or occupational status, influences life expectancy (Roget, Sorlie, & Johnson, 1992). For example, a 25-year-old White female high school graduate has a life expectancy of 75.2 years old, whereas a 25-year-old White woman with postcollege education has a life expectancy of 79.5 years old (Roget et al., 1992). Second, the age of measurement influences life expectancy. Life expectancy at birth is shorter than life expectancy at 25 years of age. The simple reason is that adults have already survived childhood and their total life expectancy is therefore longer. For example, a White male's life expectancy at birth is 70.7 years old (Singh, Kochanek, & MacDorman, 1996), but a White man's life expectancy at age 65 is 80.8 years old (Roget et al., 1992).

In Study 1, Snyder (1997) found that women estimated living 83.4 years (the sample of men was too small to analyze separately). A 25-year-old White woman with postcollege education has a life expectancy of 84.4 years old (Roget et al., 1992). Thus, there was no evidence of the optimistic bias. In Study 2, the men estimated living 60.8 years and women 85.0 years. The life expectancy for White 25-year-olds with postcollege education is 79.5 years old for men and 84.4 years old for women (Roget et al., 1992). It appears that these students were quite accurate in their assessments.

Before students made their estimates, Snyder (1997) announced that the actual life expectancy is 75 years old. It is possible that this number anchored student's estimates (Versvy & Kahneman, 1974), and that students simply estimated above this number in order to feel good. That is, it is possible that students would give different (and possibly optimistic) estimates if they received either no information or correct information about the average life expectancy. To test this possibility, undergraduate psychology students estimated their life expectancy after getting no information, the information Snyder's students received (a 75-year- old life expectancy), or the actual average life expectancy for this group (78 years old for men, 83 years old for women). All the actuarial comparison figures used in this article are probably underestimates of the actual life expectancy, which in the most recent numbers from 1996 was 76.1 years old at birth ("U.S. Infant Mortality Rate," 1997).

Method

Participants
Students from undergraduate psychology classes at the University of Florida participated (63 men, 137 women). Their average age was 20 years old. Used data only from White participants because detailed actuarial statistics compare age and educational level were available only for Whites.

Materials and Procedure

Students recorded their gender, age, ethnicity, and estimated age of death. Students (a) received no information prior to making their estimates, (b) read before making their estimates that "the average age of death for U.S. citizens (for men and women combined) is 75 years," or (c) that "the average age of death for U.S. citizens is 78 years for men and 83 years for women." These are the 1985 averages for White 25-year-old individuals who had a college degree (Roget et al., 1992).

No statistics were available for 20-year-old college-educated individuals, but it is unlikely that the 5 years difference would change life expectancy estimates dramatically. For example, comparing the life expectancy for 25- and 45-year-old college-educated individuals revealed less than 1 year gained by surviving an additional 20 years (Roget et al., 1992).

Results

To explore the extent to which the information provided influenced students' life expectancy estimates, a 2 (gender) × 3 (type of information) ANCOVA was conducted (see Table 1). Results revealed a marginally significant main effect of gender, F(1, 194) = 3.51, p = .06, such that women gave marginally higher life expectancy estimates (M = 82.3, SD = 11.1) than men (M = 78.8, SD = 14.9). However, the main effect was qualified by a significant interaction between gender and information type, F(2, 194) = 3.46, p < .05. Men made lower estimates than women when informed of their actuarial age of 75 years old, t(63) = 2.92, p < .005, whereas men and women did not differ in their estimates in the first, t(64) = 1.00, ns, or the second condition, t(63) = 0.57, ns.

This interaction is interesting and merits further study. However, these data show no evidence to suggest that Snyder's (1997) students gave accurate estimates because they anchored their estimates around 75 years old. It is possible that men gave lower estimates than women when provided with their actual life expectancy because men are not fully aware of how much lower their life expectancy really is. When provided with the actual figure they gave lower estimates.

Students were also accurate about their life expectancy. Both men and women estimated their life span at approximately their actuarial age. The t tests comparing each group to the correct average (78.3 years old for men and 83.3 years
for women) revealed that no groups significantly overesti-
ated their life expectancy (see Table 1).

Discussion

Optimistic biases are remarkably pervasive and are easily
demonstrated in the classroom. However, life expectancy ap-
pears to be one area where people are not optimistically bi-
ased. A more reliable method for demonstrating the optimis-
istic bias is to select one negative event and ask stu-
dents to write down the answers to two questions: "On a scale
from 0 to 10%, what is the chance that you one day will get
(risk/illness)?" and "On a scale from 0 to 100%, what is the
chance that the average student of your age and sex at
(your university) one day will get (risk/illness)?" Then ask the stu-
dents to raise their hands if they put a lower number for
themselves than for the average student. Most students will
estimate their own chances as lower. Helwig-Lawrenz (1997)
found that 89% estimated their own chances as lower than
the typical student for having (or causing) an unplanned
pregnancy, 95% for getting a sexually transmitted disease,
and 90% for getting HIV. The procedure works for any num-
ber of negative events or diseases (e.g., divorce, homeless-
ness, cancer, heart attack, being killed in a car accident).
Events perceived as controllable (such as divorce or HIV
infection) receive lower optimistic biases than events seen as rela-
tively uncontrollable (e.g., catching a cold or getting sick
from air pollution; Harris, 1996).

When doing the demonstration, some students may feel
dashman about defending their individual judgment. It is
important to note that they may be accurate in their esti-
mates. The demonstration shows only that some people are
optimistically biased, not who. Clearly some people have less
than average risk—the bias springs from the fact that few
people seem to be willing to claim greater than average risk.
Optimistic biases are common, although apparently not in
the domain of life expectancy estimation.

References

between perceived controllability and optimistic bias. Journal of
Helwig-Lawrenz, M. (1994). Why it won't happen to me: A cross-cultural
investigation of social comparisons as a cause of the
optimistic bias. (Doctoral dissertation, University of California, Los
employment status, income, and education in the national longitudi-
vance report of final mortality statistics. Monthly Vital Statistics re-
ten. 45(Suppl. 3). Hyattsville, MD: National Center for Health
Statistics.
stration in estimating personal mortality. Teaching of Psychology, 24,
197-199.
uristics and biases. Science, 185, 1124-1131.
The Gainesville Sun, p. 12A.
Weinstein, N. D., & Klein, W. M. (1996). Unrealistic optimism: Pre-
Interpreting the data on their size and trends. In R. G. Wilkinson
(Ed.), Class and health: Research and longitudinal data (pp. 1-20).
London: Tavistock.

Notes

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Unique Invulnerability As Applied to Personal Mortality: The Reports of Its
Demise Are Exaggerated

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Additional relevant data and literature support the biased
processing of negative self-referential information. A new exercise involves
a student first writing, on a postcard, the average age of death in
that student's family, followed by his or her own estimated age of
death. The instructor then asks students to raise their hands if their age of
death is higher than the family average, thereby allowing a
valid test of the unique invulnerability process. Teachers can try

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