

Chapter 2

Transforming Psychology

There's No Turning Back

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Chapter Summary

Dora, at age 18, finds herself caught in a web of family affairs that sound like they came straight out of a soap opera. Her father appears to be having an extramarital affair with his friend's wife. Dora's problems are with her father's friend, Mr. K.

Mr. K always seemed attracted to Dora. Starting when she was 7, Mr. K grabbed every opportunity he could to take her on long, unchaperoned walks

and buy her expensive gifts. As Dora got older, she became more and more uncomfortable with his attentions, but she didn't fully understand why until she was 14. Mr. K invited her to watch a festival from his office window, and when she arrived, she was surprised to find him alone. He kissed her deeply, and as he pulled her close to himself, she felt his erection.

It was at this point in time that Dora started to develop what her family referred to as "symptoms." These symptoms worsened over time as Mr. K's pursuit of her intensified. Dora's father insisted that Dora see the therapist he chose. He tells the therapist that Dora is defiant and willful and beseeches the therapist to "bring her to reason."

Slowly Dora's side of the story unfolds in therapy. She concludes that her father and Mr. K have reached an unspoken agreement through which her father ignores Mr. K's interest in Dora and Mr. K. ignores his wife's relationship with Dora's father.

The therapist keeps detailed notes about this case and makes it clear in his log that he believes Dora's story and her conclusions. However, he withholds telling her this for fear that it will encourage her disruptive behavior. He labels her behavior "neurotic." After only 3 months, Dora ends her therapy. In his follow-up notes, the therapist concludes that Dora terminated her sessions because she was offended when her sexual attraction to the therapist himself was not reciprocated.

What's happening here?

With our twenty-first century sensibilities, it's hard for us not to see Dora as the unfortunate victim of a seriously messed up situation. She is caught up in a dysfunctional family in which her childhood sexual abuse is secreted away and allowed to continue by her father's betrayal of her. When she tries to break out of the cycle by being defiant, she is drawn back into the drama by being cast as "neurotic." Therapy, which should focus on helping her, serves to maintain the charade and even adds to it when Dora is sexualized by the therapist himself. My guess is that most of us cheered for Dora and her defiance when she terminated her therapy, and I doubt that any of us would recommend this therapist to our friends.

Yet that therapist, Sigmund Freud, came highly recommended, and Dora's case as Freud reports it is among the cornerstones for psychoanalytic thinking (Hare-Mustin, 1983; Lakoff, 1990). In it we recognize Freud's developing ideas of fantasies of childhood sexuality and client-therapist transference. Although this case helped develop contemporary therapy as we know it today, we'd be hard pressed to represent this case as an example of "good" therapy.

This case, and our reaction to it, capture the transformation of psychology across its over 100 years as an academic and applied discipline. The androcentric perspective that victimized Dora twice (first, by sexually abusing her, and second, by invalidating that abuse by dismissing it as fantasy) would likely be replaced by an understanding that affirms her experiences and reactions and that would work toward empowering her. Psychology today has been transformed to its very core by the questions, probing, analyses, and alternatives offered by a feminist perspective. Whether we openly acknowledge the role feminism has played in this transformation or not, it is clear that there is no turning back. Psychology and the way we approach women and gender have been altered irrevocably.

The purposes of this chapter are to introduce the field of the Psychology of Women and research findings comparing women and men. I draw on Stephanie Riger's (2000b) metaphor of a videotape to explore the field: (1) rewinding to examine our history; (2) pausing to look at a present snapshot; and (3) playing forward using feminist research methodologies which hold the key to developing future research.

Keep in mind what Dora's story taught us: what may seem so obvious to us in retrospect didn't appear all that unusual while it was happening. Recognizing this point serves as a good reminder that what may seem normal now may, years from now in retrospect, look so obviously wrong. Of course, I will use current theory, research, and practice to ground my points, knowing full well though that they are dynamic and evolving. *Psychology has been transformed and is continually transforming.*

Finally, in this chapter I want to follow up on the ideas about difference that we started in Chapter 1. I'll review how we determine gender differences and what today's data tell us. This review will lay the groundwork for the next five chapters, where we'll explore *why* these differences occur and when they may not really underscore differences—serving instead to obscure fundamental similarities among all people (Hyde, 2005).

HISTORY: REWINDING THE VIDEOTAPE

Our interest in the history of psychology begins in two areas: looking at the roles women played as psychologists and looking at the way psychologists thought about women. The first of these areas makes women the subjects of doing psychology; the second, the objects of that psychology. Finally, we'll look at the Psychology of Women as a specialty area within the overall discipline of psychology to briefly describe its history.

Psychology and Women

On the face of it, histories look like simple recordings of past events. However, if we think more deeply about history, we can readily see that histories tell their stories through the perspective of the “winners.” For example, think about how the “American Revolution” would be portrayed if the British won and George Washington was hung as a traitor.

Women as psychologists. Pick up most beginning psychology texts, and even many history texts, and simply glance through the pictures. Who are the notables deemed worthy of photographs? Do they represent all areas of psychology that were ever explored? Certainly not! But even some dead ends like phrenology (reading bumps on people's head to decipher their personalities) appear in their pages. What's *not* likely to appear, or to appear only as a special example, are women and psychologists of color.

To make psychologists who were women and their work visible in the history of psychology, our thinking progresses through three different, but not necessarily smooth and clear-cut phases (Crawford & Marecek, 1989; Lerner, 1992). In the early phase, questions are raised about *androcentric bias* by pointing out how women are left out of psychology's history.

In the next *compensatory phase*, women are “discovered,” both as doers and objects of study. Biographers “discover” women and their work and contribute their once-invisible

biographies to psychology's history.¹ At the next level, an ongoing process of *transformation* begins that irrevocably alters the field and how its work is approached. Women and their work are not just add-ons, but their ideas and lives are integrated into the mainstream of psychology's history, changing its flow. It is this last integrative step that re-writes, and thus transforms, the way we look at our history in psychology.

A brief look at the history of psychology suggests that **androcentric bias** has appeared throughout it and may even persist to some degree today. Although women did not have opportunities equal to those of men at the time (Furumoto & Scarborough, 1986), there were indeed some very influential women. How many of the following psychologists can you identify? (You'll want to read footnote 2 and review Box 2.1.)

Christine Ladd Franklin	Diane Halpern
Mary Whiton Calkins	Sharon Stephens Brehm
Margaret Floy Washburn	Carol D. Goodheart
Leona Tyler	Melba J. T. Vasquez
Florence Denmark	Suzanne Bennett Johnson
Janet Taylor Spence	Leta Stetter Hollingworth
Bonnie Strickland	Ruth Howard (Beckham)
Dorothy Cantor	Martha Bernal
Norine Johnson	Maime Phipps Clark ²

Women as research subjects. Not only were women psychologists and their work overlooked, but women often were excluded as research participants. Kathleen Grady (1981) counted twice as many men as women in psychological studies. In addition, having studied only men, researchers all-too-often generalized their results to women (Reardon & Prescott, 1977). This exclusive concentration of researchers and theorists on being male-centered is part of what we have seen defines androcentric bias.

Even the inclusion of men in research was not inclusive of all men; psychologists uncritically relied on readily available White, educated, upper class, heterosexual, male college students (Lykes & Stewart, 1986), a pattern that persists into the twenty-first century (Whorley & Addis, 2006). Beyond exclusion of people as research participants was the marginalizing of diverse ideas and perspectives. Robert Guthrie (1976) made this more insidious form of exclusion clear in his seminal book, *Even the Rat Was White*. There certainly is a place for

¹The Society for the Psychology of Women's quarterly newsletter, *The Feminist Psychologist*, routinely contains a heritage column devoted to a woman who figured in psychology's history.

²Ladd-Franklin, Calkins, and Washburn were the only three women among 50 psychologists listed by James McKeen Cattell in 1903 as the most famous psychologists in the United States. Ladd-Franklin developed an influential theory of color vision; Calkins invented the paired associate technique (not Freud); and Washburn, the first woman to earn her Ph.D. in psychology, wrote "The Animal Mind" which has been cited as a precursor and impetus to behaviorism. Fourteen women are the only women APA presidents from 1892-2012: Calkins (1905), Washburn (1921), Anastasi (1972), Tyler (1973), Denmark (1980), Spence (1984), Strickland (1989), Cantor (1996), N. Johnson (2001), Halpern (2004), Brehm (2007), Goodheart (2010), Vasquez (2011), the first Latina), and S. B. Johnson (2012). Hollingworth, often declared the "mother" of the psychology of women, debunked myths that menstruation adversely affects women's performance and that women are intellectually inferior to men. Howard and Bernal were the first African American and Chicana women, respectively, to earn PhDs in psychology. Clark's work with her often-cited partner, Kenneth Clark, was critical to the U.S. Supreme Court's desegregation decision in *Brown v. the Board of Education* (Russo & Denmark, 1987). For more about women in psychology, also see Furumoto and Scarborough (1986), O'Connell & Russo (1990), Paludi (1992), Denmark et al. (2008), and <http://psychology.okstate.edu/museum/women/cover2.html> (retrieved June 2011).



Box 2.1

Carolyn Wood Sherif (1922–1982) was an early president of the Society for the Psychology of Women (1979) and is remembered through the society's most prestigious research award. Her presidential address, published in 1982, urged psychologists to conceptualize gender much like we are doing here; that is, as a social category that is integrated into each individual's identity and that is linked to social power and inequities. Her paper *Bias in Psychology*, reprinted as a tribute in 1998, makes many of the points still pertinent to our discussion of research in this chapter. Like many others, I personally pay tribute to her as a mentor and an inspiration.

Source: Photo from the Archives of the History of American Psychology at The University of Akron.

single-gender research and for research that describes the perspective of a specified group of people. The mistake is not in doing it, but in letting those excluded groups go understudied and in overgeneralizing conclusions beyond the restrictive group actually studied.

When psychologists did study women, it often was in stereotyped areas, such as motherhood (critiqued by Eyer, 1992), self-disclosure (Dindia & Allen, 1992), and neurosis and depression (Lerman, 1986), and excluded men. Both patterns served to limit what we know about women—such as ignoring critical areas like women's physical health and male violence against women—and about men—such as overlooking some men's emotional connections with others (Hurtado & Sinha, 2008).

Granted, the history of psychology was unrepresentative, but have we learned from it? Although it is clear that substantial progress has been made throughout psychology (Adler & Johnson, 1994), there remain resistant pockets of journals (e.g., in behavioral psychology) where the sex of participants is not even listed in articles, yet alone systemically explored (Sigmon et al., 2007). An informal review of 31 social psychology articles in which gender differences were tested and confirmed revealed that 18 (58%) of these articles offered no speculation about why this gender difference occurred, suggesting that the difference itself was enough of an (essentializing) explanation (Yoder & Kahn, 2003). It looks like we still have room for improvement.

The Psychology of Women: Historical Perspectives and Trends

Marianne LaFrance and her colleagues (2004) outline the perspectives and trends that characterized the historical development of the Psychology of Women we are studying today. The earliest attempts to include women in psychological research typically did so by comparing women to men. Given what we know about **androcentric bias**, it's not surprising that this approach too often concluded that women are a problem by documenting their deficiencies (for example, see Boring, 1951). In a reversal of this theme, some more recent comparative work exalted the specialness of women, for example, by glorifying women's caring (Gilligan, 1982).

A second major thread of theory and research emerged in the 1970s with Sandra Bem's (1974) introduction of the concept of **androgyny**. Before this, masculine and feminine identity were conceptualized as endpoints of the same scale so that people high in **masculinity** were, by definition, low in **femininity**. Androgyny, the blending of both high feminine with high masculine traits, was based on an understanding that these were two independent clusters of characteristics. Furthermore, these psychological clusters of traits did not map onto the sex of respondents or their sexual orientation (Dancey, 1992; Spence & Helmreich, 1978). Although stereotypes of masculine heterosexual men and feminine heterosexual women continued to define what we culturally think is appropriate for each gender, self-descriptions defied the simple categorizations culturally prescribed. Thus, the hope of androgyny rested in individual differences, not gender prescriptions, such that androgynous women and men might blend the best of both gender configurations and be flexible enough to do both feminine-typed and masculine-typed tasks (Bem, 1975). Although androgyny itself has largely fallen into disuse, the research that this concept sparked that focuses on individual rather than group differences remains vibrant (Spence, 2011).

The next phase of thinking about sex was to see it as a **stimulus variable**; that is, as a source of stereotyping and social categorization (Deaux, 1984; Sherif, 1982). Terminology in the area shifted from talking about sex to gender (Muehlenhard & Peterson, 2011) as theorists and researchers began to look at how others treated people based on their perceived membership in the social categories of female and male.

The most recent addition to thinking about sex, gender, and sexuality emerged in **social constructionism** (Marecek et al., 2004). We have seen that the central understanding of social construction is captured in the notion of **doing gender**. Gender involves concepts and categories we work at projecting. We use these categories to think about people and what people do. Most important, social constructionists focus on power and hierarchy, looking at how status, entitlement, efficacy, and self-respect play out in our social exchanges with others and are internalized into our own thinking.

PSYCHOLOGY OF WOMEN TODAY: PRESSING PAUSE

Contemporary Perspectives and Trends

If you read across the current literature on the psychology of women (and gender), you will see examples of each of these four historic perspectives and trends. Rather than replacing each other in a neat progression of ideas, each perspective continues to contribute in some form to a richer understanding of sex, gender, and sexuality. Let's fast forward our videotape then pause it on a still image of where the Psychology of Women is today.

Gender comparisons. Over the first 10 years of the 21st century, over 21,000 journal articles and over 2,300 dissertations were catalogued by PsycINFO under the keyword "human sex differences."³ Clearly research comparing women and men is still happening.

³PsycINFO is an online abstracting service for research published in psychology. I started this search using the Thesaurus term "human sex differences" as a keyword, and then I limited entries to peer-reviewed journal articles with humans and written in English.

Especially informative contemporary comparative studies have moved beyond simply documenting and compiling gender similarities and differences. Rather, these studies focus on how characteristics of individuals and of social settings can serve as **moderators** that can exaggerate or wipe out gender differences. They also explore the processes through which individual qualities, that is, **mediators**, can link gender with given outcomes. In sum, this area has grown much more complicated than saying women do this and men do that. Instead, the current study of gender comparisons builds models that designate *when* women and men are similar and different and *how* these similarities and differences come about.

To illustrate both types of models, let's focus on gender differences in job pay which, we'll see in Chapter 9, continue to disadvantage women. A well-established gender difference concerns self-pay: even when women contribute the same quantity and quality of work as men, women tend to pay themselves less—a phenomenon called **depressed entitlement** (Jost, 1997).

Mary Hogue and I (2003) recreated this gender difference for a control group of women and men and then added two experimental conditions to our model: one in which women and men were told that women were generally more skilled at the task they would be doing (raising women's, but not men's, task status) and a second in which women and men were told that high school students usually did the upcoming task, thus lending educational status to these college students' task performance. We found that status *moderated* (interacted with) gender such that status-enhanced women in both our added conditions paid themselves similarly to men and more than control women. Thus, when women's status was enhanced, the gender difference in self-pay failed to emerge, suggesting that it is women's generally lower status that is driving depressed entitlement—not being a woman per se (see Figure 2.2). In this way, our moderator (status) qualified when gender affected self-pay, limiting the effect to when the playing field was tilted by status differences between women and men.

My second example illustrates a *mediated* model and focuses on college students' expected pay for their first post-college job in their chosen career field. Again, gender played a role such that women anticipated lower pay. However, when Mary Hogue and her co-authors (2010) took into account how female-typed each student's job intention was, gender no longer predicted entry-level pay (see Figure 2.b). Rather, job intentions explained expected pay such that the more female-typed an individual's job intention was, the lower her or his projected pay was. Although it certainly was true that women's job intentions were, overall, more female-typed than men's, the degree to which both women *and* men pursued female-typed jobs, the lower their expected pay. Knowing this, we could

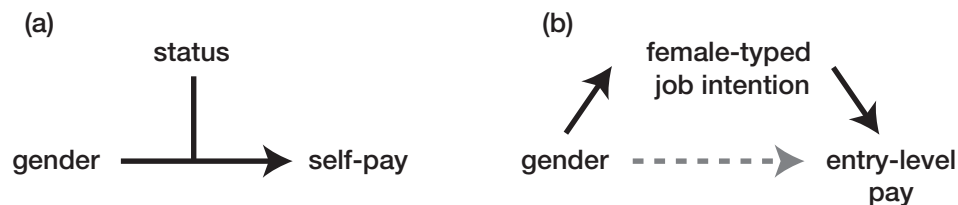


Figure 2.2

(a) Diagrams social status as a moderator of the relationship between gender and self-pay (Hogue & Yoder, 2003); (b) Diagrams job intention as fully mediating the (apparent) relationship between gender and expected entry-level pay (Hogue et al., 2010).

work to equalize expected pay by equalizing job intentions (or by reducing the pay gap between female- and male-typed jobs!), instead of assuming that there's just something essentially wrong with women's pay expectancies.

Androgyny and individual differences. The concept of androgyny still merits some attention, although we'll see in Chapter 6 that problems with measuring femininity and masculinity have muted the promise of this once-vaulted concept. The residual of androgyny that remains active in contemporary research on the Psychology of Women is a broader exploration of **individual differences**, both within and across genders. Personality traits and attitudes oftentimes distinguish individuals more than clustering people into two groups (female and male).

A strong, current example can be found in the Ambivalent Sexism Inventory, which measures **sexist prejudice** (Glick & Fiske, 2001a). As we'll see in Chapter 7, sexist prejudice refers to attitudes that serve to oppress girls and women. Although American women as a group generally score as less sexist than men as a group, there are wide individual differences among both women and men. For example, individual women and men who held hostile attitudes about women negatively evaluated women in nontraditional career roles (Glick & Fiske, 1996). What the individual difference of **ambivalent sexism** shows us here is that it predicts attitudes about career women better than the social categories of women and men.

Gender as a stimulus variable. This approach in the Psychology of Women opened the door we stepped through in Chapter 1 to thinking about gender as a social category through which others perceive and act toward us. A research example from this approach helps to demonstrate what I mean by a **stimulus variable**.

Hilary Takiff and her colleagues (2001) examined the status implications involved in how college students address their professors. Not so surprisingly, 243 students who recorded how they referred to their current instructors were significantly more likely to address their professor by title (Dr. Yoder) when that professor was male. A second study with different students explored the impact of both title and professors' sex as interacting stimulus variables. Each student read one transcript of a presumed class session. The transcripts were varied in how the female or male professor was addressed, using either title or first name. Reading the title ascribed more status to the instructor, regardless of gender, and women instructors addressed by title were regarded as less accessible than similar men.

This pattern of findings across the two studies suggests that men are addressed more commonly by title because they are perceived as higher status without affecting their accessibility. Women need to work harder to get the title they deserve and suffer a setback in doing so. Notice that whatever respect each individual professor might command by their preparation, talents, etc., as well as however accessible each is, are overshadowed to some extent by something instructors cannot control—how students perceive them because of their sex category.

Gender as socially constructed. **Social constructionism** has expanded not only our thinking about what gender is but also our approaches to studying gender. When we talked about social construction in Chapter 1, we saw that we needed to think more deeply about things we do almost reflexively (for example, check a box indicating that we are female or

male).⁴ The dominant way in which social constructionists explore gender issues, then, is through subtle means like **discursive analysis**, which looks for recurrent themes (interpretative repertoires) in the everyday language people use.

For example, Brendan Gough (1998) brought together working and middle class, second-year university psychology students in Britain, aged 20 to 50, to participate in three all-male discussion groups focused on masculinity in the 1990s. He recorded their open and free discussions in response to a series of general questions he threw out to them, such as, “What do you *not* like about feminist women?” Common throughout the discussion that ensued across multiple topics was an unspoken need to appear egalitarian and not openly hostile toward women. Yet also repeated in many statements were contradictions that backed off from truly nonsexist beliefs (consistent with some of the ambivalence we touched on above with the Ambivalent Sexism Inventory).

Take, for instance, one response to the question about feminists. One man said that feminists “...inflare things, so many things I disagree with, like about ‘em, quite a lot of it is fair enough but at the same time they take it too far...” (p. 39). Generally, this characterization of feminists is negative, in that the speaker disagrees with them and, most importantly, diminishes their cause by saying that they inflame things and take them too far. On the other hand, he recognizes that they have legitimate claims regarding injustice and even likes them, defusing charges that he is sexist. The discussion that follows this opening statement in response to the interviewer’s question continued the theme of not supporting the goals of the women’s movement while still claiming to be pro-feminist.

Integrating themes and perspectives. The case that I will make in this book is that much, although clearly not all, of the work being done in psychology overall and within the Psychology of Women makes comparisons of women with men. However, pointing out differences is just the start. A more meaningful understanding comes from exploring *why* these differences do (and do not) occur. I think this can happen by weaving together the four areas above, and I believe that the thread that can do this integration is an understanding of how difference is linked to power, privilege, oppression, and systems of inequality. The following chapters will review what we know using each of the four perspectives above and will seek to tie them together by taking a look at how the topic considered deals with issues of power.

Within the Discipline of Psychology

One strong indicator of how mainstream a specialty area is comes from examining how that area fits into the organization of the overall discipline. There is no doubt but that the Psychology of Women has become entrenched as a legitimate area of study within the discipline of psychology. There are college courses like the one you’re taking: 85 (56%) of the 152 doctoral programs responding to a survey conducted by APA offered at least one undergraduate course on women (Women’s Programs Office, 1998).⁵ In 2008, 70% (2,362

⁴Another example is the order in which we commonly say things, like “male and female.” I make a conscious effort to flip this wording so that subordinated groups come first. My bet is that, try as I might, I goof this up sometimes.

⁵More information about the Women’s Programs Office, which is part of the Public Interest Directorate of the American Psychological Association, can be found at <http://www.apa.org/pi/women/> (retrieved June 2011).

of 3,361) of all new doctorates in psychology in the United States were earned by women (National Science Foundation, 2009), and in 2010, 57% of the members of the American Psychological Association were women (2010 APA Member Profile).⁶ In 2009, women were fully 71% of undergraduate psychology majors (Carnevale, Strohl, & Melton, 2009).

There are recognized organizations within psychology: the Society for the Psychology of Women (Division 35; established in 1973)⁷; the Association for Women in Psychology (established 1969)⁸; the Women's Program Office (established 1977); and Office of Lesbian and Gay Concerns⁹ (both in the Public Interest Directorate of APA). There are journals devoted exclusively to research and theory in the field: *Sex Roles* (published since 1975), *Psychology of Women Quarterly* (1976), *Women & Therapy* (1982), and *Feminism & Psychology* (1991). Sociologists for Women in Society (SWS) in the American Sociological Association (ASA) publishes *Gender & Society* (1987), which includes research of interest to feminist psychologists. In sum, the area has all the trappings of other specialty areas within the discipline.

Unlike many of these other areas, the Psychology of Women cuts across the field, emerging in everything from experimental and cognitive to developmental, clinical, counseling, social, history, testing, and health psychologies (O'Connell & Russo, 1991). The core focus that ties this all together is women; *women*, women's lives, and gender are put at the center of what we do in order to create a psychology *for* women.

Additionally, the Psychology of Women, with its gender-sensitive understanding, helped spawn a Psychology of Men and Masculinity (Lisak, 2000) as a field of study and as a recognized organization in psychology (APA Division 51—The Society for the Psychological Study of Men and Masculinity [SPSMM], established in 1977 and inaugurating its journal, *Psychology of Men and Masculinity*, in 2000). The key point that distinguishes this field and gives it a complementary pro-feminist flavor is its focus on “men the particular, not man the generic” (Lisak, 2000, p. 3).

FEMINIST RESEARCH: PLAYING FORWARD

As we look to the future of the Psychology of Women, as well as think critically about its present and past, we need to consider our research methods. Like all of psychology, we are talking about an art and a science here—a body of knowledge based on scholarship, not opinion. Yet I made an argument in Chapter 1 for the legitimate role of values in giving meaning to the psychology we do (construct). It is this somewhat paradoxical blend that

⁶For more information about the gender composition of psychology, request a free copy of the October 1995 report on “the Changing Gender Composition of Psychology” from the Women's Program Office of the American Psychological Association. Interestingly, the honorary title of APA “fellow” has been bestowed on about 5% of all APA members, and only 29% of these select fellows are women.

⁷To become a student member in the Society for the Psychology of Women, Division 35 of APA, visit our website at <http://www.apadivisions.org/division-35/> (retrieved June 2011).

⁸To learn more about AWP, including how to join as a student, explore our website at <http://awpsych.org/> (retrieved June 2011).

⁹APA offices can be reached by contacting the American Psychological Association at 750 First St., NE, Washington, DC 20002-4242, (202) 336-5500; or visit APA's home page at <http://www.apa.org>. To e-mail APA's Practice Directorate: publicinterest@apa.org.

feminist methodologists grapple with, and indeed some of this thinking is helping to transform research across the discipline.

Put into perspective for readers of this text, I am asking you to base your thinking on systematic evidence about which you think critically. There's a balance to be struck here between the extremes of unexamined acceptance of data, on the one hand, and dismissal of anything and everything that might be less than perfect, on the other hand. *I am asking you to think.*

I will not cover the fundamentals of doing psychological research here. Instead, I want to highlight some of the innovations to research that adopting the feminist value of working toward social justice entails.

Decisions, Decisions

Every study begins with a research question so that oftentimes we don't think about the major value judgment that is made by deciding to invest time, energy, and resources in this project instead of another. Furthermore, how this question itself is framed can have a significant impact on how the project proceeds. An example from developmental psychology that explored "maternal separation anxiety" will help.

The implied question underlying much of this research was: Is day care bad for children? As we'll see in Chapter 8, researchers studied aggressive displays by children in day care, defiance, sociability, intellectual achievement, and so on. Even when positive outcomes were found, they often were presented as inadequate compensations for the "obvious" drawbacks of other-than-mother care.

Louise Silverstein (1991) approached this same area of study with a differently framed question. She argues that given trends in the employment of mothers, it is unlikely that day care will disappear as an option. She then suggests that we explore how to make day care *more effective* for children and their families. What makes day care work not only for children but also for their families? This new question inspires a very different, proactive, and expansive approach to doing research. In sum, the questions we ask (and don't ask), and how they are framed, matter.

Beyond questions, designing an actual study is filled with other critical decisions. Again, considering maternal attachment, who will participate? What about paternal separation? What will be measured? Why separation *anxiety*? Why not relief after a weekend of sibling fights, facing stacks of work to do on the job, with the security that providers are caring and well trained, and with kids happy to see their friends? Where will we study them? In high-quality day-care centers, in laboratories...? Who will study them? Government agents pushing workfare, graduate student novices...? What if problems are found? How do we interpret these? Bad kids, bad moms, bad providers, inadequate provisions? Where can we disseminate these findings? Magazines, political pamphlets, newspapers, scholarly journals? Each and every one of these decisions matters, so we need to think critically about them.

Innovations in Research

The traditional experimental approach in psychology drew on the philosophy of **positivism**, the belief that there is an objective truth out there and the job of scientists is to dis-



Box 2.3

The more politically controversial a research topic is, the more every research decision can make a difference in the outcome, and the more clear, systematic research we need over unexamined folk wisdom. Many of these topics deal with issues involving mothers, from blending family with work to abortion and child care.

cover it (Kuhn, 1970). When we recognize all the decisions that go into doing research, the very foundation of research's objectivity seems shaky. Returning to our day care example, no doubt there are Moms who are anxious about dropping off their kids, and some days are worse than others. Was the child coughing through the night; are there family members who disapprove; does the woman like her job and find it rewarding; is the childcare arrangement stable and enriched; is there a broad public outcry that discourages separation before kindergarten but lauds it afterwards? ... These are questions about culture, history, and context that have been raised by feminist scholars (Peplau & Conrad, 1989; Sherif, 1979; Unger, 1983).

Furthermore, comparing women with men violates the keystone of true experiments (random assignment), making these comparisons **quasi-experimental** and open to all the questions about causality that come with correlational designs. Involving outside observers, and even the experimenters themselves, can raise **experimenter effects**; that is, expectations about gender roles that become self-fulfilling.

Overall, all research should be suspect, but that doesn't mean that it cannot be useful. Most of what is published in academic journals has been carefully and thoughtfully reviewed by experts (and online searches like PsycINFO can limit entries to peer-reviewed journals). Still, we have seen that publication is no replacement for thinking....

...and searching more. The best approach is not to rely on any one study or any one methodology. There are surveys, interviews, case histories, archival records, biographies, experiments done in labs as well as in real-life field settings, observations, focus groups, and ethnographies. Furthermore, there are more social and physical scientists than just psychologists addressing a question; there are historians, sociologists, anthropologists, political scientists, biologists, economists, etc. A feminist psychology of women and gender offers us an approach to doing and understanding research that is problem-centered, multi-methodological, and multidisciplinary. No one study in any one discipline stands alone to answer a question. Rather, it is the **triangulation**, the bringing together, of the pieces that helps us formulate an answer.

This is my immodest goal for this book: to integrate masses of well-done and up-to-date research to give us an evolving picture of a feminist psychology of women and gender that is more like a videotape than a stagnant snapshot (Riger, 2000b). As we discussed pre-

viously, our movie will be a work-in-progress rather than a finished product. This is both the frustration and the challenge of *doing* (constructing) psychology.

Feminist Approaches to Doing Research

Sue Wilkinson (2001) describes three theoretical perspectives for *doing* (constructing) feminist research that capture what we have been discussing here. **Feminist positivist empiricism**, the mainstream approach of American psychology, uses conventional scientific methods to observe and measure behavior. The hallmark of this approach is quantitative, statistical data analyses. **Feminist experiential research** emphasizes individual experiences and seeks to give women opportunities to express themselves on their own terms and with their own “voice.” These qualitative analyses of people’s experiences as they describe them in their own words often provide a richer, deeper understanding of a social process.

Looking back to Chapter 1 where I described my own work with women firefighters (Yoder & Berendsen, 2001), a quantitative data analysis approach to survey data found that both Black and White women reported being stereotyped by their colleagues. This finding was probed more fully in subsequent interviews in which the form this stereotyping took was different for the two groups. In contrast to Black women who felt overburdened as a consequence of their stereotype of self-reliance, White women felt underburdened as the result of their stereotype of fragility. Both feminist approaches to research have been used to make gender comparisons, study individual differences, and explore gender as a stimulus variable.

Feminist social constructionists claim that all that we observe, measure, and experience is mediated through language; that is, we give meaning to what we think, feel, and do by naming it. We saw this approach being used by Gough (1998) in his **discursive analysis** of men’s discussions in all-male groups about feminists. This relatively new addition to the arsenal of research strategies available to psychologists not only is inspiring innovative research, but also is forcing feminist psychologists to look more closely at how we ourselves talk about things. For example, we saw that the very term “depressed entitlement” made assumptions about whose self-pay was normative (men’s) and who was harming themselves (women).

Intersectionality: Diversity in Feminist Research

Feminist research overall must be inclusive of *all* women by capturing their commonalities and the richness of their diversity, both as individuals and as members of various subgroups represented around the Diversity Wheel we explored in Chapter 1. This last point about subgroups returns to us to thinking about **intersectionality**, the understanding that gender is constructed in combination with a full range of **social representations**. Feminist research necessarily must be ever vigilant about this point (Bowen et al., 2010; Chisholm & Greene, 2008).

Elizabeth Cole (2009) identifies three questions that feminist researchers need to ask across every stage of the research process (see Table 2.4). Asking “Who is included in this category?” is intended to highlight the diversity we have seen represented within social

categories; within the category of women, we need to consider race/ethnicity, social class, age, etc. This question directs us to consider what groups may, and may not, be covered by our hypotheses, in our sampling, by the measures we select, through our analyses, and in how we generalize our findings. Across each of these phases of doing research, we also need to ask “What role does inequality play?” and “Where are the similarities?”

Irma Corral and Hope Landrine (2010) provide many thought-provoking examples of issues regarding intersectionality raised by asking these types of questions. Regarding Cole’s second question about inequality for example, we all probably think that a dollar is a dollar, so that when we report the income of an individual, we believe it is an objective measure of socioeconomic status (SES). However, when we consider differences in what a dollar will buy, equal incomes can have unequal uses. Women and people of color pay more for goods and services (for example, cars and haircuts), food costs more in poor neighborhoods, and individual income goes a lot farther in a dual-earning than in a single-

TABLE 2.4
Three Questions that Encourage Thinking about Intersectionality in Research

<i>Research Stage</i>	<i>Question</i>		
	<i>Who is included within this category?</i>	<i>What role does inequality play?</i>	<i>Where are the similarities?</i>
Generation of hypotheses	Is attuned to diversity within categories	Literature review attends to social and historical context of inequality	May be exploratory rather than hypothesis-testing to discover similarities
Sampling	Focuses on neglected groups	Category of memberships marks groups with unequal access to power	Includes diverse groups connected by common relationships to social and institutional power
Operationalization	Develops measures from the perspective of the group being studied	If comparative, differences are conceptualized as stemming from structural inequality (upstream) rather than as primarily individual-level differences	Views social categories in terms of individual and institutional practices, rather than primarily as characteristics of individuals
Analysis	Attends to diversity within a group and may be conducted separately for each group studied	Tests for both similarities and differences	Interest is not limited to differences
Interpretation of findings	No group's findings are interpreted to represent a universal or normative experience	Differences are interpreted in light of groups' structural positions	Sensitivity to nuanced variations across groups is maintained, even when similarities are identified

Source: Taken from Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist*, 64, 170–180, p. 172.

earning household. Corral and Landrine conclude that when we take a better informed look at SES, we find that it underlies a wide range of health outcomes that often are misleadingly attributed to ethnic and/or gender groups.

What We Know About Gender Differences

Over the next five chapters, we explore explanations for why gender differences exist as well as how these differences fit into a system of inequality. We examined the connection between difference with privilege, oppression, power, and systems of inequality in general in Chapter 1. In these next chapters, we build on that foundation to make these linkages specific to sex, gender, and sexuality. Because difference lies at the start of our work, we need to lay some groundwork about what we know about gender differences themselves.

Before we begin this next section on understanding gender differences, I want to urge to you to hang in there with me through some possibly challenging, but not indecipherable, considerations involving statistics. Some readers may see these references to stat concepts and tune out. Please don't. There is nothing here that goes beyond some very basic stats, and the outcome will be worth it. You'll be able to read and make meaning of a very complex tool (**meta analysis**) for reporting information about group differences (a tool that can extend to relationships—correlations—between variables as well).

Where We Look for Differences



Fingerprints—what in the world could fingerprints have to do with comparisons of women and men? As incredible as it may sound, scientists actually have thought to study the “dermatoglyphic asymmetry” of women’s and men’s fingerprints. Dermatoglyphic asymmetry reflects one’s “ridge-count asymmetry”; that is, the difference between the number of ridges on the digits of one’s left and right hands. Ridges on fingerprints are fixed by about the 4th month of fetal

life and appear to have a genetic link. This reasoning set the stage for comparing women and men, and lo and behold, somewhat different patterns emerged (Kimura & Carson, 1995). It didn’t take long to relate these patterns to cognitive tests, suggesting that the pattern more common among women was associated with superior verbal abilities.

There are lots of questionable methodological procedures and leaps of logic here so please don’t jump to the conclusion that fingerprints matter. Rather, the point I do want to make, echoing Michael Carroll (1998), is that *work that compares women and men gets attention whenever it supports prevailing gender ideologies*. If these fingerprint patterns didn’t already fit with our folk wisdom about women’s verbal abilities, would we be more skeptical about these data?

Remember Hegarty and Pratto’s (2004) study that we talked about in Chapter 1. Students read data about lesbians’ and heterosexual women’s memories of their childhood play. When the data purportedly showed that lesbians engaged in more female-typed play than heterosexuals, students questioned that finding more than when the contrived data fit with stereotyping about sexual orientation. In contrast, we know better: the data should

have been questioned in *both* versions because memories often are inaccurate. So, stay alert to when you do, and when you don't, automatically take a closer look.

Overlooking Similarity

Having made a value-laden choice about where to even begin comparing women and men, a second common problem rests on our very human propensity to find differences more intriguing than similarities (Hyde, 2005). Which finding is more exciting and likely to make newspaper headlines: "Women and Men Read Maps Similarly" or "Men Are Better at Reading Maps than Women"? Gender differences are more appealing to read about and to study than gender similarities, and they oftentimes fit with our folk wisdom about women and men.

But even researchers with the most unbiased intentions find themselves limited by the way we typically do research in psychology. Think back to your first statistics class or most of the journal articles you've read in psychology. The name of the game is finding statistical significance, that is, difference. We want to reject the null hypothesis of no difference, no effect, and accept the alternative. It is simplest then to compare women with men, looking for a difference between the two groups. If we don't find a difference, we are left to wonder if there really isn't one or if what we measured wasn't sensitive enough to detect a difference that really exists. Given how we go about doing research, finding a statistically defensible difference then is just more satisfying. All of this conspires to fill psychology journals with studies touting gender differences rather than similarities, and these differences then make their way into the popular press.

We can see evidence of this process in gender "differences" that seem to diminish over time. In 1974, Eleanor Maccoby and Carol Nagy Jacklin published a book, *The Psychology of Sex Differences*, which summarized an extensive body of research evidence that they read. Among other things, they concluded that women's verbal abilities were superior to men's. Thus when Janet Hyde and Marcia Linn (1988) examined gender differences in verbal abilities, they statistically compared findings published prior to Maccoby and Jacklin's book with those published subsequently. Hyde and Linn found a significant difference between these two time periods such that gender differences appeared larger before the book was published than afterwards ($d = -0.23$ before 1974; -0.10 after 1974). This pattern suggests that once the book established this difference, findings of similarity, which before would have gone unnoticed, became publishable.

I open this section with these two points because I believe they are important to keep in mind as we turn to evidence about where sex and gender differences do exist. Both points speak to the big picture here, a picture in which we may, or may not, want to think about women and men as different overall. Given the whole universe of possible comparisons we might make to completely look for similarities and differences, it's probably more accurate to say that more similarities (both in number and meaningfulness) connect all people than differentiate us.

Declaring Difference

To test for differences between women and men, researchers generally create tests to measure one or more psychological functions, directly observe women and men in action, or

ask individuals to rate how they think about themselves using a variety of adjectives (self-report measures). They then compare the responses of groups of women with groups of men, statistically analyze the data, and declare that women and men are different whenever their mean scores fall far enough apart to meet our statistical criterion. This seems objective enough.

However, there are at least two serious problems with this **comparative approach**. I find it easiest to think about these problems if I visualize gender comparisons graphically. If we graph the scores from a large group of women in a frequency distribution and do the same with the scores from a large group of men, we can compare the two distributions according to (1) the mean (arithmetic average) or median (50th percentile) scores, (2) how dispersed or spread out the scores are (the **standard deviation**), and (3) how much the two distributions overlap each other. Some possible configurations appear in Figure 2.5.

Although mean (or median) differences between two groups, such as women and men, do indicate that the groups, on average, differ, they do not automatically mean that all members of one group outscore the other. In other words, two groups' scores can overlap substantially even when their averages differ significantly (Lott, 1997). Expressed graphically, the distributions in Figure 2.5(a) illustrate an average difference and no overlap (psychologists never have found a difference between women and men such that all members of one group outscored all members of the other group). Yet when we assert that women and men are the "opposite" sexes, we imply that there is no overlap between their distributions of scores. (Referring to the "other" sex or gender reduces this misleading connotation.)

Contrast the graph in Figure 2.5(a) with the way even relatively huge, real average differences overlap in Figure 2.5(b). By far, one of the largest differences between girls and boys across childhood and adolescence found to date involves simple throwing velocity—how fast each can throw a ball. Assuming that both distributions are normal and equally spread, graphs of these distributions and their overlap appear as Figure 2.5(b). Although about 98% of all girls throw slower than the average boy at the mean, there still is some overlap between their speeds, as indicated by the shaded area. Furthermore, a few fast-throwing girls outperform some boys. In sum, when one compares an individual girl with an individual boy, it is likely that he will throw a ball faster than she, but there will be notable exceptions to this rule. As we'll see, no psychological differences, nor most motor differences for that matter, come even close to the size of this difference in throwing speed. The overlap between girls' and boys', men's and women's, cognitive and social scores will

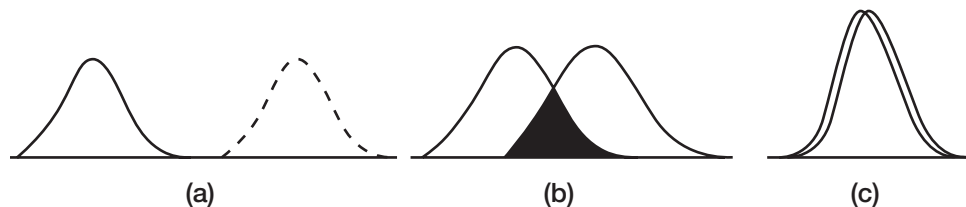


Figure 2.5

Line graphs of three combinations: (a) two frequency distributions with no overlap; (b) two distributions showing that 98% of girls throw a ball slower than the average boy; and (c) overlapping curves illustrating women's and men's math abilities (Hyde, 1994).

be more like Figure 2.5(c), which shows the gender distributions for women's and men's math abilities (Hyde, 1994). Here, there is much more overlap.

Our analysis so far assumes that the distribution of scores for women is similar in shape to the distribution for men. Often we think of this shape in terms of a “normal” bell curve and of distributions that are similarly dispersed or spread out (as indicated by the standard deviation). However, distributions can vary in both their shape and dispersion. For example, there could be a handful of exceptionally high scorers in one group who pull up the group's mean score, although most women and men score similarly.

In sum, the first problem with how psychologists study gender differences involves how we define difference—is it an average difference, a difference in dispersion, or a notable degree of nonoverlap? All three pieces of the puzzle are important to consider.

One final point about declaring difference before we move on is that we are focusing on **intergroup differences**. There probably is no measure on which the difference between girls/women and boys/men isn't dwarfed by the variability among women and among men (**intragroup differences**). For example, if you think about throwing speed, which shows a relatively huge difference between groups of girls and boys, recall individual girls and boys you have seen throw a ball. The variability within each sex is likely very large. Extend your thinking to areas where intergroup differences are much smaller, such as math abilities. You know intuitively that there are very skilled to very poor individual girls and boys; that is, lots of intragroup variability.

Summarizing Data

Traditionally, psychologists summarized research data by writing a **narrative review** (Hyde & Grabe, 2008). Quite simply, the author(s) read all the relevant research on a topic and reported their impressions and conclusions. More recently, computerized abstracts (such as PsycINFO) have helped to identify the work that's been done in an area, including references to some unpublished works that are too often lost to readers. A second approach takes the review process a step further and provides a list of publications and their conclusions so that studies showing (1) no differences, (2) differences favoring women, and (3) differences favoring men can be counted or tallied. In **counting reviews**, a difference is declared when the scales tip toward one of these three patterns. This is the procedure that Maccoby and Jacklin (1974) used in their seminal and very comprehensive review.

The most recent development in the area of literature reviews is a statistical technique called **meta analysis**. Essentially, meta analysis pools data from a large number of studies (sometimes 100 or more). In a typical research study, a researcher combines data from a sizable sample of individual research participants. In meta analysis, the units of analysis are not individual research participants, but rather are individual studies, each weighted for the number of participants involved in it. When large numbers of women and men are compared in a typical study, a *z*-score may be calculated to capture the dispersion of scores around the mean of zero. When studies involving women and men are compared in a meta analysis, a ***d* statistic** (also referred to as an **effect size**) is computed that tells us the degree of difference between the two groups. The *d* statistic tells us how far apart the means for women and men are in **standard deviation** units.

If you think about this, a $d = 0$ would indicate that two groups scored identically. When can we conclude that the difference between two groups is greater than zero? Remember

that a large number of studies, each involving a substantial number of research participants, is summarized in these calculations so that it doesn't take much for a d to be statistically significant. But what is *meaningful*? The general convention in psychology is to consider a d around ± 0.20 as small; around ± 0.50 as moderate; and around ± 0.80 as large (Cohen, 1977). Moderate effect sizes (around ± 0.50) correspond to group differences that people would normally notice in their day-to-day lives and large differences (around ± 0.80) are "grossly perceptible" (Cohen, 1977, p. 27). Thus, if we find $d = +0.50$ for aggression, we should notice in our everyday interactions that one gender (in this case men) is more aggressive, on average, than the other.

The numeric size of a d also tells us about the degree of overlap in the distributions of the scores for the two groups being compared. For a small effect size of about ± 0.20 , the distributions will overlap by 85% (Eagly, 1995). As we have seen earlier, overlap means not only that some people have similar scores, but also that some members of the group that generally scores lower actually outscore some members of the other group. For example, although adolescent and adult women exhibit more democratic leadership as a group than do men as a group ($d = -0.22$) (Eagly & Johnson, 1990), about 85% share comparable degrees of democratic leadership, and a few men are more democratic than many women. Even with larger d s, there are substantial degrees of overlap: 67% for moderate d s of about ± 0.50 ; 53% overlap for large differences of about ± 0.80 (Eagly, 1995).

Note that d s can be positive or negative depending on which mean arbitrarily is entered first. Although I would have chosen to do the opposite (consistent with my preference to put subordinated groups first), a convention seems to be popular in the literature in which a positive effect ($+d$) indicates that men typically outscore women on the variable tested and a negative d ($-d$) indicates that women's scores averaged higher than men's. To make it easier to go from here to others' work, I reluctantly have accepted that convention.

All of this information about d s is captured in Table 2.6; if you understand this table, this is most of what you'll need to know about meta analysis. A d score tells us three things: (1) its size and how detectable a difference is in everyday life; (2) the degree of overlap of the two distributions; and (3) which group's mean outscored the other's, as indicated by the sign (+ or -) of the score.

An overview of meta-analytic findings. Now that we understand the fundamentals of meta analysis, let's take a look at how the technique has been used to explore gender differences. Remember that multiple studies exploring the same measured (dependent) variable must exist for the meta-analyst to do her or his work. There are all kinds of singular studies in the literature that compare women and men so where meta analysis is done, and not done, tells us something about where researchers have concentrated their efforts.

The list in Table 2.7 is not an exhaustive list of meta analyses comparing women and men. Rather, I made choices about what to include based on prior catalogues of findings

TABLE 2.6
Interpreting Effect Sizes

$d = \pm 0.20$	small	overlap=85%	not detectable, but potentially important
$d = \pm 0.50$	moderate	overlap=67%	detectable
$d = \pm 0.80$	large	overlap=53%	grossly perceptible

TABLE 2.7
Sample Meta-Analytic Differences

	<i>d</i>	<i>Larger for</i>	<i>Size^a</i>
PHYSICAL AND MOTOR COMPARISONS			
Height ^b	+2.60	men	very large
Throwing velocity	+2.18	boys & young men	very large
Flexibility	-.29	girls	small
Activity level	+.49	boys & men	moderate
COGNITIVE ABILITIES			
Memory ^c	-.20 to -.56	women	small to mod.
Verbal abilities	-0.2 to -.40	girls & women	small to mod.
Math abilities	-.14 to -.16	depends on task	small
Spatial abilities	+.13 to +.73	boys & men	small to large
SOCIAL VARIABLES			
Aggression (all types)	+.50	boys & men	moderate
Helping (public)	+.74	men	large
Anxiety ^d	-.30	girls and women	small to mod.
Empathy (self-report) ^e	-.91	girls and women	large
Leader emergence ^f	+.49	men	moderate
Smiling	-.40	young & adult women	moderate
Gazing during conversations ^g	-.68	women	large
Risk-taking (observed driving) ^g	+.17	men	small
Attitudes about casual sexuality	+.81	men	large
Sexual satisfaction	-.06	equal in adults	
Moral reasoning: Care	-.28	girls and women	small
Moral reasoning: Justice	+.19	boys & men	large
SELF-REPORTED PERSONALITY TRAITS			
Neuroticism (anxiety)	-.32	young & adult women	small
Agreeableness (tenderminded)	-.91	young & adult women	large
PSYCHOLOGICAL WELL-BEING			
Life satisfaction	-.03	equal in adults, inc the elderly (+.08)	
Well-being	-.07	equal in adults, inc the elderly (-.06)	
Self-Esteem	+.21	boys & men	small

Note. Unless otherwise noted, data taken from Hyde (2005).

^a Size categories follow the convention used by Hyde (2005) for absolute values of $|d|$ where small = $.11 < |d| < .35$; moderate = $.36 < |d| < .65$; large $|d| = .66 - 1.00$; and very large $|d| > 1.00$. ^b Thomas & French, 1985.

^c Single studies reported by Halpern, 2000, pp. 92-93. ^d Feingold, 1995. ^e Reported in Hyde & Frost (1993).

^f Eagly & Karau, 1991. ^g Byrnes et al., 1999.

(Hyde, 2005) and on differences that we will explore in the next chapters of this text. I have grouped these findings into studies of (1) physical and motor differences, (2) cognitive abilities, (3) social variables, (4) personality traits, and (5) psychological well-being. At first glance, this table may appear intimidating, but if you hone in on a specific variable and think about what you know about d values and their meaning, tables like this one here and in published papers should be quick and valuable reservoirs of information.

I admittedly cherry-picked the variables I included in this table, selecting entries that have been the center of controversies (math abilities) and that we'll refer to later in this text. Given that over the next few chapters I often want to explore gender differences in depth, this abridged table gives the impression that there are more differences than similarities between women and men. Stepping back from this table to look at a fuller array of 128 effect sizes across 46 studies catalogued by Janet Hyde (2005), she notes that fully 30% of these effects are close to zero ($|d| < .10$) and an additional 48% are small (between .11 and .35). Beyond this general point, there are a few more specific points I'd like you to notice about Table 2.7.

First, nothing comes close in size to some very large physical differences like height ($d \approx +2.0$) and throwing velocity (+2.18). The difference between my partner and me (over a foot—he's 6'6") is far greater than the average height difference between the sexes (about 5 inches), yet even with a difference this relatively huge, we manage to live in much the same physical environment (although I hate when he moves my driver's seat in my car).

Second, there's no category in which all the effects favor one sex over the other. Third, we'll see that some of these (mostly physical and cognitive abilities) vary with age and with the measure used to define the targeted variable.

Fourth, the skills captured by each entry range from the simple (smiling) to the much more complex (math abilities). For example, math abilities can range from computational skills (adding numbers, which interestingly favor girls and women with $d = -0.14$) to general math performance (+.16, although a newer study [Lindberg et al., 2008] clocks in with a virtually negligible difference of $d = +.05$). We really can't say that men are better than women at all types of math, if at all.

Finally, the way we categorized the items in Table 2.7 is not the only, nor necessarily the best, way. Diane Halpern (2000) raises this question in relation to cognitive abilities, following up on the point I just made about math. Instead of using the usual divisions of verbal, math, and visual-spatial abilities, Halpern (p. 123) groups together the tasks on which women as a group, then men as a group, excel. For women, these tasks include language production; synonym generation; word fluency; memory for words, objects, and locations; anagrams; and computation. Men show superiority in mathematical problem solving, verbal analogies, mental rotation, spatial perception, and tasks that generate and use information in visual displays. Notice how some skills for both women and men cut across the standard verbal, math, and spatial categories.

Rather, Halpern suggests that we might look at the cognitive *processes* that underlie these two sets of abilities. The tasks at which women excel require rapid access to and retrieval of information stored in memory. The tasks at which men excel draw on the ability to maintain and manipulate mental representations. Still, much of how we think about these skills is divided along the lines used in our table, so we will need to keep to this typology in our later explorations. However, Halpern's insight may open up possibilities for the future of work in this area.

Interpreting meta analyses. Finding effect sizes and tabulating them are starting points from which we might begin to understand women and men. The size of each effect tells us whether or not that difference will be detectable in our everyday lives. In fact, Janet Swim (1994) compared meta-analytic findings with college students' judgments about the size of gender differences. She concluded that students in introductory psychology classes were pretty accurate in their assessments; in other words, their judgments of gender differences often paralleled the findings of meta-analysts. (If anything, students underestimated differences.)

However, the full story is never this simple. Even seemingly small differences can have meaningful impacts on the lives of girls/women and boys/men (Rosenthal, 1991). For example, a study at the University of California at Berkeley concluded that if SAT scores projected women's college grades without bias, fully 5% more women would have been admitted to their university (that's 200–300 students) (Leonard & Jiang, 1995).

Small differences also can lead to big consequences because they can compound over time. Richard Martell and his colleagues (1996) used a computer simulation to look at how small gender differences repeated over the course of 20 promotion cycles can significantly change the gender composition of an organization. They started with a hypothetical organization with eight tiers ranging from 10 top jobs to 500 lowest level jobs. The distribution of women and men at each level at the outset was equal, and the different people within each tier were given different performance scores, so that the average and dispersion for women and men at each level was equal to start, making women and men as groups equally qualified. In sum, they started with a completely equal structure with regard to gender.

Then Martell and his collaborators ran 20 promotion cycles in which the computer program fairly promoted the individuals at each level of the organization with the highest performance scores. However, before making its selections, the men were allotted a bias point advantaging them by a mere 5% of the variability in scores. This small benefit compounded over cycles produced a final organization in which only 29% of the top positions were held by women and fully 58% of the lowest jobs were allocated to women. In a second simulation, even a seemingly minute 1% advantage at each promotion created an imbalanced organization with 35% women top executives and 53% women low level workers. Small differences can have large impacts over time.

CHAPTER SUMMARY

In this chapter, we ran an imaginary videotape through time, rewinding back to view psychology's general history as well as trends in the Psychology of Women. Psychology's history was not always inclusive of women as both psychologists and as research participants. Looking back to re-place women in this history, we need to do more than simply rediscover forgotten pieces, but rather transform our understandings of history. Such a transformed view of psychology is captured in a brief history of the Psychology of Women that (1) made gender comparisons, (2) explored androgyny, (3) recast gender as a stimulus variable, and (4) looked at power through the lens of social construction.

Pausing our video on the present, these four trends in the Psychology of Women continue today. Greater care is taken not to repeat androcentric bias in our gender comparisons and to expand the promise of androgyny to a much broader range of individual difference variables such as ambivalent sexism. No longer a peripheral specialty area, Psychology

of Women has developed into a mainstream field within psychology with its own college courses, textbooks, journals, and professional organizations.

Our research methods help us look back to how we got here as well as forward to where they can take us. Given the questions about traditional positivism raised by feminists and other critics, we have a multimethodological, multidisciplinary, problem-centered body of scholarship from which we can triangulate findings and draw systematic conclusions. Certainly we have come a long way—and there's no turning back.

Finally, we examined the best evidence about where gender differences appear to reside, identifying mainly cognitive abilities (memory, verbal, math, and spatial) as well as a wide array of social variables. In the next four chapters, we'll seek to explain why these differences emerge by exploring biology, socialization in childhood and across the life span, and present social context. Within each of these areas, we'll see how our understandings of sex and gender differences relate to issues of power, privilege, oppression, and systems of inequality.

SUGGESTED READINGS

Rutherford, A., Vaughn-Blount, K., & Ball, L. C. (2010). Responsible opposition, disruptive voices: Science, social change, and the history of feminist psychology. *Psychology of Women Quarterly*, *34*, 460–474.

Alexandra Rutherford, Kelli Vaughn-Blount, and Laura Ball trace where feminist psychology has succeeded and been challenged since the 1980s to realize its social change agenda, giving us a vision of where we might go into the future.

Furumoto, L., & Scarborough, E. (1986). Placing women in the history of psychology: The first American women psychologists. *American Psychologist*, *41*, 35–42.

This is an excellent article on history because Laurel Furumoto and Elizabeth Scarborough look at trends in women's participation as psychologists in the field that connect individual women's stories.

LaFrance, M., Paluck, E. L., & Brescoll, V. (2004). Sex changes: A current perspective on the psychology of gender. In A. H. Eagly, A. E. Beall, & R. J. Sternberg (Eds.), *The psychology of gender*, 2nd ed., pp. 328–344. New York: Guilford.

This is my original resource for the perspectives and trends in the Psychology of Women. Marianne LaFrance, Elizabeth Levy Paluck, and Victoria Brescoll provide a more in-depth look at this history and its continuing residuals.

Sherif, C. W. (1998). Bias in psychology. *Feminism & Psychology*, *8*, 58–75.

I find this classic article by Carolyn Wood Sherif (first published in 1979) timeless in raising important questions about how we do research in psychology and our too common failure to put our findings into their social and historical context.

Hyde, J. S., & Grabe, S. (2008). Meta-analysis in the psychology of women. In F. L. Denmark & M. A. Paludi (Eds.), *Psychology of women: A handbook of issues and theories*, 2nd ed., pp. 142–173. Westport, CT: Praeger.

Janet Hyde and Shelly Grabe provide an accessible and comprehensive overview of meta analysis and its meaning.