Chapter 15

Barbara Stoddard Burks: Pioneer Behavioral Geneticist and Humanitarian

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Conspicuously absent from most history of psychology texts and biographical anthologies, Barbara Stoddard Burks is an enigmatic figure in psychology. During her brief but stellar career, she generated more than 80 publications. Her journal articles, book chapters, reviews, and monographs concerned general heredity and the genetics of behavioral traits, innovations in research methodology, and themes in developmental, personality, social, and educational psychology. When Burks died in 1943, Florence Goodenough wrote:

> In the short span of her life[,] Dr. Burks' contributions would have done credit to one of double her age. Her zeal in research, her fine technical skill, and her clear insight into the basic principles underlying the problems which she set out to solve won the unqualified admiration of her colleagues both in this country and abroad (Terman, 1944, p. 136).

CHILDHOOD

Barbara Burks was born in New York on Dec. 22, 1902, to a family of illustrious ancestry: Her father was a descendant of some of the first settlers in Virginia; her mother's lineage included Jonathan Edwards and Benjamin Franklin in addition to a number of other scholars in government, science, education, and letters.

Barbara's father, Jesse Dismukes Burks, was a graduate of the University of Chicago and Columbia University and was a prolific scholar in municipal research and education. Her mother, Frances Williston Burks, was a prominent figure in education and, together with her husband, wrote a 1913 guidebook for parents, teachers, and policymakers titled *Health and the School: A Round Table.* In it, they argued that health care should be socialized for the improvement of children as well as the educational process; they insisted that health is not only a civic obligation but also a right.

Barbara was the older of the Burks' two daughters. In 1909, the Burks family traveled to the Philippines, and Frances wrote a children's book describing the people, cultures, and regions of such areas as Hawaii, Manila, the Benguet Mountains, and the Pasig River. The book emphasized tolerance and respect for members of other cultures. Her mother made Barbara the center of the story and, indeed, the book is titled *Barbara's Philippine Journey* (Burks, F. W., 1913). Shortly after this trip, the family moved to Philadelphia, where Barbara's father worked against municipal corruption and helped develop a safe milk supply, one of the first in any large American city (Cook, 1943).

EDUCATION

During the First World War, the Burks family moved to Washington, D.C., where Barbara got her first job, with the National Bureau of Standards, after graduating from high school at age 16. When the family later moved to California, Burks began work on her undergraduate degree at the University of California at Berkeley. During this period, Burks reveled in a number of experiences that provide some insight into her variegated interests. According to one friend and colleague—indeed later her fiance,

> During her college years she was granted a commercial radio operator's license, the first woman to receive such an appointment on the Pacific Coast…. She even had the unusual experience of seeing the world, dressed in the gaudy attire of a Barnum & Bailey maharani, from the wobbly top of a circus elephant. (Cook, 1943, p. 5)

Her interest in psychology and heredity was fueled by her work as a research assistant to the Berkeley neobehaviorist Edward Chance Tolman. Although still an undergraduate, Burks supervised the painstaking statistical analysis of

Tolman's massive study on inheritance (several years before Tryon's well-known work in this area), "the first experiment to examine the genetic basis of maze learning by breeding distinct lineages of rats selected for their maze performance" (Innis, 1992, p. 192). At the end of her junior year in 1923, she transferred from Berkeley to Stanford University to study with Lewis M. Terman. In a letter of introduction, Jesse Burks (1923) wrote Terman that his daughter "has some pretty big ideas that she is determined to carry out; and I think she is likely to go far toward realizing them." Burks excelled at Stanford, graduating "with great distinction" and Phi Beta Kappa in 1924. Terman (1944) later recalled that:

> The unusual quality of her mind was so immediately evident that she was advised at once to proceed to the doctorate without undergoing the usual probationary period before setting this goal. Her record as a graduate student was in fact one of the best I have ever known (p. 136).

Burks was Terman's research assistant from 1924 to 1929 and then his research associate from 1929 to 1930. In the three years between 1926 and 1929, Burks published a dozen research articles, most of them dealing with the role of genetic factors in children's intellectual development. She collaborated with Terman on his well-known intelligence studies, culminating in 1930 with the publication of *Genetic Studies of Genius, Volume III: The Promise of Youth,* of which Burks was the principal author (Burks, Terman, & Jensen, 1930). The book reported a longitudinal study of 1,000 gifted preadolescents, which found that the probands continued to exhibit exceptional ability and aptitude several years after the original analysis. Although the investigation was initially collaborative, Terman (1944) turned most of the research reported in this publication over to Burks "because of the initiative and originality she displayed in planning the investigation" (p. 37). She was responsible for field research, office and clerical work, preparation of drafts, and statistical analyses of voluminous data. Burks' dissertation was completed in 1927, but because of the time devoted to research projects with Terman she did not receive her degree until 1929. In describing Burks' doctoral research, Terman (1927) wrote to the Stanford Committee on Graduate Study:

> Miss Burks is one of the most brilliant students we have ever had in our department and has completed a doctor's dissertation second to none we have had in our department in the last five years.

CAREER DEVELOPMENT

Upon completion of her doctorate, Burks worked as a school psychologist in Pasadena. In 1927, Burks married Herman Ramsperger, a National Research Fellow in chemistry at Stanford and later an assistant professor of chemistry at the California Institute of Technology. She kept her maiden name; in a letter to Terman in 1930, Burks wrote that "now is the time, if ever, for me to become established under the name of Burks." Although she never bore any children herself, children increasingly became the focus of Burks' research and professional positions. Ramsperger "took great pride in his wife's attainments and gave her every encouragement to continue her professional career," and Terman (1944) described their marriage as "an ideally happy one" (p. 139). Several years into their marriage, Ramsperger was diagnosed as having progressive lung cancer and began costly X-ray treatments (Burks, B. S., 1931). B. S. Burks (1932) described her desperate financial situation during the Great Depression: "If we pull Herman through it may be a long time before he can be back at work, in which case I must be responsible for earning a living for us both." Herman Ramsperger died in 1932, leaving Barbara devastated. Terman (1933), in an unpublished letter of recommendation to the National Research Council, wrote that Burks had:

> gone through a serious emotional upheaval as a result of losing her husband by death, and I do not know how seriously this condition may affect her eligibility for a National Research Fellowship. It is doubtless her emotional condition that is responsible for her developing a recent interest in spiritualism and an apparent conversion thereto.

Following Ramspergers' death, Burks worked at the Institute of Child Welfare of the University of California at Berkeley as a research associate until 1934. She co-authored a monograph on personality development in childhood with Mary Cover Jones (Jones & Burks, 1936). In 1934, she was awarded a General Education Board Fellowship that allowed her to travel to Europe to conduct research there, and spent seven months in Geneva, Switzerland, working with Jean Piaget on child egocentrism at the Rousseau Institute (Murphy & Cook, 1943). She described this research at the 1936 American Psychological Association convention (Burks, B. S. 1936). In a March 1936 letter to Terman, Burks was somewhat critical of Piaget's personality and work. She wrote:

> I will always be glad of this opportunity for close association with Piaget —for techniques acquired, and for an appreciation of his imaginative orientation toward problems, and for an insight into the Piaget man-of-science Gestalt. It is not a perfect Gestalt, his methods sometimes seem slipshod, and there is even a certain rigidity—an unwillingness on his part to consider his own techniques and his own conclusions in their relations to significant associated problems. But he approaches his work with such zest, his imagination is so fresh, and his ideas themselves so big, that one can forgive faults that would seem serious in most psychologists.

During her stay in Europe, she visited several research laboratories and clinics in England and France. She also visited with Carl Jung and Charlotte Bühler, then described her impressions of the research and the researchers in a lengthy unpublished report to Terman (Terman, 1944).

Upon her return from Europe, Burks obtained a position as research associate at the Carnegie Institute of Washington in Cold Spring Harbor, Long Island, continuing to work on the genetics of physical and mental traits. She had by this time become widely recognized in genetics and was appointed chairperson of a section meeting at the Seventh International Congress of Genetics at Edinburgh in 1939; she was one of only two women in such a role at this conference (Brehme, 1943). She was also one of only 50 psychologists included in Cattell's prestigious *American Men of Science* (Cattell, 1944). While in the New York area, she took classes at the New School for Social Research, where she came into contact with the Gestalt psychologist Max Wertheimer. With such psychologists as Solomon Asch and Abraham Maslow, Burks attended Wertheimer's seminars at the New School, and wrote that she would leave:

> always with the feeling that I have received a personal message from a genuinely great mind. He is as brilliant and as informing when discussing a philosophical or a purely experimental problem (Burks, B. S., 1938).

Wertheimer and Burks became close friends; at one point, Burks proposed a collaborative effort to test some of Piaget's theories of cognitive development, but this proposal did not come to fruition.

Although Burks' primary research interest was the genetic and environmental factors that affect development, her work reflected a wide range of interests and abilities. The work ranged from sophisticated and technical studies in genetics—

autosomal linkage and sex linkage of both personality and physical traits, among others—to studies in developmental and social psychology and education. Having minored in mathematics at Stanford as part of her doctoral studies, Burks invented a new statistical method for use in the analysis of the data from her numerous studies of children and their siblings (Burks, B. S., 1933); it concerned the distribution of birth orders in samples drawn from a total population composed of families with varying numbers of siblings. She was also the first investigator to use statistical procedures such as path coefficients in determining the relative contributions of heredity and environment to intelligence (Bulletin of the Society for the Psychological Study of Social Issues, 1943).

Burks also followed the tradition of her parents and published work on educational psychology. Together with two colleagues, she wrote *Here and There and Home,* a children's book about two adolescents on an extensive trip to Scotland and England (Strang, Burks, & Puls, 1938). The book, intended to foster critical thinking skills, historical knowledge, and vocabulary skills, contained about 1,000 words derived from the Thorndike Word List (Thorndike, 1921) that were repeated to produce familiarity. At the end of the book, the authors included a memory recognition test, suggestions for reading comprehension, and Edward Thorndike's word norms. Burks adopted a scholarly and scientific approach even when educating children.

THE NATURE–NURTURE ISSUE AND BEHAVIORAL GENETICS

Although an expert in many areas of psychology, Burks was perhaps most interested in the influence of heredity on mental development, an interest she developed at a young age. Frances Burks (1943) remembered that when her daughter was 20 years old, she

> conceived the idea of investigating hereditary influences through a study of foster children.... So she arrived in the autumn of '23 and [Terman] at once encouraged her to try out her idea by collecting enough IQs of foster children and their parents to indicate whether a more extensive investigation would promise positive results. I used to accompany her in our family car to aid her morale when she rang the doorbells (p. 1).

Burks' first scientific publication, an analysis of 71 gifted children, appeared in 1925, and she published extensively on hereditary issues until her death. She

clearly must be recognized as a pioneer in the study of behavioral genetics. Her main focus was always on the influence of nature and nurture on human development and personality traits and, as Gardner Murphy noted, her work was innovative:

> The trend toward interdisciplinary research has never been more magnificently exemplified than in the career of Dr. Burks, whose work began with an integration of biological, psychological, and educational materials in her large nature–nurture studies and went on to include materials from sociology and psychiatry.... Quite aside from the sheer volume of her work, there was no more mature or indefatigable student of the bio-social nature of human personality problems (Terman, 1944, p. 137).

In 1928, Burks published her dissertation, which one colleague (Cook, 1943, p. 3) described as "the first study of foster children designed to measure accurately effects of nature and nurture in their development." This seminal study concerned 204 California foster children, ranging from 5 to 14 years of age, adopted before they were 6 months old. She measured the intelligence of all the children and their parents and recorded other variables such as the parental level of education and the number of books in the family's library. She also did the same on a control group, 105 children and their parents, matched with the foster families on age and general socioeconomic status and the children's age (Burks, B. S., 1928). Using sophisticated statistical analysis, Burks found that both sets of children resembled their parents in intelligence, but that the degree of resemblance was greater in the control group than in the foster child-foster parent group. Differences in the intellectual level of the home were related to differences in IQ, but differences in the genetic background were more strongly related to intellectual ability. She concluded that heredity accounted for 75 to 80% of the variance in intelligence-test performance, and environmental factors accounted for only 20 to 25%.

Terman (1944) described Burks' dissertation as "among the dozen or so most important contributions in the history of nature-nurture research from Galton to the present" (p. 137). Murphy and Cook (1943) claimed that this study

> was the first adequately controlled and statistically sophisticated attempt to give numerical value to the relative contributions of heredity and

> environment to the development of that part of intelligence measured by the intelligence quotient (p. 137)

Burks' dissertation was published while behaviorism, with its explicit assumptions about the primacy of environmental influences, was dominant in American psychology. As Woodworth (1943) noted, her research was controversial, but Burks, "while not at all inclined to deny the importance of environment, was able to defend the importance of heredity with very cogent evidence." This philosophy is evident in her later work as well; a posthumous publication with Robert Cook, editor of the *Journal of Heredity,* asserted that "We must be on our guard against the lazy assumption that all differences are hereditary" (Cook & Burks, 1945, p. 75).

The work on foster children was published in a two-volume yearbook, edited by Terman, on the nature-nurture issue, sponsored by the National Society for the Study of Education. In his introduction, Terman (1928, p. 6) gave clear credit to Burks, who authored four chapters in the *Yearbook*: "no other individual deserves more credit for whatever merits the Yearbook possesses." Yet, as Grinder (1990) pointed out, much of the research presented in the yearbook was far from definitive:

> Burks knew that results of biological research since the turn of the century had been disappointing…. Consequently, all of the contributors, including Burks, concentrated attention on the proportional roles of nature and nurture in affecting not heritability but changeability in individual development…. The findings were wholly disappointing (p. 54).

Indeed, Terman (1928, p. 6) himself remarked: "it must be admitted that no final answer to the nature-nurture question has been attained or even approximated."

Despite the complexity of the data, Burks continued to explore the contribution of constitutional and environmental influences, as in a six-year longitudinal analysis of the mental and temperamental development of a pair of identical twin girls (Burks, B. S., 1942a). While at the Carnegie Institute, she studied the genetic linkage of several human biological mutations such as ovoid red blood corpuscles, mid-digital hair (hair in the space between fingers), and missing lateral incisors (specific teeth) (Brehme, 1943). According to Murphy and Cook (1943):

> She saw the production of human-linkage maps as essential in advancing

> the study of psychological characteristics in [humans], through furnishing visible "markers" of chromosomes carrying genes important in the development of these characteristics…. Burks independently devised an ingenious method whereby autosomal (non-sex linked) linkage can be tested with sibling pairs, involving only single generation pairs, and an estimate made of the crossover rate between linked genes…. Burks demonstrated the existence of this linkage and published the first crossover rate between linked genes in [humans]. A linkage between myopia and eye-color was also demonstrated. This marks an important advance in human genetics and one that will eventually put the genetic study of important pathological and psychological traits on a solid experimental base. (p. 611)

Throughout her career, Burks sought more conclusive answers to the elusive nature-nurture issue. But genetic research seldom yielded unequivocal solutions; a few days before her death, Burks wrote to a friend: "I have been thinking a great deal about nature and nurture and free will. It is a puzzling business" (quoted in Cook, 1943, p. 3).

Burks was also fascinated by the study of eugenics. From 1941 on, she served on the board of directors of the American Eugenics Society and was a vigorous advocate of the society's activities. Her affiliation, however, did not mean that she condoned racial extermination and related abuses. According to Cook (1943, p. 4):

> The concept of eugenics which envisions it as a sterilization committee to "dispose of misfits" and a score card to "help the chosen" pick out their proper mates struck her as being essentially pathetic.… One whose work with foster children had brought her into close and sympathetic contact with the terror and tragedy of the world knew that eugenics must be infinitely more than that if it is ever to have a message for humankind.

The barbarous events that led to the Second World War and her sense of obligation to eugenics doubtless sparked Burks to turn her interest in humanitarian and social concerns into action.

INVOLVEMENT WITH SOCIAL AND HUMANITARIAN ISSUES

In addition to her devotion to the welfare of children, Burks seemed always to be concerned about and involved with the social issues of her time. In 1938, she was appointed by Gordon Allport, then-president of the American Psychological Association, to serve, first as secretary, and later as chair, of a newly formed APA Committee on Displaced Foreign Psychologists. In this capacity, Burks headed a committee of such distinguished psychologists as Allport, Tolman, Gardner Murphy, and Wertheimer, charged with seeking employment for European refugee psychologists, philosophers, and physicians before and during World War II. Burks performed this task, which took not only a considerable amount of her time but also was a drain on her emotional energy, with consummate diligence. In describing her role on the committee, Allport wrote:

> At one time she had, I think, 200 names of displaced psychologists, most but not all in America…. For every placement, or instance of successful help, I estimate that [Burks] wrote twenty letters and made many personal calls. The reward was meagre and discouraging…. Her service stemmed from a deep generosity in her nature, and a willingness to take up dreary and thankless work which other people gladly escaped. Although she encountered discouragements and occasional hostility, she persevered without complaint. (quoted in Terman, 1944, p. 138)

Despite the economic challenges of the Great Depression, the APA Committee was modestly successful in placing foreign psychologists in American universities and industries.

Burks' interest in social issues was also evident in her two-year editorship of the *Bulletin of the Society for the Psychological Study of Social Issues* (SPSSI), published in the *Journal of Social Psychology.* A charter member of SPSSI, the "most activist group in mainstream psychology" (Capshew & Laszlo, 1986, p. 176), she became editor of the SPSSI Bulletin in 1941. As editor, "she added several new features to its regular coverage, and served with vigor on the Council of the Society" (Murphy & Cook, 1943, p. 612). In numerous editorials she urged the active participation of psychologists in the war effort, espousing her belief that science could be an effective agent in social action; in particular, she called on social psychologists to study such war-time issues as civilian morale and attitudes relating to gas rationing (Burks, B. S., 1942b).

As a research associate at Columbia University, a position she took in 1940, Burks continued research on human heredity with a study of the role of the

foster-home environment in the adult adjustment of foster children of alcoholic and psychotic parents. This study was financed by the Carnegie Corporation and carried out under the auspices of the Social Science Research Council and with the cooperation of the New York State Charities Aid Association. Burks did not finish the study; she died at the age of 40 on May 25, 1943, when, according to the *New York Times* the next day, she "fell or jumped from the George Washington Bridge" to the street some 200 feet below ("Woman Dies in Plunge," 1943, p. 44). After Barbara's death, the Social Science Research Council appointed Anne Roe of Yale University to complete the Carnegie study and it was published in 1945 (Roe, Burks, & Mittelmann, 1945; Woodworth, 1943). Only a month before her death, Burks had been awarded a prestigious Guggenheim Fellowship for the 1943–1944 year for research on identical twins reared in separate environments. She had also become engaged to marry Robert Cook but, according to her mother, had continually struggled with depression following a "severe nervous breakdown" in 1942 (Burks, F. W., 1943).

As a tribute to her work, the Barbara Burks Memorial Fund was established, mainly through the work of Ruth Tolman (1943, p. 1), a personal friend, as a "loan fund in aid of refugee psychologists or geneticists engaged in study or research in this country." The committee for the fund, headed by Tolman, consisted of many illustrious psychologists who respected Burks' work: Allport, Kurt Lewin, Theodore Newcomb, Terman, Wertheimer, and Robert Sessions Wood-worth.

CONCLUSION

Despite her remarkable publication record and her efforts to find jobs for foreign scholars, Barbara Burks had a difficult time finding employment in academia. Her situation was not uncommon among women during the World War II. After examining the dual labor market for men and women in psychology, Capshew and Laszlo (1986) observed that:

> Male Ph.D.s tended to hold high-status jobs in university and college departments, concentrating on teaching and experimental research. Female Ph.D.s, on the other hand, were usually tracked into service-oriented positions in hospitals, clinics, courts, and schools. Discouraged and frequently prevented from pursuing academic careers, women filled the ranks of applied psychology's low-paid, low-status workers. The few women who did gain academic employment were mostly relegated to

> women's colleges, and to university clinics and child welfare institutes linked to departments of psychology and education, (p. 160)

Burks doubtless would have thrived in an academic research institution but was instead forced to work in more applied settings. And even though the Carnegie Institute offered the opportunity to conduct research, her position there lacked the salary and prestige of a university setting. B. S. Burks (1939) wrote to Terman:

> Of course I would welcome an invitation from a university with a good department of psychology…. But the position here has so many good aspects—great freedom in the planning of research, modest financial support for assistance, the friendly interest of the executives to whom I am responsible, a salary of $3600 which I think may be increased a little before long, proximity to New York where I am identified with several psychological groups and activities—that it would be the prospect of having capable graduate students (as well as high grade undergraduates) that would seem tempting in some other offer. There is no instructional program here, and there are no other psychologists here, the last being more easily compensated for near New York than it would be in many other places.

Although Terman greatly admired Burks' research, he was unable to find her a permanent job in academia; this was due, in part, to the economic difficulties but clearly also to the overwhelming gender discrimination of the time. After Burks' death, Terman (1943) wrote that such discrimination might even interfere with the raising of funds for her memorial:

> I hope I do not seem unduly pessimistic about this memorial. One has to admit the fact that Barbara did not make many close friends and that not infrequently she offended people. Among her class mates and teachers at Stanford, admiration for her ability was somewhat tempered by her tendency to rub people the wrong way. I think the trouble lay partly in the fact that she was more aggressive in standing up for her own ideas than many teachers and male graduate students liked. Regardless of the personality traits responsible for the attitudes Barbara aroused in others, the matter would be a limiting factor in the raising of funds among the Stanford people.

Such gender discrimination had led to the formation of the National Council of Women Psychologists (NCWP) in 1941, an American organization dedicated to providing humanitarian and scientific services on the civilian front during the Second World War (Capshew & Laszlo, 1986). Unlike many constituents of the NCWP, Burks was able to develop official and even privileged affiliation with members of the scientific elite in both psychology and genetics and, as a result of such contacts, actively served on a number of important committees and boards of professional organizations. Although her career was not immune to the effects of discrimination, she produced a significant scientific legacy in a remarkably brief period of time; one can only speculate about the further contributions that her career might have offered had she lived longer. Now, more than a half century since her death, Barbara Stoddard Burks' work remains an inspiring example of productive humanitarian concern and of creative and responsible psychological scholarship at its finest.

REFERENCES

Brehme, K. S. (1943). Barbara Stoddard Burks. *Science, 98,* 462–64.

Bulletin of the Society for the Psychological Study of Social Issues. (1943, August). Barbara Stoddard Burks. *Journal of Social Psychology, 18,* 161–163.

Burks, B. S. (1925). A scale of promise, and its application to seventy-one nine-year-old gifted children. *Pedagogical Seminary, 32,* 389–413.

Burks, B. S. (1928). The relative influence of nature and nurture upon mental development: A comparative study of foster parent-foster child resemblance and true parent-true child resemblance. *Twenty-seventh yearbook of the National Society for the Study of Education, Part I* (pp. 219–316). Bloomington, IL: Public School Publishing.

Burks, B. S. (1930, September 28). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1931, October 24). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1932, May 6). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1933). A statistical method for estimating the distribution of sizes of completed fraternities in a population represented by a random sampling of individuals. *Journal of the American Statistical Association, 28,* 388–394.

Burks, B. S. (1936). Children's criticism in the light of Piaget's developmental theory. *Psychological Review, 33,* 763–764.

Burks, B. S. (1936, March 17). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1938, November 15). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1939, February 14). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, B. S. (1942a). A study of identical twins reared apart under differing types of family relationships. In

Q. McNemar & M. A. Merrill (Eds.), *Studies in personality* (pp. 35–69). New York: McGraw-Hill.

Burks, B. S. (1942b). A social psychology background for civilian morale. *Journal of Social Psychology, Bulletin of the Society for the Psychological Study of Social Issues, 16,* 150–153.

Burks, B. S., Terman, L. M., & Jensen, D. (1930). *Genetic studies of genius: Vol. 3. The promise of youth.* Stanford, CA: Stanford University Press.

Burks, F. W. (1913). *Barbara's Philippine journey.* Yonkers-on-Hudson, NY: World Book.

Burks, F. W. (1943, October 21). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, F. W. (1943, June 16). *Letter to Mrs. Terman.* Lewis M. Terman Archives, Stanford University.

Burks, F. W., & Burks, J. D. (1913). *Health and the school: A round table.* New York: Appleton.

Burks, J. D. (1923, September 27). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Capshew, J. H., & Laszlo, A. C. (1986). "We would not take no for an answer": Women psychologists and gender politics during World War II. *Journal of Social Issues, 42,* 157–180.

Cattell, J. M. (1944). *American men of science: A biographical dictionary.* Lancaster, PA: Science Press.

C[ook], R. (1943). Barbara Stoddard Burks, 1902–1943. *Eugenical News, 28,* 3–5.

Cook, R., & Burks, B. S. (1945). *How heredity builds our lives: An introduction to human genetics and eugenics.* New York: American Eugenics Society.

Grinder, R. E. (1990). Sources of giftedness in nature and nurture: Historical origins of enduring controversies. *Gifted Child Quarterly, 34,* 50–55.

Innis, N. K. (1992). Tolman and Tryon: Early research on the inheritance of the ability to learn. *American Psychologist, 47,* 190–197.

Jones, M. C., & Burks, B. S. (1936). Personality development in childhood: A survey of problems, methods, and experimental findings. *Monograph of Social Research and Child Development, 1*(4), 1–205.

Murphy, G., & Cook, R. (1943). Barbara Stoddard Burks. *American Journal of Psychology, 56,* 610–612.

Roe, A., Burks, B. [S]., & Mittelmann, B. (1945). Adult adjustment of foster children of alcoholic and psychotic parentage and the influence of the foster home. *Memorial Section of Alcohol Studies, Yale University,* No. 3, pp. xii + 164.

Strang, R., Burks, B. S., & Puls, H. S. (1938). *Here and there and home.* New York: Teacher's College, Columbia University.

Terman, L. M. (1928). Introduction. *Twenty-Seventh yearbook of the National Society for the Study of Education, Part I* (pp. 1–7). Bloomington, IL: Public School Publishing.

Terman, L. M. (1927, August 26). *Letter to the Stanford Committee on Graduate Study.* Lewis M. Terman Archives, Stanford University.

Terman, L. M. (1933, February 21). *Letter to William J. Robbins.* Lewis M. Terman Archives, Stanford University.

Terman, L. M. (1943, August 6). *Letter to Ruth S. Tolman.* Lewis M. Terman Archives, Stanford University.

Terman, L. M. (1944). Barbara Stoddard Burks, 1902–1943. *Psychological Review, 51,* 136–141.

Thorndike, E. L. (1921). *The teacher's word book.* New York: Teacher's College, Columbia University.

Tolman, R. S. (1943, October 27). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.

Woman dies in plunge: Body of ex-research worker lands under Hudson Bridge. (1943, May 26). *New York Times,* p. 44.

Woodworth, R. S. (1943, June 7). The late Dr. Barbara Burks: Death of the brilliant psychologist regretted by scientists. *New York Times,* p. 12.

Woodworth, R. S. (1943, August 23). *Letter to Lewis M. Terman.* Lewis M. Terman Archives, Stanford University.