
Blair T. Johnson

In the coming war we shall fight not only on land, on the sea, and in the air. There will be a fourth theater of operations, the Inner Front. That front will decide the continued existence or the irrevocable death of the German nation.

- Heinrich Himmler

Words, no less than guns, are materials of war.

- Floyd H. Allport

In 1936, during the depths of the Great Depression and on the eve of a second world war, the Society for the Psychological Study of Social Issues (SPSSI) was established with the formal goal of analyzing "contemporary psychological problems" stemming from the "present economic, political and cultural crisis" (Krechevsky, 1936). The Depression led many people inside and outside academia to question established institutions and structures. Thus, SPSSI resulted from a deep concern over unemployment and other social inequalities. SPSSI became an organized means for behavioral scientists to express their frustration about social conditions through scientific study and action programs concerned with issues of the day. A secondary goal was to help legitimize studies involving solutions for social problems. These two intellectual goals aside, a third motive for the creation of SPSSI was practical: to help its members to find significant employment within the field of psychology (Krech, 1973). SPSSI promised to provide its members with greater knowledge of job opportunities, something that the American Psychological Association (APA) had failed to do. Instead, knowledge of job opportunities spread by word of mouth among people who knew each other. With academic job opportunities in psychology so limited at the time, most graduating with doctorates in psychology in the 1930s and early 1940s began careers in the private sector, government, or outside of psychology altogether.

Reflecting the Society's formal goals, SPSSI members strove to find useful ways of applying the psychological principles they had learned so well. Even before warfare first erupted in Europe, SPSSI members analyzed social issues of import to the strained world situation. These efforts were extremely diverse, ranging from motivational explanations for nationalism (e.g., F. H. Allport, 1927) to analyses of opinions about fascism and communism (e.g., Katz & Cantril, 1940; Stagner, 1936) to treatises on the nature of civilian morale (e.g., F. H. Allport, 1941; F. H. Allport & Hanchett, 1940). Similarly, SPSSI produced yearbooks on significant topics of the day, such as industrial conflict (Hartmann & Newcomb, 1939). To continue this goal of providing psychological insight into significant topics, SPSSI inaugurated the Journal of Social Issues in 1945. Though diverse topically and conceptually, these efforts shared a single goal: If the principles underlying war behaviors could be understood, interventions could help stop or prevent warfare. To the membership of SPSSI, psychological research was the main way to the truth (Nicholson, 1997). Finally, by organizing knowledge in so systematic a fashion using books and journals, SPSSI was able to demonstrate its growing expertise to the scholarly world, and using press releases, to display this knowledge to the public, not just to scholars.

Given that SPSSI members took proactive intellectual stances toward world social issues, it is no surprise, therefore, that SPSSI leaders had already mobilized their resources against Adolf Hitler and his forces even before the United States formally entered the war (Cartwright, 1948). In the early to late 1930s, these efforts took the form of assisting psychologists, such as Kurt Lewin, who fled from anti-Semitic policies in Germany...
and immigrated to the United States. As war began to escalate in Europe, SPSSI members concentrated their efforts to a greater extent on generating knowledge that would assist the Allies in the war effort. Thus, when the United States entered World War II, with no lag its psychologists began producing knowledge of import to the war effort. By the middle of World War II, "most of the social psychological energies in the US" (Newcomb, 1945) were directed toward the war effort. Many psychologists volunteered for posts within the government; others pursued research of even greater import, conducting studies that could efficiently inform the actions of the U.S. government or its citizens and thereby help win the war against the Axis Forces.

Civilian morale was one crucial aspect of the war effort, as it frequently has been in other wars throughout recorded history (e.g., Braverman, 1996; Brunzt, 1938). By publically stating that the tides of war depended on the German public's mental toughness, Heinrich Himmler recognized that the success of warfare hinges on the participants' mental processes, and that, therefore, psychology would play a prominent role. Thus, it was crucial for Germany to keep its citizens' morale high. However, the morale issue cut deeper still: If one could demoralize one's opponents, resistance would drop, and the war would end more quickly. With Germany's public officials offering such highly visible statements regarding the importance of morale, it is little wonder that morale figured prominently in the research of U.S. psychologists and that they, too, were concerned about the morale of the public of which they were part. It also explains why U.S. social psychologists would have started analyzing civilian morale even before the United States entered the war.

Thus, civilian morale was important on both fronts, home and abroad, and U.S. social psychologists played significant roles in both fights. To illustrate this work, we have selected three social psychologists who took central roles studying civilian morale either on the U.S. front or on foreign fronts: Floyd H. Allport (1890-1978), Daniel Katz (1903-1998), and Rensis Likert (1903-1981). Each was a leader within SPSSI and each responded to World War II's call to arms with definitive action; the experiences of these three individuals to some extent reflect the experiences of the field of social psychology during the war but also show how the field was led. In this article, we document how Allport's, Katz's, and Likert's prewar expertise and recognition resulted in their playing significant roles during World War II, describe what positions they earned during the war, and indicate how their work before and after the war helped lay the groundwork for a veritable boom in social psychological knowledge and opportunities. We conclude by reflecting on the role that World War II played in creating the contemporary field of social psychology.

Social Psychological Expertise Prior to World War II

U.S. social psychologists could not have played high-level, significant roles in World War II without having established a great deal of methodological expertise and leadership capabilities prior to it. Before the war, most social psychologists received general psychological training in departments of psychology or departments that still combined the disciplines of philosophy and psychology: Training programs that specialized in social psychology did not become commonplace until after the war. Typically, therefore, psychologists developed a more specific self-identity as a social psychologist by working with a faculty mentor who already had distinct social psychological interests. In this section, we support with biographical details the expertise that Allport, Likert, and Katz developed before World War II. We provide more detail about Allport than about Likert or Katz because Allport was older (by about 13 years) than the other two and had worked for a longer period as a scholar; he thus had more professional accomplishments before the period that is the focus of this article.

Floyd Henry Allport

Floyd H. Allport's training typified that of early social psychologists: His 1919 dissertation for his doctorate, earned at Harvard University, was inspired by Hugo Munsterberg (1863-1916), the German experimental psychologist brought in to give Harvard's Department of Philosophy and Psychology some heft when William James moved back into philosophy (Spillman & Spillman, 1993). Unfortunately, Munsterberg did not survive to supervise the dissertation, which was an investigation of social facilitation effects (see F. H. Allport, 1920). This
chore fell to Herbert Sidney Langfeld (1879-1958), at that time an assistant professor, whose primary research interest was the experimental psychology of aesthetics. In 1922, Langfeld trained another prominent social psychologist, Floyd Allport's youngest brother, Gordon Willard Allport (1897-1967). In his autobiography, Floyd Allport (1974) also gave credit to Harvard philosopher and psychologist Edwin Bissell Holt (1873-1946) for providing him with conceptual models that centered mostly on the radical behaviorism that John B. Watson (1878-1958) had introduced (e.g., J. B. Watson, 1913). Thus, the primary influences on Allport were two experimentalists and a theoretician.

Delaying the completion of his doctorate, Allport volunteered for service in World War I and was commissioned second lieutenant, and later promoted to first lieutenant, in the U.S. Army; as a balloon observer and courier, he was shot down on his first flight and parachuted to safety still holding his dispatch of papers. Recognizing his heroism, the French Army Corps awarded him the Croix de Guerre. After his discharge from the army in 1918, Allport completed his doctorate, but remained at Harvard as an instructor (1919-1922). During this period, he became cooperating editor, with Morton Prince, of the newly titled Journal of Abnormal Psychology and Social Psychology, a role he would fill for five years (1921-1925); in 1925, the journal's title was shortened to Journal of Abnormal and Social Psychology. In 1922, Allport took the position of associate professor of psychology at the University of North Carolina, where he stayed only long enough to finish the manuscript and galley proofs for a text, Social Psychology. Simultaneously with the book's publication in 1924, Syracuse University recruited Allport as a professor of social and political psychology within its newly established interdisciplinary college, the School of Citizenship and Public Affairs; there he chaired a doctoral program in social psychology, making Syracuse the only institution offering a formal program of study in social psychology prior to World War II. Some years after the school's founding, it became formally known as the Maxwell School of Citizenship and Public Affairs, in honor of its original benefactor, George Holmes Maxwell.

Many scholars have marked the birth of social psychology as a scientific field in its own right with the publication of Allport's (1924) Social Psychology (cf. Post, 1980; R. I. Watson & Evans, 1991), but Allport's successes were not limited to this famous textbook. Beginning with his dissertation research (F. H. Allport, 1920) and continuing through the 1930s, Allport's research was among the most innovative published within the field, investigating the nature of social influence on individual decision making (F. H. Allport, 1920, 1924) and producing some of the earliest research examining attitudes (e.g., F. H. Allport & Hartmann, 1925; Katz & Allport, 1931), personality traits (F. H. Allport, 1937; F. H. Allport & Allport, 1921, 1928), social projection (e.g., F. H. Allport, 1924; Katz & Allport), and social conformity pressures (F. H. Allport, 1934). Allport wrote not only for scientific audiences, but also for the popular press, mirroring to some extent the tradition that Munsterberg had perpetuated. In the late 1920s and early 1930s Allport wrote a series of articles for the popular national magazine Harper's. In these essays, Allport plied his social psychological perspectives to the public and further increased his renown. He wrote on nationalism (1927), women's rights (1929a), the family (1930a), the role of religion in science (1930b), and institutional habits more generally (1931). In 1933, Allport published Institutional Behavior, which included these five essays as well as several others, each examining a different social phenomenon from a distinctly social psychological - and individualized - viewpoint.

Because of his scholarly and popular successes, it should be no surprise that Allport delivered numerous addresses, most notably to the National Women's Party (in 1926, 1929b, and 1932) and in two NBC radio broadcasts; was appointed, in 1931, as a member of the research subcommittee of President Hoover's Conference on Home Building and Home Ownership; was elected to the APA's board of directors for two terms (1928-1930); and represented the APA as a member of the Social Science Research Council for two terms (1925-1927, 1929-1931).

As a social psychologist interested not only in understanding social issues but also in finding his doctoral students academic positions, Allport took a strong interest in SPSSI and therefore joined at first opportunity. Although a modest and reluctant leader, on the eve of the U.S. entry into World War II, Allport served terms as SPSSI's president (1940-1941) and as a member of its council (1938-1940). His presidential address, published
in 1942, outlined the need for new methods to study collective action phenomena and provided an opportunity for him to present some of his early work on event-structure theory, a theory about regularities in social phenomena.

These varied experiences show that, even before World War II, Allport achieved significant expertise as well as recognition for that expertise. In producing a theoretical treatise for the field - his Social Psychology - and in conducting seminal research on its core concepts, Allport paved the road for succeeding generations of social psychologists to travel (Katz, Johnson, & Nichols, 1998). During Allport's tenure at Syracuse, he supervised the work of nearly 50 master's and doctoral candidates, about half of whom completed their degrees prior to World War II. Many of these students entered academic positions, including Arthur Jenness, Irving Bender, Dale Hartman, Clarence Leuba, Daniel Katz, Richard Schanck, Richard Valentine, Arnold Tannenbaum, and Nancy Morse Samuelson, although some took positions in fields outside of social psychology proper (e.g., communication, speech, clinical psychology). In 1941, when World War II's call to arms was sounded, Allport, at 51, was a distinguished, middle-aged scholar; with his years of active, youthful, wartime duty in World War I behind him, a research capacity during World War II may have appeared to him an optimal position from which to serve.

Daniel Katz

Daniel Katz's training differed from that of the other two in that he enrolled in a formal program that offered a specialization in social psychology. Initially, the School of Citizenship and Public Affairs, an interdisciplinary college within Syracuse University, recruited Katz for graduate studies in 1925 with a fellowship in political science. Shortly after arriving at Syracuse University, when the opportunity to work with Floyd Allport emerged, Katz switched to the social psychology program and, in 1928, became the world's first recipient of a doctorate from a formal program of study in social psychology. His dissertation work was based on a systematic and scientific survey of the Syracuse University student body; it formulated and tested theoretical concepts such as pluralistic ignorance (e.g., O’Gorman, 1986; Prentice & Miller, 1996) and the role of the centrality of misconceptions about institutions as determinants of attitude and behavior (see F. H. Allport, 1933; Katz & Allport, 1931). For consultation on scaling techniques, Allport and Katz turned to psychometrician L. L. Thurstone; the ultimate outcome was Thurstone's (e.g., 1928) classic work on attitude scaling.

Katz's training with Allport served him well. Herbert S. Langfeld had moved to Princeton University in 1924, and at Allport's recommendation, he recruited Katz as an instructor (see Katz et al., 1998). Katz continued doing research relevant to attitudes and opinions, specifically publishing studies on survey techniques and results (e.g., Cantril & Katz, 1939; Katz, 1928, 1940b, 1941, 1942; Katz & Cantril, 1937). As some of the earliest empirical research on stereotyping, his studies with Braly documented the nature of Princeton University undergraduates' ethnic stereotypes (Katz & Braly, 1933, 1935) and eventually became citation classics that were models for subsequent generations of research on prejudice (e.g., G. W. Allport, 1954b; Dovidio, Brigham, Johnson, & Gaertner, 1996). In 1938, Katz and another of Allport's students, Richard L. Schanck, followed their mentor's example and wrote a Social Psychology textbook (Katz & Schanck, 1938) in an effort to update Allport's work of 1924. In recognition of Katz's accomplishments, Princeton promoted Katz to associate professor in 1940. Brooklyn College recruited Katz in 1943 to chair its new department of psychology.

SPSSI and its aims resonated with Katz, as they did with most social psychologists of the day, and he quickly joined SPSSI and gradually became more and more involved in its activities. Prior to World War II, Katz followed the example that SPSSI's leaders were setting and investigated issues of relevance to the war (e.g., Katz, 1940a; Katz & Cantril, 1940). His Social Psychology included a lengthy discussion of the forces behind fascism and Hitler's movement in Germany. When America entered World War II, he, like Allport, had more than sufficient expertise to help the U.S. effort against the Axis forces, including especially his skills in poll research. Although Katz was not at the time as distinguished a professor as Allport, he was younger, at 38 years of age, and more mobile.
Rensis Likert

Like Floyd Allport, Rensis Likert also completed his doctorate within a general department of psychology. Working at Columbia University, Likert first studied animal learning with experimental psychologist Robert Sessions Woodworth (1869-1962), then moved to social psychology (Hilgard, 1987), working with Gardner Murphy (1895-1979), a psychologist with primarily social interests. Murphy was an influential advisor, mentoring several other influential social psychologists (e.g., Theodore Newcomb and MuzafarSherif). Likert's 1932 dissertation developed a new attitude-scaling technique from a survey of student attitudes and was published as "A Technique for the Measurement of Attitudes" (Likert, 1932). In this research, Likert introduced a scaling technique that was much less cumbersome than the Thurstone techniques and that in later years became quite popular (see Eagly & Chaiken, 1993).

Following a 5-year stint on the faculty of New York University (1930-1935), during which his research interests continued and broadened (e.g., Likert, 1934, 1935), Likert spent several years directing research for a life insurance company. Having good credentials in both the academic and business worlds made Likert attractive to the government; in 1939, Likert was appointed director of the Department of Agriculture's Division of Program Surveys (DPS). DPS's mission was to conduct surveys of government programs designed to aid farmers by providing information about agricultural advances. To find out how well farmers understood and accepted these programs required interviews with farmers themselves. This evaluative research gave a necessary feedback loop to administrators: Henry Wallace, Franklin Roosevelt's secretary of agriculture, believed in participatory democracy and the importance of scientific research to examine public opinion so that government could be more responsive to the needs of people; to accomplish these goals, he established the Bureau of Agricultural Economics and within it the DPS. Although the DPS's methods were initially extremely crude, hiring Likert to manage the DPS soon resulted in a high level of expertise within the division. Once World War II broke out, Likert quickly recruited many young social scientists to join the DPS (e.g., Dorwin Cartwright, Ruth Tolman, Jerome Bruner, E. R. Hilgard, Robert McLeod, Daniel Katz, Dwight Chapman, and Richard Crutchfield; see Marquis, 1944) and proceeded to develop highly refined methods for selecting and interviewing individuals (see Bruner, 1980; Campbell, 1979). As the war efforts continued, the government had at its disposal many experienced researchers, including some social psychologists, who were skilled in and familiar with in-depth or open-ended interviewing and possessed a knowledge of research design and probability sampling. Several government agencies and departments would eventually utilize the national resource of the DPS in the service of the country's goals.

Civilian Morale Research on the Home

Social Psychologists in U.S. Government Positions

When the United States finally entered World War II, many SPSSI members assumed leadership and official roles within the U.S. government. For example, Theodore M. Newcomb had barely moved from Bennington College to begin his new position at the University of Michigan when, one semester later, he began to work for the government in the Bureau of Overseas Intelligence in order to decipher foreign broadcasts and gain an understanding of enemy morale and issues. Others, like Hadley Cantril, were not officially tied to the government but studied issues of importance to the war effort from their academic posts. Cantril turned the polling done at Princeton's Office of Public Opinion Research to war-related issues and served as a correspondent with high-level officials in the U.S. government (Herman, 1995). Daniel Katz took official leaves of absence for periods of months in order to assist with Likert's DPS. Gordon Allport, a founding member of SPSSI, who had by then become a Harvard University professor, served behind the scenes, helping to organize the work of SPSSI members in the war effort, while giving speeches about civilian morale and the psychology underlying the Axis aggression.

Up until the Japanese attack on Pearl Harbor, both U.S. public opinion and official government policy were
anti-intervention, owing mostly to long-standing doctrines of isolationism. The risk was that, following a U.S.
entrance into World War II, public support for the U.S. role in the war would falter and resources would no
longer support the war effort. In contrast, maintaining public support of the U.S. role in World War II would
produce the perception that the U.S. role was justified, reduce complacency about the war, and result in greater
contributions of time and energy toward winning the war. Consequently, citizens would voluntarily enlist in the
service, not protest if they were drafted into the service, volunteer their time in war-related activities if not
formally in the service, buy war bonds, and endure with fewer complaints the unpleasantries of war such as
rationing of scarce materials (e.g., Braverman, 1996). It was believed that as greater resources backed the Allies’
efforts, the war against the Axis Forces could be won. The Japanese attack at Pearl Harbor was the catalyst to
swinging popular support in favor of entry into the war. Thereafter, maintaining positive civilian morale was
crucial to victory.

Like other governmental divisions, the U.S. government frequently called on Likert's DPS to help in the
problems of mobilizing effective civilian effort to win the war. The Office of War Information (OWI), which
often contracted with the DPS for special projects (see Marquis, 1944), did not directly attempt to stimulate
U.S. citizens to patriotic behaviors through general propaganda in the mass media. Rather, its aim was to
increase understanding of - and thus, motivation to comply with - specific programs for implementing the
national goal of victory. The morale of the nation was a multifaceted affair. During an initial term as a member
of the DPS, Katz was the study director in charge of morale surveys of a sample of shipyards (e.g., Katz &
Hyman, 1947). As German U-boats took their toll on the U.S. fleet, building liberty ships was critical to keeping
the Allied forces at full strength. Despite the importance of building ships, U.S. shipyards varied greatly in their
productivity; a DPS study by Katz and Hyman (1947) showed that companies were more productive when
working conditions were better and made recommendations about how conditions could be improved.
Similarly, Elmo Wilson and Katz conducted a large-scale study of absenteeism for OWI covering many
industrial plants. With relatively high wages and full employment, some workers were purportedly taking
extended weekends, with hangovers impeding their productivity on Mondays and Tuesdays. The mass media
sometimes exaggerated this national problem; the OWI survey showed the real dimensions of the problem and
the factors associated with high absenteeism. A sample of war plants was studied to investigate both the
incidence and causes of the problems, and the study found that absenteeism, like factory productivity, was
closely related to conditions within the factory itself. The results were sent to the War Production Board and
were featured in an article in Survey Graphic, an influential magazine (Wilson & Katz, 1943). Katz also took
part in other surveys conducted by the OWI and served as its interim director, when Elmo Wilson left for an
overseas assignment.

Social Psychologists on the Home Front

Allport, too, was quick to volunteer his services to the war effort. He had already analyzed the problem of
morale and its relation to democracy (1941), resulting in what Gardner Murphy (n.d.) called "excellent criticism
and research suggestions." On December 20, 1941, soon after the Japanese attack on Pearl Harbor, Allport
wrote to his brother Gordon, offering to do whatever he could to help (G. W. Allport, 1941a). Gordon,
recognizing that Floyd's acumen was in research and analysis, suggested that he try to understand how
newspaper headlines were affecting civilian morale (G. W. Allport, 1941b, 1941c). Newspapers were a common
source of news for Americans during World War II, although radio was also important (G. W. Allport, 1942).
Floyd vigorously pursued the headline research and added studies on wartime rumors, which were considered a
valid indicator of morale because their spread "reflect[ed] the anxieties, desires, and hostilities of the public"
(G. W. Allport & Veltfort, 1943, p. 181).

Allport quickly moved to create a new research seminar at Syracuse that would both train new social
psychologists and contribute to the current research aimed at heightening national morale (F. H. Allport, n.d.).
The course was designed in conjunction with a similar seminar taught by Gordon Allport at Harvard and was
expected to be part of a broader network of colleges and universities throughout the country (F. H. Allport,
n.d.). He also continued the Syracuse University Rumor Clinic, a regular news release patterned after other efforts around the United States. Allport saw the Rumor Clinic as a way to combat the "disturbing effect[s]" (1943d) of rumors by examining those that hindered the war effort and publishing a weekly newspaper column that directly combated the rumors. For example, Allport wrote about personal liberties, progress being made during the war (1943d), the effectiveness of the Women's Army Corps (1943e), and how to combat complacency (1942). Presaging more modern research on the inoculation effect (e.g., McGuire, 1961), the effectiveness of such articles was revealed in Allport and Lepkin's (1945) study of rumors, which found that individuals who regularly read the Rumor Clinic column became less likely to believe anti-U.S. rumors.

One of Allport's morale seminars focused specifically on rumors relating to the government's rationing program for the purpose of assessing not only how many people believed these rumors, but also what types of people believed them and why. Allport and Lepkin (1945) created questionnaires regarding 12 then-current rumors. To obtain a fairly broad sample, the questionnaires were distributed to parents of children enrolled in the local public schools. Allport and Lepkin found that those with adverse attitudes toward rationing were more likely to believe the rumors, as were those who felt that they were making sacrifices that others were not, and those who had no close friends or relatives in a war zone.

Floyd Allport's most important World War II research resulted from the headline research he conducted along with his students. Allport's interests lay in determining what types of headlines increased morale. A preliminary study examining 60 newspaper headlines asked people to indicate the degree to which the headlines made them "feel like taking a more active part in the war" (F. H. Allport & Rhine, 1942, p. 5), as well as listing the emotions aroused by the headlines. Their results suggested that headlines evoking anger were the most likely to increase morale, whereas those arousing fear were the least motivating.

To determine whether news headlines were helping or hurting the war effort, Allport and Lepkin (1943) selected 126 headlines from approximately 4,000 relating to the war, asking participants to indicate the degree to which headlines made them feel like participating more actively in the war effort. They also had independent judges rate the goodness or badness of the headline in relation to the United States' goals. Overall, Allport and Lepkin found that bad headlines, those indicating American or Allied losses or advances by the enemy, were more likely to make people want to participate in the war effort. In his survey, however, he found that the majority of newspapers used optimistic headlines. Parallel research by Floyd's brother Gordon and one of his students (Winship & Allport, 1943), in a separate survey of 3,226 newspaper headlines, also found that the majority used optimistic headlines. Moreover, Gordon's survey indicated daily circulation varied little whether good or bad headlines were used, thus eliminating one of the editors' arguments for using positive headlines.

Based on their conclusion that message framing had a large impact on reader morale, Floyd Allport then felt compelled to inform the people in power - editors of periodicals - of their findings. Together with two of his graduate students (F. H. Allport, Lepkin, & Cahen, 1943), Allport published an article in Editor & Publisher urging editors to revise their policies concerning war-related headlines to generate the highest morale value. "Words are weapons," wrote Allport and his colleagues, asserting that "you can use the phraseology of the headline, and the legitimate emotions it arouses in the reader, to cure the evil of complacency and help us on toward victory" (p. 11). The article briefly summarized the F. H. Allport and Lepkin (1943) and Winship and Allport (1943) research and depicted graphically the morale value resulting from different headlines. While urging editors to be truthful in content, Allport and colleagues asked them to frame the news negatively to produce the greatest possible morale value.

To make sure that no influential editor overlooked his study, Allport also wrote letters to the editors of the 200-plus U.S. newspapers with circulations greater than 50,000, summarizing the findings from his research and personally asking them to revise their headline policy; to bolster his claim that altering headline policy would help morale (F. H. Allport, 1943b), Allport also included reprints of the Editor & Publisher article. News of this research appeared in such periodicals as Tide, Printers' Ink, The Christian Science Monitor, and Science
Services (F. H. Allport, 1943a). The capstone of the publicity drawn to the headline research was a profile in Time magazine, complete with a photograph of the Brothers Allport ("Headlines and heartbeats," 1943). Although newspaper editors were said to "disagree with this academic handling of a practical problem" (p. 54), at the urging of Hadley Cantril and Jerome Bruner, the brothers sent a more formal report of their findings to the OWI (F. H. Allport, 1943c), and achieved at least a modicum of success: Peter Odegaard, who prior to the war was a board member of the Institute for Propaganda Analysis and who during the war served as an assistant to the Secretary of the Treasury, Henry Morgenthau, cited the Allport and Lepkin (1943) study as a direct cause in "revising the Navy's policy [about] publicity regarding casualties" (G. W. Allport, 1945; see also Cartwright, 1948). Nonetheless, it is unknown whether the research affected other military branches' news policies.

Civilian Morale on the Enemy Front: The U.S. Strategic Bombing Survey in Germany

Although they had many means of conducting psychological warfare on enemy citizens, bombing raids were the foremost method that the Allies used against the citizens of Germany and Japan (Morale Division, 1946, 1947). The theory was that the bombs, as literal invasions of the home territory, would demoralize the enemy citizens, reducing their commitment to the war effort and perhaps disrupting production of products necessary to wage war, while also having corporal consequences. Beyond the obvious effects of death and injury, bombing raids also caused widespread destruction of homes, along with evacuations and disruption of utility services for significant periods of time.

So that the government would know the extent to which bombing reduced the morale of the targeted locale, it was necessary to conduct surveys of these areas. Therefore, in 1944, the U.S. government created a new organization called the Strategic Bombing Survey (SBS) and put Likert in charge of its morale division. The SPS's initial charge was to survey Germany; its later charge was to survey Japan. The SBS included a number of divisions, one of which had as its mission the assessment of morale - its dimensions, causes, and consequences. Such was Likert's charisma that those called upon to serve with him usually decided to do so on the spot (see Hyman, 1991). Some took leaves of absence from various government agencies that employed them, whereas others served as consultants in the planning phases of the projects. Likert took leave from DPS, as did some of his colleagues. Others remained in Washington under the interim director, Angus Campbell, as DPS continued its stateside operation. For the German Bombing Survey, Likert brought back some DPS staff who had left him when the division was dropped from the Office of War Information. (As World War II continued, the United States initiated other survey teams, but none staffed as many psychologists as Likert's DPS [Marquis, 1944].) These returnees included Herbert Hyman, Richard Crutchfield, and Daniel Katz. Likert also recruited social psychologists active in other war agencies, namely Theodore Newcomb and Otto Klineberg from Overseas Intelligence, Helen Peak from the War Production Board, and David Kreech, who had experience in many war research agencies. To secure Daniel Katz's help with the implementation of the SBS in Germany, Likert paid a personal visit to Brooklyn College's president in order to charm Katz away from his commitments as a department chair. Interviewing staffs were recruited from fields other than social psychology because of their knowledge of German culture and facility with the German language. For this purpose, Otto Klineberg and Katz recruited W. H. Auden, the English author (see Likert, 1981), and George Vetter and Clarence Leuba, both of whom had taken doctorates under Floyd Allport. Similarly, the survey of postwar Japan utilized Japanese Americans familiar with cultural and linguistic issues (Hyman, 1991).

The research team, initially based in London, analyzed captured letters written by German civilians both before and after Germany surrendered; after the Normandy invasion, the team moved to the German town of Bad Nauheim and systematically sampled civilian morale using in-depth interviews. As a member of the Morale Division of the SBS, Katz analyzed and wrote the chapter on the findings from interviews with German civilians. Newcomb added the overall report, which included an analysis of intercepted letters and interviews with German leaders. Analyses of the captured letters revealed lowered morale in areas in or close to bombing raids, especially when the raid was a surprise rather than expected. After Germany's surrender, the survey
group documented that a strong majority (78%) of Germany's citizens were characterized by low morale, whereas at the outset of the war, only a small minority (17%) had low morale (Morale Division, 1947). To gauge the amount of bombing a region had received, the SBS used records of the tonnage of bombs dropped on various German cities. This measure could be related to amount of physical destruction, loss of life and injury, and decrease in morale to continue the war. In a country of 70 million citizens, bombing was found to have been most disastrous for life, limb, and property, with 1 million citizens killed or wounded, 5 million evacuated from their homes, 1.8 million homes destroyed, and 20 million deprived of utilities for significant periods of time (Morale Division, 1947). Moreover, the group documented that bombing was a significant reason for morale decline for 36% of the population, second only to military factors other than bombing (e.g., Allied superiority). Similarly, of the hardships faced during the war, 91% named bombing as the worst. Importantly, the surveys documented that people living in areas receiving even light amounts of bombing more quickly concluded that Germany should surrender than those whose areas received no bombing. Interestingly, however, morale did not drop much further in areas that received heavy bombing. Thus, the evidence strongly supported the conclusion that only small amounts of bombing are needed to demoralize a targeted population.

It is important to realize that factors other than morale also affected civilian behavior in World War II Germany. The Nazi government used organized repression to keep the Germans working to support the war effort. German workers may well have been more fearful of the Gestapo than of Allied bombing raids; the workers generally did what the authorities told them to do until their factories were destroyed. Thus, German effort collapsed not only because of a decline in morale, but also because saturation bombing destroyed the German industrial war machine (see Katz, 1950). The two factors may well have worked together: The SBS survey revealed that German workers were less likely to work following bombing raids, further reducing their industrial effectiveness. In short, Himmler's statement turned out to have been remarkably prophetic: Having lost the battle of morale to the Allies, Germany soon lost the war itself.

Reaping the Spoils of Social Psychological Success

The successes of Floyd Allport, Daniel Katz, and Rensis Likert were hardly singular accomplishments among social scientists active during World War II. In particular, Samuel Stouffer, a psychologically oriented sociologist, and Carl I. Hovland, an experimental social psychologist, had notable successes in analyzing the psychology of the American soldier (Hovland, Lumsdaine, & Sheffield, 1949; Stouffer, Lumsdaine et al., 1949; Stouffer, Suchman, DeVinney, Star, & Williams, 1949) that provided a rich knowledge base for postwar social psychology. Hovland followed up the army studies of attitude change, systematically exploring communication and persuasion processes (e.g., Hovland, Janis, & Kelley, 1953).

The expertise gained by social psychologists and the successes they earned created an unprecedented opportunity following the war. Writing to Theodore Newcomb, president of SPSSI at the close of World War II, Gordon Allport (1945) recognized the "need to prove the value of social psychology" (italics in original) in order to ensure subsequent government funding and urged Newcomb to organize a committee to document the wartime research and the influence of social psychologists in the war. Newcomb (1945) agreed that the best way for SPSSI to succeed was through a careful account of its members' achievements. The result was Dorwin Cartwright's (1948) compilation and analysis of studies conducted during the war under both academic and governmental auspices. Cartwright concluded that "the second World War [had] brought to maturity social psychology" (p. 333) by increasing the involvement of social psychologists in practical social problems. He also cited the refinement of methodologies as affecting the understanding of problems previously relegated to description only. World War II confirmed, once and for all, that social psychology as a scientific field had achieved unprecedented recognition. Such were their successes that "social scientists, the outsiders of the 1930s, became the insiders of the postwar era" (Finison, 1986, p. 32) and optimistically believed that "science was the guide to maintaining social order" (Morawski, 1986, p. 120). Writing soon after the war ended, Gordon Allport (1954a) in his history of the field went so far as to suggest that social psychology had achieved the status of being a regular, positive, cumulative science, like other more established sciences (cf. Cartwright, 1979; Farr,
1997).

Emboldened by such success, social psychologists who served in research and advisory capacities during the war returned to their home universities and colleges with more confidence in their field than ever before. Their institutions swelled with returning enlisted men and women, the G.I. Bill supporting their further education. Psychology, and perhaps especially social psychology, reaped extreme benefits from this situation (Herman, 1995). With World War II underscoring the critical importance of mental processes to the welfare of entire nations, it is little wonder that students in the postwar era naturally took a strong interest in psychology. American universities responded to the demand for instruction in psychology by producing psychology doctorates in unprecedented numbers.

The individuals who had worked so well together during the war continued to do so once it ended. Katz's work in Likert's group had endeared him not only to Likert but also to Newcomb, whose varied experiences during World War II led him to the firm conclusion that psychology would prove ever more important to society and that there would be a strong demand for doctorates in this field. Correctly perceiving that the time was right for the University of Michigan to take a leadership role in social psychology, Newcomb succeeded in lobbying Michigan to upgrade its master's program in social psychology, a program shared between psychology and sociology, to the doctoral level. He chaired this program beginning with its origination in 1947 and continued in this capacity until 1963.

Immediately after the war, realizing that the U.S. government would continue to provide financial assistance to social sciences research, Donald Marquis and other administrators at Michigan founded the Survey Research Center and hired many of the individuals who were central to Likert's World War II research efforts, including Daniel Katz (see Katz, 1946). The Survey Research Center soon became a branch of the Institute for Social Research (ISR), followed by the Institute for Group Dynamics, then led by Dorwin Cartwright and based at the Massachusetts Institute of Technology. This group, which had been founded by Kurt Lewin, also included Stanley Schachter, Harold Kelley, Leon Festinger, and Alvin Zander. Those social psychologists recruited to the ISR were routinely given second appointments in the department of psychology, which further established Michigan's critical mass in social psychology. Finally, the ISR was able to provide research assistantships to graduate students, thereby making graduate work a more attractive option for many students.

With energetic and inspirational leaders such as Newcomb, Likert, and Katz (e.g., Newcomb, 1973, p. 383), it is little wonder that the University of Michigan quickly leapt to prominence in social psychology. Funding from the U.S. government continued at a high level and with it the production of research and educational products. Michigan was able to hire additional social scientists, including many social psychologists. From these resources, the social psychology program at Michigan was able to produce nearly 200 doctorates during its first 16 years of existence (Newcomb). With Michigan’s rich tradition in action research and social issues, many of its students and its faculty continued to play central roles in SPSSI. For example, from 1946 to 1957, six members of the Michigan faculty held SPSSI's presidency, including Newcomb, Likert, and Katz; across the 50 years of SPSSI's existence through 1986, seven individuals who earned doctorates from Michigan held the presidency (Capshew, 1986). Moreover, Newcomb, Likert, and Katz each received numerous career awards reflecting their contributions to social psychology.

Immediately following World War II, the number of college students increased dramatically throughout the nation, and some of the success occurring at Michigan was paralleled at other locations around the United States. Yale University, capitalizing on Hovland's success, continued its systematic research on attitude change. Harvard University, capitalizing on Stouffer’s success, began a new interdisciplinary department of social relations, with the newly hired Stouffer directing the research laboratories. Syracuse University continued to produce social psychology doctorates, and in the 1950s hired additional social psychologists for its faculty to fill the gap to be created by Floyd Allport's impending retirement. Those earning doctorates from these programs easily found academic positions, if they wanted them, or found positions in the private sector or in government.
The stronger numbers of social psychologists in academics, in turn, originated still more graduate training programs in social psychology. The pace did not level off until the 1960s (see Jones, 1985).

Reflections on the Status of Social Psychology

Many scholars (e.g., Cartwright, 1979; Farr, 1997; Jones, 1985) have argued that World War II established, once and for all, the most important phenomena for social psychology to understand, including aggression, prejudice, and persuasion. Although these issues were certainly relevant to World War II, social psychologists had already established strong empirical track records in these areas even before the war began. As this article has documented, attitudes and attitude measures were a common topic of study by the late 1920s (e.g., F. H. Allport & Hartman, 1925; G. W. Allport, 1935), and a solid science of opinion research had emerged by the late 1930s (e.g., Katz & Cantril, 1937). Similarly, studies of message-based persuasion were already frequent by the mid-1930s (e.g., Knowler, 1936; Remmers & Morgan, 1936; Thurstone, 1931); stereotypes about minority groups had already been thoroughly investigated by the early to mid-1930s (e.g., Katz & Braly, 1933, 1935); the contact hypothesis in prejudice had been investigated by the mid-1930s (e.g., Horowitz, 1936); and by the late 1930s, aggression as a function of frustration was already an important theory (e.g., Dollard, Doob, Miller, Mowerer, & Sears, 1939). This background of knowledge based on empirical study conferred expertise on social psychologists of the World War II era that was usually much greater than that of other contemporaries who analyzed social issues. This fact was not lost on Gordon Allport (1941 d), who urged his fellow psychologists to recognize and capitalize on their expertise:

Most psychologists, whether they realize it or not, have both the perspective and the specialized knowledge that can be utilized in strengthening civilian morale. Anxiety, conflict, abulia, and social attitudes are among the more familiar problems concerned; so too are propaganda, the manipulation of symbols, crowd behavior, vocational guidance. To be sure a bit of boldness is needed in applying such knowledge as we possess; it is admittedly risky to advocate policies not based upon 100 per cent scientific certainty. Yet this is no time for feelings of inferiority or for statistical scrupulosity. If the psychologist is tempted to say that he knows too little about the subject he may gain confidence by watching the inept way in which politicians, journalists, and men in public life fence with the problems of propaganda, public opinion, and morale. More often than not these men give the impression of playing a game with a red hot poker. (p. 235)

Thus, World War II only added to the urgency of understanding central social psychological phenomena: Doing so would result in better control of negative societal problems and potentially better outcomes for the Allies.

Although it is tempting to conclude that knowledge gains before and during World War II resulted in social psychology's viability as a field, an alternative view emerges from examining the war's economic spoils. Because World War II increased social psychology's importance to public administrators, who held the purse strings to universities and research grants, social psychology suddenly received more than sufficient resources to thrive, as illustrated by the ISR at the University of Michigan. The fact that the APA accepted SPSSI as an official division in 1946 (Division 9), in addition to a division devoted solely to personality and social psychology (Division 8), added extra credibility to the field. The consequence of this abundance of resources was a plethora of doctorates in social psychology who could find gainful employment doing academic social psychology per se rather than being forced into different fields or into the private sector. With a critical mass of social psychologists active in the field immediately after World War II, social psychology's future was ensured by two facts. First, social psychologists were highly successful at recruiting to the field and training more social psychologists than had ever existed before (Cartwright, 1979). Second, with greater numbers of social psychologists actively conducting and publishing research, in theory, at least, greater progress could made in understanding social phenomena and social problems. Thus, social psychology as a field profited from a virtuous cycle that the Great Depression started and that World War II perpetuated. In short, during World War II, social psychology developed the critical mass it needed for survival.
Notwithstanding these strengths, few of the intellectual solutions offered before, during, or as a result of World War II to such problems as prejudice (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950), persuasion (e.g., Hovland et al., 1953), or aggression (e.g., Dollard et al., 1939) lasted long without serious modification or replacement. Similarly, in his 1954 history of the field, Gordon Allport recognized that optimism about social psychology has persisted even in the race of slender accomplishment to date. Human relations seem stubbornly set. Wars have not been abolished, labor troubles have not abated, and racial tensions are not relieved. . . . Man can change matter into energy but cannot yet socially control the energy he creates. (1954a, p. 4)

Thus, even while Gordon Allport recognized that social psychologists possessed greater expertise than the regular person on the street, he also recognized that the field had a long way to go. As the decades passed, the impact of individual works published during or immediately after the war diminished, consistent with this view and the convention within most scientific fields of citing only the most recent publications.

It should therefore be no surprise that Floyd Allport's research on morale, though influential at the time of its release, soon faded into obscurity. At the close of World War II, Floyd Allport was in his mid-50s and aware of an impending retirement. Although his civilian morale research had enabled him to examine critically and carefully some concepts of general theoretical interest to his larger research program, the research itself represented a definite break from his previous research interests. That he never again returned to the purely social psychological topics he had vigorously pursued prior to World War II (e.g., his J-curve work; see F. H. Allport, 1934) thus constitutes a sacrifice. Similarly, although he had worked off and on during the 1930s on a second edition of his 1924 Social Psychology text, his correspondence during World War II makes little mention of it except to acknowledge that the contracted Allport and Jenness second edition would not reach fruition (E H. Allport, 1945; Jenness, 1945). Although he subsequently published many theoretical pieces and coauthored some empirical articles with his doctoral students, Allport never again first-authored another article containing original data. Instead, he deepened his development of event-structure theory, which led him to review research on perceptual processes. This work resulted in a well-received book on that topic (1955) and to further articles on event-structure theory (e.g., F. H. Allport, 1961, 1967). Thus, World War II appears to have pushed Allport, once and for all, away from social psychology per se, even though it was as a social psychologist that he had demonstrated his greatest expertise and received the most accolades.

Floyd Allport's morale research suffered a fate little different from other practical or action-research studies. This research was conducted in the service of practical rather than theoretical goals. Despite the incompleteness of theoretical knowledge for the relevant phenomena, the problems for which this research was performed mandated immediate solutions, as Gordon Allport's red-hot-poker statement acknowledged. The corollary was that as the problems were resolved - such as by World War II ending - the impact of the research would necessarily diminish as other problems became the focus of attention (e.g., racial tensions). From this perspective, to have expected research on civilian morale to generalize to the problem of racial tensions seems a bit naive.

Ironically - especially given its apparent importance in the World War II conflict - civilian morale research and the ideas that drove it have largely been forgotten in the 50 years since the war ended. The results of the SBS morale survey on which Likert and Katz worked unfortunately have had little impact to date, perhaps in part because many of its findings were classified information until the 1970s. Although all evidence gathered in the SBS suggested that even light amounts of bombing take their toll on morale and that huge amounts of bombing have little extra impact, this generalization was ignored during the late 1960s and early 1970s, when policy makers used more and more saturation bombing in the jungles of Vietnam in an effort to win the war. Unlike the German bombing raids, industrial centers were not the targets, but rather enemy troops. Hyman (1991) despaired that, because the policy makers did not make use of the knowledge at their disposal and in particular the SBS surveys, the United States wasted huge amounts of natural and human resources and probably
prolonged the war because of the escalation that the bombing raids entailed.

Although the growing time and energy that social psychologists dedicated to gathering facts about social phenomena before, during, and after World War II strongly implied that the field's lasting knowledge of those phenomena would grow in direct proportion (cf. G. W. Allport, 1954a; Farr, 1997), the accumulation of conventional knowledge was decidedly mixed (Johnson, 1983). Although the numbers of empirical findings certainly did grow exponentially from the 1950s through 1970s, reviewers of these literatures were often hard pressed to see marked regularities among the study findings for a given phenomenon (Hunt, 1997; Johnson & Eagly, in press). Over time, central phenomena such as persuasion, prejudice, and aggression seemed to defy easy explication. For example, from the 1950s through the 1970s, research on persuasion sometimes showed that a particular factor (e.g., communicator credibility) affected persuasion, but other times did not (cf. Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Similarly, research conducted in the 1960s and 1970s on cognitive dissonance sometimes replicated Festinger and Carlsmith’s (1959) finding that insufficient reward increases persuasion, but often did not (see Eagly, 1992). If social psychology is a positive science, the reasoning seems to be, then we should be able to replicate our central research findings. Unfortunately, robust replications did not seem to occur often enough to satisfy critics of the field, who have sometimes reached disparaging conclusions about the its scientific status (e.g., Gergen, 1973). Indeed, a loose reading of two recent histories of the field, written by two social psychologists in the mainstream (cf. Cartwright, 1979; Jones, 1985) leaves the impression that social psychologists have extreme proficiency in collecting data but only the barest proficiency in explaining conflicting study results.

Another explanation for apparent inconsistencies among study findings stems from the critical mass of social psychologists that developed during this period. Since the 1950s, as we have noted, the numbers of highly trained social psychologists have burgeoned, generating a plethora of studies examining an ever-increasing array of topics using an ever-increasing arsenal of methods and published in an ever-increasing number of outlets (cf. Jones, 1985; Lambeth, 1980). It is not difficult to see that there will be practical limitations on the abilities of reviewers to understand the vagaries of a literature containing dozens if not hundreds of studies. From this perspective, social psychology was a victim of its own success: Although its practitioners had the expertise to collect ample data on social psychological phenomena, they were forced to rely on their intuition when it came to assessing the state of the knowledge about the field's central topics. Since the 1980s, however, many scholars have gained expertise in reviewing research literatures, locating studies (e.g., computerized databases), deriving standardized effect size estimates, and computing statistics based on these estimates (see Johnson & Eagly, in press). As a result, literatures that once appeared haphazard at best now frequently are shown to have substantial regularities. For example, although scholars working in the 1950s through the 1970s frequently reached disparate conclusions about whether men or women (or neither) are more easily persuaded, reviewers using meta-analytic techniques have found highly reliable tendencies in this same literature (cf. Cooper, 1979; Eagly & Carli, 1981). Moreover, contemporary meta-analysts now almost routinely move beyond relatively simple questions of whether one variable relates to another to the more sophisticated question of when the relation is larger, is smaller, or reverses in sign. Thus, there is, indeed, a great deal of replicability across a wide array of topics, and inconsistencies among study findings can often be explained on the basis of methodological differences among the studies (see Johnson & Eagly, in press). As a consequence, such central phenomena as persuasion, prejudice, and aggression once again seem explicable, even when the objects of study - people - are cognizant of psychological factors that affect their actions (e.g., Beamon, Barnes, Klentz, & McQuirk, 1978). Similarly, psychology studies appear to replicate about as well as studies in the older, natural sciences (Hedges, 1987). Of course, in social psychology as in all other sciences, it is impractical to expect either perfect replicability or perfect prediction. This conclusion is particularly important to keep in mind when challenging questions are the subject of inquiry, which is conventionally the case in social psychology. Such is the fate of attempting to reach absolute knowledge using finite techniques guided by finite intelligence.

For their helpful suggestions on a previous draft of this article, we thank John F. Dovidio, Benjamin Harris, Gretchen E. Lopez, Sam Parkovnick, Brewster Smith, and an anonymous reviewer. For answers to numerous
queries and for his friendly and patient coaching while we struggled with initial drafts of this article, we owe a strong debt of gratitude to Daniel Katz (1903-1998), whose characteristic modesty did not permit him to accept our frequent invitations to be a coauthor.

References


Allport, F. H. (1927, August). The psychology of nationalism. Harper's, 155, 291-301.

Allport, F. H. (1929a, March). Seeing women as they are. Harper's, 158, 397-408.


Allport, F. H. (1930a, June). Must we scrap the family? Harper's, 161, 185-194.


Allport, F. H. (1943e, August 15). Chivalry toward WACs. The Syracuse Post-Standard, p. 3.


Allport, F. H. (n.d.). Memorandum for the board of graduate studies. Box 8904, Folder: "Graduate faculty in psychology." Floyd H. Allport Papers, Syracuse University Archives, Syracuse, NY.


Allport, F. H., Lepkin, M., & Cahen, E. (1943, October). Headlines on Allied losses are better morale-builders. Editor & Publisher, 76(41), 11, 48.


Allport, G. W. (1945) Letter to Theodore Mead Newcomb, 19 November, probably 1945. Box 6, Folder: "Newcomb, T.M., Professional Activities, APA Division #9, SPSSI 1941-1945." Theodore Mead Newcomb Collection (851934 Aa2), Bentley Historical Library, University of Michigan, Ann Arbor, MI.


Headlines and heartbeats. (1943, September 6). Time, 42, p. 54.


Krechevsky, I. (1936). Letter to Theodore Mead Newcomb, 24 February. Box 1, Folder: "T. M. Newcomb,
Correspondence 1936. "Theodore Mead Newcomb Collection (851934 Aa2), Bentley Historical Library, University of Michigan, Ann Arbor, MI.


Murphy, G. (n.d.). Box 6, Folder: "Newcomb, T.M., Professional Activities, APA Division #9, SPSSI 1941-1945." Theodore Mead Newcomb Collection (851934 Aa2), Bentley Historical Library, University of Michigan, Ann Arbor, MI.


Remmers, H. H., & Morgan, C. L. (1936). Changing attitudes toward a racial group. Purdue University Studies


BLAIR T. JOHNSON is an Associate Professor of Psychology and the Director of the social psychology graduate program at Syracuse University. His publications include DSTAT (software for meta-analysis) and, with Robert A. Baron and Donn Byrne, Exploring Social Psychology (4th ed.). He was a recipient, in 1995, of a Research Scientist Development Award from the National Institute of Mental Health and is currently an Associate Editor of Personality and Social Psychology Bulletin. His research interests include attitude and stereotype change, HIV prevention, research synthesis, and the history of the social sciences.

DIANA R. NICHOLS is a graduate student in social psychology at Syracuse University. Her current research examines the nature of the self, attitude structure and change, and the history of the social sciences.

COPYRIGHT 1998 Plenum Publishing Corporation
COPYRIGHT 2000 Gale Group