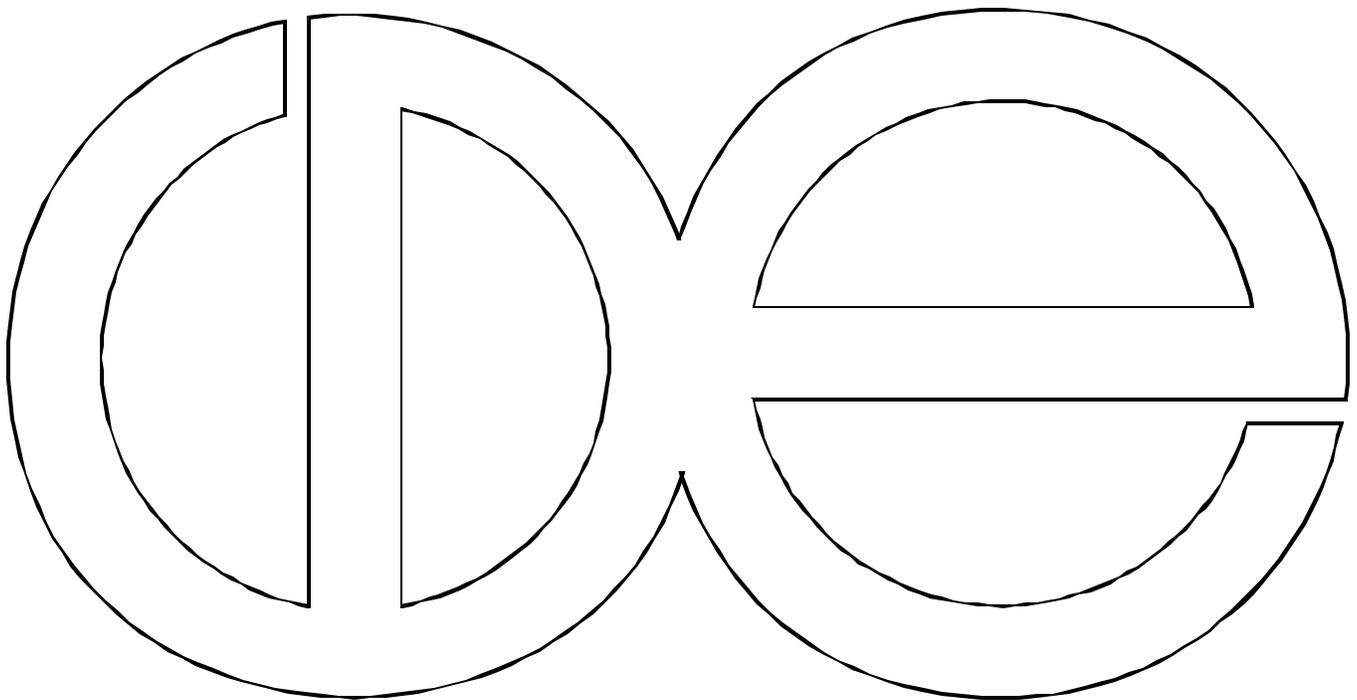


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Continuity or Disruption for the Middle Class?**

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CDE Working Paper No. 99-20



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April 1999

We acknowledge support from the National Institute of Mental Health (MH 41327), a contract with the U.S. Army Research Institute, a grant from the Department of Veterans Affairs Merit Review program, and a Research Scientist Award (MH 00567) to the first author.

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Abstract

The extraordinary manpower needs of World War II fueled a rapidly growing demand for both military and war industry personnel, though little is known about this war mobilization process in men's lives, such as the relation between manpower policies (on age, occupation, etc.) and recruitment pathways. Using theory relating State action and the life course, we investigate occupation-based activities in wartime mobilization, whether military or homefront, and their implications for postwar worklife continuity and progression. Estimates from hazard models drawing on panel data from two birth cohorts of middle-class California men (Stanford-Terman sample, birth dates 1903-1920) show significant differences in wartime activities across occupations, even with adjustments for other deferment criteria. By 1948, service in war industries (but not in the military) notably increased the entry of younger men into managerial roles, and the likelihood of occupational change among older and younger men. By extending the time frame, we find that critical employment on the homefront did not significantly impact career progress in the long run, but military experience did. Combat experience was detrimental, but officer status counteracted these negative effects.

Introduction

Political power tends to centralize during periods of national crisis. Sorokin (1942) refers to this process as one of the strongest “inductive generalizations in history” (see also Mann, 1988). During World War II, manpower mobilization under State directive reached a new high for Americans in response to the urgent need for military personnel and the soaring demand for greater war production on the homefront. In this competition for scarce human resources, government policies (Selective Service System, 1947a; Selective Service System, 1947b) were designed to address the multiple and conflicting manpower needs of the military and economy. These policies were guided by the twin goals of rapidly expanding the armed forces personnel while generating a sufficient workforce and retaining the critical technical expertise necessary for greater war production on the homefront. All of this occurred with an eye to maintaining a basic standard of living on the domestic front.

Though most young men in the United States were mobilized during World War II, little is known about their varied wartime experience and its impact on their worklives. Building upon theory of State action and the life course (Mayer, 1986; Mayer and Müller, 1986), this study investigates the worklife influence of World War II mobilization in a long-term panel of professional men and other white collar workers (N=788) from the Stanford-Terman data archive. We assess service in both the armed forces and war industry, with emphasis on occupation-defined pathways. Prewar occupations in the middle class are characterized by distinctive skills which varied in correspondence with emerging priorities in the armed forces (e.g., medical and intelligence expertise) and war industries (e.g., engineering and scientific skills).

Men who occupied professional and white collar occupations in 1940-41, one-fourth of the workforce at the time (U.S. Department of Commerce, 1943, p. 7), provided expertise essential to both the armed forces and war production. Up to the present, the mobilization of these men has not been studied in terms of military and war industry roles. Prewar occupational skills in the middle class were defined by war manpower policies in ways that could lead to different pathways of service, military and war industry (Fairchild and Grossman, 1959). Beyond this middle-class population, we have merely begun to understand the impact of military service in World War II on the life course of men who are disadvantaged (e.g., Sampson and Laub, 1996) and the process by which manpower mobilization directed women, the non-employed, and minorities into war roles (Modell, Goulden, and Magnusson, 1989; Modell and Haggerty, 1991; Campbell, 1984; Kesselman, 1990). However, most work to date is based on these sub-populations.

The soaring manpower demands of World War II ensured the recruitment of middle-class males for service roles. Indeed, the scope of mobilization left few households untouched by military service or by homefront needs. As many as 70 percent of American men in birth cohorts from 1918 to 1925 served in the Second World War (Hogan, 1981), with an age range at entry extending from 18 to nearly 40. Many civilian jobs were directly tied to the prosecution of the war, including such activities as munitions design, work in a government war agency, or civilian employment by the military. Military recruitment clearly disrupted the ordinary flow of lives and community activities, as did the mobilization of workers into critical war industries, such as shipyards, aircraft factories, and munitions plants. The older the recruit at entry into service roles, the more family and work responsibilities he would likely have, and the greater the potential for life disruptions (Elder, 1987). Whether through voluntary action,

the draft, or deferment for war-industry employment, mass mobilization pulled people from conventional pursuits of all kinds.

The competing manpower needs of the military and war industries left civilian industries and the Selective Service to compete with one another for scarce human resources. Their demands were played out in the War Manpower Commission and the Selective Service System. Both used occupation, along with other considerations (e.g., age, family status, health), as criteria for role assignment (Flynn, 1979, pp. 1-55; and Selective Service System, 1947b). But given the State's disparate goals, and the inevitable gaps between policy ideas and implementation, the relevance of prewar occupations for wartime experiences has remained largely unknown.

To investigate the link between prewar occupations and wartime service, and the latter's effect on worklife, we use data from the Stanford-Terman longitudinal study (1922-92) with its prospective records over 13 waves and 70 years. The depth and breadth of worklife information and wartime experience in the archive enabled us to code military experience and the homefront mobilization status of each job held during the war, using Selective Service definitions at the time. These definitions include specific occupations that were listed as "critical," and jobs directly tied to the prosecution of the war, such as work in a government agency or munitions plant.

Linking Manpower Mobilization and Men's Worklives

We link manpower mobilization at the State level to the micro-experiences of young men's lives in a multi-phase process. Selective service policies and deferments establish priorities for recruitment to

the armed forces and war industries. In the mobilization phase of the paper, we explore how these policies were implemented in varying degrees through the recruitment decisions of local draft boards, leading to military induction, a war industry assignment, or other deferments. Among the various deferment criteria, we focus on prewar occupations. We characterize manpower mobilization for the military and the homefront as competing processes, and estimate hazard models to answer several questions regarding these processes. The second phase of the paper focuses on worklife after the war. This worklife phase connects worklife patterns in the postwar years to the wartime roles of older and younger men. Some worklife consequences may take the form of short-lived job changes, while others persist through a process of cumulative advantage and disadvantage.

Our inquiry is organized in terms of the mobilization and the worklife phases. We begin with the former: manpower policies of World War II (e.g., occupation skills, etc.) and the question of whether they prescribed social pathways to the military and war production. Three issues have special relevance: (1) the level of direct competition between the manpower needs and priorities of the military and war industries; (2) the sorting role of prewar occupations in terms of these lines of war service; and (3) the correspondence between this allocation and State priorities (Mayer and Schoepflin, 1989, pp. 202-204).

The first hypothesis regarding mobilization focuses on the fact that some prewar occupations offered skills required more by the military than by war industry (Fairchild and Grossman, 1959) and some were associated with skills closely matching the needs of critical industries and war production. We hypothesize (*H:mob1*) that, despite the State's competing manpower goals, the imperfections of market forces, and the inevitable gaps between deferment policies and their actual implementation,

occupations with skills most needed by the armed forces (especially medical and intelligence expertise) are expected to rank highest on rates of military induction, and relatively low on rates of mobilization into critical industries on the homefront. Likewise, occupations with skills most needed by war production (e.g., engineering) are likely to rank highest on rates of war industry service and lowest on rates of military induction. Homefront industries are less likely than the military to recruit young men from occupations that lacked relevant expertise for war production, such as clerks and lawyers. Furthermore, since occupation and occupational skills were identified for deferments, as well as characteristics of the current job, we expect that occupation had an independent effect on military induction, above and beyond whether the actual job on the homefront was deemed critical.

The second hypothesis regarding mobilization focuses on military induction specifically, and the competition between the armed forces and the homefront industries for scarce manpower. Independent of the manpower skills needed in the armed forces, we hypothesize that employment in critical industries reduced the risk of military induction (*H:mob2*). Finally, given the expertise and highly skilled nature of some of the white collar and professional occupations delineated in our study, the occupational criteria are likely to have been more important than other selection criteria (age, health, and family status) in sorting men into different war service roles, whether military or war industry (*H:mob3*).

To address these three hypotheses, we estimate Cox proportional hazard models of military induction and mobilization in war employment (Cox and Oakes, 1984; Namboodiri, 1991). Manpower competition between the armed forces and war industries is addressed with competing risk models of

homefront mobilization which take into account the interdependence of exposure to risks of military induction and service on the homefront.

In the worklife phase of this paper, we explore the worklife consequences of manpower mobilization and how they depended on whether and how men served, and on their career stage at the time. The worklife consequences we investigate include occupational change and entry into managerial status after the end of demobilization (1948) and evidence of career advancement up to the 1970s. Both military service and war industry employment pulled men out of their conventional careers, thereby establishing conditions favoring worklife disruption and disorderly careers, as well as new opportunities.

In regard to worklife, we hypothesize that war industry employment exposed men to the ever-expanding opportunities of a labor market of scarcity. New opportunities, incentives, and pressures were likely experienced, whereas military duty may have provided more stability to men's work trajectories than employment in war industries since lateral changes were unlikely (between fields of expertise) and veterans had reason to expect their prewar jobs to be available upon their return. With these considerations in mind, we hypothesize that war industry employment increased the chances of occupational change after the war, and the likelihood of having supervisory duties (*H:wk1*). Were the effects long lasting, especially given the expanding economy of postwar America (cf., Maas and Settersten, in press)? We explore whether war industry employment improved long term career prospects in general (*H:wk1*).

In terms of military service, we hypothesize that the effects on worklife depended on the nature of the service, and how well the experiences in the armed forces prepared the men for civilian employment (*H:wk2*). For example, becoming an officer may have increased the likelihood of

becoming a supervisor after the war, since the responsibilities of an officer may have prepared them well for managerial and supervisory work after the war. On the other hand, besides physicians, there may not be many occupations for which the skills learned in combat are applicable to civilian work. We hypothesize that officer status, like war industry employment, might have accelerated worklife progress and we explore whether the effects were long lasting, especially given the expanding economy of postwar America (cf., Maas and Settersten, in press) and the level of education of the men in our sample (*H:wk1*). Similarly, combat experience may have been detrimental for worklife progress because of its physical and emotional toll, as well as the absence of much training in skills needed in civilian life. Though studies report adverse effects of combat on emotional health and worklife accomplishments, these effects are concentrated among men of lower status than the Terman men, and education may have represented a protective influence from the adverse effects of combat (Elder and Clipp, 1989). We explore whether disruption due to military service and combat experience permanently impeded careers, especially given the economic boom of the 1950's (*H:wk2*).

The Terman men occupied different career stages at the beginning of World War II, defined by their birth cohort. Consequently, they were likely to be influenced in different ways by war mobilization, military and homefront. In general we expect greater change among young men because of their life course stage; however, it is unknown whether wartime is more disruptive for them than their older counterparts (*H:wk3*). Their wartime experiences occurred during the formative stage of family and career development, whereas the men who were already 30 by the start of the war were more likely to be married, have children and advanced professionally. How might this pattern of change extend to a longer term view of careers and occupational advancement? Did war industry employment accelerate

their career advancement and in contrast was military service more disruptive for their older counterparts? We hypothesize that younger men were at an early enough stage of their careers to derive worklife benefits from training and broadened experiences, to the extent that these were provided in the armed forces and critical employment on the homefront (*H:wk3*). Furthermore, to the extent that mobilization was disruptive, we expect recovery to be more difficult for the older cohort because they were pulled out of jobs at the very stage that career advancement is most rapid (*H:wk3*).

The Competing Demands of War

American participation in World War II required an unprecedented level of national mobilization to increase production. The role of the State during World War II expanded dramatically through a surging demand for military technologies, from new aircraft and ships to munitions and medical innovations. With higher priorities for accelerated task completion, it was not sufficient to rely solely upon civilian oversight and market forces. State management was needed, especially in control over research and development (Baron, Dobbin, and Jennings, 1986). As the technical needs of the military increased, State managers began to exert greater power, dominating the production process as a whole (Mann, 1988; Hooks and McLauchlan, 1992, p. 762; McLauchlan, 1997; Feagin and Riddell, 1990). The pursuit of military technology had become a significant component of State-making.

As orders for war goods soared, signs of the Great Depression faded away; the large sector of unemployment had virtually come to an end, and the economy was booming. “It was like watching blood drain back into the blanched face of a person who had fainted” (Mitchell, 1947, p. 37). Cajoled and coerced by government, business expanded production to meet the ever greater need for war

supplies. But, as in other wars, mobilization involved “complex and contingent social processes” (McLachlan, 1997, p. 3), including the 1941 Lend Lease Act which allowed the President to make defense-related supplies available to the allies. Alongside the old industries of aircraft, oil, and chemicals which were operating on a much larger scale than before, new industries emerged, such as synthetic rubber (Polenberg, 1972, pp. 5-18). Production levels reached new heights in 1942 as the shock of government contracts hit the economy, and they continued to rise until the end of the war, although the rate of gain declined up to 1945 (United States Temporary Controls Office, War Production Board, 1947, pp. 540-41, p. 963). By war’s end, the GNP had nearly doubled.

Government’s efforts to build and consolidate its armed forces after the fall of France in 1940 (War Production Board, 1947, pp. 17-119) were accelerated following the Japanese assault on Pearl Harbor, December 7, 1941. From less than 30,000 recruits during the last month of 1941, the number rose to nearly 90,000 in January and to just under 160,000 in February (Selective Service System, 1948). This growth continued until early spring, 1943. The implications of this growth were especially important in the state of California, where most of the men in the Stanford-Terman study lived. California had a rapidly expanding war industry and military recruitment ran headlong into competition with the personnel needs of war industry, perhaps more so than anywhere else.

The options for young men in California were clear enough, either “fight or work” in the homefront effort. The entire San Francisco Bay Area was under the jurisdiction of the Fifth Army Command, headquartered at the Presidio, San Francisco. To strike a balance between these competing demands, government policy increasingly prescribed using workers’ occupational skills to sort them into either military service or war industry. Age, health, and family status were other criteria in the sorting

process, though the emphasis on occupational skills in policy directives became increasingly more important as the war progressed.

Occupation-Based Deferment Policy

What was the likely role of deferment policies in sorting individuals according to skill and expertise? Congress never set laws about which occupations should receive deferments, overriding other deferment criteria, and who should work in war industries on the homefront. Moreover, the government's policies were implemented unevenly and may have even differed from the original intent of the policy makers and bureaucrats. Given the State's competing goals discussed above, and the disparity between policy directives on deferment and their actual implementation, other factors, including market forces, surely played a role in sorting individuals into the competing wartime roles.

One factor subverting the influence of State directives on individual worklives is that national manpower goals and policies of the Selective Service System and War Manpower Commission (Flynn, 1979, pp. 1-55, and Selective Service System, 1947b) were implemented by local draft boards, which had almost complete autonomy in filling quotas. Perhaps most importantly, no profession or social category received a blanket deferment - the case had to be made to the local draft board on an individual basis. Also, as discussed above, the State had competing and conflicting goals, and so it is unclear how they balanced out. For example, the Selective Service System had other criteria as well as occupation, skills and expertise that included health, family status and age. Another factor operating at least in the early part of the War is that individual action weakened the State's control over decision-making since men could voluntarily enlist, obviating a decision by the local board.¹

Clearly, the process of sorting individuals on the basis of occupation was not mandated nor deterministic; however, there is reason to expect that deferment policies had important implications for occupational differentials in the rates of military induction and employment in homefront war related industries. A review of the historical documents dealing with deferment policies at the time suggests that social selection criteria (e.g., age, family status) tended to fade in significance as the war progressed and military manpower needs increased. Skill and expertise gained prominence in recruitment policy across the war years (Fairchild and Grossman, 1959). Congress never approved explicit laws stating that occupation prevailed over dependency status; however, in January 1943, for example, draft boards were notified that “greater emphasis must be laid on occupation than on dependency as a basis for deferment.” (Fairchild and Grossman, 1959, p. 159). By the end of 1942, over 70 percent of the appeals for deferment were made on occupational grounds (Selective Service System, 1947b, p. 44).

Among the white collar and professional men in our study, selection on the basis of occupational skills applies most notably to the lawyers, physicians and engineers. Lawyers were not singled out by government instructions on recruitment and war industry (Selective Service System, 1947a, p. 87), but they were in demand for intelligence tasks in the military. They also had legal training for the military justice system and for officer roles in general. As such, we expected to find a primary path to the military among lawyers, as against service on the domestic front. By contrast, wartime deferment policy defined engineering as one of the most critical occupational categories for homefront industries. The Selective Service System specified 21 branches within the engineering profession as most critical, and instructed its local boards that special consideration be given to the deferment of engineers who worked in these fields.

Unlike engineering, the medical profession appeared to face strong personnel pressures from both directions, the homefront and military, though data show that priority was given to needs on the battlefield. When mobilization began in 1940, the total pool of medical doctors (about 155,000) fell well short of wartime needs, as projected by the Selective Service System (1947a, p. 80). Initially, the Selective Service System advocated the deferment of medical students and their instructors, but this policy changed as military needs increased in 1943. The Selective Service System itself was charged by the military with the responsibility for recruiting more medical doctors. This was accomplished in part by calling up medical doctors who were serving their residencies (Selective Service System, 1947c, p. 34), a category that included a large percentage of the Terman MDs at the time.

In accord with hypotheses *mob1-3*, we expect occupational expertise to have played a major role in sorting the Terman men into military and homefront industry roles. We expect that wartime priorities directed lawyers, physicians, and less skilled workers toward military service, and channeled engineers and their physical science counterparts to homefront employment.

Worklife Discontinuity and Advancement

The potential consequences of war mobilization, whether on the homefront or in military service, likely depend on the men's career stage at the time. Their career stage and birth cohort influenced what they brought to the mobilization experience and the meaning of their wartime roles. Life course theory assumes that rapid change differentiates the options and life patterns of successive cohorts, in part as they experience the same events at different points in the life span and different

events at the same point. When each cohort encounters a historical event, such as World War II, it is “distinctively marked by the career stage it occupies” (Ryder, 1965, p. 846).

We shall look for this “mark” in two areas: (1) in the realm of occupational changes during and immediately after the war, and (2) in occupational mobility or advancement. Both of these outcomes can be anticipated by locating the Terman men in two birth cohorts just prior to the Second World War (Table 1). The older cohort of men, born before 1911, completed college before and during the 1930s, and then faced the dislocations of World War II. Approximately 40 percent served in the war and another 25 percent worked in war industries when they were older than 30 years of age. Career advancement opportunities are especially common during one’s thirties and yet a majority of the older men could not take advantage of them, owing to service or industry obligations. They were pulled out of careers just at the time when advancement is most rapid. Levinson (1979) refers to this time as the career building phase of a man’s life.

--- Table 1 about here---

By comparison, most of the younger men (born after 1910) entered wartime service and homefront employment at a time when they were especially open to job opportunities. They were still in the early stage of their adult life course when training matters. Over half served in the military and a quarter gained employment in war industries. These men were young enough to take advantage of training in the military and the novel challenges in homefront industries (cf. Sampson and Laub, 1996). The new experiences of war mobilization were more timely relative to their life course of work and family, when compared to the older men. They were young enough to derive worklife benefits from both training and broadening experiences.

If positive forces of change were most likely to alter men's worklives in the younger cohort, the change may have occurred through the broadening experiences of war (people management, overseas duty) and exposure to work opportunities in homefront industries. Exposure to the workplace of changing technology, for example, increased both job knowledge and advancement options (Lane, 1951). Service in the military during World War II also placed more constraints on occupational change when compared to work in the wartime and civilian economy.

Before turning to an account of the Stanford-Terman sample, it is important to locate these men on class-differentiated pathways from the Great Depression. Little is actually recorded about the depression hardships of the Terman men, though we know from other work that middle-class families recovered more rapidly from income losses than did lower status families (Elder, 1974). The depressed labor market of the 1930s convinced some Terman men to continue their higher education (Shanahan, Elder, and Miech, 1997), when resources were available, and this decision slowed their progress into work.

World War II caught them at a time when the costs of mobilization in family and career disruption may have exceeded any benefits, as in education, in contrast to young adults from lower income and severely deprived families in the 1930s (Elder, 1986; cf. Laub and Sampson, 1993). The military had special appeal to these young people, offering at least the promise of a better life and greater opportunity (e.g., the G.I. Bill and its educational benefits).

The Data Archive

An answer to how manpower mobilization in World War II influenced men's worklives in the middle class requires detailed longitudinal information from the prewar years into the postwar era — an especially demanding requirement in view of the absence of large-scale studies of this type at the time. The Stanford-Terman longitudinal data archive is well suited for this task.

In 1922 Lewis Terman launched a study of talented children (Minton, 1988; Holahan and Sears, 1995) with IQ scores above 130. He recruited 1528 Study members (856 boys and 672 girls) from public schools in California. Thirteen waves of data collection have been conducted up to the present: 1922, 1928, and then every five years up to 1960. In the early data waves up to 1960, the Study members were asked about their education, worklife, family events and roles, and community/leisure activities. Late-life work, health, leisure, and family were surveyed in 1972, 1977, 1982, 1986, and 1992. War experience was a key subject in the 1945 and 1950 surveys, as expressed in questions about worklife. The data frame for this study extends up to 1972.

Given the substantive questions addressed in this paper, and the selective nature of the data, we selected the 788 men in the study who were either students or white collar workers with birth dates that range from 1900 to 1920. The majority of these men had entered their thirties when the war broke out. Approximately 86 percent held an occupation in 1940. Five percent were physicians, 12 percent were engineers, 21 percent were employed as faculty in universities or colleges, 10 percent were practicing law, 15 percent held managerial jobs, 23 percent were employed in sales or clerical jobs, and 14

percent were students.² Many of the men in the study were still living in California when the U.S. entered the War.

In no place was the competition for manpower during the War more acute than in California, despite a tidal wave of workers and families from other parts of the country (Nash 1990; Foster, 1989; and Johnson, 1993). The competition for manpower was especially severe in the Bay Area jurisdiction of the Fifth Army command at San Francisco's Presidio, with its concentration of army bases and ports, shipyards and munitions. Not surprisingly, our data show that approximately 40 percent of the men served in the military during the War, and 25 percent were officially involved in war industries between 1940 and 1948.³

In our view, the Stanford-Terman data archive represents the very best available match between the questions we posed and available life record information. We are aware of no other study of reasonable size where we could obtain prospective information about work and family over a thirty year period that includes the Second World War. Thus we could examine in depth both the career patterns and wartime experiences of men in this historical time. Given the age span, the sample provides a rare opportunity to investigate how war mobilization, on both the home and war fronts, influenced men who occupied different life stages and cohorts at the time. However, some "recasting" of the data was required in order to improve the fit to our questions in the area of worklife, especially (Elder, Pavalko, and Clipp, 1993). This effort called for the development of life record files from a long series of cross-sectional surveys.

To collect the essential information, beyond statistical files, staff members made five trips to the Stanford data archive in the late 1980s and early 1990s, each lasting between one and two weeks.

Relevant data were assembled on structured forms and these were used as the basis for a coding operation on worklife and wartime experience. Out of this coding operation emerged new codes for occupational roles prior to war mobilization and a time-differentiated event history of jobs, with information on the timing of job entry and exit, and on duration in each job from 1940 to 1948. Codes were also devised to measure homefront mobilization in war-related industries.

The middle class background of the Stanford-Terman men is documented in a comparison of the full Terman sample with the National Longitudinal Survey (NLS) of American men with birth dates from 1907-1921. A third of the Terman fathers had completed 16 or more years of education, compared to 6 percent of the fathers of men in the NLS. However, Current Population Survey data from 1971 indicate that the Terman men generally resemble American men from the same birth cohorts on the percentage divorced (Pavalko and Elder, 1990). Ultimately, the issue of generalizability will depend on replications in other samples. Up to the present, evidence on the broad generalizability of findings applies to the influence of war on divorce (Pavalko and Elder, 1990) and on employment patterns in the later years (Elder and Pavalko, 1992).

Measurements

Recruitment Criteria. In the 1940 data collection, a survey form asked for information that enabled us to measure criteria of recruitment for military service and war industries: health (self reported health, five-point scale), marital and parental status, and occupation. The last prewar occupation was ascertained from occupational information collected between 1936 and recruitment time. Coders used all relevant information in order to determine the proper sequence of jobs and occupational codes. The

task included the correction of misreported jobs by detecting discrepancies between reported earnings and start-end dates of jobs.

Other prewar measures. These include years of schooling up to the doctorate, marital status by 1940, last prewar occupation (before June 1940 -- engineer/physical scientist, physician, lawyer, manager, social scientist/teacher/writer, and sales/clerical worker), an episode of floundering in worklife (1=yes, 0=no), and prewar career progress (see description under postwar career progress). An episode of floundering does not rule out career or worklife progress before the war. The two variables are correlated (r) .15.

Military Induction and War Industry Employment. Military induction was defined as any entry into the armed forces, whether voluntary or not, excluding men who had been in the military prior to World War II. Coders constructed summary sheets on the Study members' military histories from our occupational records. These data were supplemented by other materials from the archive, including letters and news clippings. Two aspects of military experience are included in the analysis as dichotomous measures: evidence of exposure to combat and officer status at any point during World War II. We were unable to distinguish between light and heavy combat.

Following the official definition reported in the Selective Service System monograph Industrial Deferment (Selective Service System, 1947a: 13-14), we defined civilian war mobilization as employment that directly relates to the prosecution of the war. Such employment includes designing munitions, working for a war mobilization agency, and being employed in the military as a civilian. More details on this coding procedure are provided in Working with Archival Data (Elder, Pavalko, and Clipp, 1993).

Wartime and Postwar Work. Three measures of work experience were included in this study: occupational change from 1940 to 1948, the end of demobilization; entry into a supervisory occupational role by 1948; and career advancement from the end of World War II to the 1970s. Note that the first two outcomes measure worklife effects up to the postwar era, while the third measure extends the time frame to 1972.

Occupational change was defined as movement from one occupation to another between 1940 and 1948, as indexed by a change of one digit codes in the 1980 Standard Occupational Classification System. This level of classification allows us to measure substantial occupational change among professionals, such as from orthopedic specialist to chief administrator of a hospital. The second index of work centers on supervisory status in 1948 and the possibility of upward mobility; a single item asked whether the respondent had supervisory responsibilities in his current job (other than in relation to a secretary).

Lastly, worklife advancement focuses on the presence or the absence of career advancement between the end of World War II and the 1970s (Pavalko, Elder, and Clipp, 1993). Advancement is defined as status change across the entire period (1: advancement present, 0: absent). This change occurs through mobility across occupations and within the same occupation, such as when one assumes higher or lower levels of responsibility in a given job, such as leadership in professional organizations. It is also indicated by substantial income changes. Upward mobility is illustrated by the advance from sales clerk to district manager. It also includes men who advance in authority and recognized expertise within an occupation, such as the lawyer who becomes a partner in his firm. This measure captures

long-term career trajectories and offers a significant advantage over the more standard quantitative measures.

Conceptual and Statistical Models

Event History Analysis of Military and War Industry Roles. Characterizing manpower mobilization as a competitive process between armed forces and the homefront for the assignment of men raises important issues about conceptualizing the role of prewar occupations in structuring recruitment pathways. When two roles compete for the same person, both must be considered at the same time. While a man is serving in the armed forces he is not at risk of war industry employment and, therefore, occupations that increase the risk of military induction remove more men from the risk of war industry employment. Alternatively, when men were mobilized into war industries their chances of being inducted may have been reduced substantially, as we hypothesize (*H:mob2*). To uncover the independent effects of occupation on each of the two competing wartime events, we take into account the effect that each event has on exposure to the risk of the other by estimating rates of these events. Comparing differences across occupations in the proportions ever inducted or ever mobilized into homefront industries does not take these exposure dependencies into account. Estimating differences in proportions (e.g., Logit or Probit) describes the experiences of men during the war by occupation, but the effects of occupation on one event are confounded by the effects on the other because induction and homefront employment are competing risks. Rates, unlike cumulative proportions ever experiencing events, take these exposure dependencies into account and thus are not confounded by differences in length of exposure to the events.

We apply Cox proportional hazard models to estimate the effects of occupation on the rates of military induction and war industry employment. The structure of this competition falls within the rubric of competing risk models (Cox and Oakes, 1984; Namboodiri, 1991). These hazard models speak to the fact that when an individual is serving in the military, he is not at risk of being mobilized on the homefront, and thus needs to be censored at that point; however, he does contribute observations during the time he is exposed to the risk of mobilization on the homefront. Relatedly, these models enable us to assess the effects of currently being mobilized for war industry employment on the risk of military induction. We expect that any effects of being mobilized in critical industries on the risk of military induction operate during the time the individual is working at this job, and not before or afterward. These hazard models will allow us to assess the effects of *currently* working in a critical job by defining such employment as a time-varying covariate. All other variables in the analysis (e.g., prewar occupation) are defined as time invariant. We include age at the beginning of war in this analysis (instead of birth cohort) because age was one of the critical factors in the federal government's deferment policy. The Cox model is non-parametric and does not impose distributional assumptions regarding survival times.

The homefront mobilization and induction histories were coded as follows: each month from 1941 to 1946 was coded as inducted (1) or not (0), and employed in war industry (1) or not (0). Duration for military induction is defined as the span of time in months prior to induction for veterans, and until the war ended for nonveterans ("censored cases"). Duration for homefront mobilization is defined as the span of time in months prior to employment in war-related industry, and for those who

were not mobilized on the homefront before the end of the war or military induction, duration is censored at the time of military induction or until the war ended.

Logistic Regression of Worklife Continuity and Progression. Analyses of the effects of wartime experiences on worklife immediately after the war focus on two aspects: the likelihood that the prewar occupation has changed by the end of demobilization; and the likelihood that the postwar job includes supervisory responsibilities. Analyses of military influences on changes in worklife from 1948-1972 focus on the presence or absence of career advancement during this time period. As noted in the measures section, this outcome indicates increasing responsibilities at work and income raises. Using logistic regression, we estimate how these worklife outcomes were affected by home front mobilization and military experience (including combat experience and officer status), controlling for cohort, prewar occupation, and marital status. Additional models included cohort interactions with the wartime effects. The occupational change analysis also controls for whether the respondent appeared to have episodes of floundering in his work life before the war, whereas the supervisory status models and the post-war long term work life progress models controlled for whether the pre-war career was characterized as one of progression. Men who were still in school when the war began were excluded from the short run analyses since they clearly were at a different career stage before the war than their counterparts.

Findings

Consistent with expectations, prewar occupations operated as a “sorting mechanism” in the manpower mobilization of white collar and professional men. Furthermore, the mobilization of these men had varying effects on their careers immediately following the war and in the long run. We first describe the men who were mobilized into the military and war-related industry, then present results from the event history analysis of military and war industry mobilization, which precedes the logistic regression models of the effects of wartime activities on worklife.

Descriptive Statistics

In a univariate analysis (Table 2), military service emerges as a far more selective process than mobilization for war-industry employment. Consistent with manpower priorities, military recruits tended to be younger and unmarried. Prewar occupations also played an important role, especially the professions of physician and lawyer, and along with managers. By comparison, only prewar occupations sorted men into war industries, particularly those of engineering and scientist. Veterans and nonveterans differed in the proportion who were supervisors after the war, and men who worked in critical jobs during the war differed in the proportion who were supervisors after the war and the proportion who had different occupations after the war.

--- Table 2 about here ---

Entering Military Service and War Industries

Prewar occupation emerges from our Cox proportional hazard models as the important factor in shaping men's wartime and postwar career experiences (Table 3). In support of hypotheses *mob1-3*, these results demonstrate that occupation-based differences in military induction were consistent with directives from the War Manpower Commission and the Selective Service System. Supporting hypothesis *mob1*: occupational differences in risks of military induction were significant, even after controlling for employment in critical industries, and occupational differences in the risk of such employment were significant. Strong support was also found for hypothesis *mob2*: employment in critical industries dramatically diminished the likelihood of military induction. Finally, as hypothesized in *mob3*, occupational differences, along with the critical nature of the current job, were more important than other deferment criteria in determining rates of military induction.

--- Table 3 about here ---

We find significant differences in wartime activities across prewar occupations, even after controlling for other criteria used by local draft boards for deferments. The rank order of occupation-based differences on war industry employment is generally the reverse observed for military induction supporting hypothesis *mob1*. Occupations with skills most needed by the military, especially physician and lawyer, ranked highest on the likelihood of military induction and lowest on the risk of homefront mobilization, whereas those with skills matching those needed by the war industries, in particular engineers and scientists, had the highest rates of mobilization on the homefront as hypothesized (*mob1*). The odds of induction for managers, social scientists and teachers, and sales-clerical workers were only about half as high as for physicians and lawyers, but they were significantly higher than for engineers. In

contrast, their odds of home front mobilization were about three times greater than physicians and lawyers but only half as high as for engineers and scientists. By comparing Models 1 and 2, we see that the effect of prewar occupation on military induction remains large and significant, even with adjustments for whether the individual was currently employed in a mobilized industry (support for *mob1*). The link between occupational skills and expertise increased the likelihood that men with certain occupations would have critical jobs on the homefront (model 3), and it also affected the risk of induction, above and beyond whether they currently held an essential job (model 2).

In addition to occupation, actual employment in a war industry was one of the most important factors affecting the risk of induction. Employment in a war industry lowered a worker's odds of induction by 60 percent (Model 2), even when controlling for occupation, (supporting *H:mob2*). Men who did enter were typically less equipped with technical skills, such as a low-level manager or supervisor.

On recruitment for the military, other criteria for induction (such as a younger age) remained potent selection factors (*H:mob3*). This is especially the case for family status, with age and prewar occupations controlled (Models 1 and 2, Table 3). The odds that married men were inducted were only .45 times as large as for the non-married, and the odds for fathers were only .75 as large as for men without children. In contrast, neither age nor family status predicted war industry employment (*H:mob3*). Furthermore, self-rated health did not predict military induction or homefront mobilization (not presented here). In the case of homefront mobilization, occupation was clearly the only significant determinant, and in regard to military recruitment where other factors were important, occupation and employment in critical industries had the largest effects.

The skills and expertise associated with occupations explain why some men ended up in war industries and why others were inducted. With jobs in war industry requiring high-level technical skills, it is understandable why talented engineers and scientists in the study had such high rates of mobilization on the homefront. During the war, in fact, two of the engineers were recruited for work on the Manhattan A-Bomb project and another was involved in wind tunnel research. A chemical engineer noted late in life that his war work provided “an immensely accelerated learning process in his business.” A civil engineer described the challenge of his war work in an aircraft plant, claiming that it offered “rapid exposure to ... accelerated ‘aerospace’ engineering development.”

Physicians were needed on both the homefront and the battlefield, but Selective Service policy gave priority to the latter. By the end of the mobilization period, physicians were at greatest risk of military duty; three out of four had been recruited by that time. The need was so great that racial-ethnic criteria were sometimes ignored. One physician of Japanese ancestry was recruited to “train medical soldiers,” despite the internment of his immediate family. The physician wrote to the project staff that his medical expertise was so vital that he was “respected by the enlisted men” and found the officers “willing to help.” Age and family responsibilities made little difference in the recruitment prospects of men with medical degrees.

There is strong evidence in our data that the medical expertise needed in the military exceeded available skills. Consequently, the military provided extraordinary opportunities for further training. An anesthesiologist became, as he put it, a “very good” one in the Army. Orthopedic surgeons were invariably placed in positions of high responsibility, near the front lines. One became the chief orthopedic surgeon at a 500 bed hospital in Manila, the Philippines. Another played a similar role in

London. The younger physicians in our data developed their medical specialties through their military assignments. They were also often assigned to accelerated career tracks. Thus, able doctors who were out of medical school only a year or so were assigned to posts with major responsibilities, such as a young physician who became the chief of one office of the Air Surgeon. Another became deputy commandant of a medical training school for the Army.

Lawyers are next to the physicians on rate of military recruitment and also resembled them in the continuity of their work during military service. Like the physicians, many of the recruited lawyers were challenged by their assignments to military justice, police, and intelligence units. In both occupational groups, men who entered the service were assigned to roles they were trained to perform, whether surgery on the warfront or legal representation and prosecution in military court. The small number of lawyers and physicians who remained on the homefront often faced very long days and weeks, owing to the shortage of professionals. One of the lawyers reported “doing the work of two attorneys because of a shortage of attorneys.” The homefront physicians spoke about the extraordinary pressures they faced at home and voiced regret that they could not be in active service where their contributions to the war effort would be greatest.

Managers were also mobilized into the military at a high rate, but their military placement was more variable than that of physicians and lawyers. Social scientists, writers, and sales-clerical workers were more likely to end up in the military than engineers/scientists, though manpower priorities less uniformly specified a military function for them during the war. Their skills were called upon by war industries and the federal government, as well as by the Armed Forces. Social scientists, for example, were requested by federal agencies and the military for data collection and analysis.⁴ The manpower

needs of war industries and military service also called for writers and media specialists. In contrast, young men in sales/clerical jobs, next to physicians, were least likely to hold critical homefront jobs. However, deferments did occur, occasionally when their companies shifted over to war production.

We assessed the difference in effects between the younger and older birth cohorts, and re-estimated the models, with the dichotomous cohort code instead of the continuous measure of age at the start of the war. However, the cohort interactions were not significant, with few exceptions, and so these results are not presented in Table 3. The exceptions are men who were physicians or in medical training before the war (in the analysis of the risk of induction), or men who were social scientists, teachers and writers (in the analysis of the risk of homefront mobilization). The older physicians were more likely to be inducted than their younger counterparts ($p=.004$). The younger men who were teachers, social scientists and writers were more likely to be mobilized on the homefront ($p=.007$).

Worklife Patterns in Postwar America

The mobilization phase focused on the competing manpower needs in the armed forces and the homefront, and the relationship between wartime experiences and the match of manpower needs with men's occupational skills. This worklife phase explores the implications of these wartime experiences for worklife continuity and progression. First we present findings about how the wartime experiences immediately impacted worklife, in terms of acquiring supervisory responsibilities and changing occupations after the war, and then we present the long term implications for worklife progress.

Differences between the pre-war and post-war occupation, the acquisition of supervisory roles immediately after the War and evidence of long term work life progress from 1948 to 1972 are

estimated with logistic regression models in Tables 4, 5 and 6 respectively. Four models are presented for each of these outcomes, with homefront mobilization and military experience the key explanatory variables. Models labeled (3) and (4) allow for the effects of military experience to vary according to combat experience and officer status. Models labeled (2) and (4) allow for cohort differences in the effects of war-time experiences. The top of Part A of the tables presents the odds ratios associated with the coefficients, and the bottom of Part A presents odds ratios for select comparisons. Part B presents the likelihood ratio test statistics for model comparisons.

Occupational change, 1940-48. The prewar life histories of the men made a significant difference in their risk for occupational change. As might be expected, the less skilled men in sales-clerical jobs were at great risk of an occupation change by the end of the war, and to a lesser extent, so were men in the fields of social science, teaching, and writing. Unstable work before the war, in the form of floundering, added to the risk of an occupational change, as one might expect. Such occupational changes were less common among married men, however (cf. Sampson and Laub, 1993); they were more bound to worklife continuity by family obligations than single men.

--- Table 4 about here ---

Apart from prewar histories, differences in war mobilization experience influenced the risk of occupational change (supporting $H:wk1$ and $H:wk2$). The likelihood ratio tests in Part B show significant cohort differences in the effects of war mobilization on occupation change ($H:wk3$). War industry employment significantly increased the likelihood of occupational change for both cohorts ($H:wk1$). The predicted odds of occupational change for men who were mobilized into critical or war-

related industries on the homefront was more than three times the odds for others. In other words, employment in critical industries on the homefront raised the odds of occupational change by more than 200 percent. The level of increase was even greater for the younger cohort, who start out with a greater baseline risk of occupational change as would be expected for men in early stages of their career, (but that cohort difference is not statistically significant).

Military service significantly decreased the odds of occupational change among the young cohort by about 50 percent, whereas, the odds for the older cohorts were increased by 39 percent (*H:wk2*, *H:wk3*). Military service appeared to be less disruptive for the life course of younger men and it provided a more stable anchorage for careers than employment in war industries with its mobility incentives. Even though the young cohort were at a formative stage of career development, it appears that the untimeliness of late recruitment for military service was more disruptive, pulling men out of established family and work careers (Elder, Shanahan, and Clipp, 1994).

Taking into account combat and officer status did not significantly improve the model overall (comparison of Models (4) and (2)). Although the difference was not significant at conventional levels, officer status was somewhat stabilizing among the older veterans. The odds of occupational change for non-officers with combat were almost twice the odds for nonveterans, and the odds for non-officers with no combat experience were about 2.7 times the odds for nonveterans. However, the odds for officers were only 1.47 times as high as the odds for nonveterans. This effect of officer status among the more established older cohort may reflect the channeling function of military command as well as the protected access of officers to the occupation they left behind as they return to civilian life.

Entry into supervisory roles by 1948. Both war industry employment and military service presented opportunities to acquire managerial expertise and relevant postwar jobs. The accelerated growth of war industries may have placed men in roles with supervisory duties, and the skill of the Terman men may have increased this prospect. Military command offered similar challenges. In the words of a quartermaster veteran from another study (Elder, 1987, pp. 464-65): “I matured very quickly. At twenty-one I had thirty men to take care of; at twenty-three, I had six hundred to seven hundred to feed and supply.”

--- Table 5 about here ---

As in the case of occupational change, we find substantial evidence of worklife continuity across the war years (Table 5). The odds of supervising others after the war among men who were supervisors or showed evidence of career progress before the war were two, and three to three and a half times as high, respectively, as others (Table 5). Homefront employment in critical industries significantly increased the likelihood of supervising others for the young cohort ($H: wk1, wk3$), but contrary to expectations, military service, and even duty with officer status ($H: wk2$), did not increase the likelihood of occupying managerial roles after the war (Table 5).

How can we explain the disconnect between military experience and supervisory roles in the postwar era, especially among the talented Terman men? First, the leadership potential of returning veterans and officers could be expressed in ways other than by occupational supervision and mobility, including civic engagement. But more importantly, the first year of postwar life in 1948 may well have been too early for an appraisal of the managerial legacy of military service. Servicemen were pulled out of the civilian mobility system and thus could not demonstrate their merit for managerial jobs until they

re-entered the labor force. In some cases, this re-entry was delayed by education or training. We have no evidence of delay due to impaired health.

War mobilization offered more possibilities for postwar managerial roles through employment in war industries, and this experience did make a significant difference among younger men. The available evidence suggests that this pathway was followed by a good many men who were mobilized on the homefront. War industry employment increased the odds of becoming a postwar supervisor or manager by 114%, $p=.03$, among younger men (*H:wk3*). Men in the older cohort were more advanced in career and family during the war and may have been less available for advancement opportunities on the homefront, especially when it involved residential change (*H:wk3*).

We find much evidence of both worklife continuity and change between the prewar years and 1948. But the truly important legacy of war mobilization most likely occurred well after World War II in men's lives. We turn now to this possibility.

Worklife advancement, 1948-70s. Nearly two out of three men in the sample were judged to have advanced in their career between the end of World War II and the early 1970s. The findings show that career progress in the prewar years clearly anticipates career progress well after the war. Table 6 shows that employment in critical industries did not have lasting effects on career advancement (*H:wk1*), in contrast to its strong positive effects on occupational change and the movement into managerial roles after the war. Mobilization into homefront industries resulted in only a slight increase in career progress that was not significant. Military experience, however, played an important role in long term career progress (*H:wk2*).

--- Table 6 about here ---

Over the long-term, postwar careers had much to do with whether men had served in the military and the nature of their war experience, whether as an officer and/or in combat. The likelihood ratio tests in Part B, Table 6 (comparing models (3) and (1) and comparing models (4) and (2)) indicate that the effects of military service depended on officer status and whether there was exposure to combat. Consistent with hypothesis $H:wk2$, officers in both cohorts were more likely to experience worklife progress after World War II, compared to other servicemen. Military service with exposure to combat and its sequelae of personal problems significantly impaired career achievement among older men, but not among younger men. The effects of military service did not differ significantly by cohort, except for the effects of combat ($H:wk3$).

Overall, we find that military service with combat experience lowered the odds of career progress by almost 40 percent [$p=.108$, Model (3)]. But this decline was only significant for men in the older cohort ($H:wk3$). The difference in combat effect by cohort is significant at $p=.076$; the ratio of the odds ratios of .32 for older men versus .93 for younger men =.34 [see Model (4), bottom of Part A, Table 6]. In the older cohort, the odds of worklife progress for veterans with combat exposure was only .32 times the odds for non veterans [$p=.019$, Model (4)].

Even without combat exposure, military experience depressed worklife progress ($H:wk2$). The predicted odds of worklife progress for those serving in the armed forces was less than three fourths the odds of those who did not serve in the military, net of combat exposure and officer status (model (3)). In other words, veterans had an odds of worklife progress more than 25 percent lower than the odds

for nonveterans. This effect was even greater for the older cohort veterans, whose odds of progress were less than half of those for their counterparts who did not serve in the armed forces (model (4)).

The positive influence of officer status on career progress countered the negative effects of military service and even combat. Among veterans, being an officer significantly improved prospects, increasing the odds by more than 100% [$p=.02$, Model (3)]. As a result, the odds of worklife progress for officers was 1.5 times the odds for nonveterans, whereas the odds for other veterans was only .74 times as large as the odds for nonveterans. Furthermore, officers who faced combat were as likely to advance in their careers as nonveterans.

Discussion

State activities and policies have numerous indirect consequences on forms of the life course, but there are also powerful direct effects. Growth of public sector employment is one example and State activities under wartime conditions represents another. As Mayer and Schoepflin (1989, p. 200) observe, “states intervene most drastically in the lives of citizens when they declare war.” Using World War II as the context, this study addressed the cross-level problem noted by Mayer and Schoepflin (1989, p. 190) that “almost no direct empirical link exists between State organization and activities on the one hand and the trajectories of individual lives on the other hand.” We investigated the process by which manpower mobilization during the Second World War influenced individual worklives. The intersection of individual characteristics, particularly occupational skills, and the particular needs of the State during this period had enormous implications for individual lives during the war, which in turn

impacted worklives and career trajectories. We explored how prior skills and expertise associated with different white collar occupations, along with other factors, influenced men's experience in the war because of the State's manpower needs, and how these wartime experiences (including employment on the homefront) in turn affected later worklife.

Americans have mobilized for war on numerous occasions in the 20th century, though no period involved more citizens than the Second World War. In this study, we have investigated two major dimensions of intervention by the United States Government during World War II , military mobilization and the mobilization of workers for war industries. The mobilization part of the analysis centers on the relation between manpower policies and the recruitment patterns of men in the study; the worklife part, on the consequences of military service and war industry employment for men's careers.

Manpower mobilization has typically been viewed in terms of military recruitment. States interrupt the life course of young citizens by "drafting large proportions of cohorts into the military, leaving many of them disabled and traumatized for the rest of their lives" (Mayer and Schoepflin (1989, p. 200). Some 40 years after World War II, longitudinal studies began to document the long-term effects of wartime service. The age at which men entered the service in World War II, their overseas duty and their exposure to combat all had significant consequences for their health and family stability (Sampson and Laub, 1996; Clipp and Elder, 1996; Elder and Chan, in press). Early pioneering studies (Hill, 1949; Stolz, 1954; see also Tuttle, 1993) paved the way for this line of inquiry by revealing the vulnerability of families and children to the absence and return of servicemen.

A neglected part of this mobilization took place on the homefront; the recruitment of workers to war industries and its long-term effect on the lives of men and women. Under the broad directives of

the State, manpower mobilization occurred along multiple pathways, featuring the provision of skilled workers for critical war industries and the assurance of essential personnel and services for homefront communities, as well as military recruitment. Overlooking the aspect of mobilization that took place on the homefront left many unanswered questions until now about wartime activities outside of the armed forces, and the implications of these experiences. Furthermore, ignoring the homefront when studying the determinants of military recruitment may have important consequences for the validity of previous findings because of the interdependencies resulting from competing manpower needs.

This study incorporated this neglected aspect of mobilization. We quantified the extent to which military recruitment and mobilization into critical industries on the homefront were competing processes, allowing us to uncover the role of occupation as a sorting mechanism between these two sectors. We then estimated the effects both aspects of mobilization had on occupational change, entry into managerial roles, and career advancement across the postwar years. The archival resources of the Stanford-Terman study with a panel of 788 white collar workers and professional men, provided empirical support for our hypotheses that the structure of the nation's military and civilian mobilization created occupation-based differences in wartime experiences (*H:mob1-3*); and these wartime experiences affected worklife continuity after the war and long term career progression, with some notable differences between cohorts (*Hwk:1-3*).

Did occupational skills mediate the effects of war on individual lives? As hypothesized, the data demonstrated that manpower priorities on skills were expressed in specific occupational patterns of recruitment. Competing risk hazard models of military induction and mobilization into homefront industries found that war industry employment served as a “major” barrier to military induction

(*H:mob2*). Prior skills and expertise associated with different occupations were important determinants of both induction and employment in critical industries in the homefront (*H:mob1*). Occupation remained an important sorting mechanism into the armed forces, even when controlling for employment in critical industries (*H:mob1*). Rates of military induction and critical employment on the homefront closely reflected the match between occupation-based skills and the pressing needs of each sector (*H:mob1*). The skills associated with each occupation, and the nature of current employment were more important than age, marital status and parenthood which were also significant criteria for military induction (*H:mob3*).

By its very nature, State-initiated manpower mobilization was disruptive of lives. In a survey of World War II veterans (Elder, 1987) during the 1980s, most placed a “disrupted life” above all other undesirable experiences during the war (55%). Each respondent could select three from a list. Very close in prevalence were examples of disruption, “separation from loved ones” and “a delayed career.” In this study we focused on worklife disruption and change. War industry employment significantly increased the likelihood of occupational change, providing support for hypothesis *H:wk1*. Military service affected each cohort differently (*H:wk3*). It appears to have provided more structure for younger wartime recruits, lowering their higher propensity of occupation change (*H:wk2*). In contrast, the armed forces were destabilizing for the older cohort. These men were typically pulled out of careers when they were mobilized into the armed forces and this disruption by itself could enhance their risk for occupational change. We hypothesized that employment in war industries would be an effective vehicle for achieving managerial status (*H:wk1*). This was clearly the case for the younger cohort, more than doubling their odds (*H:wk1*, *H:wk3*), but wartime experiences had little effect for the older cohort.

Military induction and two features of the service — officer status and exposure to combat — proved to be inconsequential (*H:wk2*), though they had greater impact on career advancement well into the postwar era.

To see whether the mobilization had lasting effects on worklife, we turned to career advancement up to the 1970s — advancement within an occupational category and/or advancement across occupational strata. Other studies have not examined long-term worklife effects of military service in World War II, though studies of wage attainment show no long-term effect (Angrist, 1990; cf. Marini, Shin, and Raymond, 1989). According to our data, when the war ended, employment in war industries tended to have a significant impact on men's work, for example, opening up managerial possibilities for the younger Terman men. But as veterans returned to the workforce, we found that this effect diminished to insignificance while military service became a more potent force.

After release from the armed forces, veterans had to make up for lost time in the market place. This did not appear to be completely possible, except for the men who became officers. As among Vietnam veterans (Egendorf et al., 1981), combat generally impaired the career progress of World War II veterans. Stress symptoms may have handicapped some veterans who faced combat for years. We were unable to measure these symptoms (disturbed sleep, inability to concentrate, irritability, flashbacks, etc.) with the data at hand, though they may have played a role in the impairment process in men's worklives. We also have no evidence that physical health made a difference in worklife advancement. More research is needed on the late-life work and health consequences of mobilization during the Second World War.

Officer status appeared to enhance career progress for veterans in both birth cohorts. Officers were more likely to advance in their career than other veterans, as well as nonveterans. Serving as an officer even countered the adverse effect of combat, so that even among the older cohort with significant negative effects of combat, the odds of career progress for officers who faced combat were no different than the odds for nonveterans. Becoming an officer may have led to friendships and professional contacts that can function as life-long convoys of occupational information and personal support (Kahn and Antonucci, 1980). Officer status would also carry “resume” significance for recruiters in high-status labor markets. Alternatively, the ability to attain officer status likely selected men on the basis of prior-expertise, maturity, and other personal qualities such as judgement and stamina under pressure, that also predict career success.

By focusing on both military recruitment and war industry employment, we have taken a small step toward broadening available accounts of the mobilization experiences of a nation at war and the implications for individual worklives. We examined how manpower mobilization in the U.S. during World War II affected the worklives of highly trained white collar workers and professionals whose skills were needed both on the homefront and in the armed forces. Caution, however, must be taken in generalizing our findings to other mobilization experiences and different kinds of worklives.

First, even in the context of highly skilled men in the U.S. during the Second World War, consideration must be given to the particular features of the Stanford-Terman study, and the context of the men - California residence, middle- to upper middle-class status, and high ability. The national imperatives of manpower mobilization may have been implemented in different ways across regions of the country (Elder and Hareven, 1993). The postwar economy also differed by region.

Second, we focused exclusively on professionals and white collar workers because these highly trained men were the segment of the population most likely to provide essential skills and expertise, whereas prior research had ignored these men, focusing instead on the unskilled and non-employed populations. However, our findings might not be comparable for differences across other levels of skill and types of careers (e.g., blue collar and manual occupations). Moreover, the effect of the war on younger men who have either not yet entered the workforce or not yet established a career path may be quite different. Sampson and Laub's 1996 study of low-income men from Boston finds some benefits to the skill training in the service and the G.I. Bill, issues that would have much less impact on the men we studied who had already entered careers before the war.

Third, in regard to other wars, manpower mobilization in the Second World War was much less selective. For example, the State recruited a very large portion of the male population over a wide age range, from the age of 18 to 38-40 — this compares to the more restricted recruitment age in the Vietnam War (about age 18 to 23) and its more working-class population (Egendorf et al., 1981).

Fourth, one might expect the most adverse worklife effects among men in war-devastated countries, such as Germany. According to research by Mayer (1988), German males, born between 1915 and 1925, were drawn very heavily into military action (up to 97 percent of an age cohort — p. 234). The surviving veterans lost as many as nine years of their occupational careers in the war and faced joblessness upon their return to civilian life.

This study provided one example of how the State's manpower mobilization during the Second World War affected individual worklives and attention was drawn to the importance of the State's competing needs, and to the homefront, which has been overlooked in much of the research on

wartime. Our conceptual framework can be applied to other instances of State intervention where individuals are sorted into competing roles as well as to other levels of aggregation of agency (e.g., the Church's allocation of priests to parishes vs. missionaries overseas). Our study also raised new questions and lines of inquiry. The scope of this study can be extended to other types and levels of skills and expertise, and to a variety of home front activities, other than war industry employment, such as civil defense and essential homefront employment. Many other compelling questions were raised concerning the enduring legacy of wartime experiences, particularly in terms of managerial skills, life-long ties to comrades and work mates. We speculated about other potential legacies of World War II for health, well-being, family, and social ties as explanations for our findings on worklives; however, these legacies also deserve more investigation than they have received to date.

Endnotes

1. This option ended in December 1942, one year after the Japanese attack on Pearl Harbor. From this date on, local draft boards assigned men to military branches according to personnel needs.
2. These figures are from the sample of professional and white collar men used in our analysis of the risk of military induction and homefront mobilization.
3. Only 27 men were coded as mobilized for war-industry employment and later for active military duty.
4. In a special issue of Social Psychology Quarterly, John Clausen (1984) describes how the mobilization of social scientists into government service during the war (especially into the “Research Branch” of the War Department influenced their careers. In the Research Branch, Sam Stouffer directed the influential American Soldier project (see Stouffer et al., 1949, Vol. I and Vol. II).

References

- Angrist, Joshua D. 1990. "Lifetime Earnings and the Vietnam Era Draft Lottery: evidence from Social Security Administrative Records." The American Economic Review 80: 313-36.
- Baron, James N., Frank R. Dobbin, and P. Devereaux Jennings. 1986. "War and Peace: The Evolution of Modern Personnel Administration in U.S. Industry." American Journal of Sociology 92: 350-83.
- Campbell, D'Ann. 1984. Women at War with America: Private Lives in a Patriotic Era. Cambridge, MA: Harvard University Press.
- Clausen, John A. 1984. "Research on the American Soldier as a Career Contingency." Social Psychology Quarterly 47(2):207-213.
- Clipp, Elizabeth Colerick, and Glen H. Elder, Jr. 1996. "The Aging Veteran of World War II: Psychiatric and Life Course Insights." Pp. 19-51 in Aging and Post-traumatic Stress Disorder, edited by Paul E. Ruskin and John A. Talbott. Washington, DC: American Psychiatric Press, Inc.
- Cox, David R., and D. Oakes. 1984. Analysis of Survival Data. London: Chapman and Hall.
- Egendorf, Arthur, Charles Kadushin, Robert S. Laufer, George Rothbart, and Lee Sloan. 1981. Legacies of Vietnam, Vol. 1: Summary of Findings. Washington, DC: US Government Printing Office.
- Elder, Glen H., Jr. 1974. Children of the Great Depression: Social Change in Life Experience. Chicago: University of Chicago Press. (1999. Reissued as 25th Anniversary Edition.) Boulder, CO: Westview Press.
- Elder, Glen H., Jr. 1986. "Military Times and Turning Points in Men's Lives." Developmental Psychology 22:233-245.
- _____. 1987. "War Mobilization and the Life Course: A Cohort of World War II Veterans." Sociological Forum 2(3)449-72.
- Elder, Glen H., Jr., and Christopher Chan. In press. "War's Legacy in Men's Lives." A Nation Divided: Diversity, Inequality and Community in American Society, edited by Phyllis Moen and Donna Dempster-McClain. Ithaca, NY: Cornell University Press.

- Elder, Glen H., Jr. and Elizabeth C. Clipp. 1988. "Wartime Losses and Social Bonding: Influences Across 40 Years in Men's Lives." *Psychiatry* 51(May)177-98.
- Elder, Glen H., Jr., and Tamara K. Hareven. 1993. "Rising Above Life's Disadvantages: From the Great Depression to War." Pp. 47-72 in Children in Time and Place: Developmental and Historical Insights, edited by Glen H. Elder, Jr., John Modell, and Ross D. Parke. New York: Cambridge University Press.
- Elder, Glen H., Jr., and Eliza K. Pavalko. 1992. "Trajectories of Health: In Concept and Empirical Pattern." Behavior, Health, and Aging 2: 159-79.
- Elder, Glen H., Jr., Eliza K. Pavalko, and Elizabeth C. Clipp. 1993. Working with Archival Data: Studying Lives. Newbury Park, CA: Sage.
- _____. 1997. "Linking Combat and Physical Health: The Legacy of World War II in Men's Lives." American Journal of Psychiatry 154(3): 330-336.
- Fairchild, Byron, and Jonathan Grossman. 1959. The Army and Industrial Manpower. Washington, DC: Office of the Chief of Military History, Department of the Army.
- Feagin, Joe R., and Kelly Riddell. 1990. "The State, Capitalism, and World War II: The U.S. Case." Armed Forces and Society 17: 53-79.
- Flynn, George Q. 1979. The Mess in Washington: Manpower Mobilization in World War II. Westport, CT: Greenwood Press.
- Foster, Mark S. 1989. Henry Keiser: Builder in the Modern American West. Austin, TX: University of Texas Press.
- Hill, Reuben. 1949. Families Under Stress: Adjustment to the Crises of War Separation and Reunion. New York: Harper & Row.
- Hogan, Dennis P. 1981. Transitions and Social Change: The Early Lives of American Men. New York: Academic Press.
- Holahan, Carole K., and Robert R. Sears. 1995. The Gifted Group in Later Maturity. Stanford, CA: Stanford University.
- Hooks, Gregory, and Gregory McLauchlan. 1992. "The Industrial Foundation of Warmaking: Three Eras of U.S. Warmaking, 1939-1989." Theory and Society 21: 757-788.

- Johnson, Marilyn S. 1993. The Second Gold Rush: Oakland and the East Bay in World War II. Berkeley, CA: University of California Press.
- Kahn, Robert L. and Toni C. Antonucci. 1980. "Convoys Over the Life Course: Attachment, Roles, and Social Support." Pp. 253-86 in *Life-Span Development and Behavior: Vol. 3*. Eds. Paul B. Baltes and Orville G. Brim, Jr. New York: Academic Press.
- Kesselman, Amy. 1990. Fleeting Opportunities: Women Shipyard Workers in Portland and Vancouver during World War II and Reconversion. Albany, NY: State University of New York Press.
- Lane, Frederick C. 1951. Ships for Victory: A History of Shipbuilding under the U.S. Maritime Commission in World War II. Baltimore, MD: Johns Hopkins Press.
- Laub, John H., and Robert J. Sampson. 1993. "Turning Points in the Life Course: Why Change Matters to the Study of Crime." Criminology 31(3):301-325.
- Levinson, Daniel J. 1979. The Seasons of A Man's Life. New York: Ballantine Books. Page 12
- Maas, Ineke, and Richard A. Settersten. In press. "Military Service During Wartime: Its Effects on Men's Occupational Trajectories and Later Economic Well-Being." The European Sociological Review.
- Mann, Michael. 1988. States, War and Capitalism: Studies in Political Sociology. New York: Basil Blackwell.
- Marini, Margaret Mooney, Hee-Choon Shin, and Jennie Raymond. 1989. "Socioeconomic Consequences of the Process of Transition to Adulthood." Social Science Research 18:89-135.
- Mayer, Karl Ulrich. 1986. "Structural Constraints on the Life Course." Human Development. 29(3):163-170.
- Mayer, Karl Ulrich. 1988. "German Survivors of World War II: The Impact of the Life Course of the Collective Experience of Birth Cohorts." Pp. 229-46 in Social Structures and Human Lives, edited by Matilda White Riley, Bettina J. Huber, and Beth B. Hess. Newbury Park, CA: Sage.
- Mayer, Karl Ulrich, and Walter Müller. 1986. "The State and the Structure of the Life Course." Pp. 217-145 in Human Development and the Life Course: Multidisciplinary Perspectives, edited by Aage B. Sørensen, Franz W.E. Weinert, and Lonnie Sherrod. Hillsdale, NJ: Erlbaum.

- Mayer, Karl Ulrich, and Urs Schoepflin. 1989. "The State and the Life Course." Annual Review of Sociology 15:187-209.
- McLaughlan, Gregory. 1997. "World War II and the Transformation of the U.S. State: The Wartime Foundations of U.S. Hegemony." Sociological Inquiry 67: 1-26.
- Minton, Henry L. 1988. "Charting Life History: Lewis M. Terman's Study of the Gifted." Pp. 138-61 in The Rise of Experimentation in American Psychology, edited by J.G. Morawsky. New Haven, CT: Yale University Press.
- Mitchell, Broadus. 1947. Depression Decade: From New Era through New Deal, 1929-1941. New York: Rinehardt and Co.
- Modell, John, and Timothy Haggerty. 1991. "The Social Impact of War." Annual Review of Sociology 17: 205-24.
- Modell, John, M. Goulden, and S. Magnusson. 1989. "World War II in the Lives of Black Americans: Some Findings and an Interpretation." Journal of American History 76: 830-48.
- Namboodiri, Krishnan. 1991. Demographic Analysis. San Diego, CA: Academic Press
- Nash, Gerald D. 1990. World War II and the West: Reestablishing the Economy. Lincoln, NE: University of Nebraska Press.
- Pavalko, Eliza K., and Glen H. Elder, Jr. 1990. "World War II and Divorce: A Life-course Perspective." American Journal of Sociology 95: 1213-34.
- Pavalko, Eliza K., Glen H. Elder, Jr., and Elizabeth C. Clipp. 1993. "Worklives and Longevity: Insights from a Life Course Perspective." Journal of Health and Social Behavior 34: 363-380.
- Polenberg, Richard. 1972. War and Society: The United States, 1941-1945. Philadelphia, PA: Lippincott.
- Ryder, Norman B. 1965. "The Cohort as a Concept in the Study of Social Change." American Sociological Review 30: 843-61.
- Sampson, Robert J., and John Laub. 1993. Crime in the Making: Pathways and Turning Points Through Life. Cambridge, MA: Harvard University Press. Page 27
- _____. 1996. "Socioeconomic Achievement in the Life Course of Disadvantaged Men: Military Service as a Turning Point, Circa 1940-1965." American Sociological Review 61: 347-67.

- Selective Service System. 1947a. Industrial Deferment. Special Monograph. No.6. Vol. 1. Text. Washington, DC: U.S. Government Printing Office.
- _____. 1947b. Dependency Deferment. Special Monograph. No.8. Washington, DC: U.S. Government Printing Office.
- _____. 1947c. Industrial Deferment. Special Monograph. No.6. Vol. 2. Appendices Washington, DC: U.S. Government Printing Office.
- _____. 1948. Quotas, Calls and Inductions. Special Monograph. No.12. Vol.2 Appendices. Washington, DC: U.S. Government Printing Office.
- Shanahan, Michael J., Glen H. Elder, Jr., and Richard A. Miech. 1997. "History and Agency in Men's Lives: Pathways to Achievement in Cohort Perspective." *Sociology of Education* 70(1)54-67.
- Sorokin, Pitirim A. 1942. Man and Society in Calamity. New York: Dutton.
- Stolz, Lois Meek. 1954. Father Relations of War-born Children. Stanford, CT: Stanford University Press.
- Stouffer, Samuel A., Arthur A. Lumsdaine, Marion Harper Lumsdaine, Robin M. Williams, Jr., M. Brewster Smith, Irving L. Janis, Shirley A. Star, and Leonard S. Cottrell, Jr. 1947. The American Soldier, Volume II: Combat and its Aftermath. Princeton, NJ: Princeton University Press.
- Stouffer, Samuel A., Edward A. Suchman, Leland C. DeVinney, Shirley A. Star, and Robin A. Williams, Jr. 1949. The American Soldier, Volume I: Adjustment During Army Life. Princeton, NJ: Princeton University Press.
- Tuttle, William M., Jr. 1993. ‘Daddy’s Gone to War’: The Second World War in the Lives of America’s Children. New York: Oxford University Press.
- United States Department of Commerce. 1943. Page 2
- United States Temporary Controls Office, Historical Reports on War Administration, War Production Board. 1947. Industrial Mobilization for War: History of the War Production Board and Predecessor Agencies, 1940-1945. Washington, DC: U.S. Government Printing Office.

Table 1 Age of California Men in Birth Cohorts by Historical Events

Date	Event	Age of Terman Men at Events by Birth Cohort	
		1904-1910	1911-1917
1906	San Francisco earthquake	1-2	---
1914-1918	World War I	4-14	3-7
1921-1922	20s depression	11-18	4-11
1923-1929	General economic boom	13-25	6-18
1929-1933	Great Depression, onset and depth	19-29	12-22
1933-1936	Partial recovery, status	23-32	16-25
1937-1938	Economic slump	27-34	20-27
1939-1940	Incipient stage of war mobilization	29-36	22-29
1941-1943	Major growth of war industries and military forces	31-39	24-32
1945	End of World War II	35-41	28-34
1950-1953	Korean War	40-49	33-42
1957	Peak of baby boom	47-53	40-46
1963-1973	Era of Vietnam War	53-69	46-62
1973	End of postwar affluence	63-69	56-62

Table 2 **Characteristics of the Terman Men by Military Induction and War Industry Employment in World War II**

Social Factors	Military Induction		War Industry Employment	
	Yes	No	Yes	No
	N= 256-300	N= 362-488	N= 156-184	N= 464-604
Age, O	28.9	30.4***	29.6	29.9
Young cohort, %	56.7	42.4***	50.5	47.0
Health (1: low 5: high), O	4.5	4.4	4.4	4.4
Education (years), O	13.3	12.4***	12.9	12.7
Ever married, %	48.3	74.8***	65.0	63.1
Parent, %	49.3	73.6***	60.3	65.6
Prewar occupation, %				
Engineer, scientist	6.0	12.9**	18.5	7.8***
Physician	9.0	1.8***	1.6	5.5**
Lawyer	12.0	5.7**	3.8	9.4**
Manager	15.0	10.0**	13.0	11.6
Social scientist, teacher, writer	16.7	17.8	22.3	15.9**
Sales, clerical workers	20.3	18.4	17.9	19.5
Student	21.0	33.2***	22.8	30.3*
Prewar floundering, %	21.2	17.4	21.9	18.0
Supervisor before the war, %	21.2	18.8	22.5	18.9
Prewar worklife progress, %	48.4	48.2	51.3	47.3
Occupational change, 1940-48, %	60.3	59.2	79.3	53.6***
Supervisor after the war, %	35.3	43.7**	47.2	38.0**
Worklife progress, 1940-48, %	61.3	59.1	60.4	59.9

***p<0.001 *** p<0.01 ** p<0.05 * p<0.1

Table 3 Military Induction and Homefront Mobilization in WWII by Selected Variables: Odds Ratios from Cox Proportional Hazard Model (N=631) ^{a)}

Social Factors	Military Induction		Homefront Mobilization
	Model 1	Model 2	Model 3
<u>Prewar Status</u>			
Age	0.96**	0.95**	0.95
Years of schooling	1.01	1.01	1.02
Married	0.46***	0.45***	1.31
Parent	0.75**	0.76*	1.00
<u>Prewar Occupation</u>			
Engineer, scientist	---	---	---
Physician	4.13***	3.27***	0.20**
Lawyer	3.08***	2.55***	0.15***
Manager	2.81***	2.56***	0.42***
Social scientist, teacher, writer	1.79**	1.66*	0.54**
Sales, clerical workers	2.03**	1.86**	0.50**
Students	1.47	1.29	0.55*
<u>Mobilization Status</u>			
Homefront mobilization		0.39***	
Model Chi-square (degree of freedom)	96.51*** (10)	120.54*** (11)	26.31*** (10)

*** p<0.01 ** p<0.05 * p<0.1

a) In Model 3 those who served in the military are treated as censored.

Table 4. Occupational Change From Prewar to Postwar Period (1940-48) by War-time Experiences and Cohort: Logistic Regression Models

A. Odds Ratios by Model ^{[1] [2] [3]}	(1)	(2)	(3)	(4)
<u>Odds Ratios Associated with Coefficients</u>				
<u>Pre-war Occupation</u> (Relative to Engineers/Scientists)				
Physician	1.73	1.55	1.68	1.60
Lawyer	0.63	0.59	0.63	0.57
Manager	1.50	1.47	1.48	1.42
Soc Sci, Teacher, Writer	2.81***	2.70***	2.74***	2.67***
Sales, Clerical Workers	4.87***	5.07***	4.79***	5.00***
<u>Other Pre-war Characteristics</u>				
Married	0.58**	0.55***	0.59**	0.57**
Career Floundering	2.55***	2.49***	2.66***	2.51***
<u>War-time Experience</u>				
Mobilized on Homefront	3.38***	3.10***	3.34***	3.11***
Military Experience	0.86	1.39	1.07	2.73*
Officer			1.00	0.54
Combat			0.67	0.70
<u>Cohort</u>				
Young (<age 30 in 1940)	1.40*	2.15**	1.43*	2.17***
Young*Mobilized		1.21		1.20
Young*Military		0.34***		0.20**
Officer				2.27
Combat				0.93
Chi Square ^[4]	125.517	133.512	127.311	136.220
Degrees of Freedom ^[4]	12	14	14	18
<u>Odds Ratios Constructed For Select Group Comparisons</u> (old cohort/young cohort)				
<u>Relative to No War Experience:</u>				
Young Military		0.47**		
Young Mobilized		3.76***		
Military with Officer				1.47/ 0.67
Military with Combat				1.91/ 0.36**
<u>Relative to Homefront Mobilized:</u>				
Military		0.45**		
Young Military		0.12***		
<u>Relative to Other Veterans:</u>				
Young Officer			1.23	
Young Combat				0.65
B. Model Comparison (Likelihood Ratio Test, bold if <=.100)				
Cohort Differences:	G ²	d.f.	Combat and Officer Differences:	G ² d.f.
Model (2) - Model (1)	8.00	2	Model (3) - Model (1)	1.79 2
Model (4) - Model (3)	8.91	4	Model (4) - Model (2)	2.71 4

[1] N = 562. [2] Level of significance for each odds ratio is based on Wald Chi-Square p-values, *** p<.01, ** p<.05, * p<.10. [3] Models estimated with indicators for missing data on pre-war characteristics. [4] Chi Square and degrees of freedom differences relative to independence model.

Table 5. Supervisor in 1948 by War-time Experiences and Cohort: Logistic Regression Models

A. Odds Ratios by Model ^{[1] [2] [3]}	(1)	(2)	(3)	(4)	
<u>Odds Ratios Associated with Coefficients</u>					
<u>Pre-war Occupation</u> (Relative to Engineers/Scientists)					
Physician	0.12***	0.11***	0.12***	0.12***	
Lawyer	0.13***	0.13***	0.13***	0.12***	
Manager	0.78	0.72	0.79	0.73	
Soc Sci, Teacher, Writer	0.43***	0.40***	0.43***	0.41***	
Sales, Clerical Workers	0.82	0.79	0.82	0.79	
<u>Other Pre-war Characteristics</u>					
Supervisor 1940	3.34***	3.48***	3.40***	3.55***	
Married	1.04	1.06	1.03	1.05	
Career Progress	2.14***	2.21***	2.16***	2.23***	
<u>War-time Experience</u>					
Mobilized on Homefront	1.26	0.79	1.27	0.79	
Military Experience	0.92	0.81	0.75	0.65	
Officer			0.89	0.96	
Combat			1.69	1.67	
<u>Cohort</u>					
Young (<age 30 in 1940)	1.40	0.94	1.37	0.93	
Young*Mobilized		2.71**		2.77**	
Young*Military		1.39		1.33	
Officer				0.92	
Combat				1.08	
Chi Square ^[4]	112.793	117.090	115.371	119.838	
Degrees of Freedom ^[4]	14	16	16	20	
<u>Odds Ratios Constructed For Select Group Comparisons</u>					
<u>Relative to No War Experience:</u>					
Young Military		1.13			
Young Mobilized		2.14**			
B. Model Comparison (Likelihood Ratio Test, bold if <= .100)					
Cohort Differences:	G ²	d.f.	Combat and Officer Differences:	G ²	d.f.
Model (2) - Model (1)	4.30	2	Model (3) - Model (1)	2.58	2
Model (4) - Model (3)	4.47	4	Model (4) - Model (2)	2.75	4

[1] N = 628. [2] All significant levels based on Wald Chi-Square p-values, *** p<.01, ** p<.05, * p<.10. [3] Models also include indicators for missing data on pre-war characteristics. [4] Chi Square and degrees of freedom differences relative to independence model.

Table 6. Long Term Worklife Progress (1948 to 1972) by War-time Experiences and Cohort: Logistic Regression Models

A. Odds Ratios by Model ^{[1] [2] [3]}	(1)	(2)	(3)	(4)
<u>Odds Ratios Associated with Coefficients</u>				
<u>Pre-war Occupation</u> (Relative to Engineer/Scientists)				
Physician	0.99	1.03	0.87	0.89
Lawyer	0.60	0.61	0.62	0.65
Manager	0.89	0.91	0.93	0.98
Soc Sci, Teacher, Writer	0.60	0.62	0.62	0.64
Sales, Clerical Workers	0.59*	0.59*	0.63	0.65
Students	0.75	0.76	0.74	0.75
<u>Other Pre-war Characteristics</u>				
Married	1.00	1.01	0.98	1.00
Career Progress	2.12***	2.13***	2.06***	2.08***
<u>War-time Experience</u>				
Mobilized on Homefront	0.97	1.02	1.01	1.05
Military Experience	1.06	0.95	0.74	0.46
Officer			2.02**	3.39**
Combat			0.85	0.69
<u>Cohort</u>				
Young (<age 30 in 1940)	1.27	1.19	1.33	1.18
Young*Mobilized		0.92		0.93
Young*Military		1.25		1.92
Officer				0.47
Combat				1.53
Chi Square ^[4]	29.357	29.871	35.717	39.163
Degrees of Freedom ^[4]	13	15	15	19
<u>Odds Ratios Constructed For Select Group Comparisons</u> (old cohort/young cohort)				
<u>Relative to No War Experience:</u>				
Military with Combat			0.63	0.32** / 0.93
Military with Officer			1.49	1.56 / 1.41
Military with Officer & Combat		1.27		1.08 / 1.47
<u>Ratio of Older to Younger Cohorts' Odds Ratios:</u>				
Military with Combat Relative to No War Experience				0.34*
<u>Relative to Other Veterans:</u>				
Young Officer			1.58	
Young Combat				1.05
B. Model Comparisons (Likelihood Ratio Test, bold if <= .100)				
Cohort Differences:	G ²	d.f.	Combat and Officer Differences:	G ² d.f.
Model (2) - Model (1)	0.51	2	Model (3) - Model (1)	6.36 2
Model (4) - Model (3)	3.45	4	Model (4) - Model (2)	9.29 4

^[1] N = 622. ^[2] All significant levels are based on Wald Chi Square p-values, *** p<.01, ** p<.05, * p<.10. ^[3]

Models estimated with indicators for missing data on pre-war characteristics. ^[4] Chi Square and degrees of freedom differences relative to independence model.

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