LOOKING BACK

Influence of the U.S. Military and Occupational Therapy Reconstruction Aides in World War I on the Development of Occupational Therapy

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During the first World War, the newly developing profession of occupational therapy fostered its professional growth through an initial involvement in the U.S. military. Occupational therapy's role in World War I was facilitated by the efforts of the Army's Orthopedic Department to establish one of the first rehabilitation programs implemented in the United States. This nascent rehabilitation program was based on a World War I English reconstruction model composed of orthopedics, occupational therapy (then called bedside occupations and curative workshops), physiotherapy, and vocational reeducation (Ireland, 1927; Jones, 1918; Letter to E. G. Brackett, Unsigned, 1918). The American orthopedists, who sought to advance their own professional purposes through the war, inadvertently assisted the development of these fellow health professions by attempting to expend their services to carry out and support orthopedic endeavors ("The Function of Orthopedic Surgery," 1917). Because of orthopedics' position in the hierarchy of the Medical Department of the U.S. military, these physicians were able to establish leadership over occupational therapy, physiotherapy, and vocational reeducation and consequently sought to define the military health care functions of all three groups. This early professional association between occupational therapy and orthopedics marked both occupational therapy's initial affiliation with the medical model and deterioration of an early attempted connection to vocational rehabilitation.

In this article, the relationship between orthopedists and reconstruction aides will be explored to discern its impact on the development of occupational therapy, as well as the influence of gender issues prevalent at this time in American history. The relationship between orthopedists and reconstruction aides was influenced by cultural expectations of suitable roles for women. The ways in which such gender role norms influenced the development of the occupational therapy profession will also be examined.

History of Relationship Between Orthopedists and Reconstruction Aides

Before the United States became involved in World War I, few physicians specialized in joint deformities or orthopedics (Arluke & Gritzer, 1985). Two influential Harvard-trained orthopedists, Joel Goldthwait and Elliot Brackett, believed that the interests of the orthopedic profession could be served through involvement in the Medical Department of the U.S. Army (Goldthwait, 1917). Goldthwait and Brackett were responsible for creating the Division of Orthopedic Surgery within the Medical Department of the Army and for organizing a reconstruction program for soldiers who had been disabled (Ireland, 1927).

This reconstruction program was based on efforts to rehabilitate soldiers that were first implemented in Eng-
land by a British colonel, Robert Jones (Ireland, 1927; Jones, 1918; Letter to E. G. Brackett, Unsigned, 1918). Like the other allied countries that had been at war long enough to witness the severe repercussions of war injuries on the civilian and military labor supply, England had already developed rehabilitation programs for soldiers with disabilities before the United States entered the war (Billings, 1919; Document for Publication in the Official Bulletin, 1818).

Under Jones’s direction, England’s reconstruction program was founded on two common ideological elements: (a) that soldiers with disabilities could undergo a process of orthopedic rehabilitation that would make them fit for either continued military duty or, if discharged, civilian employment—thus mitigating the economic strain on the country of having to provide financially for pensioned soldiers with disabilities (Jones, 1918); and (b) that the nation had a higher social responsibility or moral obligation to assist soldiers with disabilities in becoming independent “wage earning happy citizens” rather than “boastful, idle idlers” (Osgood, 1916, p. 418). However, due to England’s scarcity of orthopedists, reconstruction efforts became dependent on a team of occupational therapists, physiotherapists, and vocational educators whose responsibility it was to carry out the orders of the orthopedists (Jones, 1918).

It was on the basis of these ideas that Goldthwait and Brackett founded the Orthopedic Service and reconstruction program in the Medical Department of the U.S. Army. In plans presented to the Surgeon General, they espoused the idea that acute medical care was not sufficient to rehabilitate the soldier with disabilities and asserted themselves to be the missing link between acute medical care and physical restoration (“The Function of Orthopedic Surgery,” 1917). They maintained that through orthopedic services the soldier with disabilities could be returned to military assignment rather than be discharged to live a life reliant upon a pension, as an economic drain on the country.

Furthermore, in plans presented to the Surgeon General, orthopedists argued that they were the group most suited to implement and oversee all aspects of reconstruction (including physiotherapy, bedside occupation and curative workshops, and vocational reeducation) precisely because they were trained to think of disability in terms of function (Organization of Orthopedic Service, undated). They contended that having a medical knowledge of injury allowed them to best prescribe occupations that soldiers with disabilities could be retrained to perform with regard to their specific physical limitations (Brackett, 1918a; Watkins, 1918). They proposed a hierarchical system in which they alone would decide who would receive therapy (determining both type and duration) and set forth a process by which the orthopedist would “use [reconstruction activities] on prescription exactly as he would use drugs” (Organization of Orthopedic Service, undated, p. 1). Additionally, orthopedists argued vehemently for control in determining whether a soldier should be discharged or retrained, and attempted to secure a position of authority to select the occupation most appropriate for reeducation with respect to a soldier’s disability (Brackett, 1918a; Watkins, 1918).

Orthopedists as Advocates for Women to Assume Occupational Therapy Reconstruction Aide Positions

Although the Surgeon General of the Medical Department was supportive of much of the orthopedists’ original proposals for a reconstruction program, the War Department protracted official approval for implementation of plans (Crane, 1927). Consequently, more than 1 year of U.S. involvement in the war passed before the War Department sanctioned plans and committed funds toward the development of the reconstruction program.

Before any official ratification of plans, however, the Orthopedic Service had begun developing its reconstruction program without approval from the War Department (Crane, 1927). In early 1918, the Orthopedic Service put into clinical practice a group of female physiotherapists and occupational therapists at Walter Reed Hospital in Washington, DC (Brackett, 1918c). These two groups of therapists, then known as reconstruction aides, consisted of civilian women receiving neither military rank nor commission commensurate with experience (McDaniel, 1968; McDowell Myers, 1948).

It is unclear whether orthopedists had initially intended to employ civilian women as reconstruction aides within physiotherapy and bedside and curative workshop activities. Certainly the War Department expressed deep reservations about the idea and suggested that personnel be selected first from enlisted men who were physically “unfit for full duty” and then from civilian males if necessary (Crane, 1927, p. 8, 81): “The employment of reconstruction aides [is] inadvisable, as it [will be] difficult to coordinate them with the rest of the hospital organization, and it [is] not desirable to employ women in this type of work in military hospitals” (Crane, p. 81).

Such justifications for barring women from assuming reconstruction aide positions were later refuted by the War Department, which conceded to their presence and role in the reconstruction program but declined to award military rank or commission to these women (Medical Department, U.S. Army, 1918). The War Department’s change in policy regarding women reconstruction aides may have been precipitated by the shortage of males fit for military duty (Brackett, 1918b; Crane, 1921; Osgood, 1918). However, the female reconstruction aides unofficially employed at Walter Reed Hospital (as well as six U.S. base hospitals established later) had proven the value of their role. When commanding officers of these U.S. base
hospitals began to request more reconstruction aides, the Secretary of War was forced to concede that the employment of civilian women, who had received higher education and in many instances specialized training, was an advantageous strategy to adopt (Brackett, 1918b, 1918d; Report of Consulting Orthopedic Surgeon, 1918).

Women Who Entered Occupational Therapy Profession as World War I Reconstruction Aides

Although the military ultimately accepted the reconstruction aide position in the Medical Department, they did little to foster the success of the position. In fact, the conditions under which these women were initially received and tolerated by army personnel were so inhospitable that it surely would have hindered the attempts of persons less determined than these early occupational therapists to contribute positively to the war effort (Clifford, 1986; Crane, 1921).

The hierarchical position of reconstruction aides within the Medical Department was at the lowest rung—subordinate to all members of the Surgeon General’s Office, including male vocational reeducators who as a group possessed far less education and experience than did the reconstruction aides themselves (Crane, 1921, 1927). The aides chose to enter the military without rank and commission, agreed to accept a position inferior to that of all enlisted mates (regardless of the aides’ superior level of experience and education), and decided to leave homes and families to join the severe life-style of the military to aid injured soldiers at a time in American culture when women were not characteristically afforded employment opportunities and economic independence.

In interviews produced as part of an oral history series by the American Occupational Therapy Foundation (AOTF), many of these women spoke of wanting to become a part of the war effort to contribute to the country in a positive way. As a group, they appeared to be mission oriented and dedicated, describing their desire to participate in the war as having been founded in a belief that they were helping to win a war that would end all wars (Clifford, 1986; Hitchcock, 1979; Vanderkooi, 1986; Wheelwright Codman, 1986).

Rather than defining themselves as early feminists, these women spoke about working because of economic necessity as well as their desire to contribute something of value to society (Carlova & Ruggles, 1961; Clifford, 1986; Hitchcock, 1979; Upham Davis, 1983; Vanderkooi, 1986; Wheelwright Codman, 1986). In fact, the issue of women having limited opportunities historically to find suitable employment may have greatly affected the early development of occupational therapy. Elizabeth Upham Davis, one of the founders of the profession, was very likely addressing this issue in her efforts to establish an occupational therapy curriculum at Milwaukee-Downer College, a private women’s college in Wisconsin and one of the first four schools in the country to offer training in occupational therapy for the war reconstruction program (Jones, 1988; Upham, 1917a). In an article promoting the college’s occupational therapy program she wrote that Milwaukee-Downer College is one of the first institutions to recognize the new profession open to women of directing industrial work in hospitals. There is an increasing demand for such trained specialists, and a new and interesting field of social work is opening. (Upham, 1917b, p. 498)

Interestingly, many of the World War I reconstruction aides came from families in which it was common for women to work (Carlova & Ruggles, 1961; Clifford, 1986; Hitchcock, 1979; Upham Davis, 1983; Vanderkooi, 1986; Wheelwright Codman, 1986). Many mothers of reconstruction aides were reported to have been employed as teachers either before or during their parenting years. Many more mothers were actively involved in social causes and assumed some type of leadership role outside the family. Elizabeth Upham Davis’ mother and grandmother both served as board members of Milwaukee-Downer College (Jones, 1988; Upham Davis, 1983). Lois Clifford’s mother was a leader in the antisufragette movement and was active in the instruction of crafts and leisure activities to female worker clubs in Pittsburgh (Clifford, 1986). Lena Hitchcock’s grandmother was a painter who had received some degree of notice in the artistic community (Hitchcock, 1979).

It is not surprising to find, also, that many reconstruction aides came from families in which women’s education was considered important. In addition to receiving the specialized education that had become a qualification criterion for military acceptance as a reconstruction aide, a great number of these women had received or worked toward a degree of higher education before becoming reconstruction aides (Carlova & Ruggles, 1961; Clifford, 1986; Faglie Low, 1992; Hitchcock, 1979; Hoppin, 1933; Upham Davis, 1983; Vanderkooi, 1986; Wheelwright Codman, 1986).

Almost all of the reconstruction aides interviewed as part of the AOTF oral history series reported having been caregivers for a family member or close friend who had experienced a severe illness or disability (Carlova & Ruggles, 1961; Clifford, 1986; Hitchcock, 1979; Upham Davis, 1983; Vanderkooi, 1986; Wheelwright Codman, 1986). In some instances, reconstruction aides described their personal experience with illness and the recovery process (Upham Davis, 1983; Wheelwright Codman, 1986). With a background in which their own education was nurtured and in which they often had some opportunity to become familiar with caregiving or personal disability, it is not surprising that many of these women chose to enter vocations in which they could use their communication skills to empower others through education of occupation and the expressive arts.

Their desire to contribute to the war effort was no doubt facilitated greatly by having come from families that
emphasized social obligation (Carlova & Ruggles, 1961; Clifford, 1986; Hitchcock, 1979; Upham Davis, 1983; Vanderkooi, 1986; Wheeleright Codman, 1986). This emphasis on the work ethic and on the idea that idleness produces an immoral character appears to have been intimately linked to early occupational therapy philosophy and to the Arts and Crafts movement or anticommentism. Antimodernism, an ideological stance adopted by the upper and middle classes in the United States during the late 1800s and early 1900s, evolved in reaction to the perceived negative ramifications of industrialism. Proponents of antimodernism supported the idea that meaning and wellness could come from working with one's hands to produce an item having aesthetic value (Litterst, 1992).

Early Occupational Therapy Founders’ Perceptions of Their Role in World War I

Certainly the belief that creating products of expertise was beneficial for one’s moral character and the belief that the healing of illness could be achieved through activity made up the core of early occupational therapy treatment philosophy (Dunton, 1917; Slagle, 1922). Such an ideology also served as a foundation from which World War I reconstruction aides clinically practiced. Upham (1917a) wrote extensively on the ability to improve one’s moral character through purposeful activity: “Not only has [occupational therapy reconstruction work] a definite and therapeutic value in the medical program of institutions, but it has also the deeper social significance of adjusting the subnormal to economic life” (p. 458). Upham equated the pension system with “subsidized idleness and personal deterioration” (1917b, p. 3) and suggested that a person “who becomes an independent wage-earner adds to the resources of the country, while every one who cannot increases the drain of dependents” (1917a, p. 458).

However, Upham (1917b) also identified the need for reconstruction aides to form a stronger medical affiliation — perhaps to give greater credence to the therapeutic value of occupational therapy or to establish the profession’s position more securely among the health professions by allying with the medical profession:

The directing of occupational therapy is a new profession and requires not only special study of the processes in occupations, but a knowledge of the pathology of the various disabilities so that intelligent cooperation with the physician may be secured (p. 18).

In addition to engaging the soldier with disabilities in meaningful activity in order to empower him through purposeful use of the affected limb, World War I reconstruction aides were just as committed to providing precise therapeutic activity designed to aid in the recovery of specific physical disabilities. Susan Hills, head reconstruction aide at Base Hospital 9, Chateauaureux, American Expeditionary Force (AEF), wrote:

The purpose of the work in occupation is twofold: (1) to divert the mind from suffering and occupy the patient and bring back a more normal attitude; (2) to work with physical disabilities in cooperation with the physical therapy aides, giving definite work for improving injured hands, stiff wrists, elbows, shoulders, ankles, or knees. (cited in Crane, 1927, p. 72)

This emphasis on using activity to improve physical disabilities was most likely facilitated by the orthopedists, who were responsible for creating and defining the occupational therapy reconstruction aides’ role and function in the military. Interestingly, the orthopedists actively promoted occupational therapy reconstruction aide work as a medical service in its entirety (Medical Department, U.S. Army, 1918). In a letter to Goldthwait, Brackett asserted that “bedside occupations and curative workshop activities are purely medical functions” and that he had “tried to keep it absolutely removed from any vocational, or even prevocational hearing” (Brackett, 1918d).

Fight For Military Control of Occupational Therapy Reconstruction Aides

Clearly, this literature shows the motivation for the consensus among orthopedists that occupational therapy be developed into a curative application whose primary role was to supplement the orthopedists’ own work with continued exercising of muscles and ranging of joints through activity. Although physicians needed to create aide roles to carry out orthopedic work due to a paucity of orthopedists, they were also challenged by the vocational reeducators for control of the occupational therapy reconstruction aides.

The vocational reeducators were initially asked to participate in the reconstruction program by the orthopedists, who sought to define the vocational reeducators’ role and function as a further extension of orthopedic endeavors (Billings, 1919; Crane, 1921, Harris, 1919). Orthopedists perceived the vocational reeducators’ role to be medically therapeutic as achieved through the teaching of vocational skills to soldiers with disabilities with consideration to improving use of affected limbs or through the teaching of trades through compensation techniques. However, the vocational reeducators, who often lacked prior teaching experience as well as any medical understanding of body systems and joint and muscular functions, believed that they were appointed only to offer instruction in trades to help the soldiers become employable workers (Billings, 1919; Harris, 1919). In time, the vocational reeducators, perceiving a great discrepancy in ideologies between themselves and the Orthopedic Department, divorced themselves from any affiliation with the orthopedists and attempted to rival their control of the occupational therapy reconstruction aides.

For the vocational reeducators, bedside occupations and curative workshop activities were considered to be prevocational and served only to prepare the soldier to
begin thinking of his vocational future. They devalued any therapeutic significance of occupational therapy, asserting instead that it was either diversional or served as a feeder for the regular vocational courses (Billings, 1919; Vaughn, 1919).

In May 1918, the War Department finally moved to settle the dispute over formal control of the reconstruction aides by placing them in the Division of Physical Reconstruction, then headed by the vocational reeducators. This political move may have been prompted by the War Department’s own misunderstanding of occupational therapy’s function as trivial or diversional. In the military’s newspaper, The Official Bulletin, the War Department printed publicity literature describing bedside occupations as “cheer-up work” (“Plans for Physical Reconstruction of Disabled Soldiers, 1918,” cited in Crane, 1927, p. 43). Occupational therapy’s role in the military was further devalued by the War Department when, in November 1918, after occurrence of the influenza epidemic, the War Department declared that reconstruction aides were to serve as nurses’ aides in addition to their occupational therapy services (Circular No. 56, A.E.F., November 19, 1918, cited in Ford, 1927, p. 994).

The decision to reposition the reconstruction aides within the administrative jurisdiction of the vocational reeducators may also have served as a political message designed to chastise the Orthopedic Department, which had come to be perceived by the War Department as overly demanding. Certainly, the transfer of aides was truly only an ornamental display of wills because it carried no real weight. The orthopedic surgeons continued to possess the sole authority to supervise all reconstruction aide activities and to prescribe which soldiers would receive treatment and of what specific clinical application treatment would assume (Crane, 1921).

Rather than interacting closely with the vocational reeducators, the reconstruction aides worked more intimately with the orthopedists who, unlike the vocational educators, possessed the authority to establish and regulate the aides’ clinical functions. It is this early historical occurrence in occupational therapy’s development that marked an important link between occupational therapy and the medical model. Additionally, it signaled the deterioration of occupational therapy’s vocational connection.

Orthopedists’ Continued Influence on Occupational Therapy Development

From the beginning of the World War I reconstruction program, the orthopedists were highly invested in defining occupational therapy’s role and functions. They were responsible for determining the qualification standards for military acceptance as recreation aides and were instrumental in the creation of schools for World War I occupational therapy reconstruction training (Medical Department, U.S. Army, 1918; Brackett, 1918a, 1918c).

The creation of occupational therapy schools further enabled orthopedists to outline a curriculum in which a knowledge of medical disabilities, anatomy, and physiology became increasingly important (Brackett, 1918a). In fact, this growing value placed on the medical sciences in occupational therapy school curriculums beginning in World War I and increasing substantially in the years after the war deserves distinct exploration in its own right.

During the World War I era, occupational therapy schools appeared to equally emphasize the importance of both a knowledge of medical disabilities and an ability to empower those with disabilities through purposeful work. When Upham created the curriculum at Milwaukee-Downer College, the program emphasized both a medical knowledge of disability and a technical understanding of industry and crafts. For Upham, neither knowledge base assumed precedence; rather, they were equally important:

It [industrial work in hospitals; later addressed as occupational therapy by Upham] is an intimate knowledge of the medical and social condition of the subnormal, together with technical proficiency. Experience has taught that the nurse and doctor are not qualified to direct this work. The medical aspect of the problem is skillfully handled by them, but they lack the long practice necessary to technical industries. It is because knowledge of the medical and social points of view must be equal in importance that the course of study at Milwaukee-Downer College is divided into two classes, the academic and the technical. It is this detailed study of occupation in close correlation with the pathological study of disability which prepares the student for the special field of directing industrial work for the handicapped. (Upham, 1917a, pp. 458–459)

After the war ended, however, the profession began to attribute greater significance to the medical application of occupation—probably in great part as a result of its World War I orthopedic affiliation. Schools offering curriculums in occupational therapy now offered considerably more courses in anatomy, kinesiology, physiology, and psychology than they had before 1918 (Ball, 1921; “Emergency Course of Training,” 1918; Fulton, 1923; Greene & Wigglesworth, 1921; Kidder, 1921; Milwaukee-Downer College for OT Department Bulletin, 1920; Occupational Therapy at the College of St. Catherine Bulletin, undated; Partridge, 1921). By 1921, the St. Louis School of Occupational Therapy was requiring that courses be taken in “anatomical demonstration, psychology, injuries to the nervous system, and frequent conditions in orthopedic surgery” (Kidder, 1921, p. 66). All of these courses featured lectures by medical doctors. To earn a bachelor’s degree in occupational therapy at Milwaukee-Downer College in 1920, students were required to take anatomy, zoology, bacteriology, botany, chemistry or physics, kinesiology, physiology, and psychology in addition to a language and the required occupational therapy courses (Milwaukee-Downer College for OT Department Bulletin, 1920). The occupational therapy department at the College of St. Catherine recommended...
that interested students should possess an "aptitude for the sciences," and described occupational therapy as a "medical service" in their promotional literature (Occupational Therapy at the College of St. Catherine Bulletin, undated).

Clearly, occupational therapy had been greatly influenced by its World War I association to orthopedics and to the medical model. Promotion of the profession even shortly after World War I encompassed recognition of the era's increasing validation of medicine and the sciences, which can be seen in the movement of occupational therapy school curriculums toward a pronounced emphasis on medical and scientific courses. At the time, directing the profession's development toward a greater embracing of the medical model must have appeared as a propitious and farsighted action.

Lois Clifford, a World War I occupational therapy reconstruction aide interviewed by Nedra Gillette in 1986, was asked whether, in hindsight, she believed that occupational therapy's early alignment with physicians was beneficial to the profession's development. Clifford responded, "Yes, to a certain extent," but could not elaborate (Clifford, 1986). At the time of her reconstruction aide work in World War I, she could not have conceived what some believe to be the profession's present-day struggle to achieve recognition as a holistic health care profession concerned with enhancing one's function in the home and community environments—amid the confines of a reductionistic medical care system. Gillette offered this explanation to Clifford regarding the impact of this early affiliation: "Some people have suggested [that] it took us away from our original interests in helping people function in the community and made us more interested in disability than community readjustment" (Gillette, cited in Clifford, 1986).

Posed with a similar question, Lena Hitchcock, also a former World War I occupational therapy reconstruction aide, verbalized her feelings on occupational therapy's development:

I don't altogether like the way it's going sometimes. [We've] become too professional [medically technical] to really consider the problems of the ill, the suffering, the injured. I think there's a great danger in wandering away as physicians have; in thinking not of the whole person but of their [medical] specialty. (Hitchcock, 1979)

Summary

Historical research suggests that the collaboration of reconstruction aides with World War I orthopedists positively influenced the early development of the profession of occupational therapy. However, whereas early affiliation to orthopedics and the medical model fostered the profession's growth, it may also have steered the profession away from our founders' core philosophies regarding the connection between illness, meaningful activity, and the mastery of one's environment. Nevertheless, occupational therapy's growth as a health care profession is indeed a credit to the determination and capabilities of these early female occupational reconstruction aides who became leaders of and contributors to society in an era when women were not sanctioned to achieve success and to master their environments outside the home. Their achievements in the military and their mastery over the severe conditions of military life aided soldiers with disabilities served to foster their own skills as therapists and to further define the services that occupational therapy is capable of offering to society today.

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