

AC-10

UNIVERSAL CONSEQUENCES OF CAPTIVITY: STRESS REACTIONS
AMONG DIVERGENT POPULATIONS OF PRISONERS OF WAR AND
THEIR FAMILIES

ADA 031554

J. SEGAL, E. J. HUNTER, & Z. SEGAL

REPORT NO. 75-84

See Form 1473



DDC
RECEIVED
NOV 8 1978
RECEIVED

B *[initials]*

use 2
NAVAL HEALTH RESEARCH CENTER

SAN DIEGO, CALIFORNIA 92152

NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND

BETHESDA, MARYLAND

Open forum

Universal consequences of captivity: stress reactions among divergent populations of prisoners of war and their families

Julius Segal
Edna J. Hunter
and Zelda Segal

Incarceration has served from the beginning of recorded history as an element in armed conflicts among nations. Both military and civilian prisoner populations have been cruelly exploited as instruments of control and manipulation, sources of information, and military ransom. In Egyptian and Mesopotamian societies, for example, economies were dependent in part on captives serving in slavery as a valuable source of labour. Brutality toward prisoners of war (POWs) has been common in every period since, with little value placed on prisoners' lives except as vehicles of ransom toward economic, political or military gain. Enslavement of captives, massacres and atrocities of all kinds were accepted as natural manifestations of war. It was not until the end of the Thirty Years' War, under the terms of the Treaty of Westphalia, that prisoners were released without ransom at the close of hostilities.

By the eighteenth century, as the ideas of humanitarianism began to exert their influence, a corresponding modification of existing practices with regard to prisoners took place; men and nations were increasingly prepared to accept more compassionate rules governing the treatment of the POW.

Attempts to codify regulations regarding the treatment of captives, made with varying success earlier, reached a major turning-point with the Geneva Convention of 1949. Although ratification of the rules of the convention does not

Dr Julius Segal is Director of the Division of Scientific and Public Information, National Institute of Mental Health, Rockville, Maryland, and also serves in a consulting capacity to the Center for Prisoner of War Studies. Dr Edna J. Hunter is a clinical research psychologist and Assistant Director for Administration of the Center for Prisoner of War Studies, Naval Health Research Center, San Diego, California, where she specializes in family research. Zelda Segal is a school psychologist in Bethesda, Maryland. The writers are deeply indebted to Susan Farish for her invaluable bibliographic and manuscript research.

This research was supported by the Department of the Navy, Bureau of Medicine and Surgery (work order request No. N00018-75-WR-00004, 1 July 1974) and by the Office of the Surgeon General, Department of the Army (Military Interdepartmental Purchase Request No. 75-01, 23 September 1974). The views presented in this paper are those of the authors. No endorsement by the Department of the Navy has been given or should be inferred.

prevent acts of inhumane treatment any more than laws prevent crimes, they do create legal obligations, and their existence is a source of moral and ultimately political pressure on a detaining power to accord humane treatment. Despite such slow advances, military captivity remains a profoundly stressful experience.

Any doubts on the matter are readily dispelled by a review of telling statistics provided by Barker regarding captivity during the Second World War, at which time, the death toll of prisoners reached an unprecedented level, estimated at between 6 and 10 million. Of all British and American prisoners, approximately 11 per cent died in captivity—most of them from malnutrition or deliberate neglect; some 45 per cent of the Germans imprisoned in Soviet camps and 60 per cent of the Russians captured by the Germans also did not return from their ordeal. These numbers, already staggering, do not take into account the many millions who perished in the concentration camps which soiled the map of Europe during the Second World War.

Scope and approach

Especially since the end of the Second World War, organized attempts have been made by researchers to document the immediate and long-term effects of the captivity experience. The physical, psychological and social consequences of imprisonment have been surveyed by behavioural scientists in various countries. The purpose of this article is to provide an overview of the major themes deriving from such studies. Its underlying hypothesis is that captivity makes an impact on health and behaviour which is relatively constant across nations and cultures, that the physical, psychological and social costs of incarceration experiences are to some extent predictable, no matter who finds himself in the role of captor and captive.

It must be pointed out, of course, that as in any aspect of human behaviour, variability rather than consistency is the rule. Each captivity experience is clearly unique in many respects—in terms, for example, of the nature of the captive and captor culture, length and conditions of internment, attitudes towards the war, and many other factors. The aim here, however, is to underscore the consistency with which captivity effects appear across time and across widely divergent settings and populations of POWs.

The impact on physical health

The environment of POW captivity typically combines a potent blend of physical hardship and privation, on the one hand, and enormous psychological stress and trauma on the other. It would be foolhardy indeed to attempt to distinguish the relative impact of each of these factors on the post-captivity health status of

repatriates, but it is clear in any case that survivors of the POW experience, are at risk for a staggering range of physical disabilities and symptoms that can be ascribed to the over-all captivity episode.

For the wars of the last half century, based upon reports from various countries, one major conclusion which emerges is that, for the European, captivity suffered in an Asian country carried deleterious consequences greater than those following imprisonment by a European captor. These are differences in degree rather than of kind, however, and the theme of the survivors' experience remains fairly constant: a higher probability of physical illness and premature death.

A major base of data describing physical disease following incarceration was developed during the International Conference on Later Effects of Imprisonment and Deportation in The Hague in 1961. The object of the conference, organized by the World Veterans Federation, was to study delayed pathology, emerging after a minimum of five years, and often as long as twenty years after incarceration. The conference was attended by seventy participants from twelve countries, with papers presented on such subjects as neuropsychiatry, cardiology, rheumatology, internal medicine, endocrinology, gynaecology and gerontology. The populations described in the various papers of the resulting volume include concentration camp victims, as well as POW populations of various nationalities. The conference proceedings highlight a broad range of post-captivity health problems: pulmonary disorders such as tuberculosis and the complications of chronic bronchitis and emphysema; cardiovascular disorders, including functional cardiac disturbances; arteriosclerosis; digestive disorders; the disappearance of the menstrual period and of ovarian function during imprisonment among many women, with later untoward gynaecological effects; chronic rheumatism; and lesions of the central and peripheral nervous system, all showing a degenerative and gradually progressive tendency. A reading of the conference proceedings induces a blurring of distinction of national identities, and the emergence of a steady thread of physical deficits resulting from captivity across nations and cultures.

A major theme of the 1961 conference in The Hague, appearing also in a number of studies reported subsequently, is the process of premature aging as a result of captivity. Some investigators have explained the phenomenon as a corollary of early arteriosclerosis, while others have cited the emergence of degenerative diseases of the central nervous system. Herberg, who studied premature aging among former POWs from various countries participating in the Second World War, highlights the psychological signposts, including deficits of memory and the capacity for attention and concentration, along with an increase in fatigue. Many investigators have recognized premature senility among former POWs simply in terms of their general appearance—for example, the typical transformations of attitude, gait, skin condition and facial features.

Another major focus of studies is on the impact of malnutrition and starvation. The effects of starvation among captive soldiers are starkly portrayed in a

host of studies. Typical is an evaluation of Canadian POWs following the Second World War. When Singapore capitulated in February 1942, a large contingent of Canadian soldiers began an internment which lasted until hostilities ceased. Upon repatriation, these ex-POWs regained their original body weights, but as long as one year after liberation they continued to complain of a variety of difficulties, most of which were probably of neurological origin, many attributable to the poor diet these men received during internment. The most frequently encountered problems were easy tiredness, profuse sweating for no apparent reason, numbness and cramps in the calf muscles, poor vision, oedema, dyspnea on slight exertion, tachycardia, anorexia, nausea, restlessness, irritability and insomnia.

Further evidence of the impact of malnutrition on surviving prisoners of war appears in a relatively rare study of repatriated Japanese prisoners of war by Schnitker, Mattman and Bliss. With the defeat of the Japanese in the Philippine Islands during the spring of 1945, their armies began to retreat into the hills of Luzon. There they had to separate into small groups, scavenging for food as they went, and surviving chiefly on such substances as grasses, leaves and potato tops. The usual rice, sugar-cane, carabao meat and vegetables were kept from them by the Filipinos.

At the war's end, Japanese troops began to surrender by the thousands, and many of them, too ill to move from their cots, found themselves at the 174th Station Hospital, New Bilibid Prison, on Luzon. Here, twenty-four of the most starved patients were selected for special study. Detailed clinical and laboratory studies carried out over a period of six weeks revealed a range of symptoms including loss of weight, wasting, diarrhoea, dyspnea and palpitation on exertion, neurologic symptoms, anaemia, intestinal parasites, abnormal liver function, and evidences of improper intestinal absorption. Despite good medical care and a high calorie and vitamin diet, the response of these patients to treatment was slow; during the course of the study, five of the group of twenty-four cases died.

A study of still another national group—British troops captured by the Japanese—reinforces the universality of such findings. During captivity, these prisoners lived on a diet deficient in calories, proteins and fats. As a consequence, all of them suffered from malnutrition, and nearly all had specific evidence of various vitamin deficiencies, and especially oedema, 'peripheral neuritis' and blindness. Following the Second World War, during the period 1945–56, over 500 of the former POWs were examined, most of them repeatedly. The most significant symptoms found were fatigue, anorexia and other gastro-intestinal symptoms, cardiovascular symptoms, paresthesias of the feet and legs, and optic atrophy. There was some improvement in all symptoms during the period of study, but least in neurological signs and visual disturbances. A number of investigators have highlighted the occurrence of liver damage as a result of periods of starvation. A study by Coke, for example, is typical, involving a twelve-year follow-up of

391 Canadian veterans who suffered from dietary insufficiency from December 1944 to August 1945.

The occurrence of residual visual problems has been cited by a number of investigators. One study by Bloom, Merz and Taylor, for example, presented the stark clinical picture among American soldiers liberated after an extended confinement in Japanese prison camps under conditions of severe malnutrition. It focused on thirty-three soldiers captured in April and May 1942, on Bataan and Corregidor, and liberated in early 1945. During the period between liberation and the study, the patients had returned to approximately their normal weight, but the investigators concluded that malnutrition can result in irreversible optic atrophy.

Among Canadian soldiers who were taken prisoner at the fall of Hong Kong in 1941, many were also found by Baird and MacDonald to have suffered losses in visual acuity varying from slight to severe, and from transient to permanent. This loss first appeared about a year following internment, and a follow-up study nearly fifteen years later showed that no significant change was evident from initially found pathology in the condition of the optic pathways.

Probably the most dramatic evidence of the impact of captivity derives from studies focusing on mortality statistics. Although few well-controlled studies have been attempted, available evidence from a number of sources suggests strongly that returned captives from whatever country suffer a heightened vulnerability to premature death. In their follow-up study of the Second World War American prisoners, Cohen and Cooper found that ex-POWs interned in Japanese-conquered territory experienced a mortality rate during the first two years following liberation 2.2 times greater than that of other veterans of comparable age and service. The rate diminished somewhat over time, but remained high for the next four years. Prisoners captured in Europe, on the other hand, whose captivity experiences were apparently not as stressful, showed no such trend. The principal causes of death among the POWs from the Pacific area were tuberculosis and accidents, which occurred about 5 and 2.5 times respectively more frequently than expected. Other causes of deaths were cardiovascular disease, malignant neoplasms, diseases of the digestive system, and suicide, all of which occurred at a rate about twice that expected from experience with white males in the United States.

In a later study by Nefzger, United States Army veterans taken captive during the Second World War and the Korean war were followed with respect to mortality, along with various control groups, up to 1965. Standard mortality ratios and death rates indicate a clear early excess of deaths among prisoners held by the Japanese in the Second World War and in the Korean war. Again, in contrast, prisoners from the European and Mediterranean areas of the Second World War did not have adverse mortality to 1965.

Mortality rates among American prisoners from the Korean war were clearly elevated. At any time in the dozen years after their repatriation from Korea, the American POWs were 40 per cent more likely to die than the white male

American of the same age who had not been a POW. Accidents, tuberculosis, and cirrhosis of the liver appear to be the causes chiefly responsible for the excess deaths in Pacific prisoners. Trauma is the most common cause of death, and of excess deaths, in the younger prisoners. Suicides, though few in number, were about 30 per cent more frequent in these prisoners than in their controls. Arteriosclerotic deaths have occurred at about the same rate in both groups, as have deaths from malignant neoplasms and respiratory diseases.

More telling perhaps than impersonal mortality rates are the occasions of death. Violent accidents, suicide and murder account for more than 50 per cent of the total. An American POW returned from Korea was a third more likely to commit suicide during this period than his non-POW counterpart. He was almost twice as likely to die in an accident, and over three times as likely to be murdered. While the data on suicides and murders are based on small samples, they correspond closely to the non-statistical findings of psychologists and psychiatrists who specialize in the rehabilitation of veterans and POWs.

Evidence of higher mortality rates among surviving prisoners of war emerges from studies of other national groups as well. Among German prisoners of the Second World War, one 1959 study showed mortality rate highest among men aged 40 to 55. Tuberculosis, endocarditis, heart failure, liver disease, and kidney trouble were prominent causes of death with extraordinarily higher rates compared to the average male population of comparable age. In the case of tuberculosis deaths, the rate was ten times higher, in heart disease six times, and in liver disease fifteen times. Studies of the Second World War Canadian POWs, summarized by J. Douglas Hermann, lead also to the observation that the POWs suffered a significantly higher death rate at an earlier age than comparable veterans who had not experienced incarceration.

Psychological effects

There is a lot of pain in the world that people have, but physical pain is not the worst. The worst pain is the pain of loss, when you have nothing, no family, no home, no ties, you have nothing—that is the worst pain in the world. . . .

These words were spoken by an American captive returned from Viet-Nam in 1973. The emotional trauma of captivity is likely to leave a residue of psychic scar tissue that never altogether heals. The evidence springs from a variety of studies and clinical observations. A host of evaluations of returned prisoners from various nations describe both acute and chronic changes in personality and orientation which reflect the enormous stress to which the POW has been subjected.

A large proportion of the data describing the long-term emotional sequels of imprisonment arises from the many studies carried out among survivors of the

concentration camps of the Second World War. The hazards of drawing direct and unequivocal analogies between this experience and other incarceration experiences are admittedly great. By common consensus, concentration camp survivors endured an experience unique in the annals of human history. Nevertheless, the behavioural consequences of concentration camp trauma can be seen as reflecting problems of readaptation which all former prisoners share.

Studies conducted in Israel by Klein and Koranyi, in the United States by Trautman, and in Norway by Eitinger, are typical of the numerous articles which began appearing a decade or so after the Second World War. They all suggested an abnormally high incidence of psychiatric disorder among survivors of the trauma of concentration camps. In 1960, Bensheim reported that half of all patients in the neuropsychiatric clinic in Haifa, Israel, were under treatment for sequels of Nazi persecution. In 1961, Matussek reported a study of 130 survivors who were initially believed to have shown no after effects of the concentration camp experience; he found not a single person who did not show some pathology, albeit superficially hidden.

A decade later, Hocking also reported that virtually all of those who had been incarcerated in ghettos and concentration camps presented an appearance so characteristic that they could usually be distinguished from other patients sitting in a clinic or physician's waiting room. He concluded that although 'individuals vary in their ability to adjust to differing degrees of stress, subjection to prolonged extreme stress results in the development of "neurotic" symptoms in virtually every person exposed to it'.

The common web of psychopathology that emerged from these studies came to be known as the 'concentration camp syndrome'. First called 'repatriation neurosis', the term was subsequently replaced by 'KZ syndrome' (from the German abbreviation for *Konzentrationslager*). Read dispassionately, the psychological scars of the Second World War concentration camp experience have the ring of a textbook of psychiatric symptoms: depression, guilt, anxiety, insomnia, fatigue, psychosomatic complaints, etc. In the individual day-to-day lives of survivors, the captivity ordeal begins to take on a more poignant tone—seemingly irrational irritability with family members; acute startle reaction to such ordinary stimuli as an unexpected phone call; repetitive nightmares; inability to find pleasure in anything; chronic rumination and introspection; lacerating guilt; restlessness and searching.

In the absence of other data, one might conclude that the symptoms found among concentration camp survivors are a function of the culture and personality of the victims—typically the Eastern European Jew, with his propensity for introspection and emotional lability. It is instructive, therefore, to move half a world away to the Far East, where the prisoners were American, and the captors Asian. In a recently published report, Beebe points out that the most remarkable and long lasting earmarks of the captivity experience in the Orient in the Second World War

and the Korean war were the psychiatric symptoms which stalked survivors over time. These are seen especially in the inflated rates of hospital admissions for both psychoneurotic and psychotic breakdowns. Beebe concludes that many of these returned with permanent psychological impairment. The psychological residues of captivity have clearly been felt by those who survived Korean POW compounds as well as the concentration camps. Because studies of American POWs and concentration camp survivors dominate the literature, it would be natural to conclude that the stresses of captivity leave their mark only on select groups of POWs, but this is clearly not the case, as even a cursory view of existing studies quickly reveals.

A rare, controlled study by Kral, Pazder and Wigdor of the effects of prisoner of war experiences after twenty years in a group of Canadian POWs reveals a high incidence of nervous tension, anxiety (both free-floating and situational), depression, irritability, social isolation, poor memory and slow thinking. Similarly, among New Zealand POWs, many repatriates from Europe described restlessness and inability to settle, impaired powers of concentration and memory, a tendency to be easily affected emotionally (notably by a pathetic film or music), a feeling of awkwardness in meeting strangers, a strong dislike of crowds and queues, and an overpowering desire to be quiet and alone. Many men were inclined to resent and oppose restrictions on their freedom of action. Similarly, repatriates from the Far East described themselves as nervous and emotional or 'wrought up': lethargic, unable to concentrate, and content to just sit and dream; depressed; unable to sleep; easily irritated; mentally tired. While they mentioned that these symptoms had become less severe with the passage of time, it was clear that those men who had spent three years or more as prisoners in the Far East presented the characteristic residuals of captivity.

Studies following the Second World War reported by Juillet and Moutin, focusing on a sample of 598 French prisoners of war suffering from neuropsychiatric problems, showed the frequent presence of depressive states, including depressive psychoses arising even earlier from incarceration experiences. Comparable findings had emerged from more fragmentary data available following the First World War. Descriptions of the impact of captivity on French prisoners of war in the First World War refer to 'nostalgic psychoses', the main symptoms being anxiety focused particularly on uprooting and separation from the family. Reference is also made to 'reaction states of liberation' which often took the form of melancholia or manic fits ('mania of return'). Also prominent in the descriptions of French captives returned from their incarceration are 'asthenic states of captivity' characterized by intense fatigue, paroxysms of anxiety, nervous 'fits' and tears. Among psychosomatic complaints noted among First World War French captives are dyspeptic syndromes of an ulcerative type, cardiovascular syndromes, including tachycardia, dyspnea, tremors, and 'sexual deficiency'.

Social and family effects

Although the subject has not been studied as extensively as the physical and psychological residuals, the effects of captivity on social adjustment and on family well-being appear to be equally profound. It would be surprising indeed if the years spent in solitude and privation did not reverberate in the world to which the captive returns. And again, national boundaries do not limit the phenomena.

The returned POW, for example, finds his capacity to reintegrate into his family and into society weakened. A number of researchers have described the sense of remoteness and removal which overcomes returned prisoners. Reporting on a study of Americans repatriated from Japanese captivity following the Second World War, Brill described a group which appeared somewhat detached, lacking in spontaneity and incapable of maintaining a sustained interest in anything. Similar findings emerged from studies of American POWs returned following the Korean war, with descriptions by a number of investigators of an overhanging apathy not unlike that described among newly released concentration camp survivors.

Higher rates of unemployment and inability to adapt to the work environment among former Canadian POWs were recorded in surveys analysed by Hermann. A proportion of American POWs returned from Korea also ascribed their job-related problems to the captivity experience. Similar problems have attended the careers of many survivors of the Nazi concentration camps. In the community of Williamsburg in New York, for example, where a large population of concentration camp survivors has attempted to build a new life, recent evidence of high rates of vocational and social maladjustment has come to light.

Prisoners returned from captivity often experience an initial period during which adaptation to the existing environment and culture is profoundly difficult. American POWs repatriated from Indochina, for example, found a society in which mores and values had shifted radically—in effect, a sharply different nation from the one they left behind. Changes in dress, in sexual mores, in women's roles and political currents—among many others—were difficult for them to absorb. Their experience, while accentuated by the extraordinary length of their captivity, was hardly unique. Captives liberated from Nazi concentration camps have also reported a chronic incapacity to merge their interrupted lives with the society that sped on without them.

The problem is hardly bound by culture. A study of New Zealand POWs released after the Second World War, for example, showed a similar trend. Many of these men soon began perceiving the average civilian as 'self-centred' and 'out for himself'. The returning men were depressed by what they saw as the civilians' attitude towards work, by the tendency to give as little as possible, and take as much as possible, which the ex-POWs viewed as a disinclination to accept

responsibility. Some felt that the moral fibre of the civilian community had deteriorated during the war years.

The effects of the POW's experience on the prisoner's family has, until very recently, been largely overlooked as a subject of study. Inferences have been drawn from studies of families, mainly American, in which the husband/father has been absent for other reasons. Evidence from such studies suggests that while the outcome for the family is a function of many interlocking variables, the potential psychotoxic effects of the long-absent husband/father are considerable. It must be noted that much of the social acceptance, stability and continuity which is taken for granted in the intact family is lacking or severely taxed in the POW family during the man's absence.

The marital relationship of the repatriated captive is clearly vulnerable to the stresses of separation. McCubbin, Hunter and Dahl have highlighted adjustment problems which were found among families of American men returning from captivity in Viet-Nam. The waiting wife, functioning as head of household, was likely to mature, to develop greater independence and self-confidence, and to provide a new life style for her family, and some of these wives were reluctant to relinquish these newly acquired roles. After prolonged absences, many of the wives of the American POWs experienced extreme ambivalence and guilt immediately prior to their husbands' return. The few recent personal reports of the Viet-Nam war—for example, Chesley, Gaither, Plumb and Rutledge—and a recent study by Metres, McCubbin and Hunter confirm the view that family reunions among POWs are indeed stressful. The public demands upon the returnees, changes in personalities and values, and discrepancies in expectations of both husband and wife were real obstacles to a successful family reunion, a situation not confined to the American family. Two decades earlier, at the close of the French Indochina war, the French developed a comprehensive family programme especially designed to support their returning POWs. Not only were family specialists sent to Viet-Nam to prepare the men for their family reunions, but simultaneously in France, social workers assisted the families in preparing for the return of their husbands. Most recently, in Israel, to counter disturbed family adjustments, former Israeli POWs were used as informal care-givers, or para-professionals, for the families of men who were still held prisoner.

The effect specifically on children of the absence of a POW father has only recently begun to be studied, principally in the United States, Canada and Israel, but the potential hazards may be inferred from the considerable literature dealing with the father's absence under a variety of other circumstances, such as divorce, separation, desertion and death. That body of research reveals effects ranging from anxiety and depression to school failure and delinquency. The impact of the father's absence specifically in a military role has been studied in a variety of settings around the world, with results that carry a cumulative impact. In a study of children whose fathers were absent due to military service, Gabower found that fathers of

disturbed children were gone more frequently and for longer periods. Trunnell's study of children under 18 years of age seen for psychiatric diagnosis in an outpatient clinic revealed that the longer the father was absent and the younger the child at the time of his absence, the greater the degree of psychopathology.

Comparable data emerge from studies of Norwegian populations. In a study by Lynn and Sawrey of father-absent 8- and 9-year-old Norwegian sailor and whaler children, the father-separated boys, insecure in their masculinity, struggled to resemble the father, but reacted with compensatory masculine bravado. In addition, the boys showed poorer peer adjustment than either the father-present boys or the father-absent girls. Tiller, in another study of father absence among Norwegian children, found that although both boys and girls were negatively affected by the lack of the father's presence, the former manifested more detrimental effects.

It is clear that while the absence of the father in a military role poses difficult problems for any child, when he is a POW, there are additional and unique burdens imposed by his prolonged, and ambiguous status. Moreover, mothers must not only cope with their own problems and feelings, but also with those of their children. Children may feel intense anger at their fathers for leaving them and may even develop strong feelings of guilt and fear over paternal reprisal upon his return. One child whose father was being held in South-East Asia remarked, 'I want my Daddy to be released, but maybe he could find a job in Viet-Nam.'

Sigal's studies comparing the Canadian children of concentration camp survivors and those of the Japanese during the Second World War present similar results. In both instances the portrait is one of an over-protective, emotionally depleted parent with lowered self esteem and a depressed, aggressive, or alienated child. Hunter, McCubbin and Benson recently focused retrospectively on American POW families of the Second World War and the Korean conflict and commented that, typically, the POW's heightened irritability, chronic fatigue and emotional instability over the years had made it difficult, if not impossible, for him to assume the traditional role of father as family disciplinarian. Moreover, his own physical health appeared to spill over into an over-concern for his children's health, just as it appeared to do for the concentration camp survivor.

A recent study by Dahl and McCubbin of the personal and social adjustment of American children of returned prisoners of the Viet-Nam war revealed that the children were below the norms on over-all adjustment, and that the length of paternal absence was found significantly to affect the children's school adjustment. Similarly, follow-up assessments of the adjustment of French families following the war in South-East Asia revealed the need for special educational programmes to offset the children's emotional and academic difficulties.

Children, as well as adults, have experienced captivity. Concentration camps for entire families existed in both the United States and Canada, as well as in Europe, during the Second World War. For these families, the crisis of war and the resulting relocations increased familial interactions as well as familial tensions.

Commenting on the story of a Japanese child interned with her family in Canada, Takashima stated that the 'experience of growing up in camps is tragically common to children of this century', and, further, that the 'claustrophobia, the frustration and uncertainty, the turning on one another because the real enemy is beyond reach, are its universal syndromes'.

The experience of the Japanese-American family, incarcerated in detention centres in the United States during the Second World War, is incisively described by Ann Umemoto. Although she focuses on the impact of incarceration itself on the family, it is clear that post-incarceration re-adaptation of the family members was probably severe in many cases since, again, the prison experience served to disrupt the thread of family life and of individual roles within it. She points out that in many cases the father lost prestige as the mother developed more independence within the camp situation. Children were fully aware that the father was no longer indispensable to them. In a similar vein, Houston, another child of Japanese descent who had been interned in America as a 7-year-old, explained the feelings of hatred she developed towards her father during internment:

He had no boat crew to command, no income to manage, no trips to plan, not even a dining table to preside over. He would putter blindly along, then suddenly, unexpectedly, as if to remind himself he was still in charge of something, he would burst out like that, his intentions right, but his manner stubborn and relentless, forcing distances between us.

Analogous is a recent comment made by a psychiatrist familiar with the plight of the Viet-Nam refugees housed in camps within the United States awaiting resettlement—not officially prisoners of war, but certainly prisoners of a war situation—when he stated that 'while the children play and the women busy themselves with daily housekeeping routines, it is the men who have lost a role, and thus, their self esteem'. But children caught in the plight of captivity also suffer from diminished self esteem. Japanese-American and Japanese-Canadian children, their only crime being that of having Japanese ancestors, often wished they were someone else and seemed to resent their inherited facial characteristics which they perceived, realistically, as being alone responsible for their confinement.

Coping with captivity: human defences, strengths and resiliency

This article contains only a cursory view of the enormous stresses evidenced in the reactions of prisoners and their families to the incarceration experience. The weight of the evidence supports the well-articulated contention by Arthur:

It is now apparent from follow-up studies of concentration camp victims and American prisoners of war of the Japanese, North Koreans and North Vietnamese that permanent psychic and psycho-physiological damage can occur to adult human beings if they are subjected to prolonged malignant and cataclysmic stress. If we had access to medical

records from Eastern Europe, no doubt there would be further corroboration of the existence of these phenomena among the millions of individuals who have been incarcerated there for political reasons. Although there are doubtless individual predispositions stemming from the imperfections of child rearing, the universality and uniformity of the post imprisonment syndrome argue strongly for a common etiology, namely, the stress encountered in the prison camp situation.

In the face of these facts, it is important to consider how it is that men and families can withstand the stresses of captivity at all, and even more surprising, how some can turn the experience into an instrument for growth and emotional maturation. Describing the American POWs returned from Viet-Nam, Wilkins points out that for the most part 'they came through in remarkable ways—a tribute not only to the resiliency of man when placed in a hazardous life situation, but also to the fact that ordinary men, with grit and skill and dedication to a cause, can survive and teach us how to live better'. The Israeli POWs, returning from Syria three years subsequent to the 1967 war, as well as the Americans from South-East Asia released after up to almost nine years, both agreed that their capture was probably the most traumatic event of their lives, and both reported having underestimated their ability to tolerate stress, and expressed surprise at their success in coping.

A number of students of the captivity experience, including survivors themselves, have attempted to identify those defences which assist a man in surviving captivity and in functioning in a healthy fashion afterwards. Ford and Spaulding describe the variety of ego defence mechanisms which POWs tend to use, among them reality testing, denial, rationalization and humour. Kushner, himself a captive in South-East Asia for many years, reminds us that while a man may be subjugated and destroyed by the strange and threatening environment of captivity, he can also attempt to work within it, to mould it, and to rise above it as a vehicle for survival. Still another ex-POW, Nardini, stresses the 'will to live'; and more recently another American from South-East Asia pointed out that the one major decision he made during captivity was the decision to live, and that was made during the first few months following his capture, or he would never have survived.

Captives returned from Viet-Nam have identified not only the manner whereby they survived their ordeal, but the ways in which the ordeal served to strengthen them and build new resources. 'The perspective of a prison cell gives a unique dimension to the past and the present', notes one returned captive, 'and hopefully, it can contribute to the future'. Another admits that since he missed a lot of important events, his perspective is diminished, 'Yet', he adds, 'I can still see so much to be grateful for. Things that I had taken for granted . . . removed for a time . . . are now so much more precious to me . . . to sift out those that are most important . . . to reduce a lifetime to what really matters.'

Discipline and pride are often cited as earmarks of survival, but so, too, is a more ephemeral yet potent variable, the devotion to a faith and to a higher order of existence which transcends the senses, including physical pain and suffering. Among

former New Zealand POWs, for example, there was a realization that wealth and material possessions were not the secret of happiness. One American POW expressed the same feeling immediately following his release from South-East Asia with the simple prayer.

Almighty God, few men have the opportunity to be born again . . . to be able to stand in freedom again . . . to see the sun shining on the flowers, the trees, and the grass . . . to see clouds rolling past the hills in the distance . . . to hear birds sing . . . and more than that, to be able to share love with our families and friends again. . . .

Many of these reunited families now feel that the long separation has brought them closer together. Even their children have perceived benefits deriving from the situation, in the form of advanced maturity and greater sensitivity towards others. It is not the first time in history that captivity, with its attendant privations and persecutions, has led people to rethink their philosophies, and to develop a sense of their own worth and of life's values.

In a report on Polish concentration camp survivors, Adam Szymusik points out that individuals who were detained because of their political views or their outlook on life became ill *less* frequently than those who were detained in the camp accidentally. It was devotion to a cause, Eitinger pointed out during a conference on stress in Israel in 1975, which led concentration camp survivors like himself to bear their burden and work productively in the years beyond captivity. Whether religion, art, music, or an abiding faith in the destiny of humankind, those captives who saw beyond the pressures and the pain and the bloodshed to a higher order of functioning managed to defend themselves against collapse and to build the capacity for living beyond the barbed wire. One's mind, one's education, the ability to play a musical instrument, these are the things which assume higher value, things that captivity cannot easily erase.

This theme has been well expressed by Viktor Frankl in his description of his own search for meaning during incarceration. Frankl served as a long-time prisoner in bestial concentration camps, stripped to naked existence. Except for his sister, his entire family perished. Gordon W. Allport asked him how he could, every possession lost, everything he valued destroyed, suffering from hunger, cold and brutality and each hour expecting extermination, still find life worth preserving?

Frankl's answer was that hunger, humiliation, fear and deep anger at injustice are rendered tolerable by closely guarded images of loved persons, by religion, by a grim sense of humour, and even by glimpses of the healing beauty of the future. Frankl quotes Nietzsche to encapsulate his view: 'He who has a *why* to live can bear with almost any *how*.' In future research studies of the fate of captives, it would be well to focus not only on the vulnerability and deficits of this universally experienced stress, but on the equally universal traits and characteristics which render man invulnerable even to the most hideous stresses to which he is subjected by his fellow man.

References

- ARTHUR, R. J. 1971. Proposal for Enhancement of Health Care to Released Prisoners of War through Initial Evaluation and Documentation and Subsequent Follow-up Care. (Unpublished.) San Diego, Calif., Navy Medical Neuropsychiatric Research Unit.
- BAIRD, J. T.; MACDONALD, D. 1956. Survey of Optic Atrophy in Hong Kong Prisoners of War After Ten Years. *Canadian Medical Services Journal*, 12, p. 485-93.
- BARKER, A. J. 1974. *Behind Barbed Wire*. London, B. T. Batsford Ltd.
- BEEBE, G. W. 1975. Follow-up Studies of World War II and Korean War Prisoners. II. Morbidity, Disability, and Maladjustments. *American Journal of Epidemiology*, 101, p. 400-22.
- BENSHEIM, H. 1960. Die K-Z-Neurose Rassisch Verfalgt. *Nervenarzt*, 31, p. 10-16.
- BLOOM, S. M.; MERZ, E. H.; TAYLOR, W. W. 1946. Nutritional Amblyopia in American Prisoners of War Liberated from the Japanese. *American Journal of Ophthalmology*, 29, p. 1248-57.
- BOSWORTH, A. 1967. *Americas' Concentration Camps*. New York, W. W. Norton & Co., Inc.
- BRILL, N. Q. 1946. Neuropsychiatric Examinations of Military Personnel Recovered from Japanese Prison Camps. *Bulletin U.S. Army Medical Department*, 5, p. 429-38.
- CHESLEY, L. 1973. *Seven Years in Hanoi*. Salt Lake City, Bookcraft, Inc.
- COHEN, B. M.; COOPER, M. Z. 1954. A Follow-up Study of World War II Prisoners of War. *V. A. Medical Monograph* (September).
- COKE, L. R. 1961. Late Effects of Starvation. *Canadian Medical Services Journal*, 17, p. 313-24.
- DAHL, B.; McCUBBIN, H. 1974. The Adjustment of Children of Returned Prisoners of War: a Preliminary Report. Paper presented at the Second Joint Medical Meeting on Prisoners of War, Department of Defence, San Antonio, Texas (November).
- ETTINGER, L. 1961. Pathology of the Concentration Camp Syndrome. *Archives of General Psychiatry*, 5, p. 371-9.
- . 1962. Concentration Camp Survivors in the Post War World. *American Journal of Orthopsychiatry*, 32, p. 367-75.
- . 1963. Preliminary Notes on a Study of Concentration Camp Survivors in Norway. *Israel Annals of Psychiatry and Related Disciplines*, 1, p. 59-67.
- . 1964. *Concentration Camp Survivors in Norway and Israel*. London, Allen & Unwin.
- FORD, C. V.; SPAULDING, R. C. 1973. The Pueblo Incident. A Comparison of Factors Related to Coping with Extreme Stress. *Archives of General Psychiatry*, 29, p. 340-3.
- FRANKL, V. E. 1959. *Man's Search for Meaning: An Introduction to Logotherapy*. Boston, Beacon Hill Press.
- GABOWER, G. 1960. Behavior Problems of Children in Navy Officers' Families. *Social Casework*, 41, p. 177-84.
- GAITHER, R. 1973. *With God in a POW Camp*. Nashville, Broadman Press.
- HALPERN, E. 1975. Volunteering as a 'Natural Phenomena': an Integration Within Caplan's Theory of Support Systems. Paper presented at the International Conference on Psychological Stress and Adjustment in Time of War and Peace, Tel Aviv, Israel (January).
- HERBERG, H. J. 1961. The Cardiovascular Sequelae of Detention. Paper presented at the International Conference Organized by the World Veterans Federation on the Later Effects of Imprisonment and Deportation. The Hague (November).
- HERMANN, J. D. 1973. *Canadians Who Were Prisoners of War in Europe During World War II*. Report to the Minister of Veterans Affairs, Ottawa.
- HOCKING, F. 1970. Psychiatric Aspects of Extreme Environmental Stress. *Diseases of the Nervous System*, 31, p. 542-5.
- HOUSTON, J. 1973. *Farewell to Manzanar*. Boston, Houghton Mifflin Co.
- HUNTER, E. J.; McCUBBIN, H. I.; BENSON, D. M. *The Former Prisoner of War as the Family Patient*. (In press.)
- International Conference on Later Effects of Imprisonment and Deportation* (Organized by the World Veterans' Federation, 1961). The Hague (Netherlands).
- JUILLET, P.; MOUTIN, P. 1969. *La Captivité, Psychiatrie Militaire*, p. 209-13. Paris, Masson and Cie.
- KITAGAWA, D. 1967. *Issei and Nisei: The Internment Years*. New York, The Seabury Press.
- KLEIN, H.; ZELLERMAYER, J.; SHANAN, J. 1963. Former Concentration Camp Inmates in a Psychiatric Ward. *Archives of General Psychiatry*, 8, p. 334-42.
- KORANYI, E. K. 1969a. A Theoretical Review of the Survivor Syndrome. *Diseases of the Nervous System*, 30, p. 115-8.
- . 1969b. Psychodynamic Theories of the 'Survivor Syndrome'. *Canadian Psychiatric Association Journal*, 14, p. 165-74.

References (continued)

- KRAL, V. A.; PAZDER, L. H.; WIGDOR, B. T. 1967. Long-term Effects of a Prolonged Stress Experience. *Canadian Psychiatric Association Journal*, 12, p. 175-81.
- KUSHNER, F. H. 1974. To Live or to Die. *AMEDD Spectrum: U.S. Army Medical Department*, 1, p. 16-21.
- LYNN, D.; SAWREY, W. L. 1959. The Effects of Father-absence on Norwegian Boys and Girls. *Journal of Abnormal and Social Psychology*, 59, p. 258-62.
- MASON, W. W. 1954. *Official History of New Zealand in the Second World War Prisoners of War*. London, Oxford University Press.
- MATUSSEK, P. 1961. Die Konzentration—Slagerhaft als Kelastungssituation. *Nervenarzt*, 32, p. 538-47.
- MCCUBBIN, H.; DAHL, B. In: H. McCubbin, B. Dahl and E. Hunter (eds.), *Families in the Military System*. Chapter 10. (In press.)
- MCCUBBIN, H. I.; HUNTER, E. J.; DAHL, B. Residuals of War: Families of Prisoners of War and Servicemen Missing in Action. *Journal of Social Issues*. (In press.)
- METRES, Jr, P. J.; MCCUBBIN, H. I.; HUNTER, E. J. 1975. Families of Returned Prisoners of War: Some Impressions on their Initial Reintegration. In: H. McCubbin, B. Dahl, P. Metres, Jr, E. Hunter and J. Plag (eds.), *Family Separation and Reunion*. p. 147-56. Washington, D.C., U.S. Government Printing Office.
- MOWERY, E.; HUTCHINS, C.; ROWLAND, B. (eds.). 1975. *The Historical Management of POWs. A Synopsis of the 1968 U.S. Army Provost Marshal General's study entitled: A Review of United States Policy on Treatment of Prisoners of War*. San Diego, Naval Health Research Center, Center for POW Studies (in press).
- NARDINI, J. E. 1973. Readjustment Problems of the Returned Prisoner of War. *Medical Service Digest*, 24, p. 17-9.
- NEFZGER, M. D. 1970. Follow-up Studies of World War II and Korean War Prisoners. 1. Study Plan and Mortality Findings. *American Journal of Epidemiology*, 91, p. 123-38.
- PLUMB, C. 1973. *I'm No Hero*. Independence, Missouri, Independence Press.
- RAKOFF, V.; SIGAL, J.; EPSTEIN, N. 1967. Children and Families of Concentration Camp Survivors. *Canadian Mental Health*, 14, p. 24-6.
- RICHARDSON, H. J. 1965. Disabilities and Problems of Hong Kong Veterans 1964-1965. *Ottawa: Report to the Minister of Veterans Affairs*.
- RISNER, R. 1975. *The Passing of the Night: My Seven Years as a Prisoner of the North Vietnamese*. New York, Random House.
- RUTLEDGE, H. E. 1973. *In the Presence of Mine Enemies*. Old Tappan, N.J., Fleming H. Revell Co.
- SCHNITKER, M. A.; MATTMAN, P. E.; BLISS, T. L. 1951. A Clinical Study of Malnutrition in Japanese Prisoners of War. *Annals of Internal Medicine*, 35, p. 69-95.
- SIGAL, J. 1974. Effects of Parental Exposure to Prolonged Stress on the Mental Health of the Spouse and Children: Families of Canadian Army Survivors of the Japanese World War II Camps. Paper presented at the Annual Meeting of the Canadian Psychiatric Association, Ottawa.
- SIGAL, J.; RAKOFF, V. 1971. Concentration Camp Survival: A Pilot Study of Effects on the Second Generation. *Canadian Psychiatric Association Journal*, 16, p. 393-7.
- SIGAL, J.; SILVER, D.; RAKOFF, V.; ELLEN, B. 1973. Some Second-Generational Effects of Survival of the Nazi Persecution. *American Journal of Orthopsychiatry*, 43, p. 320-7.
- SZYMUSIK, A. 1975. Results of the Polish Psychiatric Research Regarding the Health of Former Prisoners in Navy Concentration Camps. (Unpublished manuscript, January, translated by Wanda M. Feeley, DSII, NIMH. Washington, D.C.)
- TAKASHIMA, S. 1971. *A Child in Prison Camp*. Canada, Tundra Books.
- TEICHMAN, Y.; SPIEGAL, Y.; TEICHMAN, M. 1975. Volunteers Report About Their Work With Families of Servicemen Missing in Action. Paper presented at the International Conference on Psychological Stress and Adjustment in Time of War and Peace, Tel Aviv, Israel (January).
- TILLER, P. 1961. *Father Separation and Adolescence*. Oslo, Norway, Institute for Social Research.
- TRAUTMAN, E. C. 1961. Psychiatric and Sociological Effects of Nazi Atrocities on Survivors of the Extermination Camps. *Journal of the American Association of Social Psychiatry* (December).
- . 1964. Fear and Panic in Nazi Concentration Camps: A Biosocial Evaluation of the Chronic Anxiety Syndrome. *International Journal of Social Psychiatry*, 10, p. 134-41.
- TRUNNELL, T. 1968. A Review of Studies of the Psychosocial Significance of the Absent Father. Paper presented at the Western

References (continued)

- American Psychiatric Association Meeting, Seattle, Washington (August).
- UMEMOTO, A. 1971. Crisis in the Japanese American Family. *Asian Women*, p. 31-4, University of Calif., Berkeley.
- WILKINS, W. L. 1975. Some Lessons Learned from the Long-range Study of POWs. Paper presented at the International Conference on Psychological Stress and Adjustment in Time of War and Peace, Tel Aviv, Israel (January).

ACCESSION for	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Buff Section <input type="checkbox"/>
UNANNOUNCED	<input type="checkbox"/>
JUSTIFICATION	
BY	
DISTRIBUTION/AVAILABILITY CODES	
Dist.	AVAIL. and/or SPECIAL
A	20

UNCLASSIFIED

DATE OF DECLASSIFICATION PAGE (When Data Entered)

REF ID: A60121 DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

11

1. REPORT NUMBER
75-84

2. GOVT ACCESSION NO.

3. RECIPIENT'S CATALOG NUMBER

9

6

4. TITLE (and Subtitle)
Universal Consequences of Captivity: Stress Reactions Among Divergent Populations of Prisoners of War and Their Families.

5. TYPE OF REPORT & PERIOD COVERED
Final rept.

10

7. AUTHOR(s)
Julius/Segal, Edna J./Hunter, Zelda/Segal

6. PERFORMING ORG. REPORT NUMBER

8. CONTRACT OR GRANT NUMBER(s)

12 2pp.

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Naval Health Research Center
San Diego, CA 92152

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS

Navy-N00018-75-WR-00004
Army MIPR No. 75-01

11. DISTRIBUTION STATEMENT (of this Report)

Naval Medical Research & Development Command
Bethesda, MD 20014

12. PROGRAM DATE
28 Oct 1975

13. NUMBER OF PAGES

14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)

Bureau of Medicine & Surgery
Department of the Navy
Washington, D. C. 20372

11 1976

15. SECURITY CLASS. (of this report)

Unclassified

16a. DECLASSIFICATION/DOWNGRADING SCHEDULE

Approved for public release; distribution *unlimited.*

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

captivity
POW
Stress
concentration camp survivors

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The major thesis of this paper is that the impact on health and behavior of captivity is relatively constant across nations and cultures; that is, the physical, psychological and social costs of incarceration experiences are, to some extent predictable, no matter what nations find themselves in the role of captor and captive. The paper also points out that in spite of its attendant privations and persecutions, captivity has led many individuals to rethink philosophies and to develop a finer sense of self-worth and of life's values. Thus,

BEST AVAILABLE COPY

Unclassified

DATE CLASSIFICATION OF THIS PAGE (When Data Entered)



turning a malignant and cataclysmic experience into an instrument for growth and emotional maturation.

14-73B