Twenty-five Years Later: A Limited Study of the Sequelae of the Concentration Camp Experience

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Summary. The central question raised is: To what extent does maladaptation and malfunctioning characterize survivors of the unimaginably extreme, prolonged trauma of the Nazi concentration camps, and to what extent do we find successful adaptation among such persons? The extensive literature on camp survivors is largely incapable of confronting this question. Even when not based only on a small number of patients in psychiatric treatment, most papers deal with select populations. Moreover, it is seldom that survivors are compared to appropriate controls. — A study which included Israeli women aged 45—54 of Central European birth and focused on problems of adaptation to climacterium provided data relevant to the central question. The respondents constituted a representative sample of all women in a middle-sized Israeli city meeting the criteria of age and nativity. Of the 287 women in the sample, 77 had been in a Nazi concentration camp during World War II. The remaining 210 women were used as a control group. — Adaptation was measured from several different points of view: menopausal symptomatology, the subjective sense of wellbeing, physical and emotional health status, and role satisfaction. The detailed data show camp survivors to be more poorly-adjusted than the controls. — Of greater import, however, is the fact that a not-inconsiderable number of concentration camp survivors were found to be well-adapted, despite the extreme trauma. It is suggested that this finding requires serious investigation. Three complementary explanations of the fact of successful adaptation are proposed: an initial underlying strength, a subsequent environment which provided opportunities to reestablish a satisfying and meaningful existence, and a "hardening" process which allow the survivor to view current stresses with some equanimity."

Résumé. La question principale soulevée dans ce travail est la suivante: jusqu'à quel point l'inadaptation est-elle une caractéristique des survivants aux traumatismes extrêmement graves et prolongés des camps de concentration nazis, et jusqu'à quel point trouvons-nous des adaptations réussies parmi ces personnes? L'abondante littérature existant sur les survivants des camps de concentration n'est pas capable de répondre à cette question. Même s'ils ne sont pas basés que sur un petit nombre de patients en traitement psychiatrique, la plupart des travaux ne concernent que des populations choisies. De plus, il est rare que les survivants soient comparés à des cas de contrôle appropriés. Une étude comprenant des femmes israëlites âgées de 45 à 54 ans, nées en Europe centrale, et centrée sur les problèmes de l'adaptation à la ménopause a fourni des données quant à la question principale ci-dessus. Les sujets constituaient un échantillon représentatif de toutes les femmes d'une ville israëlienne de moyenne importance en ce qui concerne les critères d'âge et de naissance. Des 287 femmes de l'échantillon, 77 avaient été dans un camp de concentration nazi pendant la seconde guerre mondiale. Les 210 autres femmes ont été utilisées comme groupe de contrôle. L'adaptation a été mesurée selon plusieurs points de vue différents: symptomatologie de la ménopause, sensation subjective de bien-être, état de santé physique et psychique, et satisfaction quant au rôle assumé. Les résultats détaillés montrent que les survivantes des camps sont moins bien adaptées que les cas contrôle. Il est cependant intéressant de noter qu'un nombre non négligeable de survivantes aux camps de concentration se sont avérées bien adaptées, malgré le grave traumatisme. On pense qu'il faudrait étudier ce résultat plus à fond. On propose trois explications complémentaires de cette adaptation réussie: une certaine force initiale sous-jacente, un environnement qui a permis aux intéressées de reprendre une existence satisfaisante et de lui donner un sens, et un processus de »durcissement« qui permet aux survivants d'envisager les stress de la vie quotidienne avec une certaine égalité d'âme.

Zusammenfassung. Die zentrale Fragestellung lautet: In welchem Ausmaß charakterisiert Fehlanpassung und schlechtes Funktionieren die Überlebenden des unvorstellbar extremen und langdauernden Traumas der nationalsozialistischen Konzentrationslager, und in welchem Ausmaß finden wir erfolgreiche Anpassung unter solchen Personen? Das ausgedehnte Schrifttum über die Überlebenden dieser Lager kann sich größtenteils mit dieser Frage nicht auseinandersetzen. Auch wenn die Arbeiten nicht nur auf einer kleinen Anzahl von Patienten in psychiatrischer Behandlung fußen, haben sie sich meistens mit ausgewählten Populationen befaßt. Außerdem werden selten Überlebende mit angemessenen Kontrollgruppen verglichen. Eine Untersuchung, die jüdische Frauen zwischen 45 und 54 Jahren, in Mitteleuropa geboren, erfaßte und auf Probleme der Anpassung an das Klimakterium abhob, lieferte für die zentrale Frage relevante Daten. Die Probanden bildeten eine repräsentative Gruppe aller Frauen in einer mittelgroßen israelischen Stadt, die ihrem Alter und ihrer Herkunft nach die Kriterien erfüllten. Von den 287 Frauen in der Gruppe waren 77 im zweiten Weltkrieg in einem nationalsozialistischen Konzentrationslager gewesen. Die übrigen 210 Frauen wurden als Kontrollgruppe verwandt. Anpassung wurde von verschiedenen Gesichtspunkten her beurteilt: Symptomatologie der Menopause, subjektives Gefühl des Wohlbefindens, körperlicher und seelischer Gesundheitszustand und Erfüllung in der eigenen Rolle. Die ausführlichen Daten zeigen, daß die den Lageraufenthalt Überlebenden schlechter angepaßt waren als die Kontrollfälle. Bedeutsamer ist jedoch die Tatsache, daß eine nicht unbeträchtliche Anzahl von den die Konzentrationslager Überlebenden als gut angepaßt gefunden wurde, trotz des extremen Traumas. Es wird vermutet, daß dieses Ergebnis eine gründliche Untersuchung fordert. Drei sich gegenseitig ergänzende Erklärungen für die Tatsache der erfolgreichen Anpassung werden vorgeschlagen: eine ursprünglich zugrundeliegende Vitalität, später eine Umgebung, die Möglichkeiten zum Wiederaufbau einer befriedigenden und bedeutungserfüllten Existenz lieferte, ein „Härtungsprozeß", der dem Überlebenden einen gewissen Gleichmut gegenüber gegenwärtigem Stress gewährte.

Introduction

It would be inconceivable to imagine that the massive, prolonged psychic and physical trauma of the concentration camp would not leave an indelible mark on survivors. There can be no question that Rappaport is correct when he states "... that the regenerative powers of the ego are not limitless." Having said this, however, is only to present the context of the core problem faced by this paper, which is: Just how regenerative are the powers of the ego?

The literature, both artistic and scientific, on what happened to Jews and others during World War II is voluminous. But scientists have tended to shy away from systematic study of the consequences of this most extreme situation for the survivors (see Winnick). More recently, greater attention has been

paid to the question of the subsequent and particularly the delayed impact of the camp experience (Krystal, International Journal of Psychoanalysis, Israel Annals of Psychiatry). The psychiatric literature increasingly refers to the "concentration camp syndrome". Almost invariably, however, such papers, if they are not strictly theoretical, are based on a relatively small number of patients in psychiatric treatment. The few studies which deal with larger numbers and are not limited to patients are based on psychiatric reports prepared for survivors submitting claims for restitution (Häfner, Hoppe, Bastiaans), or on data on persons searched out and identified as badly needing help (Eitinger, 1962).

A full understanding, however, of the regenerative powers of the ego cannot be gained from studies which do not go beyond clinical populations. By definition, patients are maladaptive. The question we have posed in this paper can only be answered in studies of total populations in the community at large.

But even this is inadequate. We know from the Midtown and other studies (Srole *et al.*) that there are many psychiatrically-ill persons in the general population who do not reach treatment and are not recorded in files. When we read that, in a 1947 to 1951 study of 1300 Danes who had been in concentration camps, "About 75 per cent ... stated they had had, or still had, neurotic symptoms of varying degrees of severity" (reported in Eitinger, 1961; Helweg-Larsen; cf. Häfner's reference to Thygesen), we do not know whether this figure is greater than might appear in an appropriate control population. Without such a comparison, we cannot understand the problem fully. The paper by Klein *et al.*, which does include a control group, is limited to hospitalized patients. The only published study which has come to our attention that fulfils both these criteria—a non-selected population of survivors matched with an appropriate control—is that of Shuval, done some two decades ago. We shall discuss her findings in the context of considering our own findings.

The opportunity to make some contribution to this question arose when the authors conducted a study focused on sociocultural and psychological factors in adaptation to climacterium. Our primary concern was to compare women of five different ethnic groups (Maoz *et al.*, Dowty *et al.*). One of these groups consisted of women born in Central Europe (Germany, Austria, Hungary and Czechoslovakia). In the course of the interview, women were asked whether they had ever been in a concentration camp. Of the 287 Central European women in the sample, 77 replied affirmatively. This distribution allowed us to compare the 77 to the other 210 on a variety of variables, most of which were designed to measure adaptation to menopause in particular and to problems of middle age in general. It is our purpose here to present the results of such comparisons and to discuss the implications of the findings.

Population and Methods

All women born in the years 1914—1923 (i. e., aged 45—54 at the time of the study) in Central Europe and resident in a fair-sized Israeli city were drawn from the Population Registry (N = 766). The study design called for samples of approximately 300 women in each ethnic group. The original European list was randomly sampled to provide an initial study sample of 595. These were ordered at random and interviewers sent out. Interviewing was halted after attempted contacts were made with 452 women, which produced a total of 287 successfully completed interviews. Comparisons of age distributions of the original list (766), study sample (595) and interviewed respondents (287) by year of birth, recorded in the Population Registry, showed only the smallest deviations.

The interview schedule consisted of 168 items, all but 11 precoded. Interviews were conducted in respondents' homes, and were completed, on the average, in 1½ hours. At the completion of the interview, all respondents were invited to come to a medical center for a general medical examination. Slightly over half (54%) of the European women agreed to participate in the medical examination. They do not differ by age from the women who were not examined.

The final stage of the field work consisted of semi-structured psychiatric interviews. These were conducted with two groups of women: those who, on the basis of the home interview protocols and medical reports were judged to be best adapted and those judged to be most poorly adapted in their current life situations. No account was taken, of course, of concentration camp experience, in selecting the women. The examining psychiatrist had no prior knowledge that such extreme groups had been selected. Psychiatric interviews were conducted with 43 European women, 24 of the best and 19 of the most poorly adapted.

Results

Demographic variables

Before considering the data reflecting various aspects of life adaptation, let us briefly review a number of demographic variables. It should, however, first be noted that the classification of the sample into two groups, with and without concentration camp experience, is based on a "yes-no" reply to the question "During the Second World War, were you in a concentration camp?" These groups will be referred to as concentration camp survivors and controls. It is most important to note that this distinction is based on minimal information. We do not know the duration of the intern-

ment of the survivors nor where they were interned. Luchterhand and Eitinger (1964) have pointed to the subsequent differential impact of duration of internment. Moreover, we do not know anything about the experiences of the 18 percent of the controls who migrated to Palestine after 1945. Most of them undoubtedly experienced extreme trauma in one form or another in living somewhere in Nazi Europe without having been interned in a concentration camp. Klein *et al.'s* study of hospitalized patients showed the differential consequences of different levels of oppression. Thus the two groups are distinguished only relatively by the level of terror experienced.

The two groups did not differ significantly on a number of major demographic variables. Somewhat more of the control women were, at the time of the study, 52 years of age or older, but the difference is not significant. Nor do they differ significantly on their current marital status, the vast majority of both groups being married. In social class terms, as measured by husband's education, the distributions are almost identical, and both are predominantly middle class.

Turning to variables more closely associated with the concentration camp experience, however, we find substantial differences. Most of those who did not succeed in reaching Palestine before 1946 were destined to pass through the camps. More than four fifths of the controls had arrived in Palestine before 1946 (71% before 1940), compared to only 7 percent of the survivors. The discrepancy on age at migration is almost as great: 82 percent of the controls and 17 percent of the survivors migrated by the time they were 25 years of age. Thus not only did the survivors experience the camp; they also had lived in central Europe throughout the interbellum and war periods, experiencing late adolescence and young adulthood under circumstances of disaster.

As noted above, the groups do not differ significantly on current marital status. There is, however, variation in the marital history. We find that many more of the survivors (30%) have ever been widowed than was the case among the controls (9%). This, as well as the more turbulent life history, may well account for the fact that they have had fewer children.

The final point we would note here is one which may be surprising to many. Significantly more of the women who had been in concentration camps identify themselves currently as being religious than is the case of those who had not been in camps (31% vs. 18%).

Measures of adjustment

Fourteen measures were used to reflect different aspects of adjustment to problems of climacterium and middle age in the following areas: health status, wellbeing, and role satisfaction. Four of these measures are based on single items; the others are composite typologies, scales or scores. With great consistency, we find that fewer of the survivors than of the controls adjusted successfully. The difference between the two groups reaches statistical significance on 11 items, and is in the expected direction on the other three (see Table 1) [1].

Table 1. *A comparison of Central European-born Israeli women aged 45—54, with and without concentration-camp experience, on adjustment-to-climacterium variables*

Variable	% more positive	% intermediate	% more negative	N	X^2	Level of significance
A. *Health status*						
1. Overall menopausal symptoms						
Survivors	27	39	34	77	21.26	.001
Controls	52	37	11	210		
2. Psychic menopausal symptoms						
Survivors	35	—	65	77	19.67	.001
Controls	65	—	35	210		
3. Psychosomatic menopausal symptoms						
Survivors	41	—	59	77	7.76	.01
Controls	60	—	40	210		
4. Somatic menopausal symptoms						
Survivors	35	—	65	77	7.11	.01
Controls	53	—	47	210		
5. Overall health, MD rating						
Survivors	40	23	37	35	7.54	.05
Controls	60	24	16	117		
6. Physical symptoms and functioning, MD rating						
Survivors	50	32	18	34	—	NS
Controls	60	22	18	116		
7. Emotional symptoms and functioning, MD rating						
Survivors	29	38	33	34	14.12	.001
Controls	51	39	10	115		
B. *Wellbeing*						
1. Self-evaluation of overall life situation						
Survivors	32	—	68	75	7.22	.01
Controls	50	—	50	204		
2. Sense of coping scale						
Survivors	47	—	53	73	7.82	.01
Controls	65	—	35	199		
3. Mood tone scale						
Survivors	39	—	61	74	5.05	.05
Controls	54	—	46	208		
4. Worries scale						
Survivors	44	—	56	77	14.57	.001
Controls	70	—	30	210		
C. *Role satisfaction*						
1. Satisfaction in 4 family roles						
Survivors	65	—	35	69	—	NS
Controls	72	—	28	202		
2. Satisfaction in 4 non-family roles						
Survivors	19	—	81	69	6.35	.02
Controls	35	—	65	194		
3. Family pleasure-worry balance						
Survivors	28	40	32	75	—	NS
Controls	29	43	28	207	—	

*Appendix: Menopausal Symptoms**

Psychic	*Somatic*	*Psychosomatic*
3. nervousness and tension	4. diarrhea	1. pounding heart
6. inability to concentrate	5. constipation	2. dizziness
7. crying spells	10. pains in the back of the head or neck	8. feeling of tiredness
9. feeling of depression		11. black spots before the eyes
14. irritability	13. breast pains	12. headaches
16. forgetfulness	15. cold sweats	
18. trouble sleeping	17. numbness and tingling in the hands and feet	
23. feeling of fright	19. cold hands and feet	
24. worry about going crazy	20. hot flushes	
25. feeling of suffocation	21. rheumatic pains	
	22. weight gain	

* The items are numbered in the order in which they were presented. Respondents were asked whether they had been troubled by the symptom often, infrequently, or not all at during the past year.

Health status. Fairly early in the interview, a check list of 25 "menopausal symptoms" was presented to respondents as a "list of things women sometimes suffer from" (see Appendix). Each woman was asked to indicate whether, during the past year, she had been troubled by the symptom often, infrequently or not at all. These responses were scored 1, 2, and 3, respectively. Thus each woman received an overall menopausal symptom score of 25 to 75. Substantively, the items differed in character: 5 were psychosomatic symptoms, 10 were psychic, and 10 were somatic. Three symptom subscores were assigned accordingly. The respective mean scores of the survivors and the controls on the overall symptom list were 54.0 and 59.3 (the higher the score, the fewer the symptoms). Significantly more of the controls were low on symptomatology, and more of the survivors had scores reflecting difficulties. This pattern is reflected in each of the three subscores. The mean subscores of the survivors and controls, respectively, are: psychosomatic, 9.9 and 11.2; psychic, 21.3 and 23.8; and somatic, 22.8 and 24.3 (Table 1, A 1—4).

It is of interest to note that the scores of the two groups differ less on the somatic and psychosomatic symptoms than they do on the psychic symptoms. This pattern is also reflected in the results of the medical examinations. The examining physicians were asked, after a standard anamnesis and physical examination were conducted, to summarize their evaluation of the woman's overall health status, for women of this age, on a six-point scale. Of the survivors, 40 percent were rated as being in excellent (9%) or in quite good (31%) health, compared to 60 percent of the controls (21% excellent, 39% quite good). Subsequently, however, the physician recorded his evaluation of the woman's physical health and of her emotional health, both items formulated on an identical seven-point scale which referred to symptom formation and functioning. On the physical health ranking, the two groups did not differ significantly, although fewer women among the survivors were rated as functioning well. On the emotional health ranking, however, the difference was highly significant. Almost twice as many of the control women as of the survivors were rated as functioning well, and more than three times as many of the survivors as of the controls were rated as having at least "moderate symptom formation with some interference in life adjustment" (Table 1, A 5—7). Although the physicians were not psychiatrists and had not been asked to focus on emotional health, it is worth noting that their evaluations are in agreement with our expectations.

Wellbeing. The second set of dependent variables to be considered here covers four different aspects of what we have called in overall terms "wellbeing". The first measure consists of the "self-anchoring technique" developed by Cantril. Briefly stated, this technique is based on the notion that a most important way of comparing people is to ascertain the distance each person feels he is from his own goals and aspirations. Respondents were shown a picture of a 10-rung ladder and told: "Let's suppose that the top step of the ladder represents the best possible life for you, and the bottom step represents the worse possible life for you. Where on the ladder do you feel you, personally, are now?" The mean score of the camp survivors on this measure was 5.6, that of the controls, 6.5 [2]. With Cantril, we take this

[1] Table 1 would have been of interminable length had we presented the total distributions on each item. The specific categories in the scale measures, of course, have no more than a relative meaning, as do such measures as the menopausal symptom score. Even on those items where the individual category has some substantive meaning, e. g., emotional symptoms and functioning, the categories are in good part arbitrary. We have, therefore, simply collapsed all measures into dichotomies or trichotomies, taking care not to allow such collapsing to distort the meaning of the full distribution. Thus, for example, overall menopausal symptom scores were cut at scores of 49 or less, 50—59, and 60 or more; on the worries scale, respondents were divided between those who had 0 to 3 worries and those who had 4 or more worries. In each case, the appropriate category, in the table, is put under "more positive", "intermediate", or "more negative". We saw no point in going into such great detail as specifying how we measured whether one had or didn't have a worry, and what the subject matter of the worries were, beyond what is specified in the text.

[2] It may be noted that the mean score of the women in a comparable age bracket in a national Israeli sample in 1962 was 5.5 (Antonovsky and Arian). Since the national sample, however, included many more women of lower social class than our respondents, and since class is directly related to ladder score, it is not surprising to find our respondents scoring higher.

measure to be one of optimism, and see that the control women are significantly more optimistic than the survivors (Table 1, B 1).

The second measure, called a coping score, was based on responses to four multiple-choice questions which dealt with: (a) the woman's feeling of satisfaction with her personal appearance; (b) the extent of her satisfaction with "what you have gotten out of life so far"; (c) the frequency with which she feels that "you are likely to break down under your problems"; and (d) the extent to which she feels herself "free to do the things that you feel like doing". The responses to these items were dichotomized or trichotomized and a composite raw score assigned to each woman. As can be seen in Table 1 (B 2), significantly more of the controls than of the survivors have a sense of coping well.

Three other items were used in similar fashion to create a five-point "mood tone" scale. Women were asked how often they felt that they have nothing to do, how their mood was when they get up in the morning, and at the end of the day. Again we find that fewer controls than survivors feel at loose ends and in a bad mood (Table 1, B 3).

Finally, the women were asked to state whether they were especially, quite, not so, or almost not at all worried about each of a series of eight items: husband's health, own health, finances, growing old, security conditions in the country, concern for a family member in the army, death, and debts. Each woman was given a point for each item which she checked as causing her to be especially or quite worried. The difference between the two groups is highly significant, the camp survivors expressing far many more worries (Table 1, B 4).

Role satisfaction. The final set of dependent variables to be discussed relates to the social roles played by the woman. The questionnaire included eight parallel series of questions, each referring to one major social role: mother, wife, grandmother, relative, friend-neighbor, housekeeper, worker, volunteer. Each series dealt with the extent of the woman's involvement in the role, the change in the extent of her involvement since age 40, and the satisfaction with the extent of her involvement. We shall here only consider the satisfaction scores.

Two such scores were derived, the one dealing with the four family roles, the other dealing with the four non-family roles. As can be seen in Table 1 (C 1—3), fewer of the survivors than of the controls are in the high satisfaction category on both the family-role score and the non-family-role score. Only the latter difference, however, reaches the level of statistical significance.

The small difference on the family-role score is also reflected in comparing the groups on another set of scores dealing with family relations (Table 1, C 3). The women were asked, referring respectively to their husband, children and housework, to what extent each is a source of pleasure and to what extent each is a source of worry for them. A net pleasures-minus-worries score was constructed, ranging from all worries and no pleasures at one extreme to all pleasures and no worries at the other. The distributions of the two groups are very similar, though the small difference is in the expected direction [3].

Discussion

Our data are very consistent in showing that middle-aged Israeli women of central European origin who were concentration camp survivors are, as a group, more poorly adapted to problems of the climacteric period than are the women in a control group. While the prolonged trauma of internment is part of a more general tragic historical experience which distinguishes between the two groups of women, the immensity of the horror of the camp in itself undoubtedly plays a causative role in the greater degree of maladaptation found a quarter of a century later. These results are not at all surprising, although as indicated in our opening discussion, they have seldom been documented in controlled studies of general populations.

What is, however, of greater fascination and of human and scientific import and of direct relevance to the core question we raised earlier—the "regenerative powers of the ego"—is the fact that a not-inconsiderable number of concentration camp survivors were found to be well-adapted. Thus 40 percent of the camp survivors were rated by the physician as being in excellent or quite good health for women of their age. Half of them showed at most, with respect to physical health, "mild symptom formation but functioning adequately." With respect to emotional health, 29 percent showed no evidence, in the physician's judgment, of any symptom formation or malfunctioning. On the more subjective measures, 31 percent placed themselves on rung 8 or higher on the ladder question. More than a fourth showed a clearly positive balance on the family pleasure-worry balance scale. Almost a fourth had no more than at most two of eight items which were especially worrisome.

What, we must ask, has given these women the strength, despite their experience, to maintain what

[3] One further area in which data were obtained might have been included in studying the adaptation of these women. A series of 23 items was used, each of which expressed, in either positive or negative terms, an evaluation of the consequences of climacterium and middle age. Respondents were asked to express their degree of agreement or disagreement with each statement. Substantively, the list covered five different areas: fertility, physical health, emotional health, social-personal relations, and marital relations. A score was obtained expressing one's location on a high-positive to a high-negative continuum in each of the five areas. In addition, a negative salience score was calculated on the basis of definite agreement with the negatively-phrased statements.

On all six of these measures, more controls than survivors were positive, but the difference only reached statistical significance on two (physical and emotional health consequences). Thus the data are consistent with, though not strongly supportive of, the rest of the data.

would seem to be the capacity not only to function well but even to be happy, at least on some level [4]. It may be objected that the camp trauma is always in the background and that, given the appropriate trigger, they will break down. Israeli psychiatrists have noted such a phenomenon during the Eichmann trial and the Six Day War of 1967 (Klein *et al.*). While this is not to be dismissed altogether, must we not admit that there are few of us who, never having been in anything approximating the concentration camp, could not conceivably break down, given the appropriate trigger? The fact of the matter is that many of our survivor respondents who went through the DP camps, illegal immigration to Palestine and/or living in transit camps, the wars of 1948, 1956 and 1967, the Eichmann trial and the other difficulties of Israeli life have not only not broken down but seem to function well and are capable of deriving (and giving) pleasure in life.

The second objection which might be raised refers to the nature of survey data. Most of our measures were gathered in an interview which made no attempt to go very far beyond the surface of things. We would not, however, dismiss so easily the clear evidence that many of the survivors function well on the everyday, overt level. Moreover, the fact is that the interview did elicit data which enabled us to classify many women as maladapted. Further, the medical examinations are clearly of a more objective nature. Finally, we would call attention to the results of the psychiatric examinations. It will be recalled that the final stage of the field work consisted of psychiatric interviews with selected subgroups. Using a combination of menopausal symptom scores and of responses to some of the "well-being" items from the interview data, two groups of women were identified as being most "well-adjusted" and most "poorly-adjusted." Women who were found on the medical examinations to have any serious medical condition were excluded. (Women who had not come to be examined were not considered.) The 27 women in each of these two extremes were invited to come for "an additional session with the doctor to discuss the problems of women in middle age." Though the survivors constituted 23 percent of all the Central European women who were examined by physicians in the general examination, they were only 15 percent of the "well-adapted" and were 41 percent of the "poorly-adapted" invited to the psychiatric examination. Thus, as was expected, the camp survivors were overrepresented among the poorly-adjusted and underrepresented among the well-adjusted.

When we consider the results of the psychiatric examinations, however, we come across an interesting finding. On the basis of the psychiatric protocol, one of us (B. M.) summarized the examination by classifying each woman as being with or without manifest pathology. In the poorly-adjusted group, 3 of the 6 examined women who had been in concentration camps manifested pathology; of the 13 examined women who had not been in camps, 10 manifested pathology. It is true that five of the survivors and three of the controls who were invited did not come for examination. But even if one assumes that all five would have been recorded as showing pathology and that none of the three would have been so recorded, the difference is not very great. The same pattern is shown among the well-adjusted women. Three of the four survivors who were examined (all those invited came) were recorded as without pathology; 14 of the 20 controls examined were so recorded (70 percent).

The problem, then, that we pose is: what has enabled some women, subjected to the most destructive experiences conceivable, to lead well-adapted lives? It is not our purpose, within the space of this paper, to do more than raise the question and very tentatively suggest a few possible answers.

In the aforementioned study by Shuval, one relevant notion—the "hardening" hypothesis—is proposed. Her study dealt with immigrants to Israel, residing at the time (1950) in transit camps. Not surprisingly, she found that the survivors were less optimistic than control respondents who had not been in concentration camps. But she also found support for her second hypothesis, which stated that survivors would be "less sensitive to current situations of strain than are persons who were not interned in concentration camps." This hypothesis was tested in an ingenious manner. A measure of optimism was used as the dependent variable. She compared the percentage of optimists in four groups: survivors subjected to a given current stress and survivors not so subjected; controls subjected and not subjected. The difference between the two survivor groups was significantly smaller than the difference between the two control groups. This comparison was made with reference to four different types of stress, with consistent results. Her explanatory argument is:

> ... while persons who did not experience the Nazi concentration camp would be sensitive to new strain and react to it in one manner or another, concentration-camp survivors would be less sensitive to the same new strain and, although their reaction might be qualitatively similar, it would be less extreme. We are not proposing that the camp trauma *immunized* its survivors to strain, but merely that it *"hardened"* them.

We do not mean to suggest that "hardened" people are happy people, nor that "hardening" erases the memory of the concentration camp. But it does seem relevant to the capacity to resist new stress and to maintain a meaningful, and even satisfying, level of adequate functioning.

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[4] It may be noted that Luchterhand reported, in his study of 52 camp survivors using intensive interviewing methods, that "Most of them seemed to be making a rather satisfactory adjustment to post-camp life". Similarly, Klein *et al.* write "... from everday experience it is evident that many individuals who have undergone oppressive experience function apparently well and fulfill important tasks".

Analysis of the psychiatric interviews, which were not intended to explore the sequelae of the concentration camp experience, provided no clear suggestions relevant to our problem. Consideration of the survey material, however, does raise one possibility which would merit systematic testing. We would propose that the focus on "regenerative powers of the ego", understood in limited fashion, may blind us to the significance of the interaction between the ego and the social environment. Perhaps our point can best be understood by considering the case of one of our respondents [5].

Mrs. R. was born in Austria in 1921, the second of two daughters. Her parents were traditional Jews. Her father was a well-to-do shopkeeper. She had partial secondary schooling. She and her sister managed to survive Auschwitz. In 1948 she migrated to Israel, where she worked at a skill she had acquired until her marriage at the age of 32. Her husband has a secure, middle-level administrative position. Originally from Austria too, he had migrated to Palestine before the war.

Her son was born in the second year of marriage. When, shortly thereafter, she again became pregnant, she had an abortion, since their economic position was poor. She had no children thereafter, though she now regrets it.

She feels very much needed by her son, particularly in providing help in his studies. While she feels that her husband has treated her no better and no worse than most husbands treat their wives, her ties to him are strong. She feels she needs him and that he needs her, stressing the affective component in their relationship. Their sexual relations, she reports, have always been very satisfying for both. She also feels very needed by her sister, whom she sees often, "for she has no children, and I feel very close to her; I have no more than this one sister." Her housework keeps her busy, though not so much as to prevent good relations with friends and neighbors. Despite her worries about her son, "who has not been feeling well lately", she never feels she has nothing to do, and is, by and large, in quite a good mood.

We see in the case of Mrs. R. the story of a woman who, having survived years of horror, came to a country which she could regard as her own, which welcomed her, though it gave no higher priority to her than to the many thousands of immigrants who came at the same time. Moreover, she was far from being alone in her past. In these two senses, survivors who came to Israel may have had advantages not available to survivors who went elsewhere. Within this general context, the social structure made possible, over the years, entry into meaningful and respectable social roles. Others came to need her, and she came to need others. Whatever the source of the ego strength which enabled her to express her needs and to respond to the needs of others, the fact remains that she was called upon to do so by the environment in which she lived. One further point which may be noted in this context is the finding that more of the survivors than of the controls were religious [6].

Calling attention to the post-camp possibilities and requirements posed by the social structure in which the survivor lived compels us to at least raise what may be the most profound determinant of successful adjustment: the underlying strengths and weaknesses of the person which existed prior to internment. There is no doubt that sheer chance played a major role in determining who would and who would not survive the concentration camp. Nonetheless, it may be posited that even among those who by some stroke of luck had the chance to survive, it was primarily the hardiest, both physically and psychically, who did survive. These fortunate few, provided with a strong constitution, growing up in a stable, satisfying home environment, were able to develop strong defense mechanisms which were not shattered by the camps, despite the suffering, and which subsequently allowed them to adapt well. On the other hand, women born with a weak constitution, who spent their early years in a difficult home environment, both in terms of physical conditions and emotional deprivation, though by chance they survived the concentration camp, continued to pay a price in suffering and maladaptation. The former type of woman was subsequently able to utilize the potential the Israeli environment offered; the latter, much less so.

We have, then, suggested three complementary explanations of the fact of the successful adaptation of a not-inconsiderable number of concentration camp survivors: an initial underlying strength, an environment which provided opportunities to re-establish a satisfying and meaningful existence, and a "hardening" process which allows the survivor to view current stresses with some equanimity. We are, of course, aware of the fact that we have hardly begun to explain a mystery which has received so little attention and which merits no less attention than explanations of the breakdowns of survivors. Some of our data, particularly from the psychiatric interviews, have led us to propose these explanations. They are, however, obviously in need of considerable systematic research.

Acknowledgements. The larger study from which the material presented here was taken was made possible by a grant from the U.S. National Institute of Mental Health (P.L. 480 Agreement No. 06-276-2).

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[5] Various details have, of course, been changed so as to make identification impossible.

[6] For a full discussion of the question of resistance resources provided by the social environment, see Antonovsky.

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Suicide Following Bereavement of Parents

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Summary. 1. A consecutive series of 75 suicides was compared with 150 living comparison cases equivalent in age group, sex, single marital status and area of residence. 2. Similar proportions of parents of suicides and controls survived to enter the final quinquennium before suicide. 3. Within this quinquennium, significantly more suicides than controls were bereaved of either parent, and of their mothers. 4. The three years before suicide showed the greatest excess of maternal bereavement among suicides. 5. Almost 60% of the bereaved suicides showed a predisposition to mental illness before their bereavement: they had psychiatric treatment, attempted suicide or had a positive family history. 41% received psychiatric treatment after they were bereaved and before killing themselves. 6. Male suicides had significantly more maternal bereavement than male controls; female suicides did not differ significantly from controls. 7. Single suicides were significantly more often bereaved of a mother than single controls; currently married suicides and controls did not differ significantly. 8. Unmarried sons recently bereaved of a mother appeared a vulnerable group for suicide.

Résumé. 1. Un groupe de 75 cas consécutifs de suicide a été comparé à 150 cas de contrôle en vie et correspondant quant à l'âge, au sexe, à l'état civil et au lieu de résidence. 2. Les parents des suicidés et des cas contrôle vivaient encore dans la même proportion avant la période de 5 ans précédant le suicide. 3. Pendant cette période de 5 ans, il y avait significativement plus de suicidés que de cas contrôle qui avaient perdu l'un de leurs parents, et surtout leur mère. 4. C'est dans les 3 ans précédant le suicide qu'on a relevé le plus de pertes de la mère parmi les suicidés. 5. Presque 60% des suicidés orphelins montraient une prédisposition à la maladie mentale avant leur deuil: ils avaient reçu un traitement psychiatrique, avaient tenté de se suicider ou avaient des antécédents pathologiques dans la famille. 41% avaient reçu un traitement psychiatrique après leur deuil et avant de se suicider. 6. Les suicidés de sexe masculin avaient, de façon significative, plus fréquemment perdu leur mère que les cas contrôle hommes; entre les cas de suicide féminins et les cas contrôle femmes, il n'y avait pas de différence significative à ce point de vue. 7. Les suicidés célibataires avaient, de façon significative, plus fréquemment perdu leur mère que les cas contrôle célibataires; les suicidés mariés ne différaient pas significativement, sur ce point, des cas contrôle correspondants. 8. Les fils célibataires ayant récemment perdu leur mère semblent donc constituer un groupe vulnérable pour ce qui est du suicide.

Zusammenfassung. 1. 75 sich nacheinander ereignende Fälle von Selbstmorden wurden mit 150 lebenden Kontrollfällen verglichen, die der Untersuchungsgruppe im Alter, im Geschlecht, im Familienstand und im Wohngebiet entsprachen. 2. Proportionsmäßig gleich viel Eltern von Suicidenten und Kontrollfällen waren in den letzten fünf Jahren vor den Suiciden am Leben. 3. Innerhalb dieses fünfjährigen Zeitraums verloren signifikant mehr Suicidenten als Kontrollfälle einen Elternteil und mehr Suicidenten als Kontrollfälle ihre Mütter. 4. In die drei Jahre vor dem Suicid fiel bei den Suicidenten am meisten der Tod der Mutter. 5. Fast 60% der Suicidenten, die einen Elternteil verloren hatten, zeigte vor ihrem Verlust eine Disposition zu seelischer Krankheit: sie erhielten psychiatrische Behandlung, begingen einen Selbstmordversuch oder zeigten Auffälligkeiten in ihrer Familiengeschichte. 41% erhielten psychiatrische Behandlung, nachdem sie durch den Tod einen Verlust erlitten hatten und bevor sie sich selbst töteten. 6. Männliche Suicidenten hatten signifikant häufiger ihre Mutter verloren als die männlichen Kontrollfälle; weibliche Suicidenten unterschieden sich nicht signifikant von den Kontrollfällen. 7. Unverheiratete Suicidenten verloren signifikant häufiger ihre Mutter als unverheiratete Kontrollfälle; gegenwärtig verheiratete Suicidenten und Kontrollfälle unterschieden sich nicht signifikant. 8. Unverheiratete Söhne, die kürzlich ihre Mutter verloren hatten, erschienen als eine besondere Risikogruppe für Suicid.

The effects of a recent bereavement of a close relative or friend have received much attention since Lindemann (1944) studied reactions of persons suddenly bereaved in the Cocoanut Grove fire disaster. Studies of normal people, such as those of Marris (1958) and Clayton (1967) have generally found a period of great disturbance (depression, anxiety, loss of interest, illusions of the dead person), succeeded by a calmer acceptance of loss after about six to ten weeks. However, studies of mentally ill patients have suggested that the after effects of grief due to bereavements may be prolonged and intractable (Parkes, 1965; Wretmark, 1959). Several studies have found an association between recent bereavement of spouse and of parents and onset of mental illness (Stein and Susser, 1969; Parkes, 1964; Birtchnell, 1970).

Systematic studies of suicide in relation to recent bereavement of parents are lacking. However, the risk of suicide has been shown to increase in the 4 years following bereavement of a spouse (McMahon, 1965). Since the majority of suicides appear to be suffering from recognisable psychiatric illness, mostly depressive, it is likely that findings drawn from