

Israelis in the Gulf War in the light of a longitudinal analysis of morale[†]#

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Abstract: Distinction is made between three varieties of morale: cognitive, affective and instrumental. These three varieties have been systematically studied in Israel since 1967 by the Israel Institute of Applied Social Research. The population studied is Jewish adults residing in all localities of Israel (excluding kibbutzim). Israelis' behavior during the Gulf War is tested on the basis of the longitudinal analysis of varieties of morale. The Gulf War is characterized by increased optimism in the cognitive-perceptual mode and in the affective mode (mood), along with a decline in coping ability. This coping problem is analyzed and discussed. The Gulf War did not produce any long-term changes in mood or coping ability, but has evoked a long-term cognitive impact by raising Israelis' awareness of the vulnerability of the home front.

Key words: morale, coping behavior, stress, longitudinal studies, Gulf War, Israel

Izraelci v Zalivski vojni: longitudinalna analiza morale

Povzetek: Prispevek loči med tremi vrstami morale: kognitivno, afektivno in instrumentalno. Te tri vrste je v Izraelu sistematično preučeval Izraelski inštitut aplikativnega socialnega raziskovanja. Preučevana populacija so bili odrasli Židi, živeči na različnih območjih Izraela (razen kibuci). Vedenje Izraelcev med zalivsko vojno je bilo preučevano v longitudinalni analizi vrst morale. Zalivsko vojno je zaznamoval povečan optimizem v kognitivno-zaznavni modalnosti in afektivni modalnosti (razpoloženju) ter znižanje sposobnosti spoprijemanja s stresom. Prispevek analizira problem spoprijemanja s stresom in razpravlja o njem. Zalivska vojna ni povzročila dolgoročnih sprememb razpoloženja ali spoprijemanja, je pa imela dolgoročne kognitivne posledice, saj se je poglobilo zavedanje Izraelcev o ranljivosti domačega praga.

Ključne besede: morala, spoprijemanje, stres, longitudinalne študije, zalivska vojna, Izrael

CC = 3120

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[†] This paper is dedicated to the memory of the late Louis Guttman. The present study sheds additional light on research conducted by the Morale Division of the United States Army in World War II, in which Guttman participated as expert consultant; it also provides a continuation of Guttman's studies of the Hagana (the underground army of the pre-State Jewish population) and the Israel Defence Forces, as well as our joint work among the civilian population in Israel.

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Stress as a social phenomenon in Israel

Stressful events are an inseparable part of every human being's life. Only a few of these events are addressed by society's provision of support to help individuals cope with the resultant distress.

Israel is often depicted as a country that lives under stress. Indeed, since its establishment, the State of Israel has experienced stressful circumstances in a variety of areas: security (wars, an ongoing state of war, terrorist activities, and so on); economic (high inflation, unemployment, etc.); and social (immigrant absorption, inter-group conflicts, etc.). If we add to these stressful circumstances the fact that Israel is a small country, in which stressful events tend to have a personal impact, stress can be viewed as a *social phenomenon*.

The most salient of the stressful conditions that affect Israel is no doubt the country's continuing state of war with its Arab neighbors, with actual warfare breaking out every few years since the 1948 war of independence (1956, 1967, 1973, 1982). In December 1987 a new aspect was added to the country's special security situation in the form of the ongoing civil uprising (the "intifada") in the territories occupied by Israel since the Six Day War. The hostile activities of the intifada abated temporarily in early 1991 in the wake of the Gulf War which however raised the problem of the home front's vulnerability in all its acuteness. Because Israel was not a combatant in this war, its army did not fight, but Israeli homes were turned into a "front" by being targeted by Iraqi missiles.

As is always the case in times of national security crisis, also in the Gulf War the question that was immediately asked was, "What happened to Israeli society?". How did it react and how did it cope? Or in other words, what was the "morale" of the Israelis? And as usual, the press was full of stories about breakdowns, fears and so on, many of which were based on the opinions and views of various "experts", usually insufficiently substantiated and totally ignoring the possible positive effects of stressful situations (Brenzitz, 1983a). One such positive aspect, for example, is the unifying power resulting from an external threat. Such phenomena have been found on numerous occasions, both in Israel (Guttman & Levy, 1974; Kamen, 1971; Stone, 1982) and elsewhere (Baker & Chapman, 1962). Another positive effect is a re-evaluation of the situation, which may lead to a more realistic—albeit more painful—view of it. A good example of this is the drastic decline which occurred following the 1973 Yom Kippur War in Israelis' positive perception of the country's situation, a view that has scarcely changed since then (Brenzitz, 1983b; Levy, 1989). The ability to cope is likely to be a healthier phenomenon when it is based on a hard-nosed view of reality, however painful (Brenzitz, 1983b, Guttman & Levy, 1983). Hence, the public's adjustive behavior (or "morale") must be viewed—and discussed—as a multivariate system.

The present article examines the Israeli population's adjustive behavior during the Gulf War. It adopts a comparative perspective with respect to varieties of morale

and other adjustive behaviors in earlier periods, relating to times of relative tranquility and relative stress. The possible long-term impact of the Gulf War on Israelis' behavior will also be discussed.

Morale as a Multivariate Concept

Morale can be said to be the ability to hold fast in the face of difficult and problematic situations, albeit holding fast can be achieved in many ways. In World War II, the US Army's Morale Division, for example, studied various aspects of personal adjustment, ranging from complaints about food to willingness to fight the enemy. While it has been acknowledged that such varieties of behavior constitute different kinds of morale, no formal definition for "morale" emerged, even in the post-war volumes published on this work. Rather, the reference to morale in the American study encompassed a universe of adjustive behaviors (Stouffer, Suchman, DeVinney, Star, & Williams, 1949, pp. 84–85). The same approach was taken by researchers who studied civilian morale in the United States and referred to "components" of morale (e.g., Harding, 1944). The multivariate nature of morale also provides the basis for the study that was developed in the framework of the Continuing Survey of the civilian population of Israel, out of recognition that a proper perspective of such an issue requires a distinction of to at least three varieties of behavior: cognitive, affective, and instrumental. This threefold classification comprises the classical trio for classifying behavior. See for example the classification of "stress reaction" (Levi, 1985, p. 17) and of "adjustive behavior" (Levy & Guttman, 1989), of which the morale items discussed here are an inseparable part. Three morale items—one from each kind of behavior—were systematically monitored in Israel starting 1967 by the Continuing Survey of the Guttman Institute of Applied Social Research. They were asked repeatedly in almost all the surveys carried out (about 300) until the Institute closed in 1996.

The *cognitive* modality is studied here by means of a general appraisal concerning Israel's general situation. The wording is as follows: "In your opinion, what is Israel's general situation today?" (Possible answers: very good; good; not so good; not good; not good at all). This question was first asked in the summer of 1973, a few months before the outbreak of the Yom Kippur War in October of that year.

The *affective* item relates to mood as formulated in the American army and in the Israeli army questionnaires. In spite of the popular view, mood is not the equivalent of morale, but is just one component of it, namely, the affective component. The question about mood was first asked on the eve of the Six Day War in June 1967 (the first time the survey was carried out) phrased as follows: "How is your mood these days?" (Possible answers: good all or almost all of the time; good most of the time; sometimes good and sometimes not good; not good most of the time; not good almost all the time).

The *instrumental* variety of morale—the ability to cope—has been studied systematically since mid-December 1973 by means of the question: “Do you think you can adjust to the present situation?” (Possible answers: I can definitely adjust; I think I can adjust; I think I cannot adjust; I definitely cannot adjust).

The wording of these questions makes no reference to events. This allows for a systematic study of the public’s reactions in stressful periods as well as in periods of relative calm. In his discussion of the “self-reporting” technique, Singer (1986) emphasizes that only through precise replication (by using identically worded questions over time) can cumulative knowledge be acquired about behavior in stressful situations. As long ago as the early 1940s Cantril determined the power of such time series to lead to generalizations and lawfulness, based on analyses of time series spanning a two-year period only (Cantril, 1944, pp. 226–230).

Samples and field work

The current analysis is made possible by the rich data accumulated over the years in the framework of the Continuing Survey conducted by the Guttman Institute of Applied Social Research. In the Continuing Survey, the Israeli public was asked systematically about a wide range of topics, including the varieties of morale discussed above, as part of the search on social problem indicators (Guttman, 1971).

The population studied is the Jewish adult population (20 years of age and over) residing in Israel’s major cities. In the late 1970s the surveys were broadened to include the adult Jewish population throughout the country (excluding kibbutzim). It should be noted that the urban samples give as adequate a picture of the Jewish population as the national samples, since there are only minor differences, if any, between national and urban samples for these issues.

The samples were selected systematically to guarantee proper representation of the population investigated. In the first stage localities were sampled from the list of localities using the system applied by Israel’s Central Bureau of Statistics. Of these localities, households (apartments) were sampled from election rosters and, within the households, sampling was done by the Kish method (Kish, 1967, pp. 396–401).

In June 1967, during and after the Six-Day War, three surveys were carried out. After a few months interval, beginning in February 1968 and up to the Yom Kippur War (October 1973), the survey was carried out three times a year on samples of over 1,500 respondents per survey. During October 1973, the surveys were conducted on a daily basis, among samples of 500 respondents each. As of November 1973 through the end of 1980, the continuing survey was carried out every two or three weeks. From 1981 onwards the survey was carried out at somewhat longer intervals.

Each time the study was run, all respondents were interviewed in their homes by one of the Institute's interviewers, all of whom were specially trained for the assignment and supervised by a field work coordinator.

Immediately after the first Scud missile attack on Israel, in January 1991, and up to the end of the Gulf War (end of February 1991), the Institute continued investigating the public's reactions by telephone interviews. The telephone sample was based on the same principles as the national (or urban) sample for face-to-face interviews, with the difference that the source of sampling was the telephone directory. Only households were sampled (excluding businesses, industrial plants, offices, etc.), and the respondent was selected from within the household. The telephone sample was similar to the face-to-face sample. From January 20, 1991, to the beginning of February, between 120 and 250 respondents (constituting a representative sample of the adult Jewish population of Israel) were interviewed practically every day. In February, three surveys were conducted: at the beginning of the month, on February 11–14, and on February 20 and 24. From May 1991 onwards the surveys resumed their regular form.

Determining “Normal” Morale Behavior in Light of the Time Series

In order to be able to examine Israelis' ability to hold fast during the Gulf War on the basis of a comparison with earlier periods, I shall start with an analysis of changes over time in civilian morale, viewed in terms of the three varieties of morale discussed above, and then additional behaviors will be discussed.

Figure 1 presents the time series of the three varieties of morale over a 29 year-period, from the Six Day War (June 1967) through the beginning of 1996. The figure indicates the actual percentage of respondents replying positively to each of the items, without any corrections, thus presenting a rare empirical picture which shows the deviations from sample to sample. It is well known that interviewing problems (both for the face-to-face and telephone interviews) sometimes cause a slight bias in sampling certain population strata, especially among the ultra-religious and low socio-economic sectors. For these reasons percentages should be regarded with a certain amount of caution. Fluctuations of 3-4 percent can occur simply for such technical reasons. Hence it is important to study the trends shown by the curves rather than the small details represented in them (Guttman, 1977). This is also the reason why in the present analysis of trends, as in the past (Guttman & Levy, 1983 ; Stone, 1982), reference is generally made to a “range” of percentages, rather than to a “precise” percentage, in determining the closest estimate for a particular behavior (such as a “positive” mood level).

In addition to notable changes following outstanding events, clear-cut trends should stand out, despite the technical problems of interviewing: a constant bias will

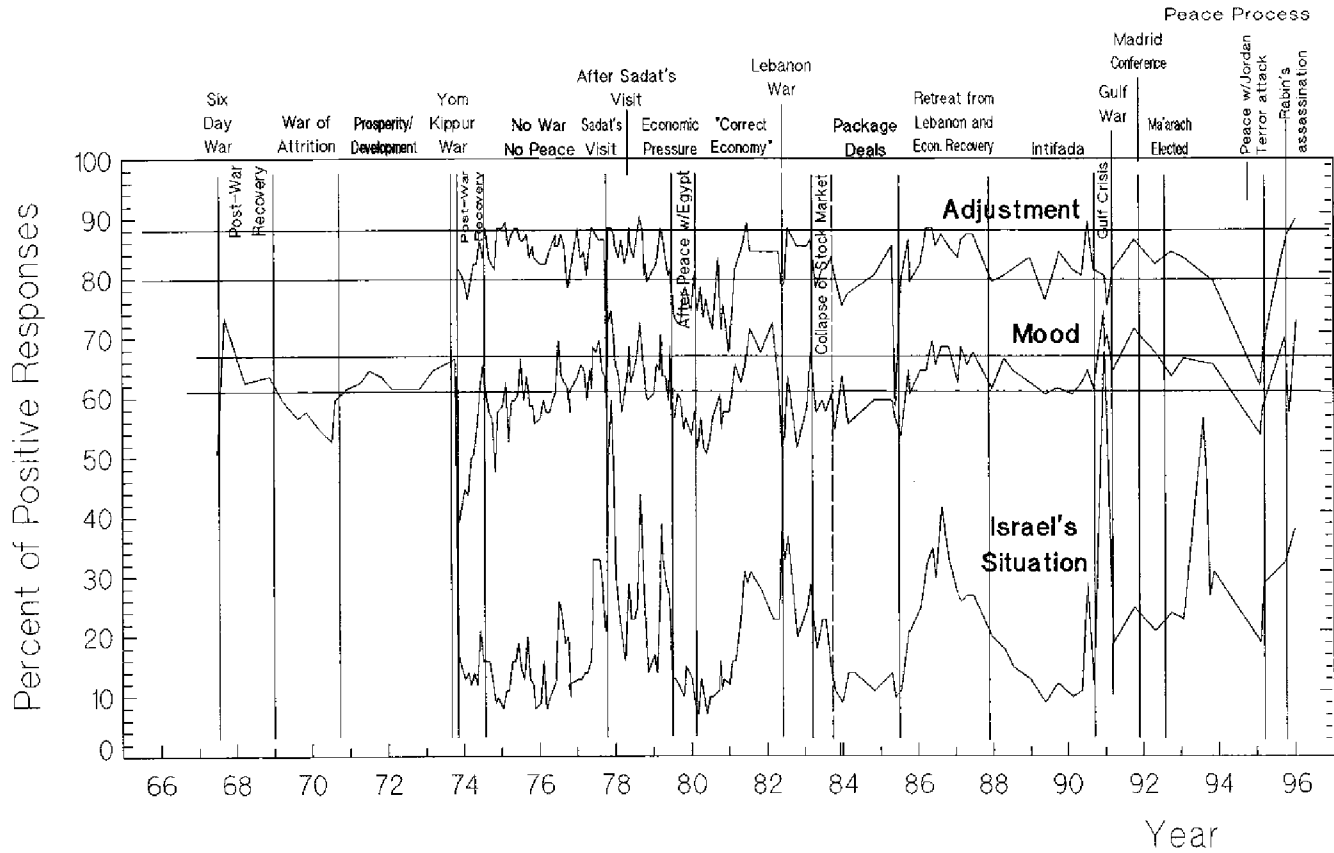


Figure 1. Changes over time in three varieties of morale: mood, adjustment and assesment of the situation of Israel: 1967 - 1996.

have no effect on the shape of a trend, and accumulating samples over time, amounting to tens of thousands of interviews, greatly reduces sampling deviation not related to bias. In order to facilitate observation, Figure 1 is divided into time periods in accordance with major events. A time series for the same varieties of morale for the years 1967–1979 can be found in Stone (1982) and in Guttman & Levy (1983), and for the years 1977–87 in Levy (1989).

One of the theoretical problems with such time series is the feasibility of determining a “positive” or “normal” level of morale for each of the variables examined (Guttman & Levy, 1983). In respect of “positivity,” a cut-off point can be determined between “good” and “bad” mood for each separate point in time, using a rather complicated analysis called “principal components of attitudes” (Guttman, 1954; Levy, 1978); but generally speaking this cannot be done constantly. A time series such as the one presented in Figure 1 makes it possible to see changes occurring over time for each behavior studied, which means that relative changes in the context of events or processes provide an adequate indicator.

If “normal” is taken to mean the percentage of positive answers characteristic of periods which are relatively calm in security and economic terms, then two of the three varieties of morale—mood (the affective aspect) and adjustment (the instrumental aspect)—have a base percentage for this. In the periods of relative tranquility in the course of the twenty-nine years—for example, the period of prosperity and development between the end of the War of Attrition (end of 1970) and the outbreak of the Yom Kippur War (October 1973)—about 60% to 67% of Israelis reported a “positive” mood.¹ The base percentage for assessing ability to adjust is higher—around 80%, ranging between 80% and 87% throughout almost the entire period and not just in periods of relative calm. This difference in percentages apparently reflects the relative importance of these two variables for survival. One cannot survive without the ability to cope, but one can cope despite a bad mood. In other words, a bad mood by itself does not necessarily indicate low morale.

Both these variables are of a personal nature, and each may perhaps serve as a universal baseline for individual survival. It would be desirable to examine other societies as well on these questions in order to learn whether this pattern is cross-culturally maintained, and what are the respective levels of “normality”.

The overall assessment of Israel’s situation differs not only in terms of mode (cognitive) from the two other variables, but also in terms of reference group. This assessment relates to the individual’s secondary environment (the State), and not to the individual. Thus it is not likely for there to be any “normal” baseline for assessing the individual’s environment.

¹ Support for this level of positivity can be found in studies conducted in the American army during World War II, where 61% of the GIs behind the front lines reported good mood (Stouffer et al., Vol. 1:89), as well as in research conducted on the Israeli forces during 1948–49, where the level of positivity was examined by means of principal components.

Changes in Varieties of Morale from June 1967 to the Gulf War

Following are briefly presented the main trends in the varieties of morale in order to facilitate an understanding of the Gulf War in Israel. A more detailed analysis of the time series can be found in earlier publications (Guttman & Levy, 1983; Levy, 1989; Stone, 1982). The most striking phenomenon shown in Figure 1 is that personal adjustment is always higher than mood, and general appraisal of the country's situation is the lowest of all—irrespective of events and regardless of any changes in these varieties.

Ability to adjust is high for most of the time and has undergone hardly any changes over the studied decades, apart from a period of about 18 months—from mid 1979 to the end of 1980—when adjustment fell to slightly below the “normal”, whereas both mood and general appraisal of Israel's situation show greater sensitivity to events. In the aftermath of the Yom Kippur War, as Israelis digested the significance of events, there was a dramatic decline in both mood and the assessment of Israel's situation. However, whereas mood returned to its “normal” level within six months, public appraisal of the country's situation was never restored to its former level, apart from during a period spanning a few days at the end of November 1977, when the president of Egypt, Sadat, visited Jerusalem, and also, as we shall see later, for a short time during the Gulf War. Thus, over the twenty nine years under study, there have been a considerable number of periods characterized by highly stable levels of adjustment, and by relatively “normal” mood, in spite of a very grave assessment of Israel's situation (when at most 10% – 15% of the population assessed the situation positively). This phenomenon is apparent, for example, between 1974 and late 1977 (end of the Yom Kippur War to Sadat's visit), and was particularly noticeable during the intifada. While the general appraisal of Israel's situation fell to an all-time low during the period of the intifada—between December 1987 and the outbreak of the Gulf War—hardly any change occurred in mood and adjustment, which remained within the range of “normal”.

These findings suggest that individuals apparently engage in life routines and behave “normally” also during periods that they perceive as difficult. It seems that life routines that are established—in life domains such as family, work, leisure, studies and so on—enable people to lead “normal” lives, even under “ongoing conflict” and “dangerous” circumstances without constantly thinking about “the situation”, but at the same time not ignoring its seriousness. Perhaps this answers the often posed question, “How is it possible to live so long under threat?” Clearly, the reference here is to a social phenomenon involving society as a whole, and not to individuals within that society who may react in different ways. Since complete correlation between the phenomena does not exist, there will always be individuals who react differently from the societal “norm”. This is obviously due to other stresses affecting the individual which are not necessarily related to general stressful events.

As mentioned above, adjustment level is by and large high and stable, irrespective of events. This further corroborates earlier findings (Guttman & Levy, 1983). However, a systematic drop was recorded during an 18-month period stretching from the second half of 1979 to January 1981 during which the ability to adjust fell to below “normal”—as low as 68%. A similar drop also occurred during this period in both mood and the general appraisal of Israel’s situation, which fell to one of its all-time lows (around 10% positive). Apart from a few isolated acts of terrorism, this period was on the whole one of relative calm in terms of security, whereas the economy experienced unrest, with drastic price increases, a rise in inflation, deterioration in labor relations and a stringent belt-tightening economic policy. This policy followed a relative economic liberalization introduced at the end of 1977. In January 1981, in the wake of a new liberal economic policy known as the “correct economy” approach, both ability to adjust and mood returned to their “normal” levels, accompanied by moderate fluctuations. Assessment of Israel’s situation also rose from its all-time low, and reverted to its usual volatile nature resulting from a relatively negative appraisal of the situation. It is likely that the rise in mood and in the general appraisal of Israel’s situation during the first half of 1981 are linked not only to the turnabout in economic policy, but also to other events, such as the destruction of Iraq’s nuclear reactor at the beginning of June, and also the establishment of the newly elected government—events which do not usually affect personal ability to adjust.

Of the three varieties of morale, the individual’s assessment of his or her ability to adjust comes closest to the popular conception of morale, in the sense of the ability to hold fast. As can be seen from Figure 1, major events (such as wars, terrorist attacks, etc.) that trigger drastic changes in the other varieties of morale, had hardly any effect on ability to adjust, which remained stable (see also Guttman & Levy, 1983). However, a sense of prolonged economic pressure does have a moderate, albeit systematic, effect on coping. It should be noted that economic unrest did not end at the beginning of 1981: rather, the new liberal policy simply made the public feel “good” (Levy, 1989). In other words, a different handling of a similar situation gave rise to a different adjustive response.

It can perhaps be hypothesized that a central reason why prolonged economic pressure reduces the ability to adjust to below its “normal” level lies in the issue of social support. Society has developed social support mechanisms to deal with situations involving external threats to security, major disasters, and loss of life. During World War II (Stouffer et al., 1949) and also in the Israel Defense Forces (e.g., Steiner & Neumann, 1981), it was shown that solidarity and a sense of support within army units helped soldiers cope and contributed to their morale. Such mechanisms are apparently lacking in other stressful situations (e.g. prolonged economic pressure), when people feel alone, abandoned and lacking appropriate support. Thus in stressful situations in which society cannot provide support for the individual and the public, ability to adjust declines.

Varieties of Morale during the Gulf War: A Comparative Analysis

Adjustive behavior patterns during the Gulf War are examined in the light of the general trends revealed by the longitudinal analysis of varieties of morale. We shall begin with mood, which has been studied longest, starting from the eve of the Six Day War (June, 1967) to the end of the period under study.

Inspection of the time series shows that the actual outbreak of war brings mood to a similar, relatively low level (52% positive). Such was the case in the Six Day War, the Yom Kippur War (October, 1973), and the Lebanon War in June 1982 (Levy, 1989). Changes in mood during and after wars depend on the public's perception of how the war is going or has gone (Guttman & Levy, 1974, 1983).

The lowest mood (only 36% positive) ever recorded in the Continuing Survey was after the Yom Kippur War, on November 7, 1973, the date designated as a mourning day for the fallen. As already mentioned, not until six months later did the country's mood gradually return to its "normal" level. On the other hand, in the wake of the Six Day War, mood continued to rise and reached a high of 74% positive about two weeks after the war. In contrast to earlier wars, the Lebanon War did not push or pull mood to any highs or lows; the relatively low mood (52%) at the beginning of the war remained invariant for about two months, and in August 1982 returned to its normal level. This was a controversial war and was perceived differently from its predecessors. It was definitely not regarded as a war for "survival" (for details see Levy, 1989).

The Gulf War too was different in that it was not an Israeli war and hence no army combat operations were involved. The Israeli home front sustained damage

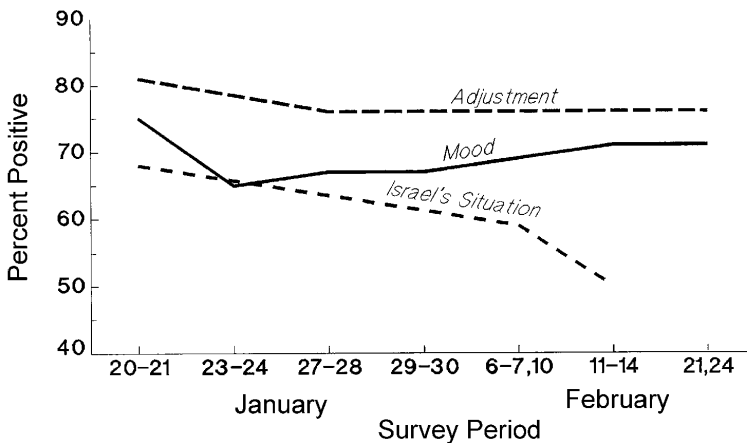


Figure 1a. Varieties of morale in the 1991 Gulf war: mood, adjustment and assesment of the situation of Israel.

and in fact became the front line, with the Israeli public being under siege. To clarify the discussion, Figure 1a provides details of the changes that occurred during the Gulf War in the three varieties of morale. Figure 1a is in fact an enlargement of the area entitled "Gulf War" in Figure 1.

It is quite possible that, prior to the outbreak of the Gulf War, as Israelis faced the unknown with respect to whether war would indeed erupt, there was, as usual under such circumstances, a drop in mood level (Guttman & Levy, 1983). We do not have data of our own to confirm this, since no surveys were conducted in the days prior to the outbreak of war. The first data available to us date from January 20–21, 1991, after the first two nights of Iraqi missile attacks on Israel. As we see from Figures 1 and 1a, with the outbreak of war, mood rose to 75% positive. It dropped slightly immediately afterwards, and remained somewhat higher than usual (67%–71% positive) throughout the war. This level was common to all residential areas, i.e. mood was elevated both in areas that were attacked and in those that were spared.

A similar phenomenon was observed in Jerusalem among the members of the Hagana (the underground army of the pre-State Jewish population) in 1947–48, as reported in a study published on the work of the Research Unit of the Jerusalem District of the Hagana Information Unit (June 1948). Louis Guttman, in his lecture to a symposium on "Life in the Shadow of Danger" (October 26, 1978), held at the Ray D. Wolff Psychological Stress Center, referred to this study as follows: "The more serious the situation, the higher the spirits" (see also Limor, 1975). Both Jerusalem in 1948 and the Israeli home front during the Gulf War were "under siege", a situation which brought about an elevated mood. This is apparently characteristic of such situations, expressing hope and mental strength.

This mental strength is also reflected in the public's response to the question, "Are you ever bothered by nervousness?" This question best differentiates between neurotic and non-neurotic individuals, and was more helpful than a whole battery of questions pertaining to psychosomatic complaints in World War II as a screening tool to identify neurotic soldiers (Stouffer et al., 1949). In the continuing survey this question was first asked during the Six Day War in June 1967 and has since been asked on a limited number of occasions only (Table 1).

Table 1 shows that the percentage who reported "often" being bothered by nervousness during the Gulf War is similar to the percentage who gave this answer under routine conditions, and is even lower than that recorded during the Six Day War. Moreover, during the Gulf War, as with the Six Day War, the number of respondents who reported "never" being bothered by nervousness actually rose in all residential areas—both those attacked and those spared. A similar distribution of responses was obtained for the American Army during World War II (see Table 1, extreme right-hand column).

A phenomenon that tends to recur in wartime is the sharpening of differences between men and women in the personal varieties of morale (Guttman & Levy, 1983). During the Gulf War too, women's mood was found to be lower than men's,

Table 1. *Changes over time in feeling nervousness (in percent).*

Answer ^a	4-6 June 1967	11-16 June 1967	11-18 December 1977 (Sadat)	May 1982	October 1983	20-21 January 1991	23-24 January 1991	11-14 February 1991	21, 24 February 1991	U.S. army W.W.II ^b
Yes, often	28	29	22	15	16	19	18	14	17	17
Yes, sometimes	45	44	62	63	69	50	51	42	45	48
No, never	28	27	15	22	15	31	31	44	38	35
Total %	100	100	100	100	100	100	100	100	100	100

^aThe question was: "Are you ever bothered by nervousness?"

^bFrom: Stouffer, S., et al. (Eds.), 1950, *Studies in Social Psychology in World War II, Vol. IV: Measurement and Prediction*: 536.

and they also complained more of nervousness. Such gender-related differences are much less pronounced in times of relative calm (Guttman and Levy, 1983). In contrast, during the Gulf War no change occurred in the weak correlation between mood and age. In the Gulf War, as in other periods, the mood of young people was found to be slightly better than that of older people. However, further analysis of nervousness by age groups revealed that older people react relatively less nervously. Although this relationship is also relatively weak, it is evident that the most vulnerable age group is of those aged 30-39 (see Table 2). The relatively high sensitivity of this group probably resulted from its large numbers of parents with young children.

Despite these differences, the percentage of respondents who said they were "never bothered by nervousness" was higher—for all age groups—during the Gulf War than in relatively calm periods.

Generally speaking, in times of national crisis more people report that they feel good in various respects—a form of expression of solidarity with the national predicament. The same was observed in previous wars, when people were asked about a variety of "worries" (Guttman & Levy, 1974). This phenomenon in no way contradicts expressions of sorrow which are likely to be reflected in a drop in mood level because of casualties, as indeed happened during the Yom Kippur War, but not in the Gulf War. During the Gulf War, there was no problem of mood, as shown also by other studies (Gal, 1991), and by supplementary data (see below). Moreover, as de-

Table 2. *Bothered by nervousness by age (in percent), February 1991.*

Age	Often	Sometimes	Never	Total %
20-29	11	43	46	100
30-39	23 (26) ^a	43 (45) ^a	34 (29) ^a	100
40-49	12	41	47	100
50-64	11	41	48	100
65+	7	42	52	100

^a The numbers in parentheses refer to parents of children in grades 1-6, 63% of whom are in the 30-39 age group.

tailed in Figure 1, the slightly higher mood level remained stable until the end of 1991 (70% positive). As of 1992 mood returned to its “normal” level.

For a short while only, the Gulf War raised the general appraisal of Israel’s situation to a peak of 68% positive, similar to that reached on the eve of the Yom Kippur War (Summer 1973) and during Sadat’s visit to Israel in November, 1977. If we recall the “applause” that Israel received for its policy of restraint, and the sympathetic international response to the Israelis’ plight in a war not theirs, we can understand the feeling that a turn for the better was taking place, that there was hope that the world, at last, had a better understanding of Israel’s problems. Reality soon proved Israel’s residents wrong, and as early as mid-February 1991 positive assessments of Israel’s situation began to drop (Figure 1a), reaching a low in May of that year (only 19% positive: Figure 1).

The Gulf War was thus characterized by a sense of optimism in both personal feeling and the appraisal of Israel’s situation, phenomena which were no doubt related also to the small number of casualties sustained. Nevertheless, the situation was not an easy one. Israelis were haunted throughout the war by a sense of uncertainty related to the missile attacks—when and where the next Iraqi missiles would fall, the types of warheads they would carry, etc. This situation of uncertainty has been identified as a principal source of “fear” (Gal, 1991, p. 13). How then did Israelis adjust to the situation? After the first missile attacks, as in times of relative tranquility, 81% of respondents stated that they would be able to cope (“definite” and “think” that I will adjust). However, after the two devastating attacks on Ramat Gan on January 22 and 25, 1991, there was a slight drop in positive assessments (to 76%), a drop that remained constant up to the end of the war (Figure 1a). This drop in the ability to adjust—albeit slight—is below “normal” for this aspect of morale, which is usually

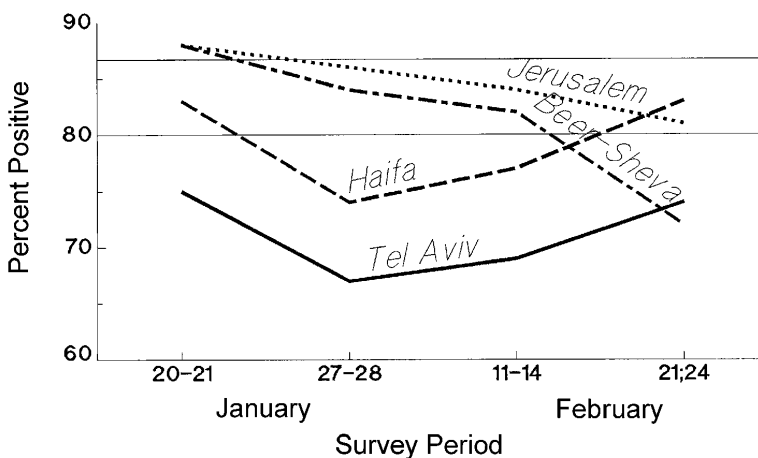


Figure 2. Ability to “Adjust to the situation” in the 1991 Gulf war, by place of residence.

Table 3. *Sense of anxiety in attacked regions during the Gulf War (Percentage responding "Often" and "Sometimes").*

	20–21 January 1991	11–14 February 1991
Tel Aviv and Dan Area	46	56
Greater Haifa	45	36

very stable: there has hardly ever been a security-related event which has caused it to fall below "normal" (Guttman & Levy, 1983; Levy, 1989).

Figure 2 shows the adjustive ability of respondents from different residential areas during the Gulf War. The most striking phenomenon evident from the diagram is that the ability to adjust fell to below "normal" (dropping to as low as 66%) for the duration of the Gulf War in the Greater Tel Aviv area only: in other words, only in "Zone A" which experienced attacks. The Haifa area experienced only a slight drop (76% positive) in ability to adjust during January, and returned to "normal" immediately afterwards.

It is worth noting that from January 25 onwards, no missiles were directed at the Haifa area, and that those that fell prior to this date caused less damage than those that fell in the Greater Tel Aviv area. It may be hypothesized that these events relate to the difference in coping abilities between the two areas that were attacked. Support for this comes from the different levels of "anxiety" recorded in these areas. Whereas at the start of the Gulf War, similar levels of feelings of anxiety were recorded for both the Tel Aviv and Haifa regions, by mid-February the percentage of Haifa residents experiencing anxiety fell to the level recorded in areas that had never been attacked, while Tel Aviv area residents showed an increase in levels of anxiety (Table 3).

Moreover, not only were respondents from the Greater Tel Aviv area the least positive about being able to adjust, but they were also the highest in choosing the extreme negative answer "definitely not" able to adjust: 12% in the Greater Tel Aviv area, compared with 6% – 8% elsewhere in the country. In times of relative calm, only 3% – 7% report much difficulty in coping.

Figure 2 further shows that respondents in areas that were not attacked—Jerusalem and Beer-Sheva—expressed a "normal" level of coping ability, apart from one time towards the end of the war, when a drop occurred in the coping ability of Beer-Sheva residents (72% positive). It is relevant here that missiles were fired at this part of the country in the last week of the war.

These findings hint at a possible coping problem in areas which were attacked, primarily Tel Aviv. However, such a drop (to 67% – 70% positive)—below the "normal" (80% – 87%)—does not necessarily indicate the existence of major problems, since the "normal" range acts as a form of "upper bound." From the time series it is difficult in the meantime to determine what is the "breaking" point in terms of adjustment, although this finding should be borne in mind for two main reasons: (a) no

previous war of those investigated ever at any stage brought about a drop in “adjustment”; (b) the relative importance that the coping ability has for survival, resulting from the difference in the “normal” level between it and mood.

Being shut up in sealed rooms, with a feeling of being exposed to missiles in the areas attacked—with hardly any military protection and with no institutionalized support mechanisms—apparently led to a feeling of “being on one’s own”. In this sense it is similar to the situations facing individuals in times of economic crisis and distress—the only situations in which, in the past, ability to adjust was found to fall to below “normal” (see Levy, 1989, and above). This further corroborates the hypothesis that the lack of social support mechanisms in times of stress and “abandoning” individuals to their own fate lead to a weakening of the ability to adjust. A short time after the Gulf War, ability to adjust had returned to normal.

Difficulties in Holding Fast and Coping Ability

As already noted, morale is the ability to continue in the face of difficulty and crisis. Hence, in the Gulf War—as in the 1973 Yom Kippur War—we focused directly on this issue which enabled us to learn more about the problematic of adjustment discussed above. Respondents were asked to assess to what extent they personally experienced difficulties in holding fast in the face of an ongoing stressful situation. The question in itself refers to the situation as “stressful”, hence a response such as “not at all difficult” does not mean that a person is ignoring the situation, but rather that he or she is capable of coping, in spite of acknowledged difficult conditions.

Respondents were asked about their own difficulty in coping with the overall situation, both in general (at the beginning of the war, and ten days later) and in four specific areas: economy, mood, ability to concentrate at work, and leisure (January 27 – 30, 1991).

Table 4. *Anticipated difficulty in holding fast during the Gulf War and the Yom Kippur War (in percent).*

“If the present situation continues, how difficult would it be for you to be able to hold fast?”	The Gulf War, January 1991		During the Yom Kippur War October 16–19, 1973
	20–21	27–30	
Not at all difficult	24	32	21
Somewhat difficult	40	30	34
Rather difficult	25	21	28
Very difficult	11	17	17
Total %	100	100	100

Table 5. *Anticipated difficulty in holding fast, by region of residence (in percent).*

“If the present situation continues, how difficult would it be for you to be able to hold fast?”	Not at all difficult	Somewhat difficult	Rather difficult	Very difficult	Total %
Tel Aviv and Dan Area					
January 20–21	21	34	28	17	100
January 27–30	32	27	22	19	100
Greater Haifa					
January 20–21	22	37	34	7	100
January 27–30	40	25	19	16	100
Jerusalem					
January 20–21	21	51	19	9	100
January 27–30	35	24	26	15	100
Beer Sheva and the South					
January 20–21	37	37	20	6	100
January 27–30	33	42	18	7	100

Difficulty in general

Over one-third of respondents (36% – 38%) anticipated they would experience considerable difficulty (“rather difficult” and “very difficult”) in coping “if the current situation continues”. This percentage is somewhat lower than that obtained during the Yom Kippur War (Table 4).

As the war progressed, responses to this question became polarized: on the one hand, there was an increase in the percentage replying that it would be “not at all” difficult for them to hold fast, and on the other hand, there was a similar increase in those anticipating that it would be “very difficult” for them to hold fast (Table 4).

Thus the continued effect of the stressful situation on ability to cope, as reflected in this distribution, points simultaneously to both the positive and negative effects of stressful situations (Breznitz, 1983a). This pattern was recorded both for residential areas that had been attacked and for those not attacked (Table 5). However, the positive effect was more pronounced in the Greater Tel Aviv area (a rise in the percentage of those responding “not at all difficult”) even though, generally speaking, throughout January a slightly higher percentage of Greater Tel Aviv residents anticipated difficulties (“rather difficult” and “very difficult”) in holding fast than did residents of Haifa and Jerusalem (43% in Greater Tel Aviv, versus 38% in Haifa and

Table 6. *Difficulty in holding fast in various areas during the Gulf War and the Yom Kippur War (Percent answering "very difficult" or "rather difficult").*

"If the present situation continues, how difficult would it be <i>for you</i> to be able to hold fast in each of the following aspects?"	Gulf War 27–30 January 1991	During the Yom Kippur War 17–18 December 1973
Recreation	60	60
Mood	34	44
Concentrating at work	29	29
Economical	30	28

34% in Jerusalem); in Beer-Sheva, no changes in this distribution were recorded during the war.

At the beginning of the war as well as during the war, difficulty in coping was found to be closely related to the ability to adjust ($\mu_2 = .67$ and $.69$, respectively): the fewer difficulties anticipated, the greater the ability to adjust to the situation. Such a monotonic relationship negates the possibility that extreme optimism in assessment of ability to hold fast ("not at all difficult") might be unhealthy in terms of adjustment, as found in the past with regard to other reactions to stress, such as "worries" (Levy & Guttman, 1976).

More women than men thought it would be difficult for them to hold fast. The anticipation of difficulties in coping characterized younger age groups slightly more than older ones. It can be hypothesized that this relationship results from the fact that more parents of young children are concentrated in these age groups. The age factor is also apparent in the responses relating to foreseeing difficulties in concentrating at work, probably for the same reason, and because most children were home from school during that time.

Difficulties in specific life areas

As in the Yom Kippur war, also during the Gulf War Israelis did not anticipate special difficulties in the "instrumental" areas of the economy and work, but they did expect to experience affective difficulty, mainly (60%) in the ability to engage in leisure and recreational pursuits (Table 6).

Although mood is ranked as second in the problematic areas in both the Gulf War and the Yom Kippur War, fewer Gulf War respondents regarded this area as problematic than did respondents in the Yom Kippur War (34% and 44%, respectively). This provides further corroboration from a different viewpoint for the fact that the Yom Kippur War was a "war of mood", while there was no special problem of mood in the Gulf War.

Anticipation of difficulties in specific areas, much like the overall assessment

Table 7. *Willingness to live in Israel: Changes from the eve of intifada to the Madrid Conference (in percent).*

“If you had the opportunity, would you wish to live your life outside Israel?”	March 1987	June 1988	May 1989	Gulf Crisis End Aug. & Sept. 1990	Gulf War 27–28 January 1991	Gulf War 29–30 January 1991	Madrid Conference Oct. 14 to Dec. 16 1991
Wish very much	5	6	6	3	1	3	4
Wish	6	5	8	5	3	2	5
Rather wish	7	7	6	4	1	1	7
Not so much	11	12	13	11	8	4	16
Don't wish	30	29	28	27	23	15	28
Don't wish at all	39	42	39	50	64	75	39
Total %	100	100	100	100	100	100	100

of difficulty in holding fast, was also found to be positively correlated to adjustment. However, these correlations are moderate (monotonicity coefficients range between .31 and .47). In other words, anticipation of difficulties in specific life areas, in a situation acknowledged to be difficult, does not suffice for predicting ability to adjust.

The Gulf War as a Unifying Factor

One of the characteristics of a stressful situation is its power to unify (see Baker & Chapman, 1962): in the face of an external threat, social conflicts and inter-group differences are swept under the rug (Breznitz, 1983a; Lazarus, 1966). Such solidarity phenomena characterized stressful situations and earlier wars in Israel (Kamen, 1971; Guttman & Levy, 1974; Levy & Guttman, 1974; Levy & Katz, 2005).

During the Gulf War, as in previous wars—the Six Day War and the Yom Kippur War—Israel was subject to an external security threat. However, unlike earlier wars, in the Gulf War the army did not eliminate the threat, the residents (particularly in certain areas) were exposed to missile attacks, and the whole country was in a state of uncertainty. The question therefore arises: Does the unifying power of a stressful situation prevail under this set of circumstances as well? The answer is “Yes”, at least with regard to the sense of solidarity with the government and the State (other varieties were not examined in the Gulf War). The government enjoyed the support of the overwhelming majority (94%) with regard to its handling of the “current situation”. Such solidarity with the government in times of crisis and war has been observed repeatedly in Israel (Levy, 1991) and other countries (see, for example, Cantril, 1944, and support for President Bush in the United States during the Gulf War).

Another aspect of solidarity is expressed in strengthening the attachment to the country. The Continuing Survey posed the following hypothetical question regarding the individual's willingness to tie his or her life to the country: "If you had the opportunity, would you wish to live your life outside Israel?" Table 7 shows the distribution of responses to this question between early 1987 (about nine months before the intifada broke out) and the end of 1991.

Table 7 reveals that the desire to remain in Israel had already grown stronger when the Gulf crisis broke out in August 1990. This feeling intensified during the Gulf War, to the extent that at the height of the war (end of January 1991), a majority of 75% gave the extreme response "would definitely not want to live abroad".

Thus, not only does an extreme stressful situation, such as the Gulf War, serve as an outstanding unifying factor engendering attachment to Israel, but even an external threat and the sense of imminent danger suffice to heighten solidarity. Such behavior expresses the justified perception that it is the State which is the entity in danger. Indeed the increased solidarity in Israel during the Gulf War was evident in both attacked and non-attacked residential areas.

By the end of 1991, the former situation was reestablished: "as usual" the majority (67%) was unwilling to live abroad permanently, even if they had the opportunity to do so, but only 39% "definitely" did not want to live abroad. Concurrently, the percentage of those who had positive feelings about leaving the country rose slightly to the pre-war level (Table 7).

Return to Routine

A year after the Gulf War, no traces of it remained in the public's adjustive behaviors. The country's heightened war-time optimism and sense of solidarity had evaporated, and with them, the problems relating to adjustment. The return to "normal" levels is evident from the data up to the end of 1993 (see *inter alia* Figure 1 and Table 7).

Although in their daily behavior the Israelis returned to the pre-war routine, they became more aware of the possibility of missile attacks on Israel. Whereas on the eve of the Gulf War the majority of respondents (63%) had not believed a missile attack on the civilian population was possible, one year later, in December 1991, the majority (59%) considered that such an attack should be expected (Table 8). This change in attitude predated media headlines reporting Iraq's growing nuclear capability in January 1992. Like the Yom Kippur War, the Gulf War brought about a change in Israelis' perception of the situation. The Yom Kippur War led to a change in the general appraisal of the situation of Israel, while after the Gulf War awareness of the threat of attacks on the country's civilians was heightened. Neither war, however, brought about long-term changes in individual behavior (Figure 1). In other words

Table 8. *Possibility of a missile attack on the civilian population before and after the Gulf War (in percent).*

“In your opinion, will there be a missile attack on the civilian population of the country?”	Prior to the outbreak of the Gulf War: The Gulf Crisis		One year after the Gulf War
	End August and September 1990	November 1990	Mid October to mid December 1991
Definitely yes	6	7	18
Probably yes	26	30	41
Probably no	44	43	29
Definitely no	24	20	12
Total %	100	100	100

while during a crisis situation changes occur in all of the behavioral modalities— affective, cognitive and instrumental—each in its own way, in the long-term changes take place only in perception, namely in the cognitive modality. In the current case the change in perception that took place following the war stands in contrast to the optimism that was heightened during the war. While there was a considerable rise in the general appraisal of Israel’s situation in the course of the war, this perception returned to its prewar low level after the war, together with a heightened awareness to the vulnerability of the home front and its exposure to missile attacks.

This study offers further support for the hypothesis that people lead a “normal” routine despite recognition of dangerous situations, and this would appear to be the driving force for survival. Whenever exceptional events or social processes interfere with the “routine” of the larger society, then certain patterns of change in a variety of behaviors are witnessed. Some of these might usefully be taken into account in planning for the future.

Epilogue

From the end of 1991, the study of the three varieties of morale continued systematically, but at considerable time intervals, as can be seen from Figure 1, which shows the fluctuations to the end of January 1996. The first five years following the Gulf War were extremely eventful, from the peace process and the 1992 political upheaval, through terrorist attacks and economic problems, to the assassination of Prime Minister Yitzhak Rabin on November 4, 1995. I therefore felt the need to add an Epilogue to this article discussing varieties of morale since the Gulf War.

The personal aspects of morale—mood and ability to adjust—which returned to their usual levels shortly after the Gulf War, remained stable and within the “normal” range until the beginning of 1994, regardless of events. Events did, however, have an impact on the cognitive aspect: there was a slight rise (to 27%) at the start of

the Madrid peace talks at the end of 1991 in the general appraisal of Israel's situation. After the talks ended and throughout the first half of 1993, this assessment declined sharply (about one-fifth positive). The renewed momentum of the peace talks, following the change of government in Israel and the signing of the agreement with the PLO in September 1993, again raised the assessment of Israel's situation to 57% positive. However, this optimism was also short-lived, and 1994 began with a low appraisal (27% positive) of Israel's situation.

Varieties of morale were re-examined around a year later, on January 29, 1995, a few days after a massive terrorist attack in which mainly young soldiers were killed by a bus bombing. This bombing was one of a series of terrorist attacks throughout the country that began in October 1994. As evident from Figure 1, a sharp drop in *all* varieties of morale was recorded by the end of January, 1995. The accumulation of terrorist attacks certainly contributed to the striking decline in mood, to increased sorrow, and the feeling of collective mourning, as well as to a further decline in the assessment of Israel's situation, despite the peace agreement with Jordan signed at the end of October 1994. The question that arises is whether it was only these events that led to the drastic drop in the feeling of ability to adjust, which is generally less affected by security incidents. Inspection of the occurrences of that period reveals that for several months, publicity was given of the government's intention to impose taxes on profits made on money invested on the Stock Exchange. Such taxes would have adversely affected the economic position of a considerable number of Israelis who were extremely apprehensive about the personal losses they would sustain as a result. The subject remained on the media agenda for quite a long time, and the Treasury's message was not clear-cut, resulting in economic uncertainty. Such a situation—in which the individual is isolated in distress—is one of the few that led in the past to a decline in ability to adjust. However, it is likely that the feeling of personal insecurity that followed the bus bombings also contributed to the decline in coping. On January 30, 1995, the Treasury made a definitive statement to the effect that it would not impose a tax on stock exchange profits. Shortly after, by February 19, 1995, there was a rise in all three varieties of morale, although they were still below the "normal" range of personal aspects. In the fall of 1995 (from mid-September to the end of October) mood and coping returned to their former "normal" levels. However, the general appraisal of Israel's situation continued to be low (around 30% positive) but not at an all-time low. This corroborates the phenomenon of the long-term impact of stressful situations on the cognitive variety of morale.

The assassination of Prime Minister Yitzhak Rabin and morale

On November 4, 1995, Prime Minister Yitzhak Rabin was assassinated, an unprecedented political event which led to a marked drop in mood, but did not affect either the instrumental variety of morale (coping) or the cognitive variety (the general appraisal of Israel's situation). An entire people was in mourning for a whole month,

but continued to show determination and strength to hold fast. Here again, the phenomenon in which people can cope despite low mood is evident. From the end of the 30-day formal period of mourning, on December 5, 1995, to the end of January 1996, mood not only returned to the pre-assassination state but was somewhat higher than its “normal” level (72% positive). Even the general appraisal of Israel’s situation rose slightly, and continued to rise to the level of 45% positive in mid-March 1996, probably due to international sympathy for Israel in the wake of the dreadful event, and the closer ties with Jordan.

Thus with respect to morale, Rabin’s assassination led in the very short term (up to a month) to an emotional decline only, having no impact on the other two varieties: the instrumental (ability to adjust) and the cognitive (general appraisal of Israel’s situation). However, right after the 30-day formal period of mourning, for about half a year later, a rise was recorded in all three varieties of morale to slightly above their “normal” levels, probably due to a nationwide feeling of being supported.

Monitoring possible long-term impacts of the assassination on morale, as well as on other related domains discussed above, is beyond the scope of this paper. Maybe it is appropriate to close this longitudinal analysis by quoting the old Jewish saying, “over and not done with” (*tam ve-lo nishlam*).

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