

JOB STRESS

IN A

CHANGING WORKFORCE

INVESTIGATING GENDER, DIVERSITY, AND FAMILY ISSUES

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Unemployment, Social Resources, and Mental and Physical Health: A Three-Wave Study on Men and Women in a Stressful Life Transition

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In 1989, the East German communist system collapsed. More than 300,000 East German citizens left their country and moved to West Germany. As part of this exodus, more than 50,000 migrants settled in West Berlin. Most of them came via the West German embassies in Warsaw, Prague, or Budapest or fled the country under other dubious and dangerous circumstances, whereas others crossed the border after the fall of the Berlin Wall on November 9, 1989. Our aim in this study was to investigate coping, adaptation processes, and health outcomes of these migrants in their new environment. We focused on the question of whether interindividual health differences can be predicted by personal employment situation and the provision of social support.

The decision to flee one's home and country has far-reaching and severe consequences. This can be considered a nonnormative critical life event (see Montada, Filipp, & Lerner, 1992). As with other critical events (such as accidents, losses, divorce, or illness), the corresponding psychological crisis may have a tremendous impact on an individual's personality development, psychosocial functioning, and health. Migration brings daily hassles—especially cramped living conditions in camps or gyms—as well as the threat of long-term unemployment and the need to build up a new social network. Thus, migrants are disadvantaged not only by higher demands than before migration, but also by heightened individual vulnerability toward stress, because they have to deal with the loss of their jobs and social support from former colleagues, friends, and relatives. According to Lazarus's (1991) cognitive-relational theory of stress, long-term employment and social support, among other factors, can be seen as protective situative resources to be used when facing stressful demands. Material, psychological, social, and health-related resources influence stress appraisals and coping processes; that is, strong resources should invoke more favorable stress experiences and coping behaviors than should a lack of such resources (Hobfoll, 1988, 1989; Hobfoll, Lilly, & Jackson, 1992; Jerusalem & Schwarzer, 1989, 1992).

We discuss employment and social support as resource factors in more

detail later. *Employment* is the basis for earning one's living and for being respected in a Western society characterized by high material and economic values. Thus, the impact of unemployment goes beyond direct economic costs. Job loss creates insecurity with respect to one's future life perspective. Although research on unemployment problems has been characterized by inconsistent empirical results, studies have generally reported an impairment of psychological and physical well-being for the majority of the unemployed, especially in the case of long-term unemployment (Dooley & Catalano, 1988; Feather, 1990; Frese & Mohr, 1987; Jahoda, 1982; Mortimer, 1991; Schaufeli & Van Yperen, 1992; Schwefel, Svensson, & Zöllner, 1987; Warr, 1987). The stressing factor of unemployment is mostly attributed to decrements in environmental features, such as weakened control possibilities because of financial hardships or social network disruption, fewer goals and task demands, a larger time budget without time markers to break up and organize each day, or reduced opportunities for social contacts. An enduring status of unemployment requires continuous adaptational efforts—instrumental actions to eliminate the jobless state as well as emotional coping to alleviate the distressing experience (Lazarus, 1991). For migrants, unemployment following relocation appears to be a universal phenomenon hardly under personal control. To these people, problem-focused behaviors, such as searching for or qualifying for a job, are only of limited value. Instead, emotion-focused coping strategies are used more to deal with this problem, particularly in the case of extended unemployment. Long-term psychological consequences of unemployment can be feelings of discouragement, hopelessness, and despondency as well as impairments of self-worth and somatic health. Kelvin and Jarrett (1985) argued that these effects are stabilized through social comparison processes because working people may perceive the long-term unemployed as a negative reference group whose members cope inadequately with life. Moreover, reemployment could be viewed as a necessary condition for reestablishing a personal resource system (Hobfoll, 1989). For these reasons, there must be a very high incentive value attached to reemployment after migration.

A well-established social network is a structural prerequisite of feeling socially integrated and emotionally accepted (Laireiter & Baumann, 1992; Thoits, 1992; Veiel & Baumann, 1992). *Social integration* refers to the mere existence of a quantity of social relationships; it is measured by the size of one's network—the number of one's relatives and friends and the frequency of contact with them. The number of active social ties determines one's degree of embeddedness, with social isolation being the extreme, negative endpoint. *Social support*, on the other hand, refers to the function and quality of beneficial social relationships.

There are different mechanisms through which social relationships may influence the development of health. Support may have a benign effect on health in the normal population, thus appearing as a statistical main effect, or it may alleviate stress and its consequences. In the latter instance, support serves as a buffer or moderator. In the stress-buffering model, support may be influential twice: first when stressful demands are cognitively appraised and again by dampening health-damaging physiological processes (Cohen, 1992;

Henderson, 1992; Monroe & Johnson, 1992; Schwarzer & Leppin, 1991, 1992; Veiel, 1992).

Employment status and social support may confound each other; that is, employment is often connected with social contacts, whereas unemployment may lead to being socially undesirable. In the present sample, the East German migrants needed to strive for both resources in their new environment. A new job is not provided automatically by Western society, and for most newcomers, there is no social network immediately available. For these reasons, looking for an appropriate job as well as trying to establish contact with other people and make friends becomes an essential adaptation problem. Most likely, one's effectiveness in solving these problems will strongly affect one's emotional experiences. Those who are more successful would be expected to feel less stressed and to be better off with respect to psychological well-being.

Following these theoretical considerations, we deal in the present study with the individual health differences of men and women with respect to employment status and social support. We expected that, over time, those who were employed would report better health than unemployed migrants, as would those receiving support as opposed to those lacking support.

Method

In October 1989, before the opening of the Berlin Wall, a study was launched to gain more detailed knowledge about the adaptation and coping processes of refugees and migrants from East Germany. The project was designed as a longitudinal study, with three measurement points during the first 2 years after migration.

The East German migrants were contacted individually in their temporary living quarters (e.g., school gymnasiums, container homes, or other emergency shelters) and were asked to take part in a psychological investigation on their adaptation process in the West. Participation was voluntary and was guaranteed to be anonymous. The standardized written interview took about 1 hour. A numerical code was recorded instead of names or addresses to correctly assign each person to the longitudinal data set. The first wave of data was collected in the fall and winter of 1989–1990, the second in the summer of 1990, and the third in the summer of 1991. A total of 1,036 migrants participated and constituted the first-wave sample. A subsample of 235 completed the questionnaires at all three points in time. Many migrants either refused to participate in the follow-up surveys or could not be tracked down again. We attributed the high attrition rate to (a) lack of incentives for responding, (b) continued mobility of the migrants after their initial arrival in Berlin, and (c) a large number of questionnaire items that took about an hour to answer.

The subjects filled out a questionnaire that measured—among other variables—employment status, received social support, perceived (anticipated) social support, depression, and health complaints. In accordance with theoretical considerations, employment status and social support were taken as

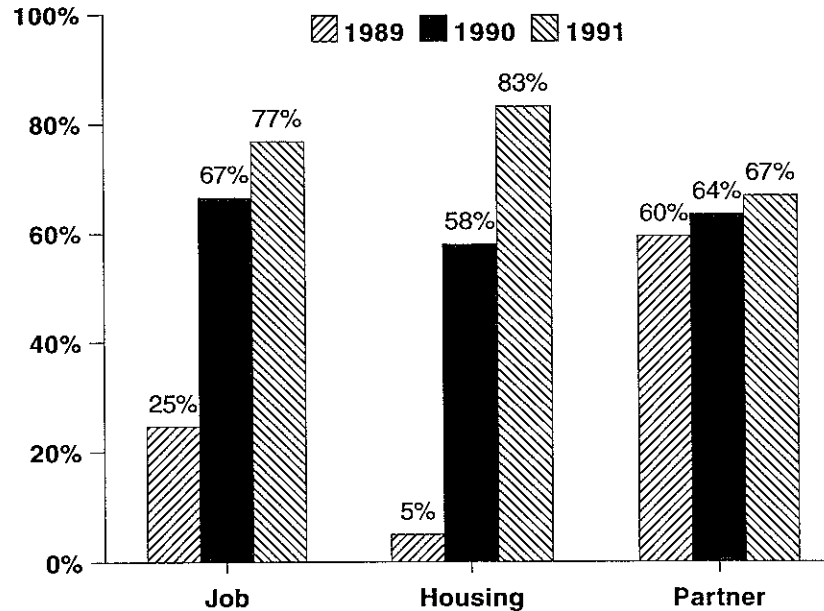


Figure 1. Demographic changes in the sample over time.

independent variables, whereas the experience of depression and physical symptoms served as dependent variables.

Subjects

The present analysis was based on data from 235 migrants who had participated in all three waves of the study. These 126 men (mean age = 31 years, $SD = 9.25$) and 109 women ($M = 32$ years, $SD = 10.39$) had arrived in West Berlin during 1989. At the onset, 63 men and 72 women were either married or had a partner. The majority of the sample consisted of refugees (62%)—defined as those who arrived illegally before the opening of the Berlin Wall on November 9, 1989—whereas the others were considered legal migrants (38%) because they had arrived after this date. Because there were no major psychological differences between refugees and legal migrants in this data set, we combined the groups for further analysis.

Figure 1 shows the reported changes in employment, housing, and partnership for the sample over time. Initially, 28% of the respondents held some kind of a job. Those who had spent several weeks in the West already had a good chance to be employed, whereas those who had just arrived were not yet ready for the job market. Thus, employment at Time 1 mainly reflected the duration of residence and could not be considered a variable worth further

exploration. At Time 2, the employment rate had increased to 67%, and at Time 3 it increased to 77%. The sample of those who remained jobless over time was of interest to us.

None of the migrants had housing at the initial interview, because the data were collected in temporary refugee shelters. Only very few were lucky enough to join relatives in the West; they were not part of the present sample. The rate of housing climbed to 58% at Time 2 and to 83% at Time 3. The success rates in employment and housing reflect the conditions for readaptation of the migrants, but they also reveal that 23% did not get jobs and 17% did not find housing after nearly 2 years.

About 60% of the migrants either made their way to the West with their partners or met a new partner during or immediately after their transition. Bonding continued, and the rate of those with intimate partners increased to 67%, but it was not possible to identify whether the participants stayed with their original partners or found new ones. Anecdotal evidence suggested that many migrants separated from their spouses in the stressful context of their critical life transition and built up new personal relationships (see Schwarzer & Hahn, in press).

Measures

The actual employment status (employed vs. not employed) of the subjects was recorded at three points in time. For the longitudinal approach, we determined whether the migrants (a) were jobless at the beginning and the end of the study ("always jobless"; $n = 50$, 15 men and 35 women), (b) were jobless at the beginning but found a job during the 2-year period ("job hunt successful"; $n = 105$, 56 men and 49 women), or (c) were employed at the beginning and at the end ("never jobless"; $n = 54$, 38 men and 16 women). Seven men held jobs at the initial interview but lost them later. These data were discarded from the analyses because of the small cell frequency. For the remaining 19 persons, there were no accurate data available. Evidently, more women than men were unemployed.

The received social support scale consisted of eight items such as "There are people upon whom I can rely when I need help" ($\alpha = .87$). Responses to all items were made on a 4-point Likert-type scale ranging from *not true* (1) to *exactly true* (4). The scores ranged from 8 to 32.

As a measure of depression, we selected a 16-item German depression scale (Zerssen, 1976; $\alpha = .90$). Typical items on this scale are "I feel simply miserable" or "I feel blue and downhearted." The scale anchors were identical to those used for the social support measure.

As indicators of ill health, self-reported physical symptoms were recorded on the basis of a well-known German instrument (Brähler & Scheer, 1983). From this inventory, 24 items ($\alpha = .92$) were taken that were subdivided into four categories: heart complaints, pains in the limbs, stomach complaints, and exhaustion. Responses to all items were made on a 5-point intensity scale ranging from *not* (1) to *strong* (4). Scores ranged from 24 to 96. (Note that,

hereinafter, the labels *physical symptoms*, *health complaints*, and *illness* are used synonymously.)

Results

Unemployment and Depression

We first analyzed the data to determine the relationship between depression and employment status across the three waves. An analysis of variance (ANOVA) was computed with three levels of employment status as one factor and the three points in time as the repeated measures factor. A main effect of employment status resulted, $F(2, 198) = 8.97, p < .001$, as did a significant time effect, $F(2, 396) = 5.04, p = .007$. There was no significant interaction between employment and time.

Figure 2 depicts the pattern of mean values for the dependent variable depression. The upper line represents those people who remained jobless over 2 years ($n = 46$); they reported the highest level of depression. The middle line represents those who found a job during the 2-year period ($n = 103$). The bottom line ($n = 52$) stands for those who had never been jobless; this last group reported the lowest degree of depression. Figure 2 also shows that there

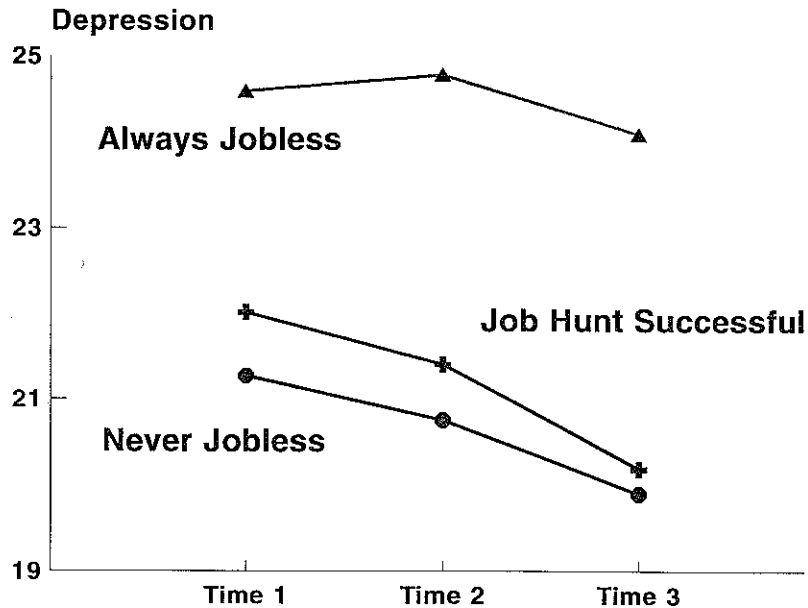


Figure 2. The relationship of employment status and depression over time. Mean scores on the depression scale are given on the vertical axis.

is a stable relationship between one's employment status and depression as well as some improvement of the depression scores over time.

Unemployment and Illness

We next analyzed the relationship between health complaints and employment status across the three waves. We computed an ANOVA with three levels of employment status as one factor and the three points in time as the repeated measures factor. A main effect of employment status resulted, $F(2, 196) = 12.67, p < .001$, whereas the time factor was only of borderline significance, $F(2, 392) = 2.75, p = .065$. There was no significant Health Complaints \times Employment Status interaction.

Figure 3 depicts the pattern of means for the dependent variable health complaints. The upper line represents those who remained jobless over 2 years ($n = 45$); they reported the highest level of symptoms. In the middle are those who found a job during the 2-year period ($n = 101$). The bottom line ($n = 53$) shows those who had not been jobless. This last group consisted of people investigated several weeks after their arrival who had already found jobs and kept these jobs over the 2-year period; they reported the lowest degree of symptoms. There was a downward trend for all three groups, but, as mentioned

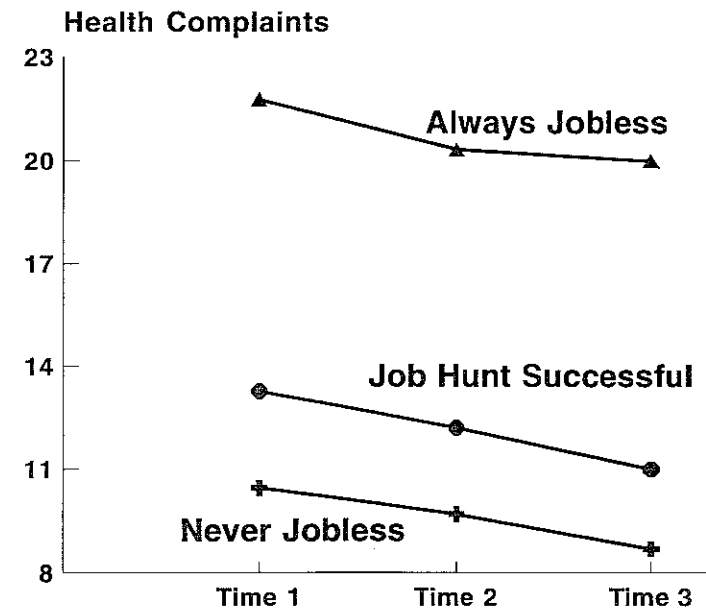


Figure 3. The relationship of employment status and health complaints over time. Mean scores on the indicator of ill-health are given on the vertical axis.

above, this trend did not reach significance. Figure 3 shows a stable relationship between one's employment status and self-reported ill health.

Gender Differences

The relationship between unemployment and health was further elucidated when gender differences were taken into account. Men and women responded differently to the stress of unemployment. At Time 1, women (mean score = 23.6) were more depressed than men ($M = 20.89$, $F(1, 223) = 12.40$, $p < .001$). At Time 2, there was the same kind of difference ($M_s = 23.24$ vs. 20.63), $F(1, 223) = 10.68$, $p < .001$. But at Time 3, this was no longer significant ($M_s = 21.55$ vs. 20.35), $F(1, 223) = 2.51$, $p < .115$. The relationships appear to be more complex when depression is broken down by gender, employment status, and time (Table 1).

Symptom reporting was much more extreme for men than for women between the three categories of employment status (Table 2). For men, unemployment seemed to be more detrimental, or initial health problems inhibited job search and hiring. At all three time periods, women reported more ill health than men: For Times 1, 2, and 3, respectively, $F(1, 219) = 13.46$, $p < .01$; $F(1, 219) = 14.49$, $p < .01$; and $F(1, 219) = 4.03$, $p < .05$. This effect was caused by the two employed groups, whereas the third group—men who were always jobless—reported more illness.

Social Resources

As a next step, we added social support as a second between-subjects factor. The question was whether support could buffer the negative effect of joblessness. The distribution of the received social support scale was dichotomized at Time 1 and Time 3. Those migrants who scored above the median at both

Table 1. Depression at Three Waves, According to Employment Status, Gender, and Time

Employment status	<i>n</i>	Women			<i>n</i>	Men		
		Time 1	Time 2	Time 3		Time 1	Time 2	Time 3
Always jobless	32				14			
<i>M</i>		24.38	24.00	22.94		25.07	26.57	26.71
<i>SD</i>		7.18	7.01	7.92		7.11	8.24	9.72
Job hunt successful	49				54			
<i>M</i>		23.45	23.16	20.69		20.70	19.80	19.72
<i>SD</i>		6.86	6.94	5.39		4.76	4.31	3.63
Never jobless	15				37			
<i>M</i>		22.80	22.13	20.67		20.65	20.19	19.72
<i>SD</i>		5.02	4.14	3.68		4.02	5.10	3.79
<i>F</i> (2, 196)		0.77	0.80	1.79		5.64	10.32	10.20
<i>p</i> <		.47	.46	.17		.01	.01	.01

Table 2. Health Complaints at Three Waves, According to Employment Status, Gender, and Time

Employment status	<i>n</i>	Women			<i>n</i>	Men		
		Time 1	Time 2	Time 3		Time 1	Time 2	Time 3
Always jobless	30				15			
<i>M</i>		20.69	17.84	16.68		23.53	26.00	26.67
<i>SD</i>		17.18	15.62	14.84		16.23	15.09	19.01
Job hunt successful	48				53			
<i>M</i>		16.76	16.00	12.75		10.31	8.51	9.53
<i>SD</i>		14.81	13.32	12.56		12.21	9.87	10.07
Never jobless	15				38			
<i>M</i>		14.56	16.07	11.56		8.95	7.16	7.34
<i>SD</i>		9.95	9.55	8.24		11.29	10.93	8.93
<i>F</i> (2, 194)		1.81	0.24	1.15		9.76	18.33	15.55
<i>p</i> <		.17	.79	.32		.01	.01	.01

times were considered to be benefiting from long-term support, whereas those migrants who scored below the median at both times were considered to be lacking long-term support. Data for all others were discarded for this analysis. To avoid cell frequencies that were too small, we included two levels instead of three in the employment status factor: migrants who remained jobless over 2 years ($n = 39$) and those who either kept a job the whole time or found one during the observation period ($n = 113$). Thus, there were four groups of migrants in this analysis: (a) those who were always jobless and were not supported ($n = 22$), (b) those who were always jobless and received support ($n = 17$), (c) those who were employed and were not supported ($n = 54$), and (d) those who were employed and received support ($n = 59$). We computed a repeated-measures ANOVA with employment status and support as between-subjects factors and time as the within-subjects factor. Because of gender differences, results are presented separately for men and women.

Effects of unemployment and social support on depression. Four analyses are presented that followed the same rationale. First, for women, the joint effects of unemployment and social support on depression were determined, followed by the same procedure for men. Afterward, this pair of computations was repeated with health complaints as the dependent variable.

The analysis of depression for women yielded a main effect for employment status, $F(1, 67) = 4.55$, $p = .037$; for support, $F(1, 67) = 14.57$, $p < .001$; and for changes over time, $F(2, 134) = 5.26$, $p = .006$.

The supported women reported low depression, whether or not they were jobless. For women who were always jobless, support made a difference. Those who suffered jointly from two stressors—that is, being unemployed and having no support—continued to report the highest level of depression at three points in time. Those who remained jobless but received social support showed a decline in depression. Thus, efficient support seems to be able to alleviate depression.

The analysis of depression for men yielded a main effect for employment status, $F(1, 75) = 16.68, p < .001$; a tendency for a main effect of support, $F(1, 75) = 3.10, p = .083$; and a tendency for a Support \times Time interaction, $F(2, 150) = 2.46, p = .089$.

Employed men reported low depression, whether or not they were supported. For the men who were always jobless, support made a difference. Those who suffered jointly from two stressors—that is, being unemployed and experiencing lack of support—continued to report the highest level of depression at all three points in time. When men remained jobless but received social support there was a decline in depression. The marginally significant interaction between support and time was reflected by a scissor effect: Of the unemployed, those with support and those without support experienced a differential development of depression as time went by.

Effects of unemployment and social support on health. The analysis of health complaints for women yielded a tendency of a main effect of employment status, $F(1, 64) = 3.61, p = .062$; a main effect of support, $F(1, 64) = 6.74, p = .012$; and a main effect of changes over time, $F(2, 128) = 3.99, p = .021$. In addition, an Employment \times Support interaction was nearly significant, $F(2, 128) = 2.58, p = .08$, and an Employment \times Support \times Time interaction emerged, $F(2, 128) = 3.11, p = .048$.

At Times 2 and 3, both once employed and unemployed women who were supported reported fewer physical symptoms. For the always jobless women, however, support was critical: Those who lacked support displayed the highest level of ill health. The remarkable decline in ill health over time for jobless women who received support represents impressive evidence of the often-hypothesized buffer effect of social support.

The analysis of health complaints for men yielded a main effect of employment status, $F(1, 75) = 24.64, p < .001$; a tendency of a main effect of support, $F(1, 75) = 3.11, p = .082$; and an Employment \times Support interaction, $F(1, 75) = 4.26, p = .043$.

The employed men enjoyed good health whether they were supported or not. For the jobless men, however, there was a difference between the unsupported, who experienced an increment in ill health, and the supported, who suffered from fewer symptoms.

Discussion

The present study differs from other research on unemployment in terms of the political and socioeconomic background and the transitory context. We examined temporary mass unemployment caused by sudden migration into a wealthy country, where the job market was able to absorb the majority of the unexpected job seekers. Unemployment was an initially universal and normative experience for these migrants but then became more and more personal and nonnormative for those who failed to get a job as time went by.

This study is unique in its long-term assessment of the relationships be-

tween unemployment, social resources, and health at three points in time over nearly 2 years. It represents the only available panel study on psychosocial changes in East German migrants of the time. The overall results show that migrants who did not succeed in finding a job suffered from depression and physical symptoms. Although women generally scored somewhat higher in depression and ill health, the detrimental effect of unemployment was stronger for men. Most interesting was that social resources made a difference here: Men and women who received social support reported less depression and symptoms of ill health over time. Thus, support appeared to buffer the stress of unemployment, a phenomenon that has rarely been demonstrated before in longitudinal designs (Cohen & Wills, 1985). This buffer effect illustrates the dynamics of a crisis and, therefore, underscores the hypothesized mechanism by which stress is alleviated through the availability of beneficial social resources.

This study sheds some light on changes of ill health depending on stress and support over a 2-year period, but it also has limitations. It is unfortunate that there was no opportunity to obtain objective health data in this investigation. This was because of the spontaneous nature of the study: It was launched without detailed preparation while the refugees were arriving in great numbers in Berlin and were interviewed, sometimes under very unusual circumstances (e.g., amid suitcases in the waiting hall of the refugee reception center). Another limitation lies in the nature of the sample itself. The findings cannot be generalized to a resident population because they were obtained only in a sample of migrants. Unemployed migrants need not have the same characteristics as long-term unemployed residents. However, the role of resource factors is best examined within a context of high stress (Hobfoll, 1989).

The focus of this study was indeed on the effects of unemployment on health, but the evidence appears to be inconclusive. In particular, it was found that, already at the onset of the study, health differences emerged between the always jobless and the successful job gainers and job holders. The evidence that symptom reporting at the beginning was associated with staying out of a job later on points to the possibility that ill health may be the true independent variable here. Feeling depressed and complaining about various bodily symptoms can be either a justification for not searching for a job or a reason for not being hired. Optimistic and healthy individuals are usually more successful in finding jobs and in staying in them. However, the present study cannot prove any causal directions. Illness and employment can be understood as reciprocal variables, and more data would be required to identify the predominant factor, if there is one.

Another critical issue lies in the definition of *unemployment*. We did not distinguish between unemployment and joblessness, and we implicitly assumed that everyone in the sample wanted to work. One might speculate that, for example, mothers who were raising children did not want a job at the time. However, this critique does not apply here because there were almost no mothers in the sample and because all migrants were eager to make money to rebuild their lives. The East Germans, who had no convertible currency, were without funds, which motivated them to search for any kind of job. Another,

similar critique could be that married female participants might feel less inclined to find jobs, being content to be homemakers. This could be true in the future, but at the onset the migrants were very concerned about making their daily living. Nevertheless, the job status of a spouse could be important for one's well-being. Unfortunately, this information was not available. The questionnaire panel study was accompanied by a more qualitative interview study of 44 migrants that provided evidence about their life situation, readjustment efforts, and motives for work. There is no complete information of this kind for the entire sample.

Another limitation is that there were no data about the nature of the available jobs. It is not known whether the jobs were part-time, explicitly temporary, or inadequate in other ways. This, however, would only represent a bias if it were unevenly distributed across the cells of the design, which is unlikely.

The study of health impairment after job loss should, if possible, include a detailed assessment of coping parameters and real opportunities for reemployment. It has been found (Lerner & Somers, 1992) that coping modes and positive illusions may contribute to well-being, job-search intentions, and job-search behavior but that this influence also depends on actual job qualifications and on the dynamics of the crisis. A possible future research question then, would be whether unrealistic optimism would be functional or dysfunctional for job search and well-being. Those who feel well and healthy may do so because they have a positive outlook on life, although their objective reemployment chances might be negligible. In our analysis, it was not possible to further break down the sample in terms of coping modes, living environments, or personality characteristics because the small cell sizes did not allow a more fine-grained examination of the data. Therefore, separate analyses will have to be performed with these variables in the future. In spite of some limitations, these results are among the few that indicate longitudinally a deleterious effect of unemployment and beneficial effects of social support on health. Results of this longitudinal study of cumulative stress add to the understanding of coping with job loss, migration, and stress resource factors.

References

- Brähler, E., & Scheer, J. (1983). *Giessener Beschwerdebogen (GBB)* [Giessen catalogue of bodily ailments (GBB)]. Bern, Switzerland: Huber.
- Cohen, S. (1992). Stress, social support, and disorder. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 109–124). Washington, DC: Hemisphere.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Dooley, D., & Catalano, R. A. (1988). Recent research on the psychological effects of unemployment. *Journal of Social Issues*, 44, 1–12.
- Feather, N. T. (1990). *The psychological impact of unemployment*. New York: Springer.
- Frese, M., & Mohr, G. (1987). Prolonged unemployment and depression in older workers: A longitudinal study of intervening variables. *Social Science Medicine*, 25, 173–178.
- Henderson, A. S. (1992). Social support and depression. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 85–92). Washington, DC: Hemisphere.
- Hobfoll, S. E. (1988). *The ecology of stress*. Washington, DC: Hemisphere.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513–524.
- Hobfoll, S. E., Lilly, R. S., & Jackson, A. P. (1992). Conservation and social resources and the self. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 125–141). Washington, DC: Hemisphere.
- Jahoda, M. (1982). *Employment and unemployment: A social-psychological analysis*. Cambridge, England: Cambridge University Press.
- Jerusalem, M., & Schwarzer, R. (1989). Anxiety and self-concept as antecedents of stress and coping: A longitudinal study with German and Turkish adolescents. *Personality and Individual Differences*, 10, 785–792.
- Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 195–213). Washington, DC: Hemisphere.
- Kelvin, P., & Jarrett, J. E. (1985). *Unemployment: Its social psychological effects*. Cambridge, England: Cambridge University Press.
- Laireiter, A., & Baumann, U. (1992). Network structures and support functions: Theoretical and empirical analyses. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 33–55). Washington, DC: Hemisphere.
- Lazarus, R. S. (1991). *Emotion and adaptation*. London: Oxford University Press.
- Lerner, M. J., & Somers, D. G. (1992). Employees' reactions to an anticipated plant closure: The influence of positive illusions. In L. Montada, S.-H. Filipp, & M. J. Lerner (Eds.), *Life crises and experiences of loss in adulthood* (pp. 229–253). Hillsdale, NJ: Erlbaum.
- Monroe, S. M., & Johnson, S. L. (1992). Social support, depression, and other mental disorders: In retrospect and toward future prospects. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 93–105). Washington, DC: Hemisphere.
- Montada, L., Filipp, S.-H., & Lerner, M. J. (1992). *Life crises and experiences of loss in adulthood*. Hillsdale, NJ: Erlbaum.
- Mortimer, J. T. (1991). Employment. In R. M. Lerner, A. C. Peterson, & J. Brooks-Gunn (Eds.), *Encyclopedia of adolescence* (pp. 311–318). New York: Garland.
- Schaufeli, W. B., & Van Yperen, N. W. (1992). Unemployment and psychological distress among graduates: A longitudinal study. *Journal of Occupational and Organizational Psychology*, 65, 291–305.
- Schwarzer, R., & Hahn, A. (in press). Reemployment after migration from East to West Germany: A longitudinal study on psychosocial factors. *Applied Psychology: An International Review*.
- Schwarzer, R., & Leppin, A. (1991). Social support and health: A theoretical and empirical overview. *Journal of Social and Personal Relationships*, 8, 99–127.
- Schwarzer, R., & Leppin, A. (1992). Social support and mental health: A conceptual and empirical overview. In L. Montada, S.-H. Filipp, & M. J. Lerner (Eds.), *Life crises and experiences of loss in adulthood* (pp. 435–458). Hillsdale, NJ: Erlbaum.
- Schwefel, D., Svensson, P. G., & Zöllner, H. (Eds.). (1987). *Unemployment, social vulnerability, and health in Europe*. Berlin, Germany: Springer-Verlag.
- Thoits, P. A. (1992). Social support functions and network structures: A supplemental view. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 57–62). Washington, DC: Hemisphere.
- Veiel, H. O. F. (1992). Some cautionary notes on buffer effects. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 273–289). Washington, DC: Hemisphere.
- Veiel, H. O. F., & Baumann, U. (1992). The many meanings of social support. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 1–9). Washington, DC: Hemisphere.
- Warr, P. (1987). *Work, unemployment, and mental health*. Oxford, England: Clarendon.
- Zerssen, D. V. (1976). *Paranoid-Depressivitäts-Skala (PD-S)*. *Depressivitäts-Skala (D-S)* [Paranoid-Depression Scale (PD-S). Depression Scale (D-S)]. Weinheim, Germany: Beltz Test.