

NEGATIVE AFFECT IN EAST GERMAN MIGRANTS: LONGITUDINAL EFFECTS OF UNEMPLOYMENT AND SOCIAL SUPPORT

RALF SCHWARZER, ANDRÉ HAHN and MATTHIAS JERUSALEM
Freie Universität Berlin, Germany

(Received 21 August 1992)

Migrants have to deal with a number of stressors, among them tenacious job search and the constitution of a new social network. Prolonged unemployment and lack of social support can result in enduring negative affect. A sample of 235 East Germans was investigated three times during two years following their transition to West Berlin in 1989, after the breakdown of the communist system. Their anxiety and depression levels were initially high but declined over time. The majority found a job during this time span and succeeded to adapt psychosocially. Those, however, who remained unemployed were worse off in terms of well-being. The stress-affect relationship was moderated, however, by social support. Within the group of migrants who suffered from long-term joblessness, social support exerted a longitudinal buffer effect. At Wave 3, most anxiety and depression was reported by migrants who neither held a job nor received support. In a longitudinal causal model, the employment status affected mainly negative affect complaints, but also social support. The relationship between negative affect and support turned out to be reciprocal over time.

KEY WORDS: Anxiety, depression, migrants, life crisis, social support, stress

In 1989, 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. Some came via the West German embassies in Warsaw, Prague or Budapest, or fled the country under other dubious and dangerous conditions, whereas a larger number crossed the border after the fall of the Berlin Wall on November 9, 1989. The aim of this study was to investigate coping, adaptation processes and well-being of these migrants in their new environment. The focus lies on the research question as to whether interindividual differences in well-being can be predicted by the personal employment situation and the provision of social support.

The decision to flee one's country and home has far-reaching and severe consequences. This can be considered a non-normative critical life event (see Montada, Philipp, & Lerner, 1992). As with other critical events (such as accidents, losses, divorce, illness, etc.) the corresponding psychological crisis may have a tremendous impact on an individual's personality development, psychosocial functioning and well-being. It is not only necessary to cope with daily hassles, especially crowded living conditions in camps or gyms, but also with the threat of long-term unemployment and the need to build up a new social network. Thus, the migrants are disadvantaged not only by higher demands than previously, but also by their

Address correspondence to: Ralf Schwarzer, Institute of Psychology (WE 7), Freie Universität Berlin, Habelschwerdter Allee 45, 1000 Berlin 33, Germany

heightened individual vulnerability towards stress because they have to deal with loss of their jobs and loss of social support from former colleagues, friends, and relatives. According to Lazarus' (1991) cognitive-relational theory of stress, long-term employment and social support, among other factors, can be seen as protective situative resources when facing stressful demands. Material, psychological, social and negative affect-related resources influence stress appraisals and coping processes, i.e., strong resources should invoke more favorable stress experiences and coping behaviors than a lack of such resources (Hobfoll, 1988, 1989; Hobfoll, Lilly, & Jackson, 1992; Jerusalem & Schwarzer, 1989, 1992).

Employment and social support as resource factors are to be discussed in more detail. *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. Loss of job creates insecurity with respect to one's future life perspective. Although research on unemployment problems is heterogeneous and there is a striking variability of empirical results, it can be summarized that the studies generally report an impairment of psychological and physical well-being for the majority of the unemployed, especially in case of long-term unemployment (Dooley & Catalano, 1988; Häfner, 1990; Feather, 1990; Frese & Mohr, 1987; Mortimer, 1991; Schwefel, Svensson, & Zöllner, 1987; Warr, 1987). The stressing quality 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. Thus, problem-focused behaviors such as searching or qualifying for a job may be evaluated as being of limited value only. Instead, emotion-focused coping strategies should be used more to deal with this problem, particularly in case of extended unemployment. Long-term psychological consequences can be feelings of discouragement, hopelessness and despondancy as well as impairments of self-worth and somatic negative affect. Kelvin and Jarrett (1985) argue that these effects are stabilized via social comparison processes since working people may perceive long-term unemployed as a negative reference group whose members cope inadequately with life. Moreover, reemployment could be viewed as a necessary condition of 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, and it comprises the size of a network, such as number of relatives and friends, and the frequency of contact with these people. The number of active social ties determines one's degree of embeddedness, with social isolation being one extreme endpoint. *Social support*, on the other hand, refers to the function and quality of beneficial social relationships. Within this functional perspective, perceived availability of support has to be distinguished from the activation of support when needed. In fact, both concepts seem to refer to

different dimensions. *Perceived support* (expected available support or “cognitive” support) denotes the anticipation of supportive action if needed. *Received support* (“behavioral” support) describes actual social encounters where someone has provided tangible help, affection or other kinds of support. Received support, thus, refers to the actual receipt of helpful transactions, which can be of the emotional, instrumental or material variety. Perceived and received support differ in terms of the point in time when they become important. Perceived support may be most important under normal, everyday circumstances where people can usually cope on their own or have to rely only to a limited degree on other’s help. A general sense that one is loved and cared for by others and that these others would help once they are really needed should contribute to psychological and physical well-being. Also, during the initial encounter of a stressful event the perceived availability of support might help to reduce stress appraisal insofar as the balance between threat and coping assets may be more favorable. However, once support actually has to be mobilized, discrepancies can occur. At this point, support receipt may differ from support expected prior to the event, either because the network does not respond in an appropriate manner, or because the available support has actually been underestimated.

There are different mechanisms through which social relationships may influence changes in well-being. Support may have either a benign effect on well-being 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 at two points in time: first, when stressful demands are cognitively appraised, and second, within the coping process. Cohen and Wills (1985) have hypothesized that perceived support is more likely to exert a main effect while received support would rather produce buffer effects. This seems a reasonable assumption insofar as the receipt of support in most cases is likely to be preceded by a prior situation of need. Thus, social support can operate as a moderator that influences the link between stressful events and affective consequences (Cohen, 1992; Henderson, 1992; Monroe & Johnson, 1992; Schwarzer & Leppin, 1991, 1992a, 1992b; Veiel, 1992).

Employment status and social support may be confounded with each other, i.e., employment is often connected with social contacts, whereas unemployment may lead to turning socially unattractive. In the present sample, the East German migrants need 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 immediately existing social network. For these reasons, looking for an appropriate job as well as trying to establish contact with other people and making friends become essential adaptation problems. Most likely the effectiveness of problem-solving in this respect has strong effects on one’s emotional experiences. Those who are successful are expected to feel less stressed and to be better off with respect to their psychological well-being than those who fail.

Following these theoretical considerations, the present study deals with individual differences in anxiety and depression with respect to employment status and social support. It is expected that, over time, employed migrants would acquire superior well-being than unemployed migrants, and that those who purport to receive support would report less negative affect than those who lack support. In particular, it will be examined if employment status and social support interact on anxiety and depression over time and whether support can alleviate the stress of unemployment.

METHOD

In early November 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 planned as a longitudinal study with three measurement points during the first two years after moving.

The East German migrants were individually contacted in their new temporary living quarters and were asked to take part in a psychological investigation on their adaptation process in the West. The participation was voluntary and guaranteed anonymous. Instead of indicating names or addresses, a numerical code was agreed upon in order to correctly assign each person to the longitudinal data set. The first wave took place in 1989/1990 (median = December 1989), the second-wave data were obtained Summer 1990 (median = August 1990), and the third wave was collected in Summer 1991 (median = July 1991). A total of 1,036 migrants agreed to participate and, thus, constituted the first-wave sample. After two years, at Wave 3, a subsample of 235 migrants were followed up. This is an attrition rate of 78%. Many migrants either refused to participate in the follow-up surveys or they could not be tracked down again. Reasons for this high rate were (a) the lack of incentives for responding, (b) the anonymous data collection, (c) the continued mobility of the migrants after their initial arrival in Berlin, and (d) the large number of questionnaire items that took about an hour to answer.

The subjects filled in a questionnaire measuring, among other variables, employment status, received social support, perceived (anticipated) social support, anxiety and depression. According to theoretical considerations, employment status and social support were taken as independent variables, whereas anxiety and depression served as dependent variables.

Subjects

The present analysis was performed on the basis of 235 migrants who had participated in all three waves. These 126 males (mean age = 31 years) and 109 females (mean age = 32 years) had arrived in West Berlin in 1989. The majority of the sample consisted of refugees (62%), defined as those who arrived before November 9, 1989, whereas the others were considered to be legal migrants (38%) because they arrived after the Berlin wall came down. For the present analysis, both groups were lumped together because they did not differ with respect to the variables under study. Of the males, 63 were married or had a partner, and of the females 72 were married or had a partner.

Measures

The actual *employment status* of the subjects was recorded at three points in time (*employed versus not employed*). For the longitudinal approach, it was determined whether the migrants (a) were jobless at the beginning of the study and jobless at the end ("always jobless", $n = 50$ [15 males and 35 females]), (b) were jobless at the beginning but had found a job during the two-year period ("job hunt successful", $n = 105$ [56 males and 49 females]), and (c) whether they were employed at the beginning and at the end ("never jobless", $n = 54$ [38 males and 16 females]). Seven men held a job at the initial interview but lost it later. They 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. It was not recorded whether subjects were employed half-time or full-time and whether they had found an appropriate job in terms of their prior training or not.

For the social support construct, a distinction was made between *received social support*, which denotes a retrospective assessment of actual behaviors, and *perceived social support* which denotes the anticipation of the availability of support in times of need. The first scale consisted of 11 items such as "Friends and relatives have helped me to look for a job" ($\alpha = .81$), and the second scale consisted of 8 items such as "There are people whom I can rely upon when I need help" ($\alpha = .87$). All items were endorsed on a four-point Likert-type scale. The correlations between received and perceived support were .73, .77, and .80 at the three points in time, respectively.

Anxiety was measured by a short subscale of four items from the German version of the State Trait Personality Inventory, which has proved to be a valid and reliable instrument for assessing the different emotions of anxiety, curiosity, and anger (STPI; Hodapp, Schwarzer, Schwenkmezger, Laux, & Spielberger, 1988). The internal consistency of the anxiety subscale used in this study was Cronbach's $\alpha = .74$. Item examples were "I get tense and restless when I think of all my worries and problems," and "I worry too much." All items are endorsed on a four-point Likert-type scale.

As a measure of *depression*, a 16-item German depression scale was selected (Zerssen, 1976). Its internal consistency was Cronbach's $\alpha = .90$. Typical items were "I feel simply miserable" or "I feel blue and downhearted." The correlations between anxiety and depression were .62, .71, and .67 at the three points in time, respectively.

RESULTS

The first analysis aimed at the relationship between employment status and anxiety and depression across the three waves. An analysis of variance was computed with three levels of employment status as one factor and three points in time as the repeated measurement factor.

Anxiety and Unemployment

A main effect of employment status resulted ($F[2,202] = 11.93, p < .001$), as well as a significant time effect ($F[2,404] = 22.53, p < .001$). There was a borderline significant interaction between employment and time ($F[4,404] = 2.36, p = .053$).

Figure 1 depicts the pattern of means for the dependent variable *anxiety*. The upper line represents those subjects who remained jobless over two years ($n = 48$). They reported the highest level of anxiety. The middle line represents those subjects who found a job during the two-year period ($n = 105$). The lower line ($n = 52$) represents those migrants who have never been jobless. This last group consists of subjects investigated several weeks after their arrival who had already found a job and kept this job over the two-year period. They report the lowest degree of anxiety. There is a strong downward trend for all three groups. Figure 1 clearly demonstrates that there is a stable relationship between one's employment

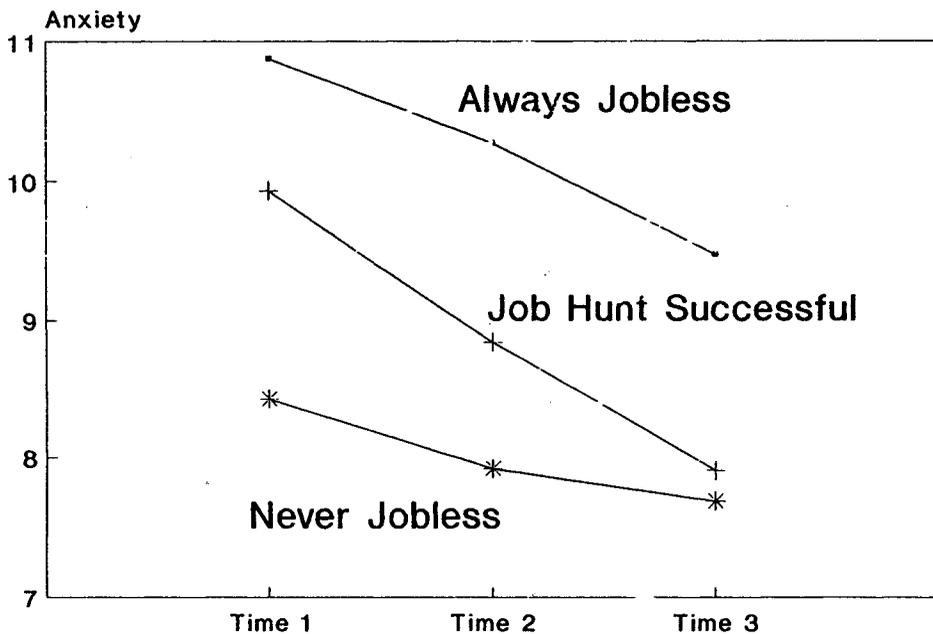


Figure 1 Employment status and anxiety.

status and anxiety as well as a remarkable improvement over time. Anxiety levels at Wave 1 point to prior individual differences that might themselves exert an influence on the likelihood of later employment. The interaction trend denotes that those benefit most who found a job.

Depression and Unemployment

A main effect of employment status resulted ($F[2,198] = 8.97, p < .001$), as well as 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 means for the dependent variable *depression*. The upper line represents those subjects who remained jobless over two years ($n = 46$). They reported the highest level of depression. The middle line represents those subjects who found a job during the two-year period ($n = 103$). The lower line ($n = 52$) represents those migrants who have never been jobless. This last group reports the lowest degree of depression. There is a weak downward trend for all three groups. Figure 2 also demonstrates that there is a stable relationship between one's employment status and depression as well as some improvement over time.

As a next step, *social support* was added as a second between-subjects factor. The question was whether support could buffer the effect of joblessness on negative affect. The distribution of the received social support scale was dichotomized at Wave 1 and at Wave 3 (due to the high correlation between received and perceived support in this study, it did not appear to be useful to replicate these procedures with both scales). Those migrants who scored above the median at both times were

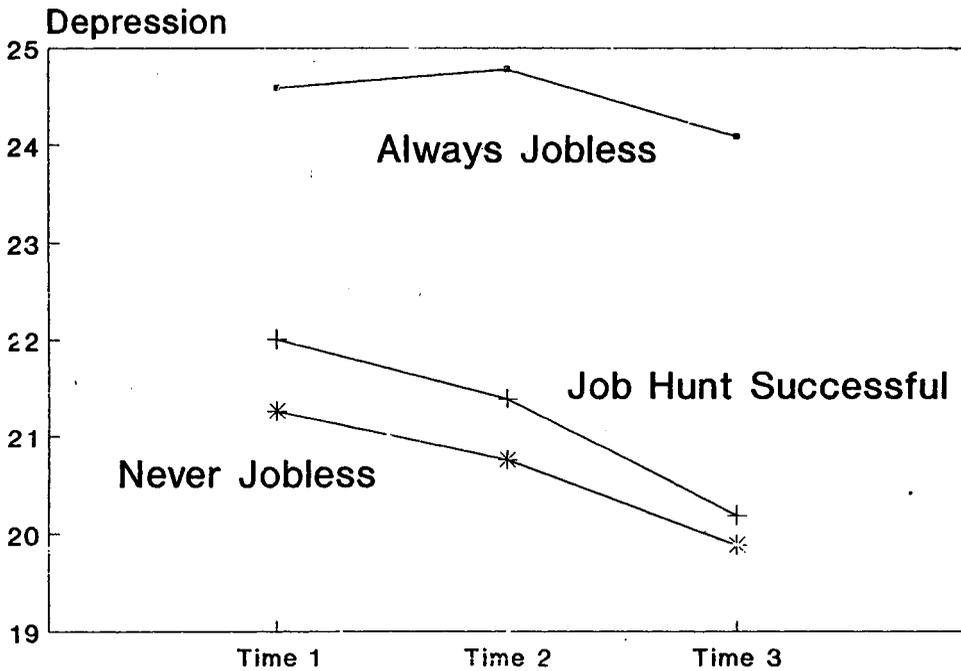


Figure 2 Employment status and depression.

considered as benefitting from long-term support, whereas those migrants who scored below the median at both times were considered as lacking long-term support. All others were discarded for this analysis. In order to avoid too-small cell frequencies, the employment status factor no longer included three levels, but instead two — those migrants who remained jobless over two 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 ($n = 59$). A repeated-measurement ANOVA was computed with employment status and support as between-subjects factors and with time as the within-subjects factor. The two indicators of negative affect, anxiety and depression, were used as dependent variables in two separate analyses.

Anxiety Depending on Unemployment and Social Support

The first analysis yielded a main effect for employment status ($F[1,149] = 16.76$, $p < .001$), no effect for support ($F[1,149] = 2.59$, $p = .11$), no interaction between employment and support ($F[1,149] = 2.00$, $p = .16$), but a strong effect of time ($F[2,298] = 59.84$, $p < .001$).

Figure 3 displays the results. The bottom two lines represent the employed migrants. They report low anxiety, whether being supported or not. For the always

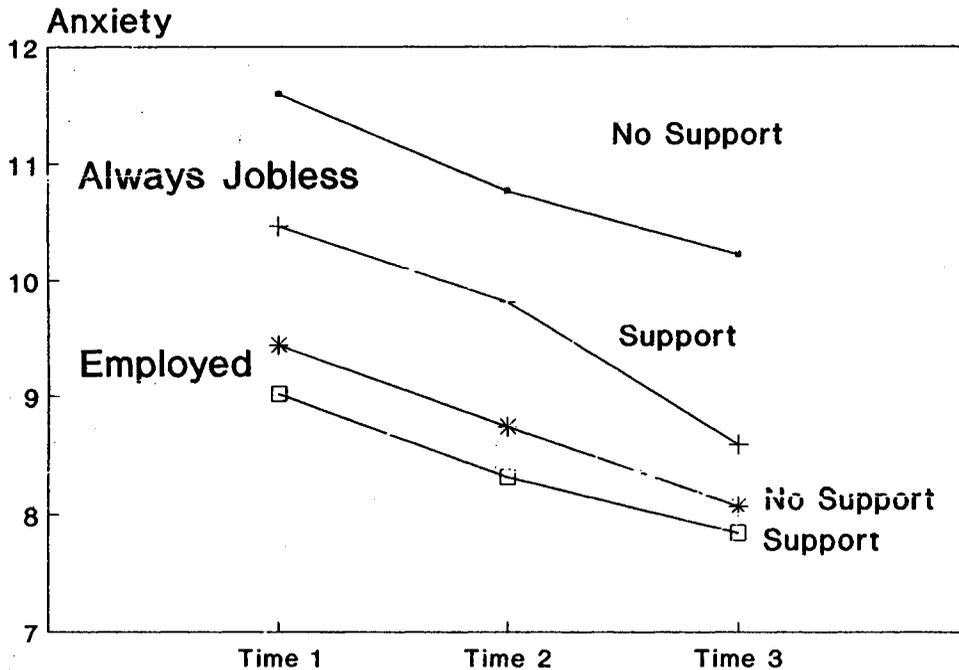


Figure 3 Employment status, social support and anxiety.

jobless migrants, however, support makes a big difference. Those who suffer jointly from two stressors, i.e., being unemployed and experiencing lack of support, continue to report the highest level of anxiety at three points in time.

Depression Depending on Unemployment and Social Support

The next analysis yielded a main effect for employment status ($F[1,149] = 22.01$, $p < .001$), a main effect for support ($F[1,149] = 16.95$, $p < .001$), an interaction between employment and support ($F[1,149] = 5.95$, $p = .016$), only a weak tendency of changes over time ($F[2,298] = 2.37$, $p = .095$). Also, there was a tendency for an interaction between support and time ($F[2,298] = 2.51$, $p = .083$).

Figure 4 displays the results. The bottom two lines represent the employed migrants. They report low depression, whether being supported or not. For the always jobless migrants, however, support makes a big difference. Those who suffer jointly from two stressors, i.e., being unemployed and experiencing lack of support, continue to report the highest level of depression at three points in time.

Those who remain jobless but receive social support show a decline in depression at the last point in time. This is an impressive research example of the often-hypothesized buffer effect of social support within the stress and negative affect relationship. Efficient support seems to be able to reduce depression down to the level of those migrants who are employed and do not suffer from this kind of job-related stress.

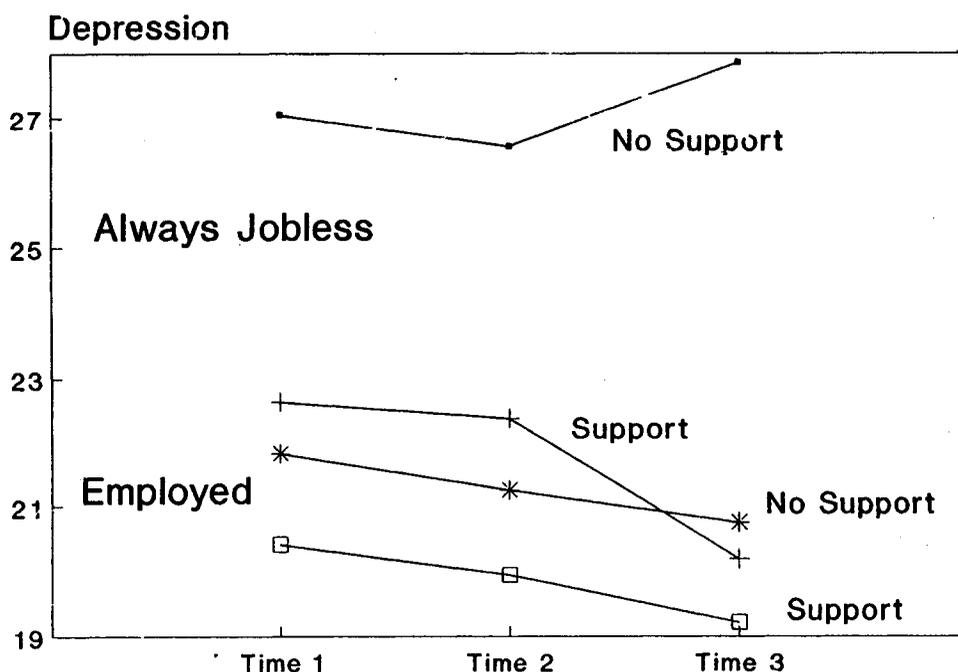


Figure 4 Employment status, social support and depression.

Mutual Influence of Social Support and Negative Affect

To further elucidate the longitudinal relationship between social support and negative affect, a *causal modeling* approach was chosen. Employment status was specified as a single indicator exogenous factor, whereas social support and negative affect were specified as multiple-indicator endogenous latent variables at three occasions, similar to a cross-lagged panel design. Anxiety and depression were taken as indicators for negative affect. Two social support scales were used as indicators for the latent support variable, namely received social support and anticipated (perceived) support. The analysis was based on 185 migrants with complete data in all 13 variables.

The analysis was done with the LISREL VII program (Jöreskog & Sörbom, 1988). The free parameters were estimated by the unweighted least squares method. Several indices of goodness of fit were obtained: (a) chi-square (52) = 109.71 (ss), (b) chi-square/df = 2.11, (c) GFI = .99, (d) AGFI = .99 and (e) RMSR = .043.

Figure 5 displays the results. The direct effect of employment status on *support* (Wave 1) was .19, its indirect effect on support (Wave 2) was .19, and its indirect effect on support (Wave 3) was .17. Being employed therefore was associated with more social support. Note that pathways leading via affect exert some influence on support.

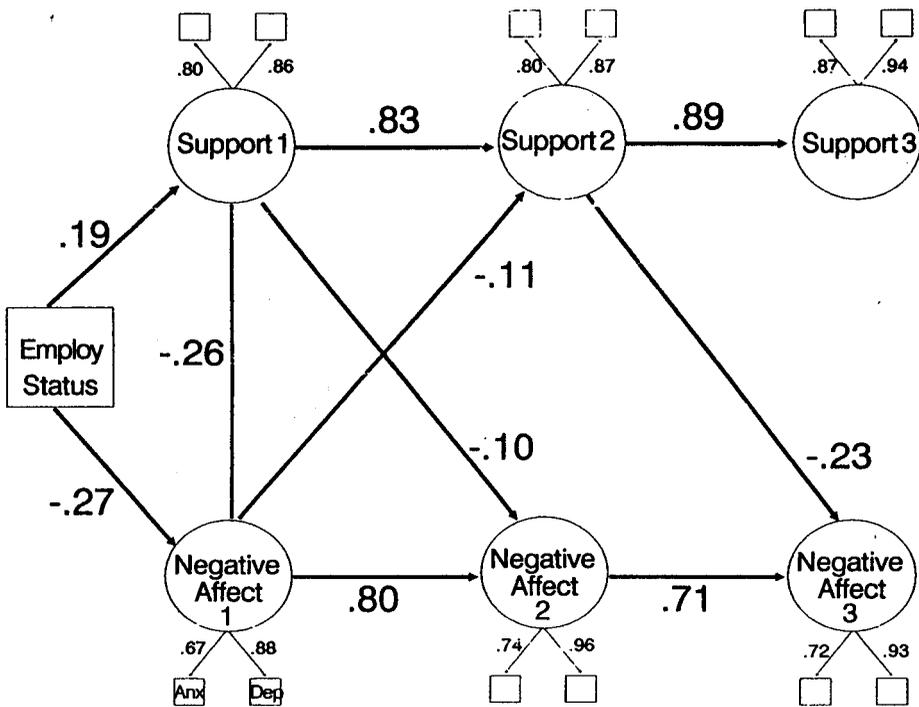


Figure 5 The reciprocal relationship between social support and negative affect.

Being employed also exerted a beneficial influence on *affect*. The direct effect of employment status on affect (Wave 1) was $-.27$, its indirect effect on affect (Wave 2) was $-.24$, and its indirect effect on affect (Wave 3) was $-.20$. Joblessness, therefore, influences affect somewhat more than support.

Both support and affect were stable constructs over two years, as indicated by the test-retest correlations varying between $.71$ and $.89$. The cross-sectional support-affect correlation was $-.26$, at Wave 1. The lagged paths were somewhat weaker. Small influences went from support (Wave 1) to affect (Wave 2) of $-.10$, from affect (Wave 1) to support (Wave 2) of $-.11$, and, most important, from support (Wave 2) to affect (Wave 3) of $-.23$. There is no consistent unidirectional influence of one latent variable to the other, except at the last interval. The provision of support at Wave 2 alleviates negative affect at Wave 3. The opposite direction, from affect (Wave 2) to support (Wave 3) appeared to be zero. Thus, a causal predominance could only be demonstrated for the second half of the time interval under study.

For illustration reasons, the autocorrelated residuals were not depicted in Figure 5. For each indicator, its error variance (epsilon) was allowed to correlate with its corresponding error variance at any other point in time. This is a common specification in longitudinal causal models. The explained variances for the latent *social support* construct were 3.5% at Wave 1, 76% at Wave 2, and 79% at Wave 3. The explained variances for *negative affect* were 7.5% at Wave 1, 70% at Wave 2, and 68% at Wave 3.

DISCUSSION

The main feature of the present study lies in its longitudinal examination of the relationships between a stress experience, social support and negative affect at three points in time over two years. It also represents the only available panel study on psychosocial changes in East German migrants. The three analyses presented above raise a number of questions to be discussed. The first result (Figure 1) has documented two effects, a stable effect of employment status on anxiety and a significant decline of anxiety over time. In particular those who found a job during the two years showed a gain in well-being. The second result (Figure 2) confirmed the two effects for depression as the dependent variable. Again, jobless people were more depressed, and depression decreased over time. In particular, those who remained jobless over two years reported continuously the highest degree of negative affect. The design implicitly assumes a causal influence from being jobless to the reporting of negative affect. However, although this direction is suggestive, it cannot be ruled out that the opposite causal direction may operate. Feeling anxious and depressed can be either a justification for not searching for a job or a reason for not being hired. Psychologically stable individuals usually have a better chance of finding a job and of staying on the job. This latter interpretation is in line with the anxiety differences observed at Wave 1.

The third result (Figure 3) includes the combined effects of employment and social support on anxiety over time. Social support makes a difference because those who remain jobless but receive support are less anxious. The fourth result (Figure 4) repeats this finding for depression as the dependent variable. It documents a remarkable decline of depression in those migrants who receive support while being continuously jobless. This *longitudinal buffer effect* goes beyond the well-known cross-sectional buffer effects of social support as reported in many other studies (Cohen & Wills, 1985). It refers to the dynamics of a crisis, and therefore it underscores the hypothesized mechanism of alleviating stress by the availability of beneficial social resources. Although the measure of the *quantity* of received support does not necessarily imply the occurrence of efficient and satisfactory support behaviors, the present results suggest that this has been the case because otherwise it could not be explained why persons with a high quantity of support feel less anxious and depressed.

The existence of this longitudinal buffer effect raises some questions about the last result (Figure 5), since in this causal model only main effects were considered. The advantage of this multi-occasion model with latent variable lies, however, in the estimation of direct and indirect effects over time. It documents that support and negative affect are stable constructs, being only moderately related to each other. From Time 1 to Time 2, there is no unidirectional causal relationship, but a reciprocal relationship. Negative affect leads to less support, and less support in turn leads to more negative affect. But from Time 2 to Time 3, a dominant causal path from support to affect emerged. There is a considerable impact of social relationships and the improvement of well-being in line with a lesser degree of stability (.71) of the negative affect construct. This could mean that the psychosocial adaptation process needed a year or so, before resulting in this beneficial outcome. Many migrants have established new social bonds after the transition to Berlin which is reflected by a delayed conversion of supportive actions into subjective well-being, a mechanism that takes its time.

This study sheds some light on changes of negative affect depending on stress and

support over a two-year period, but it also has its limitations. The findings cannot be generalized to a normal population since they were obtained in a sample of migrants only. Unemployed migrants need not have the same characteristics as long-term unemployed citizens who did not migrate. However, the role of resource factors is best examined within a context of high stress (Hobfoll, 1989).

The study of affect impairment after job loss should, if possible, include the detailed assessment of coping parameters and real opportunities for re-employment. 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 research question would be, for example, whether unrealistic optimism would be functional or dysfunctional for job search and well-being. Those who feel well may do so because they have a positive outlook on life although their objective re-employment chance could be negligible. In this analysis, it was not possible to further break down the sample in terms of coping modes, gender, living environments, or personality characteristics because the small cell sizes did not allow a more fine-grained examination of the data. Therefore, separate analyses have to be performed with these variables in the future.

In spite of some limitations, these results are among the few that confirm longitudinally the deleterious effects of unemployment and the beneficial effects of social support on well-being. It is an example of cumulative stress and adds to our understanding of coping with job loss, migration and stress resource factors.

References

- 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). New York: Hemisphere.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310–357.
- Dooley, C.D., & Catalano, R. A. (Eds.). (1988). Psychological effects of unemployment. *Journal of Social Issues*, *44*(4).
- 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* (2), 173–178.
- Häfner, A. (1990). Arbeitslosigkeit — Ursache von Krankheit und Sterberisiken? (Unemployment — Cause of illness and death risks?) *Zeitschrift für Klinische Psychologie*, *19*, 1–17.
- 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). New York: 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*(3), 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). New York: Hemisphere.
- Hodapp, V., Schwarzer, R., Schwenkmezger, P., Laux, L., & Spielberger, C. D. (1988). *State-Trait Personality Inventory (STPI)*. Unpublished manuscript. Düsseldorf, Germany: Heinrich-Heine Universität Düsseldorf.
- 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*(7), 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.
- Jöreskog, K., & Sörbom, D. (1988). *LISREL VII: A guide to the program and applications*. Mooresville, IN: Scientific Software.

- Kelvin, P., & Jarrett, J. E. (1985). *Unemployment: Its social psychological effects*. Cambridge: 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). New York: 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). New York: Hemisphere.
- Montada, L., Filipp, S.-H., & Lerner, M. J. (1992). *Life crises and experience 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 Publishing.
- 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. (1992a). 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.
- Schwarzer, R., & Leppin, A. (1992b). Possible impact of social ties and support on morbidity and mortality. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 65–83). New York: Hemisphere.
- Schwefel, D., Svensson, P. G., & Zöllner, H. (Eds.). (1987). *Unemployment, social vulnerability, and health in Europe*. Berlin: Springer.
- 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). New York: 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). New York: 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). New York: Hemisphere.
- Warr, P. (1987). *Work, unemployment, and mental health*. Oxford: Clarendon.
- Zerssen, D. V. (1976). *Die Paranoid-Depressivitäts-Skala* (The Paranoid-Depression Scale). Weinheim, Germany: Beltz-Test.