

Helping hands, slapping hands? The buffering effect of social support and relationships during unemployment in Germany.

FIRST DRAFT

Małgorzata Mikucka*

*Université catholique de Louvain, Belgium,
malgorzata.mikucka@uclouvain.be
Laboratory for Comparative Social Research, HSE, Russia*

February 20, 2014

Abstract

This paper analyses the buffering effect of social support and relationships during the transition to unemployment in Germany. I distinguish two possible mechanisms. The first assumes that social support and closeness have an overall positive effect on life satisfaction (social undermining and distance in relationships – negative effect), and states that the networks respond to the transition to unemployment by providing more support and closeness, and by decreasing social undermining and distance. The second mechanism assumes that social support and closeness have an overall positive effect on life satisfaction, and states that this effect becomes even more positive during the transitions to unemployment.

I use German Family Panel (pairfam) data, which contain 70 measures of social support, social undermining, closeness, and distance in relationships. I investigate the relationships with parents, partner, relatives and non-relatives networks, and estimate the effects separately for men and women, and for people experiencing the transition to unemployment from employment, from schooling, and from homemaking. I use the statistical method of first difference models, which is conceptually equivalent to fixed-effects models.

The results support both mechanisms, but only for a limited number of support / relationship variables. The relationship that provides more support and less conflict in response to transition to unemployment is mainly the relationship with the partner. On the other hand, support and relationship with parents and socializing networks gain importance during the transition to unemployment.

*This paper uses data from the German Family Panel pairfam, coordinated by Josef Brüderl, Johannes Huinink, Bernhard Nauck, and Sabine Walper. Pairfam is funded as long-term project by the German Research Foundation (DFG).

KEY WORDS:

Buffering effect; Family support; Life satisfaction; Pairfam; Social support; Unemployment; Unemployment benefit;

1 Introduction

Unemployment hurts, but it may hurt more or less. Some people suffer more than others, depending on individual characteristics and on social context. This suggests, that it is possible to decrease the psychological costs of unemployment. A common policy tool are unemployment benefits. However, the suffering of the unemployed is stronger than what could be attributed to the loss of income (Brereton et al., 2008, Helliwell and Putnam, 2004, Winkelmann and Winkelmann, 1998), which suggests that other factors are of prime importance.

It is particularly painful to be unemployed in a developed, rich country: in Europe the unemployed suffer most in Switzerland, Germany, the Netherlands, and Finland (Mikucka, 2011). Research suggested that the low unemployment rate, and the related “norm to work”, might play an important role (Clark, 2003, Stutzer and Lalive, 2004). If this is the main moderating factor, then an attempt to decrease the psychological costs of unemployment would require undermining the social norm to work, which is not a conceivable socially desirable strategy.

However, other research suggested that the family ties, and – more broadly – social support might also shape the outcomes. In European countries with stronger norm of family support the unemployed suffer less (Mikucka, 2014). However, this conclusion rests on cross-national comparisons of cross-sectional data. Proper verification of this hypothesis requires individual-level analysis of longitudinal data. This paper attempts to provide such a test for Germany.

This paper investigates the social support and relationships as potential moderators of the effect of unemployment on life satisfaction. In other words, I verify the hypothesis that social support and relationships may have a buffering effect in the context of unemployment. Current analysis examines the support from, and relationships with: parents, partner, relatives, and non-relatives, and compares the buffering effect of these (potential) sources of support with the two other potential buffering factors: household income and unemployment benefit.

The question if social support and relationships in developed and rich countries may effectively help the unemployed is particularly relevant now, when the unemployment rates in many of these countries are on the rise. The trend toward state austerity and reducing welfare provisions makes it even more important. On the one hand, it is important to understand if in rich developed societies the network of mutual obligations between people is strong enough to have a real protective effect in a difficult situation. On the other hand, if social support and relationships may act as a buffer, then support groups might be considered as a potential low-cost welfare tool. Finally, this analysis may allow identifying groups who are likely to suffer more than others, and possibly design welfare tools tailored for these groups.

This paper contributes to several streams of research. (1) It adds to the literature on heterogeneity of unemployment on subjective well-being. Up to date, social support and relationships was rarely examined in this context with large scale panel data.

(2) The paper contributes to the research on positive well-being consequences of social capital. Growing evidence shows that social capital may have a positive effect on subjective well-being (e.g., Alesina and Giuliano, 2010, Dolan et al., 2008, Haller and Hadler, 2006, Powdthavee, 2008). One of the ways how social capital may raise life satisfaction is through the buffering effect. One of the types of social capital that should be considered are relationships with parents, partner, friends, and relatives, which act as a potential source of support. (3) This research adds also to the sociological literature on social support, by investigating which types of support and which aspects of relationships may be treated as effective sources of support in difficult situation. Moreover, this paper analyses the dynamics of these relationships in the context of unemployment.

2 Previous research

Broad evidence showed that the unemployed are less happy and satisfied with their lives than employed persons (Helliwell, 2003, Lucas et al., 2004, McKee-Ryan et al., 2005, Pittau et al., 2010). In the analysis of Clark et al. (2008), transition to unemployment stood out as one of the events most detrimental to life satisfaction of individuals: its effect was stronger than the effects of layoff or divorce, and it was equivalent to 80% (in case of men, 60% for women) of the effect of death of a spouse. Clark and Oswald (1994) showed that unemployment reduced well-being more strongly than impaired health. This negative effect is larger than what could be attributed to the lost income (Brereton et al., 2008, Helliwell and Putnam, 2004, Winkelmann and Winkelmann, 1998), which likely reflects the non-financial, psychological benefits of work: e.g., self-esteem, feeling of control, or opportunities for socialization (Darity and Goldsmith, 1996, McKee-Ryan et al., 2005, Warr and Jackson, 1987). Moreover, in contrast to other events negatively affecting well-being, the effect of unemployment is relatively persistent in time (Clark et al., 2008, Lucas, 2007, Winkelmann and Winkelmann, 1998).

The effect of unemployment on well-being differs across individuals (Winkelmann, 2009). Men suffer more than women (Lucas, 2007, Winkelmann and Winkelmann, 1998), and long-term unemployed suffer more than short-term unemployed (McKee-Ryan et al., 2005). The differences between countries and regions are also considerable. In particular, the unemployed suffer more in social contexts of low unemployment, and where the “norm to work” is stronger (Clark, 2003, Stutzer and Lalive, 2004).

Similarly as in the case of other difficult events, it is plausible that protective factors may moderate the negative effect of unemployment on subjective well-being. This reasoning has been formulated in psychological literature as the “buffering hypothesis” (Cohen and Wills, 1985, Thoits, 1982), and has been utilized also in other disciplines (e.g., Clark and Lelkes, 2005, LaRocco et al., 1980, Smith et al., 2005). According to buffering hypothesis, social support contributes to individuals’ health and subjective well-being by alleviating the negative consequences of stress associated with difficult events. This effect should be distinguished from the direct positive effect of social support on well-being: the former refers to support as a moderating factor, whereas the latter considers it as a main effect.

Some forms of buffering factors during unemployment have been analyzed in previous research. For instance, Winkelmann (2009) focused on social capital (defined as attending cultural and entertainment events, visiting friends, relatives or neighbors, engaging in sports or in voluntary work, and attending church) to check if these net-

works and activities (a source of self-esteem and a controlled, structured life for the unemployed) reduced the well-being loss due to becoming unemployed. The result was negative: social capital did not work as a buffer for the unemployed. Clark and Lelkes (2005) investigated if religion moderated the negative effect of unemployment and divorce on well-being, and delivered positive evidence: irrespective of denomination, religious persons suffered less during the transition to unemployment; moreover, cross-sectionally, the well-being gap related to unemployment was smaller among the religious persons. Participation in religious gatherings seemed to be of particular relevance. Analysis of the same question on a small sample of British Asians also provided positive results (Shams, 1993a)

Another part of the literature did not explicitly examine the buffering effect, but showed the importance of social support and relationships. Studies using small samples showed that perceived social support decreased anxiety of the unemployed and their spouses (Westman et al., 2004), as well as improved psychological health of unemployed men from an ethnic minority (Shams, 1993b). Similarly, a review of psychological literature by McKee-Ryan et al. (2005) cited the evidence that social interaction reduced the well-being loss and stress associated with unemployment. A review by Thoits (2011) showed that social support protects not only the subjective well-being, but also physical and mental health.

Some other previous works took a comparative approach and focused on the potential support received from the family. Mikucka (2014) showed that in Europe in countries with stronger norm of intra-family support the well-being gap between the unemployed and employed was smaller, which suggests that informal social support may be important.

Indeed, literature shows that informal networks are a source of support for the unemployed. Schoeni (2002) showed that the unemployed (even those who collect unemployment benefits) regularly receive financial support from their families and friends. WORK MORE ON THIS PART - CHAN & ERMISH

Social support can come from various sources, in particular from family and from non-family networks. Research postulates that family stands out as the provider of long-term, non-reciprocal, and expensive support (Agneessens et al., 2006, Stewart-Williams, 2007). Family members help each other in everyday situations, e.g. with shopping, housework, childcare, or financial transfers (Chan, 2009) and they are particularly responsive to recent crisis (Eggebeen and Davey, 1998, Schoeni, 2002, Silverstein et al., 2006). Stability of family relationships (in contrast to e.g. friendship, work or community networks) makes them a reliable source of support even during transitions which largely restructure the economic conditions and the networks of individuals (Burt, 2000, Roberts and Dunbar, 2011).

Especially in absence of family, non-family networks also act as sources of support (Chan, 2009, Chan and Ermisch, 2011, Plickert et al., 2007, Treas, 2011). The help provided by friends strongly depends on emotional ties (Wellman and Wortley, 1990) and similarity of experiences (Thoits, 2011). However, friendship ties are overall less stable than family ties (Belot and Ermisch, 2009, Burt, 2000, Oswald and Clark, 2003, Roberts and Dunbar, 2011).

Apart from informal support, a factor potentially buffering the effect of difficult events is money. For instance, Smith et al. (2005) showed that wealth reduces the well-being loss after the onset of a disability, especially in the initial period. Similarly, Westman et al. (2004) demonstrated that economic hardship increased anxiety

of unemployed and their spouses.

Specific financial source of support for the unemployed are unemployment benefits. EXTEND + REFS ON BENEFITS

2.1 The current study

This analysis examines the buffering effect of social support during unemployment in Germany. Conceptually, I separate buffering effect into following two mechanisms.

- M1 Social support has an overall positive effect on life satisfaction. Following the transition to unemployment the support increases, which acts as a buffer. Previous studies suggested that the increase of support concerns especially the initial period of unemployment (first two months in Westman et al., 2004).
- M2 Social support has an overall positive effect on life satisfaction. Following the transition to unemployment this positive effect becomes stronger, which acts as a buffer.

The above mentioned reasoning differs from the conceptualizations of Winkelmann (2009) and Clark and Lelkes (2005), who accounted for the average (for individuals, over the observation period) levels of the buffering factors (i.e., respectively, social capital and religion) and tested if the higher levels of buffering factor correlated with the less negative effects of unemployment on life satisfaction. In case of the analysis for religion, this design is a consequence of the (validated) assumption that religiosity does not change in response to unemployment (Clark and Lelkes, 2005). In case of social capital, Winkelmann did not test explicitly if the potential buffering factor results from increased social capital or from increased importance of it, probably also because no buffering effect was observed. (Winkelmann (2009) accounted also for the initial level of social capital, before the transition to unemployment, which suggests that the assumed mechanism was the increase of importance of social capital during unemployment.) In contrast to above mentioned analyses, social support and relationships likely change in response to unemployment, therefore the distinction between mechanisms M1 and M2 seems particularly relevant.

Following the literature, I also expect that the dynamics and importance of family and non-family network and relationships differ. Specifically, I expect that family support and relationships are more efficient buffers during unemployment than non-family networks. Because part of the non-family networks may be cultivated at work, unemployment may decrease the frequency of contact and overall weaken these relationships.

Moreover, my analysis focuses on various types on transitions to unemployment: from employment, from schooling, and from homemaking. This differs from the typical approach of examining only the transition from employment to unemployment. Although it is difficult to formulate specific hypotheses, it is likely that the dynamics of social support and relationships, as well as their importance differs across these groups.

3 Data and method

3.1 Data

This analysis uses German Family Panel (pairfam) data (Nauck et al., 2013), a German panel study initiated in 2008 with an initial sample of 12,402 randomly selected anchor persons of the three birth cohorts (1991-93, 1981-83, and 1971-73). Additionally included in the survey are the partners and, from the second wave onwards, also the parents and children of the anchor persons. At the time of the analysis, four waves of the study were available for analysis. A detailed description of the study can be found in the paper by Huinink et al. (2011).

Pairfam is a good source of data for this analysis because it observes a sufficient number of transitions to unemployment and it collects a detailed information on social support and relationships in various points in time. This choice also extends the empirical base of analysis of buffering effects during unemployment: previous analyses used the Socio-Economic Panel (Winkelmann, 2009), as well as European Social Study and British Household Panel (Clark and Lelkes, 2005) data.

3.2 Sample

The analysis distinguishes three types of transitions: between schooling and unemployment, employment and unemployment, and between homemaking and unemployment. The transitions are observed separately for men and women, as well as for the overall sample.

Overall in the data I observe the following numbers of transitions.

- 218 transitions from employment to unemployment and 304 from unemployment to employment;
- 227 transitions from schooling to unemployment and 101 from unemployment to schooling;
- 70 transitions from homemaking to unemployment and 55 from unemployment to homemaking;
- 74 transitions from other employment status to unemployment and 88 from unemployment to other employment status;

However, the exact number of cases in each analysis depends on many factors. Many variables measuring social support, social undermining, closeness and distance in relationships were observed every second wave which decreases the number of transitions taken into account. Moreover, these variables were not observed for all respondents. For example, the variables measuring relationships with parents were measured for respondents who had, and kept the contact with, respectively mother and father. Similarly, questions on the relationship with partner were asked only to respondents who had a partner.

The first difference regression models are estimated on the full sample (i.e. both individuals who underwent a transition and those who did not) with non-missing data. The sample size differs between $N = 481$ (receiving of childcare from respondent's father by men) and $N = 17,102$ for $n = 8,218$ individuals (analysis of individual income for the combined sample of men and women).

This approach differs from the one of Winkelmann (2009), who studied only individuals who underwent the transition to unemployment. In current paper other

respondents (not undergoing transition) are also included in the analysis. This has the advantage of enabling me to estimate the difference between individuals who underwent the transition and those who did not.

3.3 Measures of support

Pairfam data contain several measures of social support but also characterize the relationships of the respondent in terms of closeness, distance, and social undermining. Social undermining is defined as behaviors that involve anger, dislike, or criticism, or that hinder the individual's attainment of desired goals (McKee-Ryan et al., 2005). I account also for these aspects, because closeness in a relationship may be a source of emotional support. On the other hand, the distance in a relationships and social undermining may be considered negative measures of closeness and social support, respectively.

The negative measures (i.e, distance and social undermining) are used only in the analysis of the first buffering mechanism. I expect that social undermining and distance in relationships should decrease in response to transition to unemployment.

I observe various relationships / potential sources of support, including parents, partner, relatives, and non-family networks. All the measures are listed in Appendix 1. To assess the relative importance of informal social support, I compare the coefficients with the ones for personal and household income, as well as unemployment benefits. (THIS PART IS NOT YET READY)

3.4 Statistical method

I estimate the results using the first difference models which focus on within-individual changes, therefore they control for unobserved time-invariant heterogeneity. This is important, as the overall less happy people are likely selected into unemployment (Clark, 2003, Clark et al., 2008).

I estimate two regression models for each measure of support/relationship: one estimates the change of support as a function of the transition to unemployment, second model estimates the change of life satisfaction as a function of the transition, the change of social support, and the interaction of the two.

Model of support:

$$\begin{aligned} \text{d.Supp} = & \alpha + \Gamma_1 \text{d.U} + \\ & + \gamma_2 \text{d.Mar} + \gamma_3 \text{d.Div} + \gamma_4 \text{d.Health} + \gamma_5 \text{d.IInc} + \gamma_6 \text{d.HHInc} + \Gamma_7 w + \epsilon \end{aligned} \quad (1)$$

In this model, the change of support is a function of a vector of dichotomous variables representing the transitions between employment statuses (d.U), and the situations when the employment status did not change. The reference category is being employed in both previous and in current wave. The dichotomous variables code all the possible transitions between employment, unemployment, schooling, homemaking, and other employment status, as well as staying unemployed (i.e., unemployed in previous and current wave), staying in schooling, staying a housewife, and staying in other employment status. Γ_1 is the vector of coefficients estimating the effects of changes (and lack of change) of employment statuses. Coefficients γ_2 to γ_6 represent the effects of control variables: marriage, divorce, change of health, change of individual income, and the change of household income. The models using information

for more than two waves include also the dummies coding the waves; these effects are represented by the vector of coefficients Γ_7 .

Model of life satisfaction:

$$\begin{aligned} d.LS = & \alpha + \beta_1 d.Sup + \mathbf{B}_2 \mathbf{d.U} + \mathbf{B}_3 \mathbf{d.U} \cdot d.Sup + \\ & + \beta_4 d.Mar + \beta_5 d.Div + \beta_6 d.Health + \beta_7 d.IInc + \beta_8 d.HHInc + \mathbf{B}_9 \mathbf{w} + \tau \end{aligned} \quad (2)$$

In this model, the change of life satisfaction is a function of change of support or relationship ($d.Sup$), change of employment status ($\mathbf{d.U}$) defined as in the model of support described above, and the change of support for those who underwent a transition to unemployment ($\mathbf{d.U} \cdot d.Sup$). This vector includes only the transitions to unemployment and remaining unemployed. Again, the model accounts for the controls and waves (only for analyses using more than two waves).

4 Results

Buffering hypothesis assumes that social support and closeness correlate with higher life satisfaction, and the social undermining and distance – with lower life satisfaction. However, this relationships cannot be taken for granted. Therefore I begin by checking if various measures of support and closeness correlate with higher life satisfaction (overall, not just among people who became unemployed), and measures of distance and social undermining – with lower life satisfaction.

4.1 Do support, closeness, distance and undermining correlate with life satisfaction?

The overall effect of various types of support is estimated in the life satisfaction equations. The results (coefficients β_1) for men and women are summarized in Table 1.

Table 1: Overall effects of social support and relationships on life satisfaction. Difference models, separate for each measure of social support / relationship

	Men		Women	
Effect of social support on life satisfaction:				
Co-residence with mother	−0.28	.01	−0.08	ns
Co-residence with father	−0.18	.10	0.02	ns
Financial gift received from mother	−0.09	.05	0.06	ns
Financial gift received from father	−0.07	.10	0.02	ns
Childcare from father	−0.06	ns	−0.19	.01
Advice and information from mother	−0.06	ns	−0.03	ns
Advice received from mother	−0.05	ns	−0.02	ns
Financial help received from mother	−0.05	ns	−0.03	ns
Housework received from mother	−0.05	.10	−0.03	ns
Advice received from father	−0.05	ns	−0.03	ns
Childcare from mother	−0.04	ns	0.00	ns
Housework received from father	−0.03	ns	0.01	ns
Financial help received from father	−0.02	ns	0.01	ns
Advice and information – nr of non-relatives	0.01	ns	−0.00	ns
Advice and information – nr of people	0.02	.10	0.02	.10
Advice and information – nr of siblings	0.04	ns	0.10	ns
Advice and information – nr of relatives	0.04	ns	0.11	.05

If problems, partner listens	0.10	ns	0.18	.01
Advice and information from father	0.10	ns	0.00	ns
If problems, partner understands	0.17	.05	0.26	.01
If problems, partner supports	0.19	.01	0.10	ns
Advice and information from partner	0.20	.01	0.22	.01

Effect of social undermining on life satisfaction:

Disagreements with mother	−0.22	.05	−0.03	ns
Freq of being annoyed with partner	−0.21	.01	−0.23	.01
Freq of disagreeing with partner	−0.14	.01	−0.18	.01
Freq of disagr. with partner about leisure	−0.14	.01	−0.15	.01
Freq of disagr. with partner about relationships	−0.12	.05	−0.12	.05
Disagreements – nr of siblings	−0.10	ns	0.05	ns
Disagreements – nr of relatives	−0.10	ns	0.07	ns
Freq of disagr. with partner about housework	−0.09	.10	−0.15	.01
Frequency of getting angry with father	−0.09	.01	−0.06	.10
Freq of disagr. with partner about finances	−0.08	ns	−0.12	.05
Frequency of getting angry with mother	−0.08	.01	−0.03	ns
Disagreements frequency with father	−0.07	.01	−0.05	.10
Freq of disagr. with partner about career	−0.07	ns	−0.17	.01
Disagreements with father	−0.05	ns	0.05	ns
Disagreements frequency with mother	−0.04	ns	−0.07	.05
Disagreements – nr of non-relatives	−0.02	ns	−0.04	ns
Disagreements – nr of people	−0.02	ns	−0.01	ns
Disagreements with partner	0.15	.10	−0.06	ns

Effect of closeness in relationships on life satisfaction:

Worries shared with mother	−0.08	.10	0.00	ns
Sharing of thoughts – nr of non-relatives	−0.02	ns	−0.02	ns
Sharing of thoughts – nr of siblings	−0.02	ns	0.04	ns
Regular companionship – nr of non-relatives	0.00	ns	0.01	ns
Sharing of thoughts – nr of people	0.00	ns	0.01	ns
Sharing of thoughts – nr of relatives	0.00	ns	0.09	ns
Regular companionship – nr of people	0.02	ns	0.02	ns
Worries shared with father	0.03	ns	0.06	ns
Sharing of thoughts with mother	0.03	ns	−0.14	.10
Regular companionship – nr of relatives	0.04	ns	0.06	ns
Able to speak openly with mother	0.04	ns	0.06	.10
Regular companionship with father	0.05	ns	−0.24	.10
Sharing of thoughts with father	0.05	ns	−0.07	ns
Able to speak openly with father	0.08	.01	0.09	.01
Satisfaction with the partnership	0.09	.01	0.09	.01
Regular companionship with mother	0.09	ns	−0.15	.10
Freq of sharing with partner secrets/private feelings	0.10	.01	0.18	.01
Regular companionship – nr of siblings	0.10	ns	0.06	ns
Perceived satisfaction of the partner	0.10	.01	0.08	.01
Emotional closeness to mother	0.10	.01	0.11	.01
Freq of telling to partner what one is thinking	0.11	.01	0.15	.01
Emotional closeness to father	0.13	.01	0.07	.05
Partner can fulfill my needs very well	0.13	.05	0.32	.01
Sharing of thoughts, partner	0.25	.01	0.27	.01
Regular companionship with partner	0.27	.01	0.23	.01

Effect of distance in relationships on life satisfaction:

Freq meeting friends (rev)	−0.10	.10	−0.09	ns
----------------------------	-------	-----	-------	----

Contact frequency (rev) with father	−0.02	ns	−0.01	ns
Distance of living to father	0.01	ns	−0.09	ns
Contact frequency (rev) with mother	0.02	ns	−0.00	ns
Distance of living to mother	0.04	ns	−0.05	ns

Table 1 shows that the assumed pattern, that social support and closeness are related to higher life satisfaction, and social undermining and distance are related to lower life satisfaction, is only partly true. For instance, among measures of social support, there is a group which correlates with lower life satisfaction. Co-residence and receiving financial gifts from parents (among men), receiving housework help from mother (among men), and receiving housework help from father (among women) are all related to lower life satisfaction. It seems that these are the types of support to which people hesitate to resort, and do this only in some critical moments of their lives. On the other hand, another group of social support variables positively correlate with life satisfaction. Many of them refer to the quality of the partnership and the support received from a partner (e.g., receiving advice and information from partner, belief that partner understands in case of problems). Also the size of network from whom one receives advice and information correlates with higher life satisfaction (for women, also the size of the relatives' network). Overall, out of 22 measures, 6 correlates positively with life satisfaction for at least one gender, 6 correlates negatively, and remaining 10 have no statistically significant effect.

The measures of social undermining consistently correlate with lower life satisfaction. Only size of the network with whom one has disagreements (size of network overall, size of network of relatives, non-relatives, and siblings), and disagreements with father do not have a statistically significant effect for neither gender.

Measures of emotional closeness consistently correlate with higher life satisfaction. Overall, measures referring to the size of network of sharing thoughts and regular companionship, as well as sharing thoughts or worries with father, do not have a statically significant relationship with life satisfaction.

Measures of distance in relationships overall do not have a statistically significant effect on life satisfaction. Only low frequency of meeting friends negatively correlates with life satisfaction of men.

4.2 Buffer through the increase of support and closeness, decline of social undermining and distance

To investigate the first of the postulated mechanisms, I examine the results of support models to check if during the transition to unemployment the social support indeed increases and social undermining decreases, and relationships become more close and less distant. The results are summarized in Table 2 for the transitions from employment to unemployment, in Table 3 for the transitions from schooling to unemployment, and in Table 4 for the transitions from homemaking to unemployment. The tables list the measures of support and relationships which (statistically significantly) decreased or increased during the transitions to unemployment. The measures that did not change are not listed.

Moreover, each measure listed in the table is accompanied by a sign (+), (−), or (*ns*), which inform which effect had this measure on life satisfaction in the models of life satisfaction in the previous section. Note, that the buffering effect formulated as “Mechanism 1” requires that the forms of social support or emotional closeness

which increase during transition to unemployment also have a positive effect on life satisfaction overall.

Concerning the distance in relationships and social undermining, the buffering mechanism would imply that these aspects of relationships become less common during the transition to unemployment, which would bring positive life-satisfaction consequences.

Table 2: Summary of the results for the regression of support on transitions to unemployment. Difference models. Transitions from employment to unemployment. The table lists the forms of social support, social undermining, closeness and distance, for which the change was significant at the 90% level.

Men		Women
Form of support which:		
increased	(<i>ns</i>) Advice and information – nr of siblings (<i>ns</i>) Financial help received from father (<i>ns</i>) Financial help received from mother	(+) If problems, partner listens
decreased	(<i>ns</i>) Childcare from father (+) If problems, partner understands	(+) Advice and information from partner (<i>ns</i>) Financial help received from mother
Forms of closeness which:		
increased	(+) Able to speak openly with father (+) Emotional closeness to mother (+) Freq of sharing with partner secrets/private feelings (<i>ns</i>) Regular companionship – nr of non-relatives (<i>ns</i>) Regular companionship – nr of people (<i>ns</i>) Regular companionship – nr of siblings (–) Worries shared with mother	(<i>ns</i>) Sharing of thoughts – nr of people
decreased		
Forms of distance which:		
increased		(<i>ns</i>) Distance of living to father
decreased		
Forms of social undermining which:		
increased	(–) Frequency of getting angry with father	
decreased	(–) Freq of disagreeing with partner	(–) Freq of disagr. with partner about house-work

Let us look at the dynamics of support and relationships during each of the transitions.

- During the transition from employment to unemployment among men we observe the following buffers:

Table 3: Summary of the results for the regression of support on transitions to unemployment. Difference models. Transitions from schooling to unemployment. The table lists the forms of social support, social undermining, closeness and distance, for which the change was significant at the 90% level.

	Men	Women
Form of support which:		
increased	(<i>ns</i>) Childcare from mother	(<i>ns</i>) Advice and information – nr of non-relatives (+) Advice and information – nr of people (–) Childcare from father (+) If problems, partner listens (<i>ns</i>) If problems, partner supports (+) If problems, partner understands
decreased	(–) Financial gift received from father	(<i>ns</i>) Financial help received from father
Forms of closeness which:		
increased	(+) Freq of sharing with partner secrets/private feelings (+) Partner can fulfill my needs very well (<i>ns</i>) Regular companionship – nr of relatives (<i>ns</i>) Regular companionship with mother	(+) Partner can fulfill my needs very well
decreased	(+) Emotional closeness to father	(+) Emotional closeness to father
Forms of distance which:		
increased		
decreased	(–) Freq meeting friends (rev)	
Forms of social undermining which:		
increased	(–) Disagreements frequency with father (<i>ns</i>) Disagreements – nr of relatives (<i>ns</i>) Disagreements with father (–) Disagreements with mother (–) Freq of disagr. with partner about leisure	
decreased	(–) Freq of disagr. with partner about relationships	(<i>ns</i>) Disagreements – nr of siblings (–) Freq of disagr. with partner about career (–) Freq of disagr. with partner about finances (–) Freq of disagr. with partner about housework (–) Freq of disagr. with partner about leisure (–) Freq of disagr. with partner about relationships

Table 4: Summary of the results for the regression of support on transitions to unemployment. Difference models. Transitions from homemaking to unemployment. The table lists the forms of social support, social undermining, closeness and distance, for which the change was significant at the 90% level.

Men		Women
Form of support which:		
increased		(<i>ns</i>) Advice and information from mother
decreased		
Forms of closeness which:		
increased	(+) Able to speak openly with father (+) Emotional closeness to mother	(–) Regular companionship with father (<i>ns</i>) Sharing of thoughts – nr of siblings
decreased	(+) Emotional closeness to father (+) Freq of sharing with partner secrets/private feelings (+) Freq of telling to partner what one is thinking (+) Satisfaction with the partnership	(+) Perceived satisfaction of the partner (+) Satisfaction with the partnership (<i>ns</i>) Worries shared with mother
Forms of distance which:		
increased	(<i>ns</i>) Contact frequency (rev) with father	
decreased	(<i>ns</i>) Contact frequency (rev) with mother	(<i>ns</i>) Contact frequency (rev) with mother (<i>ns</i>) Distance of living to father
Forms of social undermining which:		
increased	(–) Disagreements frequency with father (<i>ns</i>) Disagreements frequency with mother (–) Freq of being annoyed with partner (–) Freq of disagreeing with partner (–) Frequency of getting angry with father (–) Frequency of getting angry with mother	(–) Disagreements frequency with mother (<i>ns</i>) Disagreements – nr of siblings
decreased		

- an increase of the ability to speak openly with the father,
- an increase of the emotional closeness to the mother,
- an increase of the frequency of sharing private thoughts and secrets with a partner, and
- a decreased frequency of disagreeing with the partner.
- During the transition from employment to unemployment among women we observe the following buffers:
 - an increase of partner listening in case of problems, and
 - a decreased frequency of disagreeing with the partner about housework.
- During the transition from schooling to unemployment among men we observe the following buffers:
 - an increase of the frequency of sharing private thoughts and secrets with a partner,
 - increased feeling that the partner can fulfill one's needs very well,
 - increased frequency of meeting friends, and
 - a decreased frequency of disagreeing with the partner about relationships.
- During the transition from schooling to unemployment among women we observe the following buffers:
 - an increase of partner listening in case of problems,
 - an increase of partner understanding in case of problems,
 - increase of size of the network providing advice and information,
 - increased feeling that the partner can fulfill one's needs very well, and
 - a decreased frequency of disagreeing with the partner about career, finances, housework, leisure and relationships.
- During the transition from homemaking to unemployment among men we observe the following buffers:
 - an increase of the ability to speak openly with the father, and
 - an increase of the emotional closeness to the mother.
- During the transition from homemaking to unemployment among women we observe no buffering factors.

Summing up, the inspection of Tables 2-4 informs that, out of 70 examined measures of support and relationships, only a few behave according to the buffering schema. Moreover, it is frequent that a factor associated with higher life satisfaction decreases during the transition to unemployment, or that a factor associated with lower life satisfaction increases. This suggests that transition to unemployment not only activates social support, but also erodes some supportive networks or increases social undermining in relationships.

Moreover, the factors that act as buffers concern primarily the relationship with the partner. The relationship with parents has a buffering effect only among men moving to unemployment from employment or from homemaking; non-family networks play some role only among men and women experiencing transition from schooling to unemployment.

4.2.1 What are the life satisfaction effects of these buffers?

The information on the effect of the support / relationship on life satisfaction can be combined with information on the change of support / relationship that occurs during the transition to unemployment, to estimate the effect of this change on life satisfaction. Results of such estimation are summarized in Table 5.

Table 5: Estimate of the buffering effect on life satisfaction of support / relationship changes during transitions to unemployment

Support or relationship measure	Change of support/ relationship during transition	Effect of support/ relationship on LS	Buffering effect on LS
Transitions from employment, men:			
Emotional closeness to mother	0.16	.1	0.10
Freq of sharing with partner secrets/private feelings	0.25	.1	0.10
Able to speak openly with father	0.33	.05	0.08
Freq of disagreeing with partner	-0.27	.05	-0.14
Transitions from employment, women:			
If problems, partner listens	0.55	.05	0.18
Freq of disagr. with partner about housework	-0.46	.1	-0.15
Transitions from schooling, men:			
Partner can fulfill my needs very well	0.14	.05	0.13
Freq of sharing with partner secrets/private feelings	0.27	.05	0.10
Freq meeting friends (rev)	-0.12	.05	-0.10
Freq of disagr. with partner about relationships	-0.56	.1	-0.12
Transitions from schooling, women:			
If problems, partner understands	0.11	.05	0.26
Advice and information – nr of people	1.72	.05	0.02
Partner can fulfill my needs very well	0.14	.01	0.32
If problems, partner listens	1.15	.01	0.18
Freq of disagr. with partner about leisure	-0.12	.05	-0.15
Freq of disagr. with partner about finances	-0.16	.01	-0.12
Freq of disagr. with partner about relationships	-1.14	.01	-0.12
Freq of disagr. with partner about career	-1.11	.01	-0.17
Freq of disagr. with partner about housework	-3.07	.01	-0.15
Transitions from homemaking, men:			
Able to speak openly with father	0.31	.01	0.08
Emotional closeness to mother	3.71	.01	0.10
Transitions from homemaking, women:			
(none)			

4.3 Buffer through the increasing importance of support, closeness, social undermining, and distance.

Let us now move to the second postulated buffering mechanism, namely that social support and closeness in relationships have a stronger positive effect on life satisfaction during the transition to unemployment. This has been captured in the life satisfaction models by the interaction term between the transition to unemployment and the social support/closeness. Technically, the interaction term captures how much the effect of given aspect of support or closeness among people entering unemployment differs from the overall effect. Therefore, to understand what is its effect among people who become unemployed, I sum up the two coefficients. These results are summarized in Table 6. I present only these aspects of support and closeness in relationships. I exclude social undermining and distance in relationships, because it is not clear how could these overall negative forms of relationships have a buffering effect in a difficult situation. Moreover, in Table 6 I include only measures, for which:

- the interaction with the transition to unemployment is statistically significant, that is I only show measures of support and closeness which have a different effect on people who enter unemployment than on people who do not enter unemployment; and
- the overall effect on life satisfaction is either as expected (i.e, positive) or statistically not significant.

Table 6: The effect of support and relationships estimated for the overall population and for people experiencing the transition to unemployment.

Support / relationship measure	Overall effect on LS		Interaction effect		Effect during the transition to unemployment
Transitions from employment, men, social support and closeness in relationships:					
Worries shared with father	0.03	ns	-0.71	.05	-0.71
Sharing of thoughts – nr of siblings	-0.02	ns	-0.55	.1	-0.55
Sharing of thoughts – nr of non-relatives	-0.02	ns	-0.43	.1	-0.43
Freq of sharing with partner secrets/private feelings	0.10	.01	-0.39	.1	-0.30
Regular companionship – nr of relatives	0.04	ns	0.88	.05	0.88
Childcare from father	-0.06	ns	0.96	.01	0.96
Transitions from employment, women, social support and closeness in relationships:					
Financial gift received from mother	0.06	ns	-0.72	.01	-0.72
Worries shared with father	0.06	ns	-0.64	.05	-0.64
Financial help received from father	0.01	ns	0.44	.05	0.44
Advice received from father	-0.03	ns	0.45	.1	0.45
Housework received from father	0.01	ns	0.61	.05	0.61
Sharing of thoughts – nr of siblings	0.04	ns	0.69	.1	0.69
Advice and information – nr of relatives	0.11	.05	0.63	.05	0.74
Sharing of thoughts with father	-0.07	ns	1.77	.01	1.77
Transitions from schooling, men, social support and closeness in relationships:					
Advice and information – nr of relatives	0.04	ns	-1.13	.1	-1.13

If problems, partner listens	0.10	ns	-0.67	.01	-0.67
If problems, partner understands	0.17	.05	-0.74	.01	-0.58
If problems, partner supports	0.19	.01	-0.76	.01	-0.57
Freq of sharing with partner secrets/private feelings	0.10	.01	-0.65	.1	-0.55
Satisfaction with the partnership	0.09	.01	-0.29	.1	-0.20
Regular companionship – nr of people	0.02	ns	-0.15	.05	-0.15
Financial help received from mother	-0.05	ns	0.39	.05	0.39
Emotional closeness to father	0.13	.01	0.32	.1	0.45
Housework received from father	-0.03	ns	0.67	.01	0.67

Transitions from schooling, women, social support and closeness in relationships:

Advice and information from partner	0.22	.01	-1.56	.01	-1.34
Regular companionship with partner	0.23	.01	-1.16	.05	-0.92
Regular companionship – nr of people	0.02	ns	0.23	.05	0.23
Regular companionship – nr of non-relatives	0.01	ns	0.38	.05	0.38
Financial gift received from father	0.02	ns	0.41	.1	0.41
Housework received from mother	-0.03	ns	0.43	.05	0.43
Satisfaction with the partnership	0.09	.01	0.42	.1	0.51
Financial help received from mother	-0.03	ns	0.57	.1	0.57
Perceived satisfaction of the partner	0.08	.01	0.59	.01	0.67
Financial help received from father	0.01	ns	0.68	.05	0.68
Regular companionship – nr of relatives	0.06	ns	1.06	.05	1.06
Regular companionship – nr of siblings	0.06	ns	1.44	.01	1.44

Transitions from homemaking, men, social support and closeness in relationships:

(none)

Transitions from homemaking, women, social support and closeness in relationships:

Regular companionship – nr of siblings	0.06	ns	-1.48	.01	-1.48
Regular companionship – nr of relatives	0.06	ns	0.42	.01	0.42
Regular companionship – nr of people	0.02	ns	0.48	.05	0.48
Advice received from mother	-0.02	ns	0.55	.1	0.55
Sharing of thoughts – nr of people	0.01	ns	0.58	.05	0.58
Childcare from mother	0.00	ns	0.61	.1	0.61
Regular companionship – nr of non-relatives	0.01	ns	0.67	.05	0.67
Sharing of thoughts – nr of non-relatives	-0.02	ns	1.04	.01	1.04
Worries shared with mother	0.00	ns	1.08	.05	1.08

According to the second mechanism, the buffering effect implies that social support and closeness in relationships (a potential source of emotional support) should have stronger positive effect on life satisfaction among people who become unemployed than among people who do not become unemployed. The results in Table 6 show that this is not a general rule.

- Among men moving from employment to unemployment buffering effect have:
 - childcare provided by father, and
 - group of relatives with whom one spends time regularly.
- Among women moving from employment to unemployment buffering effect have:
 - the relationship with father (receiving financial help, advice, and housework, as well as sharing the thoughts with father), and

- relationships with the relatives and siblings (group with whom one may share thoughts and from whom to receive advice and information).
- Among men moving from schooling to unemployment buffering effect have:
 - the relationship with parents: financial help from mother, and emotional closeness to father and housework received from him.
- Among women moving from schooling to unemployment buffering effect have:
 - regular companionship of both siblings, relatives, and non-relatives,
 - relationship with the parents (financial gift and financial help received from father; and housework and financial help received from mother)
 - own satisfaction with the partnership and the perceived satisfaction of the partner.
- Among men moving from homemaking to unemployment no factors have a buffering effect.
- Among women moving from schooling to unemployment buffering effect have:
 - relationship with the mother (advice and childcare received from mother, sharing worries with the mother), and
 - socializing group, i.e. number of both relatives and non-relatives with whom one can spend time regularly, and the number of non-relatives with whom to share thoughts.

STILL TO ADD HERE: ESTIMATION FOR INCOME AND UNEMPLOYMENT BENEFIT – BENCHMARK

5 Conclusions

The results suggest that the buffering effect of social support and relationships in Germany during the transition to unemployment is rather weak.

First, among the examined 70 measures of social support, social undermining, closeness in relationships and distance in relationships, only a few change during the transition to unemployment in a way which protects the life satisfaction of individuals. In other words, in only few cases transition to unemployment is accompanied by increase of support or closeness (positively associate with life satisfaction), or by a decrease of social undermining or distance in relationships (which negatively correlate with life satisfaction). Among the various sources of support, the most responsive to the difficult situation of unemployment is the support and relationships with a partner. Relationships with and support from parents and non-family networks also improve in response to the transition to unemployment, but this considers very limited number of measures and only respondents who moved to unemployment from schooling.

Second, the importance of some forms of social support and closeness increase during the transition to unemployment. Here, a close relationship with parents and the support received from them are significant most often. The socializing networks (non-family, but also with relatives, and siblings) also play a role. The partnership becomes more important only among women who move from schooling to unemployment.

Appendix A Measures of social support and relationships

Table 7: Measures of support from, closeness to, and tensions in relationship with non-family network, as well as income-related support and resources.

Measure of support or tensions	Values' range	Availability (waves)
Non-family network, support:		
Advice and information, network (network size)	0...26	.1.1
Advice and information, non-family (network size)	0...23	.1.1
Non-family network, closeness:		
Regular companionship, network (network size)	0...21	.1.1
Regular companionship, non-family (network size)	0...21	.1.1
Sharing of thoughts, network (network size)	0...21	.1.1
Sharing of thoughts, non-family (network size)	0...20	.1.1
Non-family network, tensions:		
Disagreements, network (network size)	0...16	.1.1
Disagreements, non-family (network size)	0...21	.1.1
Income-related support and resources:		
Household income	0...25	1111
Individual income	-0...3	1111
Social Benefits D	dummy	1111
Unemployment Benefit D	dummy	1111

Table 8: Measures of support from parents, closeness and distance to parents, and tensions in relationship with parents.

Measure of support or tensions	Values' range	Availability (waves)
Parents, support:		
Advice and information (F) D	dummy	.1.1
Advice and information (M) D	dummy	.1.1
Advice received (F)	1...5	.1.1
Advice received (M)	1...5	.1.1
Childcare (F)	1...5	.1.1
Childcare (M)	1...5	.1.1
Co-residence (F) D	dummy	1111
Co-residence (M) D	dummy	1111
Financial gift received (F)	1...5	.1.1
Financial gift received (M)	1...5	.1.1
Financial help received (F)	1...5	.1.1
Financial help received (M)	1...5	.1.1
Housework received (F)	1...5	.1.1
Housework received (M)	1...5	.1.1
Parents, closeness:		
Able to speak openly (F)	1...5	1111
Able to speak openly (M)	1...5	1111
Emotional closeness (F)	1...5	1111
Emotional closeness (M)	1...5	1111
Regular companionship (F) D	dummy	.1.1
Regular companionship (M) D	dummy	.1.1
Sharing of thoughts (F) D	dummy	.1.1
Sharing of thoughts (M) D	dummy	.1.1
Worries shared (F)	1...5	.1.1
Worries shared (M)	1...5	.1.1
Parents, distance:		
Contact frequency (rev) (F)	1...7	1111
Contact frequency (rev) (M)	1...7	1111
Distance of living (F)	1...6	1111
Distance of living (M)	1...6	1111
Parents, tensions:		
Disagreements (F) D	dummy	.1.1
Disagreements (M) D	dummy	.1.1
Disagreements frequency (F)	1...5	1111
Disagreements frequency (M)	1...5	1111
Frequency of getting angry (F)	1...5	1111
Frequency of getting angry (M)	1...5	1111

Table 9: Measures of support from, closeness to, and tensions in relationship with partner and family network.

Measure of support or tensions	Values' range	Availability (waves)
Relationship, support:		
If problems, partner listens	1...5	1.1.
If problems, partner supports	1...5	1.1.
If problems, partner understands	1...5	1.1.
Partner can fulfill my needs very well	1...5	1.1.
Perceived satisfaction of the partner	0...10	1111
Satisfaction with the partnership	0...10	1111
Relationship, closeness:		
Freq of sharing secrets/private feelings	1...5	1111
Freq of telling what is thinking	1...5	1111
Relationship, tensions:		
Freq of being annoyed	1...5	1111
Freq of disagr. about career	1...5	1.1.
Freq of disagr. about finances	1...5	1.1.
Freq of disagr. about housework	1...5	1.1.
Freq of disagr. about leisure	1...5	1.1.
Freq of disagr. about relationships	1...5	1.1.
Freq of disagreeing	1...5	1111
Family network, support:		
Advice and information, relatives (network size)	0...8	.1.1
Advice and information, siblings (network size)	0...3	.1.1
Family network, closeness:		
Advice and information, relatives (network size)	0...8	.1.1
Advice and information, siblings (network size)	0...3	.1.1
Family network, tensions:		
Disagreements, relatives (network size)	0...3	.1.1
Disagreements, siblings (network size)	0...4	.1.1

References

- Agneessens, F., Waeye, H., and Lievens, J. (2006). Diversity in social support by role relations: A typology. *Social Networks*, 28(4):427–441.
- Alesina, A. and Giuliano, P. (2010). The power of the family. *Journal of Economic Growth*, 15(2):93–125.
- Belot, M. and Ermisch, J. (2009). Friendship ties and geographical mobility: evidence from great britain. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 172(2):427–442.
- Brereton, F., Clinch, J. P., and Ferreira, S. (2008). Employment and life-satisfaction: Insights from Ireland. *The Economic and Social Review*, 39(3):207–234.
- Burt, R. S. (2000). Decay functions. *Social Networks*, 22(1):1 – 28.
- Chan, T. W. (2009). Intergenerational exchange in the UK. Working paper, published on the website of Oxford University Computing Services. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.157.3983&rep=rep1&type=pdf>.
- Chan, T. W. and Ermisch, J. (2011). Intergenerational exchange of instrumental support: Dynamic evidence from the British Household Panel Survey. Working paper, paper published on the website of Oxford University Computing Services. <http://users.ox.ac.uk/~sfos0006/papers/famex9.pdf>.
- Clark, A. (2003). Unemployment as a social norm: Psychological evidence from panel data. *Journal of Labor Economics*, 21(2):323–351.
- Clark, A. E., Diener, E., Georgellis, Y., and Lucas, R. E. (2008). Lags and leads in life satisfaction: a test of the baseline hypothesis. *The Economic Journal*, 118(529):F222–F243.
- Clark, A. E. and Lelkes, O. (2005). Deliver us from evil: Religion as insurance. Papers on Economics of Religion No 06/03, Department of Economic Theory and Economic History of the University of Granada.
- Clark, A. E. and Oswald, A. J. (1994). Unhappiness and unemployment. *Economic Journal*, 104(424):648–59.
- Cohen, S. and Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2):310–357.
- Darity, William, J. and Goldsmith, A. H. (1996). Social psychology, unemployment and macroeconomics. *The Journal of Economic Perspectives*, 10(1):121–140.
- Dolan, P., Peasgood, T., and White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1):94 – 122.
- Engelbeen, D. J. and Davey, A. (1998). Do safety nets work? The role of anticipated help in times of need. *Journal of Marriage and the Family*, 60(4):939 – 950.
- Haller, M. and Hadler, M. (2006). How social relations and structures can produce happiness and unhappiness: An international comparative analysis. *Social Indicators Research*, 75:169–216.

- Helliwell, J. F. (2003). How's life? Combining individual and national variables to explain subjective well-being. *Economic Modelling*, 20(2):331 – 360. Henry Special Issue.
- Helliwell, J. F. and Putnam, R. D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1449):1435–1446.
- Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., and Feldhaus, M. (2011). Panel analysis of intimate relationships and family dynamics (pairfam): Conceptual framework and design. *Zeitschrift für Familienforschung - Journal of Family Research*, 23:77–101.
- LaRocco, J. M., House, J. S., and French, John R. P., J. (1980). Social support, occupational stress, and health. *Journal of Health and Social Behavior*, 21(3):pp. 202–218.
- Lucas, R. E. (2007). Adaptation and the set-point model of subjective well-being. *Current Directions in Psychological Science*, 16(2):75–79.
- Lucas, R. E., Clark, A. E., Georgellis, Y., and Diener, E. (2004). Unemployment alters the set point for life satisfaction. *Psychological Science*, 15(1):8–13.
- McKee-Ryan, F. M., Song, Z., Wanberg, C. R., and Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, 90(1):53 – 76.
- Mikucka, M. (2011). Unemployment and well-being in Europe. The effect of country unemployment rate, work ethics and family ties. Working Paper 2011-014, CEPS/INSTEAD, Luxembourg.
- Mikucka, M. (2014). Does individualistic culture lower the well-being of the unemployed? Evidence from Europe. *Journal of Happiness Studies*, forthcoming.
- Nauck, B., Brüderl, J., Huinink, J., and Walper, S. (2013). The German Family Panel (pairfam). Data-set Version 4.0.0, GESIS Data Archive, Cologne. ZA5678 Data file.
- Oswald, D. L. and Clark, E. M. (2003). Best friends forever?: High school best friendships and the transition to college. *Personal Relationships*, 10(2):187–196.
- Pittau, M., Zelli, R., and Gelman, A. (2010). Economic disparities and life satisfaction in European regions. *Social Indicators Research*, 96:339–361.
- Plickert, G., Côté, R. R., and Wellman, B. (2007). It's not who you know, it's how you know them: Who exchanges what with whom? *Social Networks*, 29(3):405–429. Special Section: Personal Networks.
- Powdthavee, N. (2008). Putting a price tag on friends, relatives, and neighbours: Using surveys of life satisfaction to value social relationships. *Journal of Socio-Economics*, 37(4):1459 – 1480.
- Roberts, S. G. and Dunbar, R. I. (2011). The costs of family and friends: An 18-month longitudinal study of relationship maintenance and decay. *Evolution and Human Behavior*, 32(3):186–197.
- Schoeni, R. F. (2002). Does unemployment insurance displace familial assistance? *Public Choice*, 110(1-2):99–119.
- Shams, M. (1993a). Religiosity as a predictor of well-being and moderator of the psychological impact of unemployment. *British Journal of Medical Psychology*, 66(4):341–352.

- Shams, M. (1993b). Social support and psychological well-being among unemployed British Asian men. *Social Behavior and Personality: an International Journal*, 21(3):175–186.
- Silverstein, M., Gans, D., and Yang, F. M. (2006). Intergenerational support to aging parents. *Journal of Family Issues*, 27(8):1068–1084.
- Smith, D. M., Langa, K. M., Kabeto, M. U., and Ubel, P. A. (2005). Health, wealth, and happiness. *Psychological Science*, 16(9):663–666.
- Stewart-Williams, S. (2007). Altruism among kin vs. nonkin: effects of cost of help and reciprocal exchange. *Evolution and Human Behavior*, 28:193–198.
- Stutzer, A. and Lalive, R. (2004). The role of social work norms in job searching and subjective well-being. *Journal of the European Economic Association*, 2(4):696–719.
- Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior*, 23(2):145–159.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2):145–161.
- Treas, J. (2011). Revisiting the Bott thesis on kin networks and marriage. *Social Science Research*, 40(3):716 – 726.
- Warr, P. and Jackson, P. (1987). Adapting to the unemployed role: A longitudinal investigation. *Social Science & Medicine*, 25(11):1219 – 1224.
- Wellman, B. and Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96(3):558–588.
- Westman, M., Etzion, D., and Horovitz, S. (2004). The toll of unemployment does not stop with the unemployed. *Human Relations*, 57(7):823–844.
- Winkelmann, L. and Winkelmann, R. (1998). Why are the unemployed so unhappy? Evidence from panel data. *Economica*, 65(257):1–15.
- Winkelmann, R. (2009). Unemployment, social capital, and subjective well-being. *Journal of Happiness Studies*, 10(4):421–430.