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Gender Differences in the Social Consequences of Unemployment: How Job Loss Affects the Risk of Becoming Socially Isolated

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Abstract

Using longitudinal data from the German Socio-Economic Panel, the study examines whether the impact of unemployment on the risk of becoming socially isolated is different for women and men and whether it can be traced back to financial straits. An isolating effect of unemployment is found only with regard to men, to long-term unemployment, and to social isolation in terms of scarce contact to friends and family. There is no such effect with regard to women, to short-time unemployment, and to social isolation in terms of a non-participation in civic associations. It is also found that the isolating impact of unemployment is only to a small extent attributable to the financial situation of the unemployed.

Keywords

employment, gender, gender roles, loneliness, marginalization, poverty, social capital, social exclusion, social isolation, unemployment

Introduction

In recent years, social isolation has become a broadly discussed issue in the media, in politics and in science. In media reports, social isolation has been called a modern epidemic (for a critical view see Klinenberg, 2018) and some national governments have taken on this issue (for the UK see HM Government, 2018; for Germany see Deutsche Bundesregierung, 2018: 26). Scientific studies point out adverse impacts of social isolation on health (for an overview see Courtin and Knapp, 2017) and social theory suggests

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Article

social isolation to have meaningful consequences not only for the isolated individuals but also for society as a whole (for an overview see Machielse, 2006).

A frequently discussed predictor of social isolation is unemployment (Brand, 2015; Brand and Burgard, 2008; Dieckhoff and Gash, 2015; Diewald, 2003; Julkunen, 2002; Paugam and Russell, 2000). This study discusses possible mechanisms in the causal relationship between unemployment and social disconnectedness and will be the first study to examine gender differences in the impact of unemployment on isolation by using panel data covering a long period of time. Utilizing 10 waves of the German Socio-Economic Panel, analyses evince social consequences of unemployment to be different for women and men and to be only marginally attributable to the financial implications of joblessness. The suggested theoretical explanation refers to the psychological implications of unemployment and to the related impact of the cultural setting. It is argued that men may be more severely affected by psychological implications of unemployment because of prevailing gender roles which induce men to link their self-esteem more strongly to career success than women.

In Germany, the unemployment rate is about 6 per cent with approximately one-third of it being long-term unemployment (Bundesagentur für Arbeit, 2019). Unemployment is one of the most significant risk factors of poverty in Germany. More than half of the unemployed are living below the poverty line (Giesselmann and Goebel, 2013). Against this background, Germany appears to be an interesting case for studying the role of unemployment in social isolation. With the unemployment rate being comparatively low, the jobless might be exposed more strongly to feelings of shame and inferiority. Also, with long-term unemployment being linked to a high risk of poverty, jobless men and women might often lack the resources needed to maintain social ties.

Throughout this article, social isolation is defined as the absence of social contacts. This is in accordance with the understanding of social isolation in most of the recent studies (e.g. McPherson et al., 2006; Parigi and Henson, 2014; Shankar et al., 2017; Valtorta et al., 2016; Zavaleta et al., 2017). In compliance with previous research on the link between social isolation and unemployment (Dieckhoff and Gash, 2015; Gallie et al., 2003), the study further differentiates between isolation from formal groups (civic associations) and isolation from informal relationships (friendships and family ties).

Hypotheses and previous research

Theories on social exclusion suggest that labour market marginalization is linked to marginalization in other areas of society (Kronauer, 1998; Silver, 1995). In particular, unemployment (exclusion from the labour market) is assumed to raise the risk of becoming socially isolated (exclusion from social contacts). This can result in a 'vicious circle' (Gallie et al., 2003) because social isolation, in turn, goes along with reduced re-employment prospects (Brandt, 2006).

A number of cross-sectional studies already showed that unemployment is negatively correlated to social connectedness or, respectively, to social activities. Julkunen (2002) examined social activities of unemployed 18–24 year olds in Scotland and in the Scandinavian countries. Social activities such as visiting friends were less frequent among those who had been unemployed for more than one year than among those with a

shorter duration of unemployment. By using the German Family Survey, Diewald (2003) found that current unemployment, as well as the cumulated duration of prior periods of unemployment, were associated with small numbers of personal relationships. Dieckhoff and Gash (2015) linked unemployment to participation in formal and informal social networks. By using the European Survey of Income and Living Conditions from 2006, they found that unemployed persons had less contact with friends and could less often name a person to whom they could turn for help. In accordance with other earlier studies (Paugam and Russell, 2000; Rotolo and Wilson, 2003), they also found that the unemployed participated less often in civic associations.

For considering possible opportunities for intervention, it is necessary to focus on the underlying mechanisms that are constitutive to the isolating impact of unemployment. On this matter, there are two major lines of argumentation about the underlying mechanism in the effect of unemployment on social involvement. The first one follows the tradition of classic sociological studies such as the Marienthal-study (Jahoda et al., 1933) and refers to the psychological implications of unemployment. The second one, by contrast, puts more of an emphasis on the role of the financial situation of the unemployed.

As regards psychological implications, unemployment is known to be negatively linked to self-esteem and to a positive self-perception (Paul and Moser, 2009). As argued in the theory of social comparison processes (Festinger, 1954), comparing oneself to persons holding a better social position can lower one's self-esteem and is therefore often avoided. Breaking off contact with social ties might thus be a common pattern of reaction to feelings of shame and inferiority provoked by unemployment. This implicates that psychological consequences of unemployment may engender an increased risk to become socially isolated. The psychological repercussions of unemployment, however, are very likely different for women and men. This becomes conjecturable from studies pointing towards the significance of gender roles in the way people cope with dismissal or occupational setback (Hakim, 1995; Jahoda, 1982; Jahoda et al., 1933; Komarovsky, 1940; for an overview see Strandh et al., 2013). Gender roles corresponding to the male-breadwinner norm (Lewis, 1992; Pfau-Effinger, 2004) – which are still prevailing in most countries (Aboim, 2010) – entail female identity to be less connected to employment (Hakim, 1995) whereas masculine identity is seen as 'intricately linked to having a job' and to be 'severely threatened by unemployment' (Paul and Moser, 2009: 266). By the same token, gender roles might induce that, in the case of unemployment, men are exposed more strongly to feelings of inferiority and shame whereas women are able to turn to alternative roles more easily (because in doing so they are not deviating from prevailing gender roles). The risk of social isolation can therefore be expected to be higher for unemployed men than for unemployed women. This assumption will be referred to in the following as the gender-difference hypothesis.

H1 (gender-difference hypothesis): The isolating effect of unemployment is moderated by gender. There is a strong isolating effect of unemployment for men and a comparatively weak or even non-existent isolating effect for women. Findings from several previous studies on psychological reactions to unemployment support this assumption. These studies reveal men to be more psychologically distressed by unemployment than women (for an overview see Paul and Moser, 2009). However, gender differences in the impact of unemployment on social isolation were investigated only by very few studies. Findings from these studies are likewise in line with the gender-difference hypothesis. Based on data collected in 1986 in Florida, Leana and Feldman (1991) found that unemployed women were more likely than unemployed men to talk to friends about their problems after the job loss. Using data conducted in the UK in 1986 and 1987, Russell (1999) found that unemployed persons were more often socially isolated in terms of having no one to rely on when feeling depressed or needing help. Here, the difference between the unemployed and the employed was smaller for women than for men (Russell, 1999: 217), whereas the proportion of those who reported a decrease in social activities was higher among the unemployed men than among the unemployed women (Russell, 1999: 211).

Psychological impacts, however, are not the only conceivable explanation for the isolating effect of unemployment and for related differences between women and men. An alternative explanation is that the high rates of social isolation among the unemployed are caused by economic consequences of unemployment rather than by its psychological implications. Unemployment is among the most meaningful risk factors of poverty in Germany as well as in most other countries (Atkinson and Marlier, 2010: 147; Heyne, 2012). Poverty, in turn, is a major predictor of social isolation (Böhnke and Link, 2017; Eckhard, 2018b; Mood and Jonsson, 2016). This is often explained by arguing that people in financial difficulties have to forgo several means which would otherwise help to maintain or start personal ties (Gallie et al., 2003; Kempson, 1996; Steward et al., 2009). Following this line of argumentation, the isolating effect of unemployment is presumably attributable to financial restrictions. In technical terms, the financial situation is expected to be an important mediator variable of the effect of unemployment on the risk to be socially isolated. This assumption will be referred to in the following as the financial-straits hypothesis.

H2 (financial-straits hypothesis): The isolating effect of unemployment is attributable to financial straits.

Previous research provides only limited evidence for gender differences in the isolating impact of unemployment or for the mediating role of financial hardship. Almost all of the above-mentioned studies were based on cross-sectional data. A general problem of cross-sectional studies is that their findings are prone to biases due to unobserved heterogeneity. There are a lot of individual attributes which are difficult to measure by using survey questionnaires and which presumably entail both an increased risk of unemployment and a comparatively high risk of social isolation. Brandt and Burgard (2008) elucidated this problem by showing that already before the job loss many of the unemployed workers in their study had not participated in civic associations.¹

The problem of biases due to unobserved confounders can be alleviated by using panel data. The only study which applied panel data to examine the impact of unemployment on social isolation is a study by Gallie et al. (2003). Because it is based on only three consecutive waves of the European Community Household Panel (1994, 1995 and 1996), the study, however, was incapable of capturing effects of longer unemployment durations.

Summarized, previous research on the link between unemployment and social isolation has yielded mixed results. This is presumably due to different types of data limitations. Almost all studies used cross-sectional data and the only previous longitudinal study was not able to capture the effects of long durations of unemployment. Moreover, only very few cross-sectional studies have dealt with gender differences and no previous study includes a mediation analysis to investigate the role of financial hardship.

Data and methods

The study at hand applies ten waves of the German Socio-Economic Panel (SOEP) (Goebel et al., 2019): waves 1992, 1994, 1996, 1997, 1999, 2001, 2005, 2007, 2009 and 2011.² These waves include information that can be used to identify social isolation: information on meetings with friends and family members and information on participation in clubs and associations.³ The study uses information on all SOEP respondents who were interviewed in at least two of the ten panel waves and were between 18 and 60 years old at the time of the interviews. For methodological reasons, all time-series in the sample start with a period in which the related respondent was not unemployed. If a period of unemployment is observed in subsequent years, then the time-series is cut off at the end of the unemployment period.⁴ After deleting non-response units, the sample includes 21,199 respondents. In total, it involves 95,515 episodes (i.e. 95,515 single observations constituting the 21,199 time-series). Table A1 (Appendix) gives a more detailed description of the sample.

The data are analysed using fixed-effects regression methods which produce estimators that are unbiased by any possible confounders which do not change over time (Allison, 2005). Fixed-effects estimators for categorial variables can be calculated by using either a conditional-logit model (Chamberlain, 1980) or a linear-probability model (Wooldrigde, 2002: 454–455). An advantage of the latter is that linear-probability models with different combinations of independent variables can be compared to each other. We therefore apply linear-probability models but additionally use conditional-logit models for cross-checking.⁵

Further data preparations ensure that the resulting estimators relate to the impact of entries into unemployment rather than to the impact of re-entries into employment. Firstly, time-series always start with a period in which the related respondent is not unemployed. Secondly, if a time-series involves a period of unemployment, it ends when the unemployment period is over. The regression models further include coefficients for different durations of unemployment as well as for the year before the unemployment period. In the context of a fixed-effects model and a sample in which all observed persons are not unemployed at the beginning of the observed period, this makes sure that the effect of unemployment on isolation is not evoked by direct selection (i.e. selection into the group of the unemployed of those who had already beforehand been isolated).

Unemployment is defined as being registered as unemployed by the public employment agencies. In Germany, registering as unemployed is also possible in the case of marginal employment. Registered unemployment thus also includes marginally employed persons who are looking for a regular job. The data also contain information on unemployment experiences in times before the interviews. This information is used to determine the duration of unemployment.

Regarding social isolation, analyses distinguish between the sphere of friends and family members and the sphere of civic associations. This corresponds to previous studies (Dieckhoff and Gash, 2015; Eckhard, 2018b, 2020; Gallie et al., 2003). Isolation from friends and family is measured by combining various sources of information: a) information on the existence of persons living in the same household; b) information on the existence of a partner relationship; c) information about the frequency of meetings with friends, relatives or neighbours; d) information about the frequency of giving support to friends, relatives or neighbours. The resulting indicator classifies those as isolated from friends and family who at the same time a) live alone, b) are without a partner, c) meet socially with friends, relatives or neighbours less often than once per month and d) give help to friends, relatives or neighbours less often than once per month. This indicator was found to produce rather small rates of social isolation and can therefore be seen as a conservative estimate. Moreover, when compared to other indicators, it produces outcomes that are of greater consistency with theoretical expectations about the relation of social isolation to age, well-being and health (Eckhard, 2018a). Isolation from civic associations is identified by using information on participation in clubs, political organizations and churches. Respondents were asked how often they attended church or religious events, how often they voluntarily contributed in associations or civil services and how often they participated in political organizations.⁶ Those who reported that they never did any of these activities are classified as isolated with regard to civic associations. Additionally, a further variable identifies those who are at the same time isolated from family and friends as well as from civic associations. This variable is referred to in the following as overall isolation.

The applied measurement of financial straits encompasses the concept of relative income poverty as well as a subjective indicator for financial hardship. As regards the latter, two dummy-variables are used which identify those who reported that they were seriously worried or, respectively, somewhat worried about their financial situation. In the following, this measurement is referred to as self-reported financial worries. As regards income poverty, annual poverty lines were calculated by using the gross sample of the SOEP whereby poverty lines were defined by an equivalized net household-income lower than 50 per cent of the median. Equivalence income is calculated by using the newer OECD scale (from 1994).⁷

Pre-studies showed that the effect of income poverty on social isolation was weaker when using the 60 per cent threshold whereas results regarding the mediation effect of income poverty turned out to be very similar (see also Eckhard, 2018a, 2018b). For cross-checking, grouped income percentiles are used as a more sensitive measure for income change.

Estimators deriving from fixed-effects regression are unbiased from any time constant confounders. Hence, analyses implicitly adjust for the effects on social isolation of any determinants that do not (or only very rarely) vary during the observation period. This relates to variables such as attributes of the social origin, attributes of the place of living, a migrant background, educational attainment and basic personality traits. However, this is different for confounders that change over time. It is therefore important to account for variables that change over time and are likely to have an impact on both the risk of unemployment and the risk of social isolation. Such variables are health, duration of residence, as well as variables related to transitions in partner relationships. As regards health, we adopt a five-point scale for the self-assessed condition of health. The effect on social isolation was observed to be strongest when the scale is converted into a binary variable relating to those with the lowest degree of self-reported health. Analyses presented below apply this binary variable. Duration of residence is determined by using information on the date when respondents moved into a certain household. Additionally, relocations are identified by a change of the household identification number (meaning that the respondent moved out of the original SOEP household into a new one). Information about transitions in partner relationships derives from the annual SOEP questions about family events. Analyses include a set of variables referring to whether a person experienced a divorce, a separation of a non-marital relationship, the death of a spouse or the death of a partner in a non-marital relationship. Included is also the number of years since the respective event.

Gender differences in the effect of unemployment on social isolation

Estimators in Figure 1 are within-estimators deriving from a fixed-effects linear-probability model. They show whether the risk of social isolation increased in the first, second or third year of unemployment or only after a longer unemployment duration. The small coefficients for the 'year before' indicate that those who became unemployed had not shown any increased risk of social isolation in the year before their transmission into unemployment. Because time-series were cut off when periods of unemployment ended, estimators are not further affected by changes in social isolation that occurred after a reentry into employment. Regression models underlying Figure 1 do not include any further control variables except for the year of observation because the question of biases due to confounding variables that change over time will be addressed in the next section.

The related numbers of cases in the sample are 1275 male and 1184 female respondents for the first year of unemployment, 549 male and 533 female respondents for the second year, 265 male and 220 female respondents for the third year and 340 male and 318 female respondents for later years. A more detailed presentation of the regression models underlying Figure 1 is given in Table A2 in the Appendix. Table A2 also shows that a conditional-logit regression leads to similar findings as the linear-probability models.

Regarding women, Figure 1 shows that neither the risk of isolation from friends and family nor the risk of isolation from civic associations was significantly increased by unemployment. For social isolation in terms of non-participation in civic associations, there was even a reduced risk of social isolation for women who had been unemployed for longer than three years. When experiencing long-term unemployment, women thus appeared to rather apply themselves to associational life instead of withdrawing from it.

As regards men, by contrast, the risk of isolation from friends and family members was found to rise strongly after two years of unemployment. The figure shows that the first two years of unemployment had no significant effects whereas longer unemployment



Figure 1. Fixed-effects estimators for the impact of unemployment duration on social isolation; by gender and type of isolation (fixed-effects linear-probability regression; percentage points, 95 per cent confidence limits).

Adjusted for the period of observation (dummy-variables, grouped: 1992/1994, 1996/1997, 1999/2001, 2005/2007, 2009/2011).

Unemployment is defined by being registered as unemployed by the public employment agencies. Data: German Socio-Economic Panel 1992, 1994, 1996, 1997, 1999, 2001, 2005, 2007, 2009 and 2011, age 18-60. For further details see Table A2 (Appendix). durations had. This was observed for isolation from friends and family as well as for overall isolation. Only isolation from civic associations was found to be unaffected by unemployment.

By showing a reinforcing impact of unemployment on social isolation only for men but not for women, Figure 1 supports the gender-difference hypothesis (H1). Unemployment did not increase the risk of social isolation as regards women, whereas men were exposed to an increased risk of isolation from friends and family as well as to an increased risk of overall isolation when they had been unemployed for more than two years.

The role of financial conditions

Having found that, as regards men, a longer duration of unemployment entails an increased risk of social isolation, the question arises whether this can be traced back to the financial implications of being jobless. This question can be addressed by mediation analysis. Mediation by financial straits becomes apparent when the observed effect of unemployment on social isolation is reduced after indicators for financial straits are additionally fitted into the regression model (Baron and Kenny, 1986). A precondition for this, however, is that causality runs from unemployment to poverty rather than from poverty to unemployment. Concerning this matter, additional research with the SOEP-data revealed that respondents who slipped into poverty showed no higher probability of being unemployed than before the onset of poverty (see Figure A1 in the Appendix).⁸ This suggests that financial straits have no reinforcing impact on the probability of being unemployed and that the correlation between unemployment and poverty rather results from the financial consequences of joblessness.

Figure 2 presents the results from different regression models which were enhanced stepwise by possible mediator variables. Because the findings discussed in the previous section revealed that there was no reinforcing impact of unemployment on social isolation as regards women and as regards social isolation in terms of non-participation in civic associations, regression models underlying Figure 2 were limited to male respondents and to isolation from friends and family. A more detailed presentation of these regression models is given in Table A3 (Appendix).

In Model A, the effects of different unemployment durations were adjusted only for the period of observation. In Model B, the effects were further adjusted for health. Effects deriving from Model B were almost identical to those deriving from Model A. Only slightly different effects were produced by Model C which additionally included the duration of residence, transitions in couple relationships and the existence of children in the household. Hence, the effect of unemployment on the risk of isolation was found to be only marginally mediated by transitions in health, by duration of residence, by transitions in couple relationships and by living with children. This is important because health, duration of residence, the existence of children and transitions in couple relationships are expectably correlated to occupational changes, to social isolation as well as to financial conditions. In Model D, the effects of different unemployment durations were additionally adjusted for income poverty. In comparison with Models A, B and C, there was again only a very slight decrease in the effects of the different unemployment durations.⁹



Figure 2. Mediation of the effects of unemployment duration on isolation from friends and family among men (fixed-effects linear-probability regression; percentage points, 95%-confidence limits).

Adjusted for

A: period of observation (dummy-variables, grouped: 1992/1994, 1996/1997, 1999/2001, 2005/2007, 2009/2011).

B: same as A and health (self-reported bad or very bad health).

C: same as B and duration of residence, living with children and transitions in couple relationships.¹

D: same as C and income poverty.²

E: same as D and self-reported financial worries.³

¹Marriage separations, separations of non-marital live-in relationships, separations of relationships with separate households, duration since the separation, death of a spouse, death of a live-in partner, death of non-cohabiting partner, duration since the death.

 2 Equivalence income, newer OECD scale (from 1994); poverty is defined by an income lower than 50 per cent of the median.

³Two dummy-variables identifying those who are seriously and those who are somewhat worried about their financial situation.

Unemployment is defined by being registered as unemployed by the public employment agencies.

Data: German Socio-Economic Panel 1992, 1994, 1996, 1997, 1999, 2001, 2005, 2007, 2009 and 2011; men at age 18 to 60.

For further details see Table A3 (Appendix).

Model E, finally, was supplemented by adjusting for self-reported financial worries. Unemployment effects of Model D and Model E were almost identical. This suggests that there is at best a slight mediation of the unemployment effect by financial straits, regardless of whether financial straits are measured by income poverty or by self-reported financial worries.

Similar results as in Figure 2 were also found with regard to overall social isolation (in terms of being without any involvement in civic associations and at the same time without contact to friends and family members). A detailed presentation of this is given in Table A4 in the Appendix. In addition to the findings of Figure 2, Sobel-Goodman tests were applied to assess the size of the mediation effect. At this, unemployment durations of more than two years were used as the independent variable. The results are shown in Table 1. Again, it was found that the effect of longer unemployment durations on social isolation from friends and family was mediated only to a minor degree by income poverty and by self-reported financial worries. The percentage of the total effect that was mediated was only 8.16 per cent for income poverty and only 3.91 per cent for

Table 1. Sobel-Goodman tests for mediation by income poverty and by self-reported financial distress of the isolating effect of unemployment durations of two years and above; men at age 18 to 60 (fixed-effects linear-probability regression; 10,404 persons, 46,549 observations).

Dependent variable	Mediator variable	Total effect of unemployment duration > 2 years	Indirect effect	Per cent mediated	Test statistics
Isolation from friends and family ¹	Income poverty ³	0.031**	0.003*	8.16%	Goodman I 2.37 Goodman II 2.40 Sobel 2.38***
	Self-reported serious financial worries	0.031**	0.001*	3.91%	Goodman I 2.24 Goodman II 2.26 Sobel 2.25***
Overall isolation ²	Income poverty ³	0.025**	0.002*	7.96%	Goodman I 2.08 Goodman II 2.11 Sobel 2.09***
	Self-reported serious financial worries	0.025**	0.001	2.70%	Goodman 1.61 Goodman 1.62 Sobel 1.61

*, **, *** significance level p<0.05, p<0.01, p<0.001.

¹Persons who at the same time a) live alone, b) have no couple relationship, c) have meetings with or give help to friends, relatives or neighbours less than once a month.

²Isolation from friends and family and at the same time no involvement in a citizens group, political organization or political party, never attending church or religious events and also never working voluntarily in a club or in social services.

³Equivalence income, newer OECD scale (from 1994); poverty is defined by an income lower than 50 per cent of the median.

Unemployment is defined by being registered as unemployed by the public employment agencies.

Data: German Socio-Economic Panel, waves 1992, 1994, 1996, 1997, 1999, 2001, 2005, 2007, 2009 and 2011, men at age 18-60.

self-reported financial worries. As regards overall isolation, it was only 7.96 per cent for income poverty and only 2.70 per cent for self-reported financial worries. In the case of the latter, the indirect effect was not statistically significant.

As shown in Figure 1, no isolating impact of unemployment was found for women. Further mediation analyses have ascertained that, as regards women, there is neither a direct effect of unemployment on social isolation nor an indirect effect caused by financial hardship.¹⁰ Besides that, unemployment was confirmed to be a meaningful predictor of financial hardship for both genders. A two-year period of unemployment was found to increase the risk of income poverty by 17 per cent for men and by 10 per cent for women. As regards self-reported financial worries, the respective effects are 22 per cent for men and 20 per cent for women.

Summarized, financial conditions seem to be of minor importance for explaining the impact of unemployment on social life. Whereas there is no isolating effect of unemployment on women, men are exposed to an increased risk of social isolation during longer periods of unemployment. However, it has turned out that this increased risk for men is only to a very small proportion attributable to their financial circumstances. This is

contradictory to the financial-straits hypothesis (H2). Social isolation after a job loss thus seems to be a consequence of the psychological implications of unemployment rather than a consequence of the financial implications.

Discussion

In the previous sections the impact of unemployment on social isolation was, for the first time, analysed by using multi-wave panel data covering a long timeframe and by calculating fixed-effects estimators which are less prone to biases due to unobserved confounders. Through this, it was possible to examine the isolating impact of both short and long durations of unemployment. Within this framework, the study's focus was on gender differences and on the question of whether the isolating impact of unemployment can be traced back to the financial situation of the unemployed.

In the literature, we find explanations on the link between unemployment and social isolation which are referring either to the financial implications or to the psychological implications of unemployment. As suggested by the gender-differences hypothesis, the psychological implications are different for women and men. According to this, it was to be expected that the isolating impact of unemployment would be stronger for men than for women. By contrast, no gender differences would have been expected according to the financial-straits hypothesis which suggests that the isolating impact of unemployment is attributable in the first place to the financial situation of the unemployed.

As the analyses have shown, the isolating impact of unemployment was limited to men and to unemployment durations of two years and above. It was also found that this impact of unemployment pertained to social isolation in terms of absent contact to friends and family members rather than to isolation in terms of non-participation in civic associations. Unemployment did not increase the risk of being socially isolated among women. As regards men, the isolating impact of unemployment was attributable only to a minor degree to financial circumstances.

These results are in line with the gender-differences hypothesis whereas the financialstraits hypothesis is not supported. The findings of this study thus are also contradictory to theories which suggest that the comparatively high risk of social isolation among the unemployed is in the first place a consequence of their financial position. The association between unemployment and social isolation seems to be based on the psychological implications such as feelings of inferiority and shame rather than on the economic consequences of joblessness. According to theoretical considerations underlying the genderdifferences hypothesis, men are more severely affected by psychological implications of unemployment because of gender roles involving that men link their self-esteem more strongly to career success than women.

The question arises why men's risk of isolation from friends and family was found to increase only after a duration of unemployment of more than two years. From our findings it can be concluded that this is not because of a deterioration in the financial situation (for instance, because savings might often be used up at this time). Hence, a possible explanation might rather be that the psychological implications of unemployment become stronger with every year of unemployment and in many cases culminate after two or three years.

Unemployment was not observed to affect participation in civic associations. An isolating impact was found only with regard to social isolation from friends and family members and with regard to overall isolation in terms of being without participation in civic associations and at the same time without contact to friends and family. An implication of this is that long-term unemployment entails a high risk of overall isolation particularly for those who, in times before the onset of unemployment, already stayed away from civic associations. Already having been without any connection to civic associations before the job loss, these men become completely isolated when a long duration of unemployment additionally leads to a withdrawal from friends and family members.

Findings of this study are contradictory to the results of most previous studies. On the one hand, the longitudinal study by Gallie et al. (2003) found neither an effect of unemployment on social isolation in terms of non-participation in civic associations nor on social isolation in terms of absent contact to friends and family members. A probable reason for this might be that Gallie et al. were faced with a rather restricted data situation and could use only three subsequent panel waves (1994, 1995 and 1996) of the European Community Household Panel. Because of this, the study was incapable of capturing effects of longer durations of unemployment. As shown above, only long durations of unemployment increase the risk of becoming socially isolated.

On the other hand, cross-sectional studies found unemployment to be linked not only to social isolation from friends and family members but also to non-participation in civic associations. A probable reason for this is that the results of cross-sectional studies are likely to be biased due to unobserved confounders. In addition to the analyses presented above, the SOEP data were also analysed by using a standard logit-regression with panel-robust standard errors (pooled-logit model). Whereas the fixed-effects estimators represent the longitudinal impact of unemployment, which is unbiased by unobserved heterogeneity, this does not pertain to the estimators deriving from the pooled-logit model. Unlike the fixed-effects models, pooled-logit regression produced strong reinforcing effects of unemployment on social isolation from friends and family as well as on social isolation in terms of absent participation in civic associations. This was found for both genders as well as for both long and short durations of unemployment (Table A5 in the Appendix). It can be concluded from this that cross-sectional findings on the link between unemployment and social isolation are likely to be biased by unrecognized confounders.

Social isolation is known to limit the prospects of re-employment (Brandt, 2006). This can result in a self-reinforcing dynamic leading to entrapments in unemployment (Gallie et al., 2003). In light of this as well as in light of further serious consequences of social isolation, it is in the public interest to find possible approaches for interventions against the isolating impact of unemployment.

Financial assistance for the unemployed is undoubtedly of a high importance in many respects. However, considering that the isolating impact of unemployment is attributable only to a small extent to financial straits, it seems unlikely that financial measures are capable of preventing unemployed persons from becoming socially isolated. More effective in this respect might be interventions targeted at the psychological implications of unemployment such as feelings of inferiority and shame. Such interventions could, for instance, deal with modifications in the ways public agencies and public advisory offices interact with unemployed persons. Campaigns for a more positive public image of the unemployed are also conceivable.

With only men but not women affected by the isolating impact of unemployment, considerations on possible interventions should also take gender roles into account. Theoretically, men are more affected by the psychological implications of unemployment because gainful employment is socio-culturally linked to the male identity. According to this, gender equality policies might contribute to the dissolution of this link and might therefore be another possible approach to reducing the risk of social isolation among unemployed men.

Besides that, initiatives to strengthen civil society can be seen as a strategy to diminish the isolating impact of unemployment. This can be concluded from the finding that participation in civic associations was less affected by unemployment than friendships and family ties. The reason for this might be that engagement in civic associations is a way in which unemployed persons can gain recognition regardless of their occupational situation. This might be particularly true when the engagement is long-standing and when it reaches back to times before the onset of unemployment. Moreover, even those who withdraw from friendships and family during the time of unemployment are protected against the threat of overall social isolation if they are continually integrated into civic associations. In this sense, a strong civil society can act as a preventive against the isolating impact of unemployment.

Although the study benefits largely from applying multi-wave panel data, some limitations of the study have to be considered. Firstly, although fixed-effects regression precludes biases due to confounders that are stable over time, we cannot completely rule out biases due to unrecognized confounding variables that change over time. However, estimators were at least adjusted for the effects of relocations, changes in health and transitions in partner relationships.

Secondly, the applied data do not include indicators relating to the psychological implications of unemployment. Because of this, it was not possible to directly test the assumption that the high risk of isolation from friends and family among long-term unemployed has psychological reasons. However, the study could preclude alternative explanations by showing that the observed impact of unemployment on social isolation is not attributable to financial straits or to further supposed mediator variables such as physical health, change of residence and transitions in partner relationships.

Finally, using only data from Germany, it is uncertain whether the findings apply to other national settings. There are various possible sources for cross-country differences in the link between unemployment and social isolation: labour market regulations, social security systems or elements of the country-specific social cultures. For instance, Germany has been described as comparatively conservative regarding gender roles (Pfau-Effinger, 2012). Further research based on data from various countries is needed to clarify whether the findings of this study are generalizable to other national settings. In particular, such research based on international data could also provide further insights on moderating effects of political frameworks and sociocultural environments.

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Notes

- The study by Brand and Burgard (2008) suggests adverse effects of a job loss on participation in church-related and community-related groups. However, as also noted by the authors, the validity of their data is limited by large time-gaps between the three measurement dates in 1975, 1993 and 2004. Because of these time-gaps, it is in many cases not possible to determine whether social participation was ceased before the job loss or thereafter.
- 2. The study uses SOEP-release V32.
- 3. The items in question were also included in 2013, 2015 and 2017. These waves are not used in this study because the wording of the questions was altered in wave 2013.
- 4. In case of respondents who went through more than one period of unemployment, only the last period was included.
- 5. The cross-checking is reasonable because estimators deriving from linear-probability models are prone to biases in the case of dependent binary variables for which the probability of observing one category is either very high or very low (Andreß et al., 2013: 212).
- 6. There might be further areas of civil society that are important. In alternative analyses, we included information on sports though it could not be distinguished between those doing sports on their own and those doing sports in an organized group. However, these alternative analyses produced similar results as the analyses reported in this article.
- 7. It seems appropriate to refrain from using the individual income instead of the (equivalence) household income because a decline in individual income in the aftermath of a job loss might often be compensated by the income of other household members.
- 8. This was obtained by applying a linear-probability fixed-effects model for calculating the effects of different durations of poverty. Reference category was the year before the onset of poverty. Estimators were adjusted for the survey year. Data basis were SOEP-waves 1984–2011, limited to respondents at age 18 to 60.
- 9. In alternative analyses, grouped income percentiles were used instead of the poverty-threshold. These alternative analyses produced similar results as the analyses reported in this article.
- 10. This has been found for both types of social isolation (overall isolation; isolation from friends and family) and for both indicators of financial hardship (income poverty; self-reported financial worries). In each case, the indirect effect is below 0.002 and is not statistically significant.

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