

## **Disconnected Young Adults in Germany: Initial Evidence**

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### **Abstract**

Disconnectedness among young adults can have several dimensions. From a socio-economic viewpoint, failure in school, unemployment and the lack of a partner are among the most important ones. In our sample of respondents to the SOEP Youth Questionnaire, approximately 13% of young people had been socio-economically disconnected at least once between the ages of 17 and 19. The percentage of disconnected young adults also rose from 2001 to 2008. We found evidence that an adverse family background is the most important variable affecting disconnection in young adulthood. Macroeconomic factors also contribute to socio-economic disconnection. Recessions are followed by increases in the share of disconnected young adults.

*JEL Classifications: D87, I12, I21, J13*

### **1. Introduction**

Disconnectedness among young adults can have several dimensions. From a socio-economic viewpoint, failure in school, unemployment and the lack of a partner are among the most important ones. Furthermore, even in modern society, young people sometimes lack the personal networks that provide emotional and financial support and that guarantee access to higher levels of education. For young people who lack such support networks and also face difficulties obtaining loans, the danger of becoming disconnected is exacerbated. Successful social integration is contingent upon the passage of a number of thresholds governed by formal and informal rules. Those who do not pass such thresholds or who do not adhere to social rules face a higher probability of fail-

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ure (e.g., McCurdy et al., 2006). Failure in an apprenticeship or training program, for example, produces long-run negative effects on income, increases the likelihood of unemployment, and results in permanent rather than temporary earnings setbacks (e.g., Franz et al., 2000).

The literature has discussed various factors that cause young people to become disconnected, among them early life adversity and an unfavorable family environment (e.g., Bartling et al., 2010; Blomeyer et al., 2009; Heckman, 2007; and Fertig/Tamm, 2010), as well as imperfections in credit and labor markets (e.g., McCurdy et al., 2006; or Franz et al., 2000).

Despite the pertinacity of disconnection among young adults, there is still a lack of empirical research on the extent of the problem, its evolution over recent decades, and the main socio-economic factors driving it. Our study was intended to close part of this gap. We examined the percentage of disconnected young adults between the ages of 17 to 19 from 1991 to 2008, and studied the role of sex, parental education, lone-parent homes, migration background, region, and economic conditions as key factors leading to socio-economic disconnection. Furthermore, we investigated the relationship between socio-economic disconnection and related social outcomes such as locus of control and involvement in sports activities. We focused on young people between the ages of 17 and 19 who were categorized as disconnected because they were not currently working, in school, or in a relationship. In Germany, this age group is generally either in school or in vocational training, which should mean that disconnection rates are close to zero. Moreover, adolescents who are disconnected at this age have a 15 percentage point higher probability of being disconnected two years later than those who are not disconnected (Pfeiffer/Seiberlich, 2010).

Our results show that disconnectedness among young adults is a social reality in Germany. In our sample of respondents to the SOEP Youth Questionnaire, approximately 13% of young people between the ages of 17 and 19 had experienced disconnection at least once. The percentage of disconnected young people also rose from 2001 to 2008. The empirical findings suggest that this is the result of low-quality adult mentoring in periods of emotional and economic development when mentoring is needed most. Furthermore, the evidence shows that job loss, credit market imperfections, and a lack of emotional support during economic recessions exacerbate youth unemployment, culminating in an increased percentage of disconnected young adults.

The paper is organized as follows. Section 2 explains the concept of disconnection. Section 3 examines individual determinants of disconnection among young people, and Section 4 explores its association with school grades, class repetition, locus of control, and sports activities. Section 5 concludes.

## 2. Concepts of Disconnectedness and its Evolution among Young People from 1991 to 2008

MaCurdy et al. (2006) employed two concepts of disconnection. The first defined young people as disconnected if they were neither in school nor working; the second added the category of not living with a spouse. They found that teen mothers, high-school dropouts, young people convicted of a crime, and young people who had spent time living outside their parents' home were over-represented in the group of disconnected young adults according to the second broader definition.

Since life partners – and not only spouses – provide financial and emotional support, we define young people as disconnected if they are not working, not enrolled in school, and not living with a partner, whether married or unmarried. Cohabitation is a socially accepted alternative to marriage in modern German society, as evidenced in the 34% increase in the percentage of unmarried couples living together between 1996 and 2007 (Destatis, 2008).

The concept of disconnection can be viewed as one aspect of the broader concept of social exclusion (e.g., Böhnke, 2010). Disconnection relates to a person's educational and employment status as well as to social relationships. Other dimensions of social exclusion, such as poverty and living standards, are also closely linked to disconnection. In our analysis of individual determinants of disconnection, we also include the educational and immigration status of the family (measured when the respondent was 15 years old), variables that are closely associated with poverty and the standard of living.

To examine the level and determinants of disconnectedness, we used two samples taken from the German Socio-Economic Panel (SOEP, see Wagner et al., 2007). The first one, termed *Sample 91/08*, consists of young people between the ages of 17 and 19, and covers the period from 1991 to 2008<sup>1</sup> to investigate the evolution of disconnectedness based on yearly cross-sections. *Sample 00/08* was taken from the SOEP Youth Questionnaire introduced in 2000 and will be described in section 3 below.

In the 17 to 19 age group, the percentage of disconnected young adults increased from 4.2% in 1991 to 7.2% in 2008. It should be noted that the percentage of disconnected young adults and the official unemployment rates among young adults sometimes move in opposite directions. From 1997 to 2004, for instance, official unemployment rates decreased, but disconnection among young adults increased slightly. The reason is that our measure covers social

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<sup>1</sup> For details, see Pfeiffer/Seiberlich (2010), who also studied disconnection rates among adolescents and young adults in the 17 to 25 age group. Note that in the period under investigation, the German economy suffered two major recessions, one in 1993–95 and one in 2001–03.

factors in addition to economic factors of disconnectedness. Both of these dimensions are important in their own right. Interestingly, disconnection rates follow the official unemployment rate with a time lag. The correlation between our concept of disconnection and the lagged unemployment rate amounts to 0.38 (calculation based on *Sample 91/08*). Thus, economic recessions contribute to youth unemployment (see Gomez-Salvador/Leiner-Killinger, 2008; Verick 2009, among others), in turn increasing the prevalence of disconnection. The consequences of job loss, credit market imperfections, and a lack of emotional support culminate in a higher rate of disconnection during the periods following recessions.

### 3. Determinants of Disconnection in the Period 2000 to 2008

The prevalence and determinants of disconnection were examined using a sample of respondents to the SOEP Youth Questionnaire (2000–2008), referred to here as *Sample 00/08*, enriched with follow-up data on disconnection from the regular SOEP survey up to the age of 19. *Sample 00/08* is therefore comprised of adolescents who participated at the ages of 17, 18, and 19. The youngest cohort consists of individuals who were 17 in 2000 and the oldest consists of those who were 19 in 2008. Three observations for each individual – at age 17, 18, and 19 – were utilized to define disconnection. The variable “disconnected young adult” in this sample equals 1 if a person is not working, not enrolled in school, and not living with a spouse/partner at the age of 17, 18, or 19 (otherwise, it is 0). Only one adolescent from each household was examined to avoid composition effects. The restrictions leave us with 1,335 individuals, 676 females, and 659 males.

Disconnection in *Sample 00/08* hovered around 13% over the period under investigation, see Table 1. Rates were higher than those for *Sample 91/08* because of the different structure of *Sample 00/08*, as described above. Disconnection increased during the economic recession from 6.6% in 2001 to 15.9% in 2003 (Table 1).

Table 1

#### Disconnection in the 17 to 19 Age Group, 2001–2008, and by Sex in Percentages

	All	Males	Females	2001	2002	2003	2004	2005	2006
%	12.7	12.1	13.3	6.6	9.2	15.9	14.5	13.7	17.7

Source: SOEP, 1,335 observations taken from the SOEP Youth Questionnaire, 2000–2008; authors' calculations.

Individual determinants of disconnection were investigated with a probit model based on *Sample 00/08*. In the model, we used only predetermined variables. As *predictor* variables, we included a set of dummy variables for parental educational level. If one parent was highly (or moderately) educated and the other was not, parental education was denoted (*high*) *medium*. If both mother and father had a low level of education, parental education was defined to be *low*. In addition, a dummy variable, *first 15 years without both parents*, indicates whether the individual spent the first 15 years of her/his life without both parents (1) or with both parents (1). A further set of controls includes time indicators,<sup>2</sup> a sex variable, *female*, a regional dummy variable, *West* (which equals 1 if the individual was from West Germany), and *migration background*, which equals 1 if the young person had a migration background (i.e., a first- or second-generation immigrant).

We found significant (5% level) differences in some of these variables among the disconnected and connected young adults and none in others.<sup>3</sup> In East Germany, the share of disconnected young adults was lower than in West Germany, despite the fact that youth unemployment rates in 2008 were higher in the East (12.7%) than in the West (5.7%) (Federal Employment Agency, 2009). The lower rates of disconnection in East Germany are presumably a legacy of the culture of early independence that was prevalent in East Germany under communism. Even today, East German young people still tend to marry sooner, start their own families earlier, and therefore seem to assert their independence from their parents earlier on the whole (see Montada/Oerter 2002, 320). The lower rates might as well result from lower shares of young people with a migration background in the East than in the West, or from differences in parental education.

Our findings also showed higher levels of disconnection among young people with a migration background in Germany similar than in the United States (MaCurdy et al., 2006; Fernandes/Gabe, 2009). Although disconnection rates were slightly higher among females, the difference is not statistically significant, which is also in line with MaCurdy et al. (2006). Disconnected young adults also have a statistically significantly higher likelihood of having low-educated parents and of growing up without both parents present in the household. We conducted further tests dealing with the role of parental education and migration status in disconnection. The differences in disconnection rates between young people with low and high parental education were 14.2% for young Germans and 13% for young people with a migration background. Although disconnection rates were higher in the latter group, the inequality in

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<sup>2</sup> In all specifications, only the dummy variable for the year 2001 was found to be significant, indicating that those who were 17 in 2001 had a higher probability of becoming disconnected than those who were 17 in 2000.

<sup>3</sup> For a similar test, see Table 5 in Pfeiffer/Seiberlich (2010).

disconnection rates by parental education was slightly higher among German young adults. The parental education gap in disconnection rates therefore seems to be slightly wider among young people of German origin than among those with a migration background.

The findings from a set of probit estimates are displayed in Table 2. Equation (1) contains time dummies and further dummies for sex, region, and migration background. In this specification, the only variable that remained significant (at the 10% level) was *West*, that is, living in West Germany. West German young people had a 3.7% higher marginal probability of being disconnected than East German young adults.

Table 2  
Findings of the Multivariate Analysis (Marginal Effects)

Equation	Probit Regressions: Disconnection					
	(1)		(2)		(3)	
Variables	dF/dx	z	dF/dx	z	dF/dx	Z
<i>female</i>	0.0151	0.85	0.0123	0.71	0.0123	0.71
<i>West</i>	0.0371	1.78	0.0272	1.26	0.0283	1.29
<i>migration background</i>	0.0327	1.35	0.0367	1.53	-	-
<i>first 15 years without both parents</i>	-	-	0.0815	3.61	0.0806	3.57
Parental education (2)						
<i>moderately educated family</i>	-	-	-0.0580	-2.67	-	-
<i>highly educated family</i>	-	-	-0.1063	-5.02	-	-
Parental education by migration status (3)						
<i>family low-educated German</i>	-	-	-	-	-0.0272	-0.83
<i>family moderately educated immigrant</i>	-	-	-	-	-0.0552	-1.48
<i>family moderately educated German</i>	-	-	-	-	-0.0816	-2.52
<i>family highly educated immigrant</i>	-	-	-	-	-0.0739	-2.15
<i>family highly educated German</i>	-	-	-	-	-0.1253	-4.26
	Obs. = 1,335		Obs. = 1,335		Obs. = 1,335	
	Ps. R <sup>2</sup> = 0.02		Ps. R <sup>2</sup> = 0.06		Ps. R <sup>2</sup> = 0.06	
	Wald = 19,89		Wald = 55,84		Wald = 55,60	

Source: SOEP, 1,335 observations taken from the SOEP Youth Questionnaire, 2000–2008; time dummies are included in all equations, but not reported in the table; authors' calculations.

Equation (2) also contains our parental background variable (*low parental education* serves as a reference category for parental education) and confirms the descriptive findings. If parental education was *medium (high)*, the probability of being disconnected was reduced by 5.8% (10.6%), a finding that is in

line with the literature (MaCurdy et al., 2006; among others). Furthermore, if the young person did *not live with both parents* up to the age of 15 the probability of being socio-economically disconnected increased by 8.2%. Here, living in West Germany no longer increased the marginal probability of being disconnected, and the coefficient for *West* became insignificant. This finding suggests that parental background, and not inherited cultural differences, was responsible for the significant regional coefficient in equation (1).

The goal of equation (3) was to assess whether parental education had a different impact on the probability of being disconnected for young people of German origin than for those with a migration background. The marginal effects (Table 2, equation (3)) suggest that there is no statistically significant difference between young people with a migration background and German young people with low-educated parents. Moreover, the relative probability of being disconnected (compared to the reference group of young people with a migration background and low-educated parents) was 5.5% (8.2%) lower for young adults with a migration background (German young adults) and moderately educated parents and 7.4% (12.5%) lower for young people with a migration background (German young adults) and highly educated parents. Although the marginal effects were lower for young people with a migration background, the differences at each educational level were not statistically significant.

We therefore conclude that parental skills are more important for the probability of being disconnected than migration background. The higher disconnection rates among young people with a migration background result mainly, according to these findings, from the fact that parental education was lower among young people with a migration background. Presumably, language skills and not migration background per se contribute to disconnectedness (see, e.g., Aldashev et al., 2009, who reported similar findings for earnings in Germany). Language skills were correlated with parental education.

#### 4. Disconnection and Related Socio-Economic Outcomes

One advantage of using *Sample 00/08* is that the SOEP Youth Questionnaire includes a number of related, yet different socio-economic life outcomes. Since there is a lack of research on the association between socio-economic disconnection during young adulthood and these other socio-economic outcome variables, Table 3 presents the association between disconnection and average locus of control, sports activities, school grades, and class repeats. It is intended to highlight the empirical proximity between these related socio-economic outcomes, not their causal interdependencies.

Table 3

**The Relationship Between Disconnectedness and Other Outcomes**

	Min	Max	Mean	DC = 0	DC = 1	t-Test
School grade	1	6	2.9	2.9	3.2	t = -4.3
Class repetition	0	1	0.22	0.20	0.33	t = -3.7
Rotter score	17	63	45.4	45.7	43.4	t = 3.8
Sport activities	0	4	2.4	2.5	1.9	t = 4.9

*Source:* SOEP, 1,335 observations taken from the SOEP Youth Questionnaire, 2000–2008; authors' calculations.

The group of disconnected young adults performed significantly worse on average in school, engaged less frequently in sports activities, and had lower locus of control scores. Moreover, disconnected young adults more often repeated a grade in school at least once. Thus, in our sample, the path to socio-economic disconnection started long before young adulthood. Being disconnected also goes hand in hand with a tendency to “externalize”. Participation in sports activities indicates social integration and a concern for physical as well as mental health. In much of the industrialized world, physical activities are no longer necessary for survival, and people have to take the initiative to engage in activities that improve health, well-being, and other outcomes. Lechner (2009), for instance, estimates the rate of labor market returns for investments in sports activities at 5% to 10%. Given that our findings show sports investments to be lower among disconnected young adults, the probability of negative labor market outcomes in the group of disconnected young people might also be higher as a consequence.

## 5. Conclusion

In this article, we examined the prevalence of disconnection among young adults in Germany. The definition of disconnection used here was based on both economic and social factors. Around 13% of the young people in our sample were socio-economically disconnected at least once between the ages of 17 to 19 according to our definition. This figure has been on the rise since 2001. There is evidence that an adverse family environment (having low-educated parents and/or living in a lone-parent household) is the most important variable predicting disconnection at 17 to 19 years of age.

Our research demonstrates that aspects of socio-economic disconnection in adolescence have deeper roots in childhood. Parents in disadvantaged families have difficulties providing emotional and material support for their children both at crucial turning points in the life course and in times of economic hard-



ship. Disconnection is significantly associated with weaker self-control and lower involvement in sports activities. While there is no (strong) evidence that a migration background contributes per se to disconnection, adolescents with a migration background are overrepresented among the disconnected, mainly because parental education is lower in this group. Furthermore, our evidence shows that economic downturns have a delayed effect on disconnection. Following a recession, it is disadvantaged young people who seem to suffer most, presumably because recessions compound the problems arising from early life adversity.

Although our findings are corroborated by international research, three shortcomings should be mentioned. First, the magnitude of the problem of disconnected young people is presumably underestimated due to survey bias: one can assume that disconnected young people participate in the SOEP less frequently. Second, there are heterogeneities among the group of disconnected young people. For instance, while some may live at home, others may live alone. Third, there are further dimensions and outcomes of disconnectedness not examined in our paper. Disconnectedness may also be associated with a bias to the present or with developmental problems such as anxiety or mood disorders. An investigation of the heterogeneities and of the psychological dimensions of disconnectedness is left for further research.

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