Predicting the Timing of Social Transitions from Personal, Social and Socio-Economic Resources of German Adolescents

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Abstract: Social transitions are characterized by an increased heterogeneity in Western societies. Following the life course perspective, individual agency becomes central in shaping one’s life course. This article examines social transitions of adolescents using individual resource theory to explain differences of the timing of five transitions in partnership and family formation: the first sexual experience, the first intimate relationship, the first cohabitation, the first marriage, and the birth of the first child. Since little is so far known about how individual characteristics interact and influence the social transition to adulthood, we focus on the varying impacts of personal, social and socio-economic resources across the social life course. We use longitudinal data from the German LifE-Study, which focuses on the birth cohort of individuals born between 1965 and 1967. Using event history analysis, we find that the timing of the first sexual experience and first partnership transitions are mainly influenced by personal and social resources, whereas socio-economic resources offer better explanations for the timing of entering marriage and parenthood. Most striking are the different explanatory models for women and men.

Keywords: Social transitions · Partnership and family formation · Resources · Life course · Youth

1 Introduction

On the way to adulthood most people experience social transitions: they have sexual experiences, form romantic relationships, begin living with a partner in a shared household, marry and start a family of their own (Meulemann 1999). In Western societies, the sequence and timing of these transitions is characterized by an increased heterogeneity (Dommermuth 2008; Ross et al. 2009). Even, there is considerable variance regarding the timing of these transitions: Some people experience transitions early, others rather late. For example, the beginning of the first romantic
relationship varies from age 17 to age 23 for individuals born in 1965. The youngest 25 percent of women born between 1965 and 1969 were younger than 22 years old when they married, the oldest 25 percent entered marriage being older than 30 years of age. Among men of the same birth cohort, the interquartile range is even 30 years (Scherger 2007: 161).

There is also a significant range regarding the length of time between the first sexual contact and the birth of the first child. While most young adults experience their first sexual contacts before the age of 20 (Bode/Heßling 2015), the average ages at marriage and at birth of the first child do not occur until they reach their fourth decade (marriage: women 31 years, men: 34 years; birth of first child: women: 30 years (Federal Statistical Office of Germany 2016b: 36, 54)). Thus, social transitions on the way to middle adulthood stretch over a long period of time over the life course (Mayer 2009). At the same time, the transitions are very age-heterogenous: Some pass the mentioned transitions quite quickly at an early age, others to the contrary much more slowly at an older age. What we also find is that men and women experience these transitions at different points in time, women being more quickly than men.

Transitions that occur during the life course are determined by institutional contexts (the educational system, labour market or legal requirements) as well as individual resources (Konietzka 2010). Social norms, however, have largely ceased to be effective in orienting and planning individual life stages (Beck 1999). Young adults themselves have become central in planning and organizing their transition to adulthood, embedded in institutional contexts (Beck 1986; Mayer/Müller 2009). They are themselves responsible for beginning romantic partnerships, for the number of relationships over their life course, and whether and when to start a family. The individual is the “active agent”: “Individuals construct their own life course through choices and actions they take within the opportunities and constraints of history and social circumstance” (Elder et al. 2004). Thus, individual agency becomes central in shaping one’s life course and making decisions to pass through certain life stages. Adolescents and young adults decide, based on their own resources, when the time is “right” for these transitions (Neyer 1999). This explains the empirically “mixed age picture” with regard to social transitions.

In this paper, we present a resource perspective of social transitions to middle adulthood in Germany for the birth cohort 1965-1967. The objective of this contribution is to analyse the varying explanatory power of individual resources, which we differentiate between personal, social and socio-economic resources. A number of studies have focused on the latter type of resources and showed how partnership and family formation in Germany is influenced by, e.g., the educational attainment (e.g. Kreyenfeld/Konietzka 2008; Schaeper et al. 2013), labour force participation (Huinink 1988; Seyda 2003) and educational homogamy (Bauer/Jacob 2010; Blossfeld/Timm 1997). However, little is known about the question of how individual characteristics interact and influence the social transition to adulthood. How do resources influence sexual experiences, partnership formation, cohabitation, marriage and the birth of the first child? Particularly the varying effects of personal, social and
socio-economic resources on these transitions are unknown. Does the influence of some factors change over time? And does the influence differ for women and men?

To address these questions, we outline the changes of social transitions since the latter half of the twentieth century (Section 2.1.). We proceed with the differences of the transitions analysed in this study (Section 2.2.). Next, we offer a model that represents the changing influences of individual resources on a sequence of five social transitions in the second, third and fourth decade of life (Section 2.3.). Next, we describe the data, measurements and analytical procedures employed (Section 3). Finally, we present the results (Section 4) and discuss our central findings (Section 5).

2 Theoretical considerations and state of research

2.1 Social transitions and their timing over the life course

Becoming socially independent from the parental home and forming an own social identity as well as entering into relationships are major steps on the way to middle adulthood. On this way, adolescents and young adults are faced with decisions regarding the timing of the first sexual contact, the first partnership, cohabitation or marriage. This process is understood as a “pathway through the age-differentiated life span, to social patterns in the timing, duration, spacing, and order of events […]” (Elder 1978: 21). This pathway is divided into individual points in time, that represent life stages marked by transitions (Elder et al. 2004). Transitions such as entering marriage or parenthood indicate a change from one status to another (e.g. from unmarried to married).

Since the late 1960s, however, the transition to adulthood has changed in most Western societies, which also applies to Germany. Whereas in the 1950s and 1960s, leaving the parental home was directly linked with entering marriage, usually followed by the birth of the first child, nowadays these events have been increasingly decoupled. For example, the share of nonmarital births has more than doubled in the last 25 years in Germany, from 15 percent of all births in 1990 to 35 percent in 2015. For first births, the percentage is even higher reaching 44 percent (Federal Statistical Office of Germany 2016a). Furthermore, Hayford et al. (2014) show for U.S. women throughout the second half of the 20th century that the link between marriage and parenthood has weakened: Women who married in the 1970s or later show more variation in the timing of birth of their first child compared to women of earlier birth cohorts who had children more immediately after marriage. Not least because adolescents and young adults remain longer within the educational system, transitions to adulthood have decoupled and postponed. Thus, events which occurred within a short time span, are now considered over a longer stretch of time (Mayer 2009). Moreover, it becomes increasingly unclear which events define the status of adulthood, since there is an increasing number of individuals who (permanently) remain unmarried and/or childless. In Germany, for instance, the percentage of permanently childless women amounts to around 21 percent in the 1967 cohort,
comparable to the cohort in our analysis. In the 1937 cohort, the share was around 11 percent (Federal Statistical Office of Germany 2017). Therefore, we suggest no longer to speak of becoming an adult but rather only of status transitions that occur during the life course within the first four decades (see also Konietzka 2010).

2.2 Differences of social transitions over the life course

The social transitions examined here are: the first sexual contact, the first romantic relationship, the first cohabitation, the first marriage and the birth of the first child. These transitions differ in terms of the investments, commitments and liabilities required in friendships and partnerships. The first sexual contact and the first relationship are usually experienced in youth or young adulthood and are associated with rather low investments in a relationship. By marriage and especially by the birth of the first child, partnerships become highly committed and institutionalized.

An intermediate stage is cohabiting with a partner (Lauterbach 2006). Cohabitation has become more and more relevant, since the number of cohabitating unions considerably increased since the 1970s (1972: 137,000, 1996: 1,382,000, 2014: 2,920,000 (Federal Statistical Office of Germany 2002; Krack-Roberg et al. 2016)). This living arrangement is especially popular among young adults between the ages of 18 and 35, and represents the beginning of partnership and family formation (Peuckert 2012). Cohabitation resembles marriage, since it involves an intimate and time-intensive relationship with a partner, a joint household and a merger of personal economies (Thornton et al. 1995). One main difference between cohabitation and marriage can be seen in the absence of a formally recognized status (Nock 1995). Cohabitation is more binding than first partnership experiences but does not have the same obligations and institutionalized status as a marriage or especially the birth of a child. Partnerships can break up without any legal consequences, whereas being married or having children makes partners legally obligated to one another – even after divorce.

Moreover, unlike the first sexual and partnership experiences, economic security is necessary for establishing a shared household and even more so marriage and parenthood. Even if normative regulations regarding the timing and sequencing of status passages have generally decreased, financial independence from the parental home or a certain economic status is still highly significant especially for entering into marriage and starting a family. Following family economics, entering long-term relationships and starting a family is not desirable as long as individuals are in education (institution effect), because achieving a certain educational level requires a lot of time that cannot be invested in an intimate relationship or family. Furthermore, there are normative expectations that married men and women have to be economically independent (Brüderl/Diekmann 1997; Huinink 2000). Therefore, “finishing one’s education (…) counts as one of the important prerequisites for entering into marriage and parenthood” (Blossfeld/Huinink 1991). For 58 percent of participants of the Population Policy Acceptance Study 2003 a low income was the reason for postponing marriage (BiB 2009). Several studies have shown the influence of the level of education, which is itself strongly connected with the timing of economic in-
dependence, on delays in marriage and family formations (Blossfeld/Huinink 1991; Dommermuth 2008; Kreyenfeld 2015; Kreyenfeld/Konietzka 2015; Schaeper et al. 2013). Thus, individuals want to achieve economic security before they establish long-term intimate relationships (Huinink 2000). Consequently, we expect that with increasing investments and commitments in relationships and thus an increasing institutionalization of relationships, the individual’s educational and economic situation becomes more important for the timing of social transitions.

2.3 Resource model

From a life course perspective, we argue, that different resources become important at different stages in the first four decades: the personal, social and socio-economic resources (Diewald/Mayer 2009). Thus, the pathway to middle adulthood is a co-determined process of individual action, based on a framework of institutional settings and individual resources (Asendorpf/Neyer 2012). Resources formed and stabilised during childhood and youth serve as guiding scripts to master the stages to middle adulthood (Huinink/Feldhaus 2009).

The resource model of life management assumes that the (social) transitions (t1-t5) in the first four decades of the life course, represented here by the five transition markers, are influenced by early life conditions and resources. We argue that social transitions are influenced by personal, social and socio-economic resources formed in youth, and are embedded in institutional settings and historical opportunities. Figure 1 illustrates this assumption and provides examples for indicators of the different resources which will be described in the next section.

However, passing through the social transitions and reaching middle adulthood is different for male and female adolescents. As studies show, men experience various transitions later than women (Bode/Heßling 2015; Dommermuth 2008; Grünheid 2017; Marbach/Tölke 1996; Müller et al. 1999), and they also have a higher risk of never experiencing specific transitions, since they more often remain permanently single or childless (Schmitt/Winkelmann 2016; Sprenger 2014). Therefore, we assume that personal, social and socio-economic resources have different meanings for male and female young adults in terms of the five social transitions under study.

2.4 Personal resources

Personal resources include cognitive, emotional and social competences which characterize people’s individual agency (Raithel 2011), or rather their coping capacity (Hurrelmann/Quenzel 2012). Personal resources comprise both cognitive skills and the perceived capacity for self-regulation (emotion control, impulse control, as well as temper and personality) (Petermann/Schmidt 2006).

Research findings have proven the link between personal resources, including the personality factors neuroticism and extraversion, such as shyness, self-control or sociability, and partnership characteristics. For example, partnership status differs by personality: Singles are often much shyer than persons who live in a steady partnership. People committed to a partner show higher levels of extraversion and
Fig. 1: Resource model of life management

Source: Own presentation, based on Fend et al. 2009
lower levels of neuroticism than singles (Neyer 1999). Having a first relationship is linked with decreases in neuroticism (Lehnart et al. 2010; Neyer/Lehnart 2007). Sociability is associated with an increased probability of finding a partner (Neyer/Lehnart 2007), and high extraversion and low neuroticism are linked to a high number of children (Jokela et al. 2011) and a probability of encountering the first romantic experiences between the ages of 23 and 25 (but not at other ages analysed in the study) (Wagner et al. 2015). Additionally, Stavrova and Ehlebracht (2015) show the connection between extraversion and an increased probability of entering a romantic relationship.

Furthermore, the influence of childhood and adolescent characteristics and resources has been revealed in longitudinal studies which also point to gender differences: It has been found that men’s shy behaviour in childhood is related to delayed entry into marriage and fatherhood. In contrast, shy girls are more likely to adopt a traditional female role, but in this case shyness is not associated with the timing of marriage and parenthood (Caspi et al. 1988). Similarly, a German longitudinal study shows that personality types in childhood predict the timing of entering the first stable romantic relationship for men but not for women. Men with personalities characterized as resilient enter into their first romantic partnerships earlier than men described as “over-“ or “under-controlled“ (Dennissen et al. 2008). The timing of the first sexual relationship is also associated with personal resources. Individuals characterized as “under-controlled“ in childhood find it hard to maintain social contacts, and experience their first sexual contacts earlier than those characterized as “over-controlled“ or “resilient“; gender differences were not tested (Atkins/Hart 2008). Another longitudinal study demonstrates that women with a low self-control in childhood tend to enter motherhood earlier (Kokko et al. 2009).

A further important personal resource which becomes salient in youth is the self-perceived physical attractiveness. Adolescents develop a specific idea of their own appearance and attractiveness (in comparison to others (see Fend 2005)). With respect to partner selection and behaviour in social interactions, these concepts of one’s own appearance are especially relevant in Western cultures. This applies in particular to young women (Smolak 2004), who learn that they have to pay attention to their appearance, how to judge their body image and how it is judged by others (Brown/Gilligan 1994; Müller 2006). Girls are more worried about body fat and invest more in their body than boys and are more likely to act according to their body satisfaction (see Smolak 2004 for a review).

Research has also shown that the body image is related to the perceived relationship quality for both, men and women (Ambwani/Strauss 2007; van den Brink et al. 2018). This association is mediated by greater sexual satisfaction of those satisfied with their bodies (van den Brink et al. 2018). However, it is yet unknown how body image influences the timing of partnership transition markers.

Overall, personal resources seem to influence social transitions from the first sexual experience to the first birth. Regarding gender differences, we find no clear picture from the literature as we described above. But, due to gender-specific socialization processes which expect young girls more than young boys to control their emotional and behavioural reactions in social situations (Davis 1995; Weis et
al. 2013), and the fact that women put more importance on their body image (Smołak 2004), we expect personal resources to generally be more important for females than for males.

2.5 Social resources

Theories on the explanatory power of resources designate networks in which adolescents are integrated as social resources that they can draw on. These are primarily relationships to parents, but also to peers inside and outside of school (Hurrelmann 2002; Oerter/Dreher 2002). In this article, we focus on two indicators of social resources: the peer group integration and the experience of parental divorce.

Particularly the integration into peer groups is a decisive factor influencing the transitions to middle adulthood. In peer groups, adolescents learn to form, to maintain and also to terminate social relationships. The peer group is a place where adolescents test their ability to engage in important relationships (McCormick et al. 2011). Thus, the peer group serves as an early model for romantic relationships in emerging adulthood (Reitz et al. 2014). We therefore expect that a strong peer integration — and tied with this a testing of one’s own ability to form and maintain relationships — should speed up the transition to adulthood. Furthermore, the influence of peer groups in the cohort analysed in this paper (individuals born in the middle of the 1960s) should be stronger for young men than for young women, because girls are raised to be more emotionally attached to the parents and stay longer within the protected environment of the family (Naudascher 1978; White 1994; Goldscheider/Goldscheider 1999) in contrast to boys of whom it is expected to be more emotionally independent and self-sufficient earlier (Shulman/Seiffge-Krenke 1996; Becker-Stoll et al. 2000).

A well-known finding is that children who experience their parents’ divorce have themselves a higher risk of divorce (e.g. Amato/Patterson 2016; Berger 2009; Diekmann/Engelhardt 1995; Diekmann/Schmidheiny 2013; Feldhaus/Heintz-Martin 2015). Therefore, it is plausible that experiencing parental divorce also has effects on the timing of other partnership events. According to the economic deprivation theory, a parental divorce influences the economic situation of the parents and possibly leads to an earlier entry of adolescents into the labour market as well as to an earlier age at first marriage, less commitment to intimate partners, and a higher prevalence of union dissolutions. In addition, socialization theory supposes that parental divorce is linked to a reduced control behaviour of parents and hence leads to earlier sexual contacts and earlier partnership formation (Berger 2009; Diekmann/Engelhardt 1995). In sum, the theory proposes that a parental divorce is linked to an acceleration in the childrens’ own partnership and family formation process. As Raab (2017) shows for Germany, experiencing an alternative family structure (not living with both biological parents) up to the age of 18 is associated with earlier cohabitation and parenthood. Regarding gender differences, previous findings for Germany are rather ambivalent (Berger 2009; Diekmann/Engelhardt 1995; Engelhardt 1998; Schulz 2009).
2.6 Socio-economic resources

Socio-economic factors also have a powerful influence on the transitions to middle adulthood. Educational attainment, for example, influences the transitions from adolescence to adulthood, as especially one’s educational level is considered to be a deciding factor in the timing of marriage and the birth of the first child. According to economic theory, higher educated people tend to delay marriage and family formation into higher ages, the effects being stronger for women than for men. Highly educated women tend to delay marriage and motherhood, while for men a u-shaped effect is observed (Bauer/Jacob 2010; Diekmann 1999; Dommermuth 2008; Huinink/Kreyenfeld 2004; Lauterbach 2004). Women with high educational levels tend to gain less from marriage, since they are economically independent. In contrast, highly educated men have higher income prospects and are therefore attractive marriage partners.

So far, there has been insufficient longitudinal examination of the influence of the education level on the timing of the first cohabitation: Do people with a university degree who stay longer within the educational system delay cohabitation with a partner? Uncertainty in one’s life situation might have a negative effect on the timing of cohabitation. However, cohabitation requires less financial commitment and has lower opportunity costs than marriage (Berrington/Diamond 2000). Thus, the effect of the level of education should be stronger for marriage than for cohabitation. Müller et al. (1999) found gender-specific effects of the educational level on the timing of cohabitation and marriage. While highly educated men enter into marriage more quickly, highly educated women cohabit earlier.

The most important socio-economic resource for adolescents and young adults is, however, economic independence. From a historical point of view, the underlying normative concept indicates that young men must become economically independent before they can responsibly form a shared household, marry, and have their first child (Huinink 1995). Historically, individual financial independence is of less importance for women. According to the traditional female life course pattern, economic independence from the parental home was achieved by establishing a household with a marriage partner, rather than by becoming gainfully employed. However, the old male breadwinner model has been shaken (Blossfeld/Drobnic 2001; Janssens 1997; Lauterbach 2006). High educational levels and gainful employment at the beginning of the working life, have increased women’s financial independence. Today, financial independence is not only expected for men but also for women before entering into long-term intimate relationships and starting a family (Huinink 2000). One can therefore conclude that the later young adults achieve financial independence, the later they start a joint household and enter into marriage and parenthood.

In addition, socio-economic resources from the family of origin can also be seen as resources for adolescents. It has been shown that adolescents growing up in families with lower socio-economic backgrounds tend to enter into their first relationships, cohabitation and marriage earlier than their counterparts from an advantaged background (Berrington/Diamond 2000). Social background may directly affect the timing of these transitions through class-specific norms and perceptions.
about the “right” timing of cohabitation or marriage. Indirectly, the social background can have a mediating effect through one’s own educational qualifications (Berrington/Diamond 2000; Blossfeld/Huinink 1991).

2.7 Hypotheses

In sum, theoretical considerations and previous findings suggest that personal, social and socio-economic resources do influence social transitions experienced by adolescents. Nevertheless a systematic, concurrent examination of different transition markers and their prediction by personal, social and socio-economic resources is still missing. Thus, the varying explanatory power of these resources over the life course is unclear. Hence, our first research question reads as follows:

**Question 1:** How does the explanatory power of personal, social and socio-economic resources for different social transitions vary over the life course?

As described above, the transitions studied here differ in terms of investments and commitments in partnerships. Initial sexual and romantic experiences are usually experienced in different living situations than the first cohabitation and especially the first marriage and the birth of the first child, which all have different demands on individual resources. Thus, our first hypothesis assumes the following:

**Hypothesis 1:** Due to different investments and commitments in partnerships, personal and social resources should have a strong effect on early transitions and thus on the first sexual and partnership experiences. In contrast, with increasing institutionalization of relationships (cohabitation, first marriage and birth of the first child) socio-economic resources should become more important.

Additionally, our literature review showed that men and women experience different transitions at different points in time and previous studies found that the importance of resources is gender-specific. Thus, the following research question and hypotheses were addressed:

**Question 2:** Are there gender differences in the varying influences of personal, social and socio-economic resources?

**Hypothesis 2:** The impact of personal resources should be stronger for women than for men.

**Hypothesis 3:** The impact of social resources (peer group integration) should be stronger for men than for women.

**Hypothesis 4:** Economic independence influences both, men and women. The later young adults achieve financial independence, the later they will enter their first cohabitating union, marriage and especially parenthood.

**Hypothesis 5:** The higher the educational level, the later young adults will marry, especially in the case of highly educated women.
3 Method

3.1 Data and sample

The analyses conducted to test the assumptions above are based on data from the German LiFE Study (Pathways from Late Childhood to Adulthood). The study is one of a small number of studies worldwide, providing information on adolescents’ life courses from age 12 to the age of 45 (1979-2012). Thus, a range of more than 30 years is covered by the dataset. The LiFE Study is a sample of men and women in Germany born between 1965 and 1967, which was first surveyed from 1979 to 1983, and again in 2002 and 2012 (Lauterbach et al. 2016).

Initially, the study was conducted as a school survey (adolescence study) comprising 12-year-old adolescents who were interviewed annually until the age of 16. The study focused on adolescents growing up in both urban and rural environments, as well as in different school contexts. Thus, an urban area of former “West” Germany (Frankfurt am Main) and two adjacent rural areas (Odenwald, Bergstraße) with different types of schools were chosen. The study was, therefore, conducted in a “quasi-experimental design”. The research focused on adolescents coping with developmental tasks and on the development of personality. Analysing these developments required using a longitudinal design. The first data collection was carried out in 1979. 1,830 children in the 6th grade, which is equivalent to the age of 12, were interviewed. The survey – conducted as a panel study – was retaken five times in one-year intervals. The data collection was completed when the adolescents attended the 10th grade. Panel mortality and non-response were controlled by two parallel studies. Data from parents and teachers were also collected twice in 1980 and 1982.

In 2002 and 2012, data of the former students were collected again, investigating the conditions for a productive life development in young and middle adulthood. Life course data are now available for 1,359 persons. External validation in 2012 using two German representative datasets (the Socio-Economic Panel (SOEP) and the microcensus) proved that the LiFE data are reliable, especially regarding family and partnership characteristics. However, the LiFE data show a lower divorce rate for women and a higher number of families with two children (Lauterbach et al. 2016).

An important component of the LiFE Study are retrospectively sampled partnership biographies from the ages of 16 to 45. Only partnerships that lasted longer than six months were taken into account. Subjects were also asked whether their partnerships led to a shared home and marriage. Thus, we have data on the partnership and family formation process over a period of almost thirty years.

Data on personality characteristics as well as on socio-economic and cultural characteristics of the contexts of origin are also available. For the analyses, we draw on data from 1983, when subjects were 16 years old. When information was lacking, data from 1982 and 1981 were imputed.

Only men and women with full information on the dependent as well as independent variables were included in our study. Thus, after restricting the sample to persons with full information on partnership and family transitions, the case number
reduced to 1,008 (74 percent). Dropping cases with incomplete data on childhood and youth resources further reduced the sample to 695 cases (51 percent), leaving 388 women and 307 men in the sample. Robustness checks showed that even though the sample includes more women than men (50 percent baseline, 56 percent analysis sample), less respondents who experienced parental divorce during childhood and adolescence (12 percent baseline sample, 9 percent analysis sample) and more individuals with a university degree (23 percent baseline sample, 26 percent analysis sample), there exist no systematic differences between the baseline sample and the analysis sample.

3.2 Measures

**Dependent variables**

Five events were investigated as factors influencing the social transitions: first sexual contact, age of first partnership, first cohabitation, first marriage and birth of the first child. All variables are measured in years. Information on the partnership and family history were collected in 2002 and 2012 retrospectively from age 16 to age 45. If events had not taken place until the age of 45, the respective case was treated as right censored. Information about the first sexual contact was only collected in 2002, when subjects were approximately 35 years of age. Therefore, analyses on this topic are limited up to this age.

**A Personal resources**

We used three indicators to measure personal resources: emotional stability, out-goingness and body image (A in Fig. 1). The scale emotional stability is comparable to the Big Five factor of neuroticism and asks how individuals deal with their feelings and emotions, which is an important aspect of neuroticism. The scale was operationalized by eight items from the youth study\(^2\) (e.g. “I sometimes get upset about every little thing”). The possible responses are “true” vs. “not true”. High values of the emotional stability scale indicate a high emotional stability. The internal consistency of the items was satisfying (\(\alpha=0.79\)).

Second, we used the scale out-goingness, which is comparable to the Big Five characteristic of extraversion. This scale was also operationalized by eight items (e.g. “I enjoy making new acquaintances”). The variables are dichotomous as well (“true” vs. “not true”). High values of the outgoingness scale indicate a high interest in establishing and maintaining contacts. Cronbach’s alpha for this scale was 0.65.

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1. Even though some missing information from age 16 could be replaced by information from the two previous waves, the share of missing values among the independent variables was still 8 to 15 percent, meaning that of the 1,008 individuals with complete social life course information another 313 cases had to be dropped by listwise deletion.

2. All items are presented in the Appendix. For a detailed documentation of all scales and items of the youth study, see Fendi/Prester (1986).
The third personal resource used is body image which refers to a person’s generalized perception of his or her physical attractiveness. A person’s own perception and evaluation of his or her appearance is significant for this study because it is associated in Western culture with greater social success and especially with better chances on the “partner market” (Fend 2005: 239). The scale used here includes six items (e.g. “Compared with others, I really look very good.”), coded the same way as emotional stability. High values point to a positive body image. Cronbach’s alpha for this scale was 0.71.

B Social resources
In order to measure social resources, we used two indicators: integration in a peer group and the experience of parental divorce during childhood or youth (B in Fig. 1).

The scale peer group integration consists of eight items (e.g. “Do you belong to a group of youths who meet regularly or often and have a sense of belonging together? We do not mean a club or association”) and shows the extent to which pupils were integrated into networks of social relationships with peers. Cronbach’s alpha was 0.66.

The experience of parental divorce in childhood and youth is used as a second indicator of social resources. It is assumed that experiencing a parental divorce leads to an earlier acquisition of adult roles and an acceleration of the timing of social transitions. The dummy-coded variable indicates whether a parental divorce or separation had been experienced up to the age of 16 or not.

C Socio-economic resources
In this study, the highest achieved individual level of education was included as socio-economic resource. Due to the small number of respondents with a low educational level, low and medium qualifications had to be combined into one category. Two different variables were included in our analyses. Since the events first sexual contact and first partnership were usually experienced from ages 16 to 20, the highest educational attainment for these events was indicated by the type of school attended (lower secondary school track (Hauptschule and Realschule) (0) vs. higher secondary school track (Gymnasium) (1)). For the other three further events (cohabitation, marriage, first child), the highest individual level of education was indicated by a variable containing the two categories “vocational training” (0) and “higher educational or technical college degree” (1). In the LifE Study, low educational levels such as “no vocational training” were under-represented (Lauterbach et al. 2016). In order not to violate the Cox model proportionality assumption (see Section 3.3), pupils from Hauptschule and Realschule were combined into one group, and pupils with no vocational qualification (N=14) were not included at all in the

3 Depending on the level of courses attended, pupils from integrated comprehensive schools (integrierte Gesamtschule) were assigned to the three different types of schools. This procedure is appropriate as it appears that pupils largely remain at the level of their courses. Change occurs above all with pupils assigned to the Realschule.
analysis. Because the level of education violates the proportional hazard assumption (see Section 3.3), this variable was included as time-varying variable.

In 2002 respondents were asked when they first earned enough money to fend for themselves. This variable was included in the analyses as timing of economic independence (coded as a time-dependent variable).

The study focuses on adolescents’ own resources. To control for effects of social origin, we included the socio-economic background of the family of origin as robustness check in the regression models. Therefore, we used the HISEI (“Highest International Socio-Economic Index of Occupational Status”) as a measure for the parental socio-economic status. The HISEI has a metric range from 16 (janitor, cleaning personnel) to 90 (medical doctor, judge). For the analyses, the HISEI was coded into three categories (16-40=low, 41-65=middle, 66-90=high).

3.3 Methods of analysis

To study the timing of the five partnership status transitions, event history analysis was applied. On a descriptive level, survival curves are presented based on the Kaplan-Meier estimator.

To measure the influence of personal, social and socio-economic resources on the timing of different status changes, Cox models were estimated. Effects in the Cox models can be read as \( \beta \)-coefficients. The hazard ratio (\( hz \)) represents the antilogarithm of the \( \beta \)-coefficient (\( hz=\exp(\beta) \)) and (\( hz-1)\times100 \) can be interpreted as the percentage effect of a covariate on the occurrence rate of a respective event (Weick 1993: 97). A hazard ratio of 1.50 can thus be interpreted as an increase in the probability of the occurrence by 50 percent. We can thus speak of an acceleration of the event. In contrast, a hazard ratio of 0.75 signifies a reduction in the probability of the occurrence of a specific event by 25 percent ((0.75-1)\times100). Thus, one can speak of a deceleration of the transition.

Variables that do not change their value over time (e.g. sex, social background) are considered as time-independent variables. Covariates that change their values over time are time-dependent variables. Thus, the effects of these variables are not constant, but rather unfold (increase or decrease) with the appearance of a specific event. In the study, the commencement of economic independence is modelled as a time-dependent covariate. This is done by episode splitting, whereby the data are transferred to a person-period format. The observation period is divided into annual intervals from the first occurrence\(^4\) of the event until the end of the period of observation in 2012.

The Cox model assumes that the hazard function for different levels of a covariate is proportional over time, which means that effect sizes of covariates are

\(^4\) For the first sexual experience, the age of 12 was chosen to exclude involuntary sexual experiences. The age of the first partnership was set at 16 years based on questionnaire items. The same holds for age at first cohabitation. The possible start of the first marriage was set at 18 years (legal marriage age), first birth at 12 years.
constant over time. This proportionality assumption was tested both graphically as well as by using the zero slope test developed by Therneau and Grambsch (2000). If the proportionality assumption is violated, this can be corrected by introducing interaction terms of the relevant variables with time (Blossfeld 2010: 1005; Windzio 2013: 112). In the following analyses, the effect of educational attainment changes over time and thus is modelled as time-varying variable. To correct for violation of the proportionality assumption, we included the main effect as well as an interaction term in the model. For example, a main effect of 0.05 means that the effect was negative immediately after the beginning of the observation: Highly educated people severely delay the event. However, a coefficient of the interaction term of 1.10 would suggest that the two educational levels under consideration converge over time by a factor of 1.10 each year, thus 10 percent a year.

Modelling not only time-independent covariates but also time-dependent variables and time-varying effects is a special advantage of the Cox model. A further advantage of event history analysis is that so-called “right censored cases” (subjects who have not yet experienced the respective event by age 45) can be included in the analyses as well (Blossfeld 2010). Based on suspected differences between women and men, separate models are estimated. In addition, all scales that display random metrics were z-transformed in order to compare effect sizes in the Cox regressions.

4 Findings

In a first step, we present descriptive findings, followed by Cox regression models to estimate the impact of time-independent and time-varying resources on the timing of transitions.

The descriptive results in Table 1 show for each status change that more men than women had not yet experienced the respective event by age 35 or 45 respectively. While the share of censored cases for first sexual contact is less than 2 percent, it increases with subsequent events. In total, 2.3 percent of women did not have a partnership by the age of 45. For men, this share is nearly the same with 2.9 percent. The shares of unmarried women and men are also similar (17.0 percent/18.2 percent). Likewise, up to the age of 45, slightly more men (22.2 percent) than women (19.6 percent) remained childless, which is comparable with representative data for Germany (reported in Section 2.1.)

Examining the average age at the events in Table 1, it is apparent that they occur earlier among women than among men. The t-tests show that these differences are all statistically significant, even though the difference in the age of first sexual contact between men and women is rather low.

Differences in timing can be observed in the age differences between men and women as well as in the age range from 16 to 45 years across almost the entire observation period. Figure 2 graphically shows the transition rates for the five events separately for men and women based on Kaplan-Meier estimators (for better readability, only from ages 16 to 35). The survival distributions of all events differ significantly between men and women (see log-rank test in Table 1).
Until the age of 18, the proportion of young women who experienced their first relationship is slightly higher than the proportion of those who had their first sexual intercourse. Hence, especially young women seem to make their first experiences within a partnership. After the age of 18, the situation is reversed and the proportion of women who had their first sexual contact is higher than the proportion of those who ever had a partnership. On average, the first cohabitation takes place later. More than three-quarters of women had lived together with a partner at the age of 25. Up to the age of 35, 6 percent of women had never entered a cohabitation.

These three transitions (first sexual experience, first partnership, first cohabitation) are mainly experienced during late adolescence and young adulthood. The situation is different, however, in the case of the first marriage and the birth of the first child. Not surprisingly, these events mainly occur towards the end of the third decade of life. On average, the curves show a traditional pattern: Women first get married and then have a child.

In contrast to women, the proportion of men who had their first sexual experiences is always higher than the proportion of men who had a partnership that lasted six months or longer. Furthermore, for men, moving in with a partner for the first time takes place later in life. 60 percent had lived together with a partner at the age of 25. Similar to women, men also marry before they have children.

Altogether, women seem to experience the investigated transitions earlier than men. The reason can be seen in the earlier physical maturation of girls who thus enter into relationships more quickly (Wendt 2010). An additional explanation for
Fig. 2: Percentages of women and men, who experienced the five transitions until the age of 35

Source: LifE 2012, own calculations
the gender differences might be that women often choose older partners while men select younger ones (Wendt 2010). Moreover, it seems that for young women first sexual experiences are more often associated with a relationship than in the case of men. In the German youth report on sexuality, women reported more often than men that their first sexual partner was well known or a very good friend of them (64 percent vs. 58 percent). 11 percent of men reported that their first sexual partner was not well known to them or was a casual acquaintance (women: 4 percent; Federal Centre for Health Education 2010).

Next, using Cox regression, we examined the timing of the five partnership and family transitions. Table 2 summarizes the results for the complete models.

It turns out that personal and social resources influence the timing of early transitions such as the first sexual experience, the first partnership and the first cohabitation with a partner. A high degree of emotional stability increases the probability of these events by 11 percent to 19 percent per standard deviation. A high degree of outgoingness, a positive body image and a high degree of peer group integration accelerate the timing of the first sexual experience and the first partnership by 9 percent to 16 percent per standard deviation. The experience of a parental divorce

| Tab. 2: Cox regression of timing of first sexual experience, first partnership, first cohabitation, first marriage and family formation (Hazard Ratios) |
|-----------------|----------------|----------------|----------------|----------------|
|                 | First sexual experience | First partnership | First cohabitation | First marriage |
| Men (ref. women)| 0.88             | 0.72***         | 0.76**          | 0.91           | 0.83           |
| A1: Personal resources |
| Emotional stability | 1.19***       | 1.15***        | 1.11*          | 1.01           | 1.04           |
| Outgoingness       | 1.09*          | 1.09*          | 1.07           | 1.09           | 1.01           |
| Body image         | 1.12**         | 1.09*          | 1.05           | 1.00           | 0.99           |
| A2: Social resources |
| Peer group integration | 1.16***      | 1.13**         | 1.05           | 0.98           | 1.05           |
| Parental divorce   | 1.83*          | 1.31           | 1.18           | 1.05           | 1.26           |
| B: Socio-economic resources |
| Individual level of education: |
| low/medium (ref.) | 0.47            | 0.84           | 0.13***        | 0.07***        | 0.02***        |
| high              | 1.08            | 1.09           | 1.54***        | 5.23***        | 2.91***        |
| Economic independence | 1.04          | 1.01           | 0.99***        | 0.99***        | 1.13***        |
| Education*time    | 79.15***       | 64.81***       | 85.64***       | 89.10***       | 70.80***       |
| N subjects        | 695             | 695            | 695            | 695            | 695            |
| N events          | 684             | 677            | 652            | 573            | 551            |

Level of significance: * p < 0.05, ** p < 0.01, *** p < 0.001

z z-standardized continuous covariates; b time-dependent covariates; c time-varying effect

Robustness check: controlled for parental socio-economic status (HISEI)

Source: LifE 2012, own calculations
or separation in childhood or youth appears to have a strong influence on the timing of the first sexual experience (acceleration rate of 83 percent). In contrast, the timing of the first marriage and the birth of the first child are not significantly influenced by personal or social resources.

Socio-economic resources show no significant influences on the timing of the first sexual experience and the first partnership. However, the first cohabitation, first marriage and the birth of the first child can significantly be predicted by young adults’ education level and the timing of their economic independence. Educational attainment is modelled as a time-varying variable. This means that the transition rate for highly educated men and women is at first much lower than for men and women with a vocational degree (Hazard Ratio: 0.13). But, the difference in the hazard ratio declines by 9 percent (factor of 1.09) each year. This pattern is repeated for first marriage and the birth of the first child. Highly educated people delay marriage and childbirth but converge with lower educated people over time. Furthermore, achieving economic independence leads to a clear acceleration of the first cohabitation (increase of 54 percent), first marriage (423 percent) and the timing of family formation (191 percent).

Overall, results show that the timing of the first sexual experience and partnership is influenced by personal and social resources. In contrast, the timing of the first marriage and the birth of the first child are influenced by socio-economic resources. Entering the first cohabitation is influenced by personal and social as well as socio-economic resources.

Table 3 summarizes the results for women. We see that personal resources significantly influence the timing of women’s first sexual experience, their first partnership and their first cohabitation. A high emotional stability increases the probability of the first sexual experience and first partnership by 26 percent and 17 percent respectively. An increase of one standard deviation on the outgoingness scale leads to an increase in the probability of the first sexual experience, first partnership and first cohabitation by 12 percent to 19 percent. For women, a favourable body image accelerates the timing of the sexual debut and the first partnership: The higher the evaluation of their own appearance, the more likely women are to begin these events (acceleration of 10 percent to 12 percent per standard deviation). The timing of the first marriage and the birth of the first child are not significantly influenced by personal resources. Further social resources do not have a strong influence on any transitions studied. Only the first sexual experience is strongly influenced by divorce experiences in childhood and youth (acceleration rate of 52 percent per standard deviation). For women, personal resources seem to exert a greater influence than social resources on the timing of social transitions.

Socio-economic resources have no significant influences on the timing of the first sexual experience and the first partnership. For the timing of the first cohabitation, only women’s economic independence is significant (acceleration of 57 percent). Major influences on the timing of the first marriage and the birth of the first child are exerted by the level of education and economic independence. Since educational attainment is modelled as a time-varying effect, at first, the marriage rate for highly educated women is much lower than for women with a vocational degree.
But, the effect declines by 10 percent each year (factor of 1.10). This pattern is repeated for the timing of the first birth. Women with a university degree have their first child later but converge with lower educated women over time.

Table 4 presents the results for men. Here, the highest level of education is also modeled as time-varying effect. In contrast to women, personal resources do not appear to have a strong influence on the timing of partnership events. Only body image has a strong influence on the timing of men’s first sexual experiences: The more attractive they feel, the earlier they experience their first sexual contact (acceleration of 17 percent per standard deviation).

While for women social resources have relatively little influence, men are strongly influenced by their integration in a peer group as well as by the experience of a parental divorce in childhood or youth. A high peer group integration accelerates the sexual debut, the first relationship and the first cohabitation by 20 percent to 30 percent per standard deviation. Moreover, the timing of these three events is strongly accelerated (74 percent to 140 percent) by the experience of a parental divorce in childhood or adolescence.

Tab. 3: Cox regression of timing of first sexual experience, first partnership, first cohabitation, first marriage and family formation for women (Hazard Ratios)

<table>
<thead>
<tr>
<th></th>
<th>First sexual experience</th>
<th>First partnership</th>
<th>First cohabitation</th>
<th>First marriage</th>
<th>First birth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1: Personal resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional stability(z)</td>
<td>1.26***</td>
<td>1.17**</td>
<td>1.10</td>
<td>0.97</td>
<td>1.07</td>
</tr>
<tr>
<td>Outgoingness(z)</td>
<td>1.19**</td>
<td>1.12*</td>
<td>1.14*</td>
<td>1.09</td>
<td>1.07</td>
</tr>
<tr>
<td>Body image(z)</td>
<td>1.10*</td>
<td>1.12*</td>
<td>1.04</td>
<td>0.99</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>A2: Social resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer group integration(z)</td>
<td>1.06</td>
<td>1.08</td>
<td>0.96</td>
<td>0.94</td>
<td>1.02</td>
</tr>
<tr>
<td>Parental divorce</td>
<td>1.52*</td>
<td>1.11</td>
<td>0.87</td>
<td>0.82</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>B: Socio-economic resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual level of education:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low/medium (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>0.30</td>
<td>0.89</td>
<td>0.29</td>
<td>0.05**</td>
<td>0.02**</td>
</tr>
<tr>
<td>Economic independence(b)</td>
<td>0.95</td>
<td>0.97</td>
<td>1.57**</td>
<td>4.31***</td>
<td>1.97*</td>
</tr>
<tr>
<td>Education*time(c)</td>
<td>1.07</td>
<td>1.01</td>
<td>1.05</td>
<td>1.10**</td>
<td>1.12**</td>
</tr>
</tbody>
</table>

Level of significance: *\(p < 0.05\), **\(p < 0.01\), ***\(p < 0.001\)
\(z\) – z-standardized continuous covariates; \(b\) time-dependent covariates; \(c\) time-varying effect

Robustness check: controlled for parental socio-economic status (HISEI)

Source: LifE 2012, own calculations

(Hazard Ratio: 0.05).
With respect to socio-economic resources, results show that achieving economic independence leads to a profound acceleration of the first cohabitation, the first marriage and the birth of the first child (acceleration of 45 to 506 percent). Furthermore, highly educated men experience these events later. However, their timing converges over the course of time with that of men who have a vocational degree.

### 5 Discussion

The purpose of this contribution was, first, to determine how personal, social and socio-economic resources influence the timing of five transitions on the way to middle adulthood and, second, whether there are varying influences of personal, social and socio-economic resources among women and men. For this purpose, we applied a resource model of life management, assuming that people pass different transitions drawing back on these resources.

In line with Hypothesis 1, we found that personal and social resources predominantly influence the timing of events that occur in late youth or early adulthood,
such as the first sexual intercourse and the first long-term relationship. At this stage of partnership formation processes individuals obviously draw on their own personal and social resources, whereas socio-economic resources are less relevant. However, with increasing institutionalization of the partnership, i.e. the sharing of a household, marriage and the birth of the first child, socio-economic resources become dominant. At these stages of partnership and family formation, commitments, responsibilities, and economic investments increase. As the descriptive findings showed, the first sexual experiences and first romantic relationships occur in late adolescence and early adulthood, whereas marriage and childbirth take place later in life. Thereby, partnerships in youth do not only differ from those in adulthood in terms of timing and duration but also concerning the role, investment and expectations placed on them (Walper et al. 2008). With marriage and parenthood, mutual support, stable emotional bonds and financial security become more important.

Overall, it turns out that in terms of personal, social and socio-economic resources the social life course from late adolescence to middle adulthood consists of two phases: The first phase is predominantly influenced by personal and social resources, while the second phase is determined by socio-economic resources. While early events like the first sexual contact and first partnership more strongly depend on personal and social resources, educational attainment and especially economic security become more important with increasing institutionalization of partnerships (marriage and birth of the first child). The first cohabitation seems to play an intermediate role in the process of partnership and family formation. The timing is influenced by personal and social resources as well as socio-economic resources.

As very important result we found different effects on the timing of transitions among men and women. While women are strongly influenced by personal resources (Hypothesis 2), such as emotional stability, high outgoingness, and self-perceived appearance, male adolescents are strongly influenced by their integration in a peer group and the parental support system in their family of origin (Hypothesis 3). A parental divorce proved to accelerate the transition to adulthood for men but not for women (except for the timing of the first sexual experience). The results indicate that those men tend to begin their own romantic relationships at an earlier age than men with (structurally) intact families. It can be supposed that young men are particularly influenced by the lack of (mostly) father figures, because the father as male role model is absent. Not only the absence of the role model, but also the reduction in parental control caused by a divorce which may lead to an earlier orientation to peers and partnerships (Diefenbach 1999), seems to affect men in particular. In addition, integration in a social network seems to be much more important for men than for women. Young men, who are part of a network are more likely to carry out transitions earlier. Peer group integration is not related to the timing of transitions among women. Overall, young men seem to be much more closely orientated to others while young women tend to be more interested in close female friends (Fend 2005; Steinberg 2010). Furthermore, the greater importance of the peer group for men compared to women can be explained by the different meaning of socialization agents for men and women. It can be argued that girls are socialized to a greater extent within the family; boys, however, are more oriented to further agents of so-
ocialization besides the family (Erzinger 2009), such as the peer group which has a greater impact on men’s romantic development than on girls’.

In line with our expectations (Hypothesis 4), economic independence accelerates the timing of social transitions for both men and women: Not only men are supposed to achieve economic independence before marriage and having children, but also women. Changes in women’s life course structure are obvious. Women and men postpone events like marriage and having children in times of economic uncertainty. Thus, economic independence seems to enhance the chances of partnership formation for both men and women (Brose 2008).

In common with previous studies (Bauer/Jacob 2010; Dommermuth 2008) and in line with Hypothesis 5, our results show that highly educated women and highly educated men tend to delay marriage and parenthood. However, the effect of educational attainment is stronger for women than for men. Furthermore, the retarding effect of the educational level is stronger for family formation than for marriage, for both men and women. This finding indicates that the most important transition marker in a partnership history is no longer marriage but the birth of the first child. However, the influence of the educational level is stronger for men than for women. Moreover, the individual educational level only influences men’s timing of a cohabitation but not women’s. Contrary to our expectations, cohabitation is even more strongly influenced by men’s educational attainment than marriage. This indicates the increased acceptance and importance of cohabitation in the last decades.

In summary, earlier social transitions appear to be determined by personal and social resources, but we found different mechanisms for men and for women. Later, however, when a partnership becomes institutionalized, the educational attainment and economic situation more strongly influence the timing of relevant passages in the process of partnership and family formation. A finding that holds true for men and women alike.

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Appendix

Tab. A1: Items and scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
<th>Answer</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I sometimes get upset over little things. (-)</td>
<td>Two-point response scale: true (2) or not true (1), sum score 0.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Often, I cannot get out of my moods. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I belong to those who sometimes cannot control their anger. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sometimes I don’t even know what’s wrong with me. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>There are days when everyone annoys me. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sometimes I am very sad for no reason. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional stability</td>
<td>When something annoys me, I sometimes lose my temper. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sometimes I don’t care about anything. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I like being around people.</td>
<td>Two-point response scale: true (2) or not true (1), sum score 0.65</td>
<td></td>
</tr>
<tr>
<td>Outgoingness</td>
<td>I feel comfortable being alone. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I enjoy making new acquaintances.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I always look forward to meeting with my friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I don’t like being with a lot of people. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I enjoy meeting new people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I don’t mind being alone for days. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>During the school breaks I prefer to be alone. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body image</td>
<td>Sometimes I envy classmates who look better than me. (-)</td>
<td>Two-point response scale: true (2) or not true (1), sum score 0.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If I looked better, I would have more friends. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compared to others, I am really good looking.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have already been teased about my appearance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have already wished I would look completely different. (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The way I look, I am popular with girls/boys.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer group integration</td>
<td>How many friends do you have?</td>
<td>various response categories; values were standardized and calculated to a weighted sum score 0.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How many of your friends are in your class?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often do you meet with your friends after school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you have the opportunity to meet with your friends after school?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you belong to a group of youths who meet regularly or often and have a sense of belonging together? We do not mean a club or association.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you sometimes or often feel lonely? (-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do schoolmates come to your place sometimes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you have a best friend?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: For detailed information about singles items, scale construction and characteristic values, see Fend/Prester (1986).
Source: Own calculation