

Career Compromises and Dropout from Vocational Education and Training in Germany

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Abstract

This study investigates the relevance of career compromises (i.e., the discrepancy between the expected and the actually attained training position) to the decision to drop out of vocational education and training (VET), focusing on compromises in terms of social status and gender type. We pay particular attention to upward and downward compromises. Using longitudinal data on 7205 apprentices from the German National Educational Panel Study (Starting Cohort 4), the results of discrete event history models show that both dimensions of compromise are crucial to the decision to drop out of a first VET position. In particular, downward gender-type discrepancies increase the probability that female apprentices will drop out. These findings draw attention to the role of pre-entry VET policies, such as career counseling, in minimizing the incidence of career compromises.

Introduction

Countries with an apprenticeship-based vocational education and training (VET) system often facilitate smooth transitions to the labor market (Barbieri, Cutuli, and Passaretta 2018; Kogan 2019). Having obtained an apprenticeship is then key to a successful school-to-work transition (Masdonati, Lamamra, and Jordan 2010), which, in turn, leads to relatively stable occupational careers and avoids unemployment (Manzoni, Härkönen, and Mayer 2014; Müller, Steinmann, and Ell 1998; Solga 2008; Ainsworth and Roscigno 2005). At the same time, however,

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apprenticeship dropout behavior constitutes a prevalent phenomenon in many VET systems (e.g., Switzerland: Fillietaz 2014; Negrini et al. 2016; Schmid and Stalder 2012; e.g., Germany: Neuber-Pohl 2021). In Germany, for example, 25% of apprenticeship contracts have been terminated prematurely every year over the past decades (Uhly 2015).¹ This is of particular concern since dropping out of VET can have severe consequences for young people's later lives, such as high "labor market vulnerability," stigmatization, and lower social status (Solga 2008). Moreover, it is costly for companies when trainees drop out (Wenzelmann and Lemmermann 2012). In order to develop targeted educational policy measures to diminish VET dropout rates, it is therefore important to identify the precursors.

Previous research has found manifold predictors of apprenticeship dropout behavior. The majority of studies highlight the relevance of individual characteristics (e.g., school-leaving certificates, migration background; see, e.g., Beicht and Walden 2013; Bessey and Backes-Gellner 2015; Rohrbach-Schmidt and Uhly 2015; Stalder and Schmid 2016), financial resources (Bessey and Backes-Gellner 2015; Seidel 2019), and the structural characteristics of the occupations in question and the firms doing the training (Christ 2013; Rohrbach-Schmidt and Uhly 2015; Uhly 2015).

Another important strand of research focuses on the role of young people's career choices in predicting VET dropout rates. While some studies attribute dropout behavior to poorly informed career decisions (Beinke 2010), other studies take into account that career choices are made in light of various constraints that often require *career compromises*, i.e., there is a discrepancy between the occupational aspirations of students and the apprenticeship they actually begin (Ahrens et al. 2021; Nießen et al. 2022; Schels et al. 2022). The relevance of career compromises is reflected in the higher dropout rates of young people who did not obtain an apprenticeship in their desired occupation (Beicht and Walden 2013; Holtmann and Solga 2023). Studies further show that employees who perceive that their job does not match their aspirations have lower job satisfaction and change jobs more often (Kalleberg and Mastekaasa 2001; Turnley and Feldman 2000).

While these findings suggest that not attaining one's career aspirations may lead to dissatisfaction and dropping out, the present study addresses two crucial remaining research gaps: (1) It is not yet fully understood which dimensions of career compromise matter. Previous research has examined the consequences of different compromises separately, e.g., those related to intrinsic aspects of the field of work (e.g., Taris, Feij, and Capel 2006) or those related to social status (e.g., Creed and Saporta 2003; Hardie 2014). In line with Gottfredson's (2002) theory of circumscription and compromise and previous findings on key dimensions of career compromise (Ahrens et al. 2021), we examine the relevance of social status and gender-type compromises for young people's decision to drop out of their first VET position. We use the arithmetic difference between the attained VET position and aspirations based on the International Socio-Economic Index (ISEI) (Ganzeboom, Graaf, and Treiman 1992) and the share of same-sex employees in a training program to measure social status and gender-type compromises, respectively. (2) This study investigates whether the direction of compromise (i.e., upward or downward discrepancies between attained position and aspiration) has a bearing on the decision to drop out of a first VET position. While the majority of previous studies have examined downward discrepancies (i.e., an attained SES that is lower than expected), cultural theory suggests that upward discrepancies may also increase the risk of dropping out.

Our case study is Germany, a country with a strong degree of social and gender stratification in the labor market (Allmendinger 1989; Charles and Grusky 2004) and a strong linkage between the VET system and the labor market, i.e., career compromises have long-term implications. We use longitudinal data on 7205 apprentices from the German National Educational Panel Study (NEPS, Starting Cohort 4), providing detailed information on young people's career aspirations, the VET position they attained after general schooling, as well as their dropout behavior at their first VET position. Results show that both upward and downward discrepancies in gender type and social status increased the probability of apprentices dropping out, especially in the first 6 months of

their apprenticeship. Downward gender-type compromises are identified as a particularly strong predictor that women will drop out of their first VET position.

Theoretical Framework: Dropping Out of VET in Relation to Career Compromises

Career Compromise and VET Dropout Behaviors

Previous research examines potential consequences of career compromise mostly from a socio-psychological perspective: *Self-discrepancy theory* (Higgins 1987) and *multiple discrepancies theory* (Michalos 1985), for example, generally consider the realization of goals and preferences as the primary source of satisfaction and feelings of success. Both theories identify the perceived discrepancy between preferences and attainment as a central predictor of psychological well-being and satisfaction. Not attaining goals and preferences generates negative emotions such as disappointment, dissatisfaction, self-criticism, and frustration.

The expectation that career compromises have negative consequences is generally supported by the existing empirical evidence. Not attaining career aspirations is associated with lower psychological well-being and higher levels of distress (Carr 1997; Creed and Blume 2012; Hardie 2014; Niefen et al. 2021; Tsaousides and Jome 2008; for contradictory evidence regarding educational aspirations, see Reynolds and Baird 2010). Studies investigating career outcomes found that unmet aspirations are associated with lower levels of career satisfaction, work adjustment, and work motivation (Ashforth and Saks 2000; Creed and Gagliardi 2015; Irving and Montes 2009; Tsaousides and Jome 2008; Turnley and Feldman 2000). Career compromise was further related to increased absenteeism due to sickness and a greater risk of unemployment (Carr 1997; Gjerustad 2016; Gjerustad and Soest 2011).

In this context, dropping out can be understood as a way to dissolve discrepancies and associated negative feelings. Apprentices who make career compromises are, thus, likely to be more at risk of leaving their apprenticeship (in order to improve upon their situation). Empirical evidence on the return to job mobility supports this expectation and shows that a job change is often accompanied by an improvement in job satisfaction, income, status, and commitment to the company (e.g., Gesthuizen and Dagevos 2008; Kalleberg and Mastekaasa 2001; on apprenticeships see Schmid and Stalder 2012). Moreover, studies suggest that career compromises are associated with a higher probability of searching for a new job and higher rates of turnover (Creed and Saporita 2003; Pearson 1995; Taris, Feij, and Capel 2006). Concerning apprentices, analyses for Germany found that not attaining the desired training occupation was associated with higher rates of dropping out of VET (Beicht and Walden 2013; Holtmann and Solga 2023).

While the research presented thus far has shown that career compromises can be associated with dropping out of VET, it remains unclear which *dimensions* of compromise are relevant in this context. Generally, career choice serves to establish a young person's vocational self-image, that is, their vocational identity and social role in society (Super 1957). According to Gottfredson's (2002, 1981) *theory of circumscription and compromise*, gender and social status are core dimensions in the career choice process. Especially during adolescence, individuals categorize occupations along these two dimensions (e.g., Kleinert and Schels 2020; Miyamoto and Wicht 2020). Significant compromises regarding gender type are usually considered a greater threat to one's self-image than compromises regarding social status (Gottfredson 2002). Descriptive evidence confirms that in Germany, career compromises mainly concern social status and gender type and that compromises are made in both upward and downward directions (Ahrens et al. 2021; Niefen et al. 2022).

Sociological theory can make a significant contribution to explaining compromises in social status and gender type. In the following sections, we thus establish a link between these dimensions of compromise and dropping out of VET from a mainly sociological perspective. Moreover, we discuss whether these compromises tend to exhibit a directional or a nondirectional relationship to VET dropout behavior.

Social Status Compromise

Regarding discrepancies in social status, *theories of (bounded) rational educational decisions* (e.g., Boudon 1974; Breen and Goldthorpe 1997) suggest that young people's career aspirations are the result of cost-benefit considerations and that they evaluate their career attainment primarily in terms of expected benefits: the higher the social status of the VET position attained compared to their aspirations, the higher the value young people attach to it². Moreover, *level-of-aspiration theory* (e.g., Starbuck 1963) considers the level of aspirations as a reference point for feelings of success or failure. The lower the attainment with respect to this reference point, the more negative are the attendant emotions, and vice versa (Heath, Larrick, and Wu 1999). This theoretical perspective highlights the detrimental effects of falling below the expected social status in the form of a loss of resources such as income, power, and social recognition.

Empirical studies investigating such downward discrepancies find that not attaining the aspired social status is related to a higher risk of developing mental-health problems (Carr 1997) and higher rates of sickness absenteeism (Gjerustad and Soest 2011). Gjerustad (2016) further found that finding oneself with a lower social status than expected increased the risk of unemployment. If the social status of the acquired VET position falls below the expected one, negative emotions may arise that increase the risk of dropping out of VET. Conversely, attaining a VET position that confers a higher social status than expected is likely to be associated with more positive emotions and a lower risk of dropping out. This corresponds to a directional linear relationship between status discrepancy and dropping out:

H1a (directional social discrepancy): Attaining a VET position with a lower (higher) social status than expected is associated with a higher (lower) probability of dropping out.

Alternatively, a cultural-theory perspective suggests that not only downward but also upward discrepancies could be detrimental. Following Bourdieu (1979), members of an occupation share an occupational *habitus* that is shaped by social categories such as social class and gender (see also Colley et al. 2003). Individuals express their class membership through esthetics, attitudes, speech, and social networks and in this way constantly reproduce their social position. Occupations provide distinct “constellations of conditions” that are related to social status, comprising, e.g., occupation-specific lifestyles, life opportunities, and culture (Weeden and Grusky 2005). Previous studies have shown that when social class habitus and context do not correspond, feelings of ambivalence, insecurity, and unease emerge (Sennett and Cobb 1972), e.g., in the case of working-class students at university (Reay 2005). Thus, being confronted with an alien occupational habitus could mean that attaining a higher social status than expected might lead to feelings of not belonging in one's social position. Furthermore, attaining a higher social status than expected could result in feelings of overload due to the greater effort, responsibility, and workload required by the occupation in question. This is related to the fact that higher status occupations often require more complex and cognitively demanding tasks in comparison to low-status occupations.

Previous studies that explicitly consider both downward and upward discrepancies in social status have had mixed results. Gjerustad and Soest (2012) have documented a curvilinear relationship between status discrepancies and anxiety symptoms, suggesting that both upward and downward compromises are detrimental. However, they found a linear relationship between status discrepancies and depressive symptoms. Irving and Montes (2009) have shown that exceeding aspirations in terms of skill development and monetary compensation was associated with a reduction in job satisfaction, supporting the theoretical argumentation provided above. Hardie (2014) also finds that both exceeding and falling short of social status aspirations is related to diminished well-being. Carr (1997), however, finds that there is no difference in terms of mental-health outcomes between surpassing and attaining one's expected social status. The cultural perspective hence suggests a nondirectional relationship between social status compromises and dropping out:

H1b (nondirectional social discrepancy): Attaining a VET position incongruent with the expected social status is associated with an increase in dropout probability (irrespective of whether the attained VET position exceeds or falls short of the expected social status).

Gender-type Compromise

Kanter's (1977) concept of *tokenism* frames the experiences of individuals who are minorities in their workplace or occupation (Busch 2013; Kanter 1977; Taylor 2010, 2016). A key finding is that the more skewed the gender ratio in an occupation, the more attention the minority (token) group receives from the dominant group. As a result, minorities often operate under greater pressure to perform (Kanter 1977). This is often accompanied by a less supportive work climate (Busch 2013; Taylor 2010), higher levels of physical stress (Taylor 2016) and even a higher probability of early termination (Beckmann 2023; Rohrbach-Schmidt and Uhly 2015). Such negative repercussions are less pronounced for individuals in more gender-balanced work settings or for individuals who belong to an occupational majority (Kanter 1977). Thus, the more gender-atypical the attained VET position is in relation to a young person's aspirations, the lower their satisfaction with their VET position, which can be expected to lead to a higher risk of dropping out. Conversely, we can expect young people to be more likely to be satisfied and at a lower risk of dropping out if they attain a VET position that is equally or more gender-typical than their previous career aspirations. There is a lack of empirical evidence on the consequences of gender-type compromises.

H2a (directional gender-type discrepancy): Attaining a VET position that is less (more) gender-typical than expected is associated with an increase (decrease) in the probability of dropping out.

Again, cultural theory suggests an alternative theoretical expectation here. Scholars have coined the term *gender habitus* to refer to the social construction of gender and the different gender-specific behaviors and aspirations that are perceived as either typically feminine or typically masculine (Behnke and Meuser 2001; Schwiter et al. 2011). Gender habitus is thus a critical filter through which occupations are perceived and career aspirations are established. This is also reflected in the gender-typed connotations of different work tasks, such that manual and technical work is often perceived as "masculine," whereas social and care work is viewed as "feminine." Gender is therefore another important aspect of occupational habitus.

Importantly, gender habitus can be understood as a continuum of different more or less rigid expressions of femininity and masculinity (Behnke and Meuser 2001), that is, some individuals adhere to traditional gender norms, constructing male and female as highly distinct social categories, while others express a less rigid construction of gender. Consequently, young people who enter occupations that are not congruent with their expected gender habitus will experience "habitual insecurity." The salience of gender and the gender continuum is also visible in the structure of the German labor market: although most occupations can be described as either typically male or typically female, there is strong variability in the extent to which occupations are skewed toward gender (see the "German school and VET system" section, below). Thus, occupations may not only be perceived as being "too gender-atypical" (as argued above) but also as "too gender-typical" in relation to the expected gender habitus.

H2b (nondirectional gender-type discrepancy): Attaining a VET position incongruent with the expected gender type is associated with an increase in the probability of dropping out (irrespective of whether the attained VET position is more or less gender-typical than expected).

The German School and VET System

The German school and VET system shows a high degree of stratification and early tracking. After elementary school, children usually enter the secondary school system at age 10, where they can

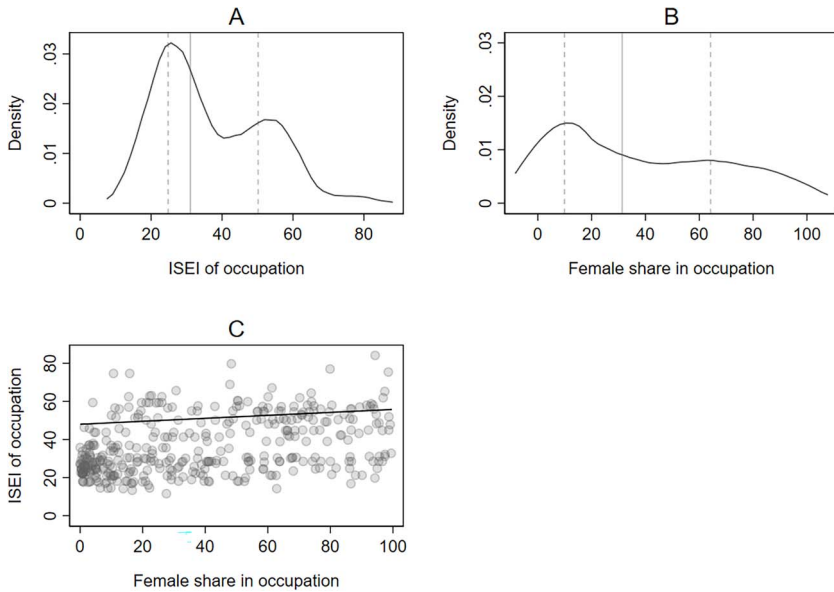


Figure 1. Distribution of occupational characteristics in the German VET system. Note: Data source: 2011 Census (German Federal Statistical Office, 2014); based on $N = 414$ occupations at requirement level 2 (according to KldB-2010). The solid lines in panels A and B mark the median, and the dashed lines are the first and third quartiles.

acquire one of three hierarchically ordered school-leaving qualifications. Completion of 9th grade (at age 15) leads to a lower secondary school-leaving certificate (*Hauptschulabschluss*), while young people who complete 10th grade (at age 16) earn an intermediate school-leaving qualification (*Realschulabschluss*). The highest qualification is *Abitur*, which is usually obtained after completing 12th grade (or 13th grade in some federal states) of *Gymnasium* and entitles students to enter university (Standing Conference of the Ministers of Education and Cultural Affairs 2019).

All school degrees open the way to VET, either within the school-based or the dual system (a combination of firm-based and school-based training), which is taken by around a third of German school-leavers after 9th or 10th grade (Federal Institute for Vocational Education and Training 2022). The respective training occupations differ in terms of skill level and social status. Young people with a *Hauptschulabschluss* usually take up training in low- or medium-skilled working-class jobs (e.g., sales assistant, painter and varnisher, bricklayer, or care assistant), whereas those with a *Realschulabschluss* enter skilled occupations with an intermediate social status (such as are held, e.g., by medical assistants, industrial mechanics, or electronics technicians). Graduates with an *Abitur* usually enter occupations with a comparatively higher status, becoming, for instance, industrial clerks, media designers, or IT specialists. Accordingly, aggregate data from the 2011 German census show that most occupations in the German VET system are associated with lower or intermediate social status (Figure 1a).

Moreover, occupations in Germany are segregated by gender. Women get funneled into a smaller number of occupations, which is reflected in the labor market (Busch 2013; Hausmann and Kleinert 2014) as well as in the VET market (Figure 1b): while 50% of the training occupations can be classified as male-dominated (with a female share of less than 30%), the occupational spectrum for women is much narrower, since less than 25% of the training occupations are female-dominated (with a female share of more than 70%). This is related to the fact that training for female-dominated occupations mostly takes place in the school-based system (Federal Institute for Vocational Education and Training 2022).

Furthermore, occupational social status and gender types are interrelated. In the German labor market, low-skilled occupations are more segregated by gender than high-skilled occupations (Busch 2013: 164 f.). In this context, Krüger et al. (2022) find a u-shaped relationship between the share of women in an occupation and its social status. For the VET system, however, the data indicate a moderate linear relationship ($r = 0.39$) between the share of women and social status (Figure 1c). This may be because most of the (female-dominated) school-based VET programs require at least an intermediate school-leaving certificate, as opposed to the dual system, which is also accessible for graduates from lower school types (Protsch and Solga, 2016).

Data and Methods

Data

This study uses the German survey data from the NEPS, Starting Cohort 4 (SC4), version 10.0.0, doi:10.5157/NEPS:SC4:10.0.0 (Blossfeld and Roßbach 2019; NEPS Network 2021). The NEPS-SC4 survey includes a representative sample of students attending 9th grade at regular schools in Germany and covers their transition from the general school system to the VET system and their subsequent trajectories within this system. The first survey was carried out in the classroom via paper-and-pencil interviewing (PAPI) in autumn 2010 (Wave 1), followed by a second survey in spring 2011 (Wave 2). From 10th grade onwards, surveys took place annually in the classroom via PAPI (Waves 3–8). Young people who had left the general education system were interviewed twice a year (Waves 3–6) and then annually (Wave 7 onwards) using computer-assisted telephone interviewing. The current study uses data from Wave 1 to Wave 10.

The analytical sample includes students who graduated from general secondary school after lower or upper secondary education (usually with a lower [Hauptschulabschluss] or intermediate [Realschulabschluss] secondary school certificate or with the German university entrance qualification [Fachhochschulreife/Abitur]). 7245 individuals entered their first VET position after graduating from general schooling. Apprentices who entered their first VET position abroad or on a part-time basis were excluded ($n = 40$). The final analytical sample included 7205 apprentices with a total of 151,425 months in training (captured in a person-month dataset). Individuals were observed, on average, for 21 months (S.D. 12.86).

Measures

Focal Variables

Dropping out of a first VET position The dependent variable captures dropouts from first full-qualifying VET positions (0: no dropout, 1: dropout) on a monthly basis, based on apprentices' self-reported, retrospective information. (Former) apprentices were asked if they prematurely quit their apprenticeship and, if so, whether this was a deliberate decision or whether they were dismissed by their employer or school. Because the latter situation (dismissal by employer or school) does not involve a deliberate decision to drop out, we defined these cases as censored. Apprentices who participated in their VET until the end but did not pass the final exam were not considered dropouts. VET episodes lasting longer than 42 months (which approximates the average maximum duration of VET in Germany) were truncated and treated as right-censored ($n = 151$).

Career compromises The different types of career compromise were constructed based on students' realistic career aspirations (sometimes called expectations) measured before entering the VET system ("Considering everything you know right now, what will probably be your profession in the future?"). Career aspirations were measured (annually or bi-annually) from 9th grade to the end of schooling. We used the latest information available before respondents left the school system.

Social status compromises were measured based on the ISEI, which measures values between 16 and 90 (Ganzeboom, Graaf, and Treiman 1992). The compromise measure refers to the

discrepancy between the ISEI of apprentices' career aspirations and their attained VET position. The value 0 indicates no compromise, while positive values refer to upward compromises (i.e., apprentices attained a higher social status than expected) and negative values indicate downward compromises (i.e., apprentices attained an occupation with a lower social status than expected).

Gender-type compromise was constructed based on the share of same-sex employees in both the expected and attained occupation (employment statistics of the [Federal Employment Agency 2014](#)). A continuous discrepancy measure was used, with a value of 0 indicating that apprentices attained their expected gender type. Positive values refer to deviations toward occupations with a higher share of the respondent's gender and negative values toward occupations with a lower share of their gender. There was a positive correlation between the absolute values of gender-type and social-status discrepancies, $r = 0.322$, $p = 0.000$ (see also [Figure A1](#) in the appendix).

Gender was coded such that men represented the reference group.

Duration of training refers to the time apprentices had spent in training in three categories: first 6 months (reference category), second 6 months, and second year and beyond.

Control Variables

Migration background distinguishes between three categories: no migration background, first-generation immigrants, and second-generation immigrants. The variable is based on information on students' country of birth as well as the country of birth of their parents and grandparents ([Olczyk, Will, and Kristen 2014](#)). First-generation immigrants are those individuals who were born outside Germany and second-generation immigrants are those individuals who were born in Germany but whose parents were both born outside of Germany.

Educational qualification refers to the highest school-leaving qualification attained before entering VET, distinguishing between low (*Hauptschulabschluss*, the reference category), medium (*Realschulabschluss*), and high (*Fachhochschulreife/Abitur*) educational qualifications.

Grade point average (GPA) obtained in the highest school-leaving qualification, ranging from 1 (very good) to 6 (insufficient).

Parental socio-economic status (SES) was measured by the highest ISEI ([Ganzeboom, Graaf, and Treiman 1992](#)) of parental occupations. Values range from 11.74 to 88.96.

Type of Training refers to apprentices' statements about their training type (firm-based or school-based). The variable was coded such that firm-based training represented the reference group.

Attained VET position was measured by the ISEI of the attained VET position (social status) and the share of same-sex employees of the attained VET position (gender type).

Career compromises in the field of work were measured based on the German Classification of Occupations (KldB 2010) and the constructs of occupational sectors and segments ([Matthes, Meinken, and Neuhauser 2015](#)). These classifications group occupations at varying levels of similarity in terms of vocational tasks, competencies, and required knowledge ([Paulus and Matthes 2013](#)). Based on the occupational level at which discrepancies between expected and attained apprenticeships occur, four different types of field-of-work compromises are distinguished: (1) *no compromise*: there is no discrepancy at the most detailed level of "occupational sub-groups," the reference category), (2) *weak compromise* (discrepancy at the level of "main occupational groups"), (3) *moderate compromise* (discrepancy at the level of "occupational segments"), and (4) *strong compromise* (discrepancy at the level of "occupational sectors").

Distance between measuring aspirations and apprenticeship start date was used to account for differences in the time when students' career aspirations were measured (between 12 and 24 months before entering the VET system).

East or West Germany accounts for regional differences in labor market structures within Germany.

[Table 1](#) shows the descriptive statistics of the analytic sample.

Table 1. Descriptive statistics

Variables	Mean/ percent	SD	Min	Max	N(valid)
<i>Dependent variable</i>					
Dropout from first VET position	10.96		0	1	7205
<i>Career compromise</i>					
Social status	−5.82	16.50	−70.57	60.38	5889
Gender type	1.63	22.82	−96.31	98.43	5786
Field of work			0	1	5858
No compromise (ref.)	40.44				
Weak compromise	18.49				
Moderate compromise	14.63				
Strong compromise	26.44				
<i>Time dependency</i>					
Time			0	1	7205
1 st 6 months (ref.)	19.13				
2 nd 6 months	12.16				
2 nd year and beyond	68.72				
<i>Controls</i>					
Gender: female	47.00		0	1	7205
Migration background			0	1	7106
German (ref.)	75.54				
1 st generation migrant	6.19				
2 nd generation migrant	18.27				
Highest parental ISEI	47.47	19.34	11.74	88.96	6294
Educational degree			0	1	6458
Low (ref.)	27.75				
Medium	49.75				
High	22.50				
GPA	2.69	0.54	1	5.8	6132
East Germany (ref. West)	13.65		0	1	7201
Dual training (ref. school-based)	76.55		0	1	7195
Distance between aspiration and VET entry	11.73	11.73	1	64	5985
VET: ISEI	38.27	13.52	11.56	85.85	7037
VET: share of same-sex employees	73.85	26.63	0.24	99.86	7033

Note: N(valid) refers to the total number of individuals with valid information. Descriptive statistics of the time-constant variables are calculated based on the person dataset only.

Statistical Analyses

To investigate associations between the different types of compromise when entering VET and dropping out of training, we use discrete-time event history models (Allison 1982). The model corresponds to a binary logistic regression model. The dependent variable is the transition probability from state 0 (being in VET) to state 1 (dropping out of the first VET position). The transition probability is defined as the log-odds for the conditional probability of dropping out at time t_i . Since the transition probability depends on the processing time (i.e., the time already spent in training), we use a piecewise-constant modeling strategy, where the transition probability is assumed to be constant only within particular time intervals (Blossfeld and Rohwer 2002). To map this, we included controls for process time intervals (see the “Control variables” section, below). The logistic model for the conditional discrete time to event is as follows:

$$\ln \left\{ \frac{P(t)}{1-P(t)} \right\} = a(t) + bX + bX(t)$$

The analysis is conducted on the level of person-months. To address the resulting problem of the non-independence of person-month observations, cluster-robust standard errors were obtained using a Huber-White sandwich estimator (Williams 2000). In all models, gender, migration background, parental SES, educational qualification, GPA, duration of training, region, and type of training were included as covariates, in order to rule out the possibility that associations between compromises and dropouts are in part due to differences in those variables. While the results of our analytical strategy provide important clues about the association between career compromise and dropping out, they remain correlational. Since we cannot adjust for potential unobserved confounders, no causal interpretation is possible.

We applied multiple imputations to deal with missing values in control variables (Little and Rubin 2002). As can be seen in Table 1, most of the missing values relate to the measurement of occupational aspirations ($n = 1293$ for gender type; $n = 1189$ for social status). The missing values are due primarily due to lacking information about respondents' aspirations, or to difficulties information that was too vague. An analysis of these missing values shows a systematic correlation with the control variables included in our analysis models, in particular school type, final grade, and migration background. But even if we control for these variables, selection bias due to unobservable variables cannot be completely ruled out. We used sequential imputation by chained equations to create 20 datasets. The imputation model encompasses all variables of our analysis models as well as auxiliary variables, including the occupational sector, and processing time in months.

To examine the directionality of the association between dropping out and compromises on gender type and social status, we used piecewise regression. This allowed us to separately assess the intercept and slope of downward and upward compromises in predicting dropouts. To this end, we artificially split the sample at the threshold of zero (no compromises) and ran two models: one model predicted cases of dropping out by downward compromises when no compromises and upward compromises were set to zero. The other model predicted cases of dropping out by upward compromise with no compromise and downward compromise set to zero. In all models, we accounted for the time dependence of the relationship between dropping out and compromises by using interaction terms between compromises and training duration. The consideration of time dependence is important because the opportunity costs of dropping out increase with the duration of training (Patzina and Wydra-Somaggio 2020; Becker 1962).

In two further steps, we conducted exploratory analyses: first, we compared the strength of the associations between social status as well as gender-type compromises and dropping out of the first VET position before (unconditional model) and after (conditional model) controlling for the attained VET position and compromises in the field of work. This way, we rule out the possibility that the associations found in this study are partly driven by occupational characteristics or by field-of-work compromises that usually go hand in hand with gender-type and social status compromises (Rohrbach-Schmidt and Uhly 2015). Second, we tested for gender differences in the conditional models for two reasons: (1) women are more likely to experience career compromises than men, mainly because of their higher occupational aspirations in terms of social status (Nießen et al. 2022), and (2) men and women differ in their preferences and work values (e.g., Busch-Heizmann 2015; Lechner et al. 2018; Quadlin 2019) and, therefore, different kinds of compromises may have gender-specific implications.

Results

Our descriptive analyses show that about 11% of apprentices make a conscious decision to drop out of their first VET early. This share is calculated on the basis of the full sample, which includes right-censored apprenticeship episodes (i.e. it can be assumed that some dropouts are not observed due to panel attrition). Considering only those apprentices who were observed until the end of their episode, the dropout rate is 22%. Figure 2 shows the hazard function with 95% confidence intervals reporting the estimated probability of dropping out of a first VET position as a function of the time spent in VET in months.

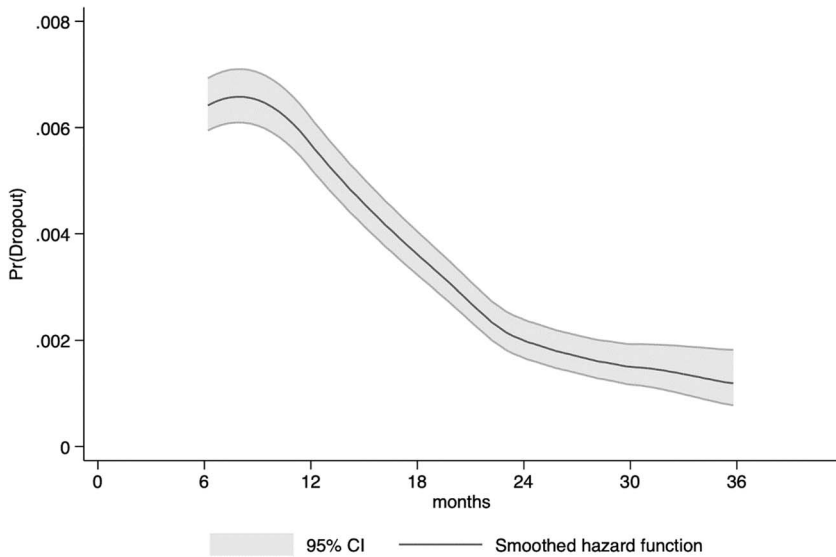


Figure 2. Smoothed hazard curve of the probability of dropping out.

Given the overall low number of apprentices in our sample who drop out of their first VET position, the hazard function shows that the probability of dropping out is relatively low at all observed time points. In the first year, the dropout probability increases, with the increase leveling during the second half of the year. The highest dropout probability is estimated for month 6 (0.009, S.E. 0.001) and month 12 (0.012, S.E. 0.002). From the second year on, the dropout probability decreases at a relatively constant rate.

Are Career Compromises in Social Status Associated with Dropping Out?

Figure 3 shows the results of our piecewise models on the relationships between dropping out of a first VET position and upward and downward compromises in social status. We report the predicted absolute probabilities of dropping out at certain observed levels of compromise and for three different time intervals (first 6 months, second 6 months, and second year and beyond). Full logistic regression results including the associations between dropping out and control variables can be found in Table A1 of the Appendix.

The results reveal two interesting patterns: first, consistent with Hypothesis 1b, a u-shaped relationship emerges between social status compromises and dropping out of the first VET position. That is, both upward and downward compromises are associated with increasing dropout behavior. The larger the discrepancy in social status between aspiration and VET, the higher the probability of dropping out. Effect sizes are comparable for upward and downward discrepancies for the second 6 months and beyond. In the first 6 months, upward discrepancies are only weakly correlated with a higher probability of dropping out.

Second, the relationship between dropping out and social status compromises is time-dependent, with downward compromises more likely to be associated with dropping out in the first 6 months. For example, apprentices who experience a downward compromise of 33 ISEI points (corresponding to about 2 S.D. of social status compromise and to an exemplary shift from sales occupations to occupations in real estate marketing or management) are about 1 percentage point more likely to drop out in the first 6 months of training than apprentices who have been in training for >2 years. Overall, however, it should be noted that while the estimated probabilities are statistically significant (at least $p < 0.05$), the differences between time intervals in the association between compromise and dropping out are not (see Table A1). This could be due to the overall low number of dropouts.

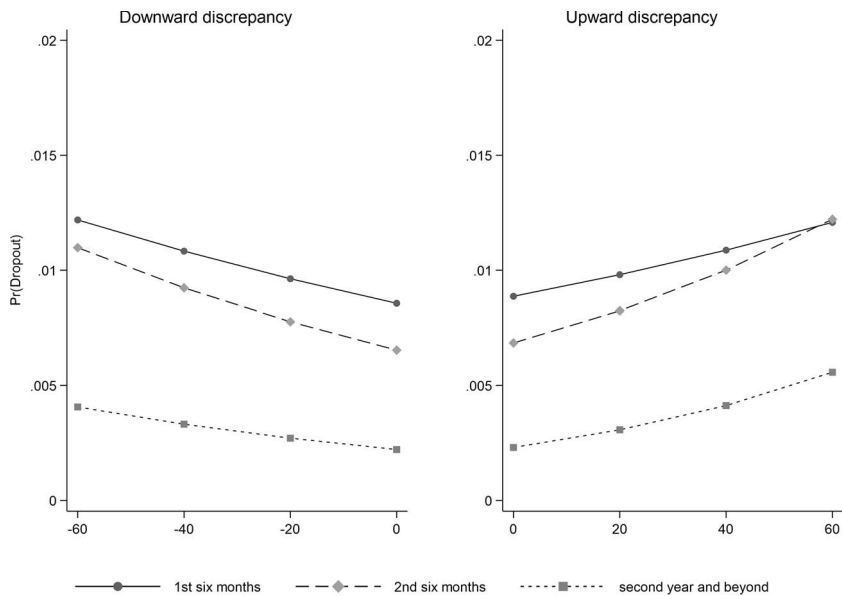


Figure 3. Association between social status discrepancies and dropout behavior (by time interval). Note: results from two piecewise linear regressions of dropout behavior on social status discrepancies (see Table A1).

Are Career Compromises in Gender Type Associated with Dropping Out?

Like the results presented above, Figure 4 shows the results of our piecewise models on the relationships between dropping out of a first VET position and upward and downward compromises in gender type. Full logistic regression results including the associations between dropping out and control variables can be found in Table A1 of the Appendix.

Again, the association between gender-type compromises and dropping out shows a u-shaped pattern. Both increasing upward and downward compromises are associated with a higher probability of dropping out, confirming hypothesis 2b. Overall, the curve for downward compromises is much steeper than that for upward compromises, especially for the first 6 months. For example, an upward compromise of 46 percentage points (which corresponds to about 2 S.D. in gender-type compromises) is associated with an increased probability of dropping out by 1% in the first 6 months, while the same downward shift is associated with an increased probability of dropping out by about 1.5%. After the first 6 months, only downward gender-type compromises are (weakly) associated with an increased probability of dropping out. While the estimated probabilities are statistically significant (at least $p < 0.05$), only the main association between dropping out and downward compromises, i.e., the association for the first 6 months, is statistically significant at the 1% level (see Table A1).

What Type of Compromise has the Greatest Bearing on the Decision to Drop Out?

Figure 5 shows the comparative results for the relationship between dropping out and compromises in social status and gender type. In each case, a u-shaped relationship was modeled for the estimation by considering a linear and a quadratic term of the z-standardized compromise variables. We estimated an unconditional and a conditional model in which we account for compromises in the field of work and social status/gender type of the VET occupation (see the “Statistical Analyses” chapter, below). Full regression results of the z-standardized and non-standardized logistic regression models can be found in Tables A2 and A3.

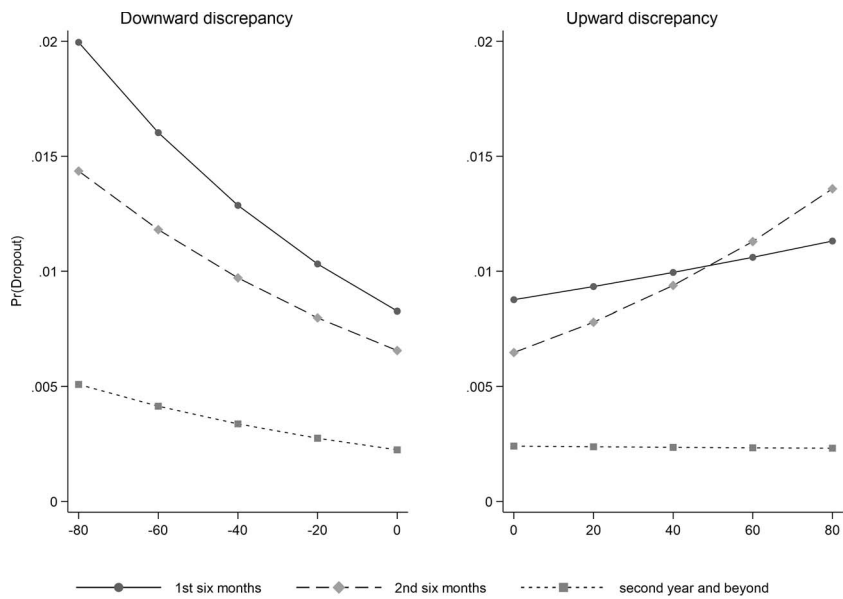


Figure 4. Association between gender-type discrepancies and dropout behavior (by time interval). Note: Results from two piecewise linear regressions of dropout behavior on gender-type discrepancies (see Table A1).

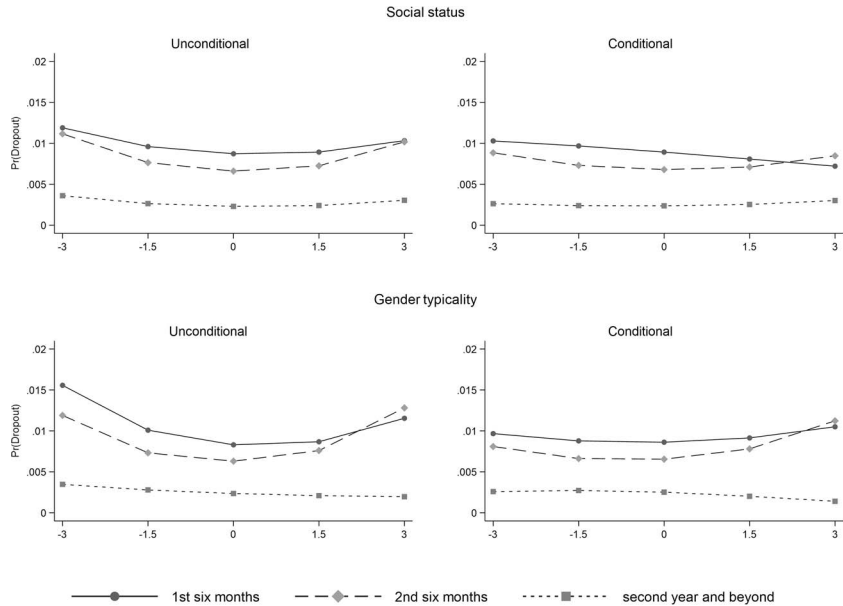


Figure 5. Comparisons of associations between gender-type and social-status discrepancies and dropout behavior (by time interval). Note: results from four linear regressions of dropout behavior on social-status and gender-type discrepancies (see Tables A2 and A3). In the conditional models, the field-of-work compromise, the gender type of VET and the social status of VET are included as covariates.

Looking at the unconditional models reveals that the u-shaped pattern of the predicted probabilities of dropping out is in general most pronounced for gender-type compromises (first 6 months and second 6 months). Like the results from the piecewise models, the probability of

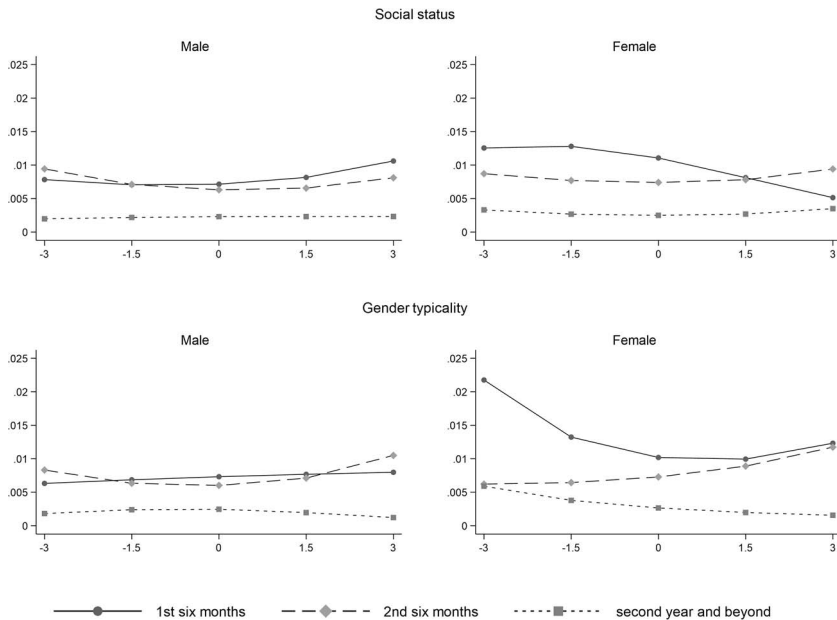


Figure 6. Gender differences in the associations between gender-type and social-status discrepancies and dropout behavior (by time interval). Note: Results from four linear regressions of dropout behavior on social-status and gender—type discrepancies, separate regressions for each gender (see [Tables A4](#) and [A5](#)). Displayed are the conditional models.

dropping out is strongest for downward gender-type compromises and downward social-status compromises. After the first year, compromises in social status and gender type are not associated with an increased probability of dropping out. In terms of the conditional models, this pattern weakens substantially when controlling for field-of-work compromise and the social status resp. gender type of the VET position. This is mainly because the extent of career compromise is not independent of the attained VET position. As such, higher values in the discrepancy variables occur more frequently for individuals with more extreme values of the distributions related to the VET position. It is therefore methodologically difficult to fully separate the relationship between compromises and dropping out from the relationship between attained VET and dropping out, especially at the edges of the compromise distribution.

Do the Associations Between Compromises and Dropping Out Vary by Gender?

[Figure 6](#) shows the comparative results for the relationship between dropping out and compromises in social status and gender type, separated by apprentices' gender. We use the same set of variables for the analyses as for the conditional models presented prior. Full regression results can be found in [Tables A4](#) and [A5](#).

For male apprentices, the association between compromise and dropping out of a first VET position shows a weak u-shaped pattern. The association is therefore less pronounced than has been found in the conditional models for both genders shown in [Figure 5](#). The models for the female sample reveal interesting and more distinct relationships. First, females display a substantial increase in the probability of dropping out in the first 6 months with increasing downward gender-type compromises. Hence, the previously identified relationship between dropping out of VET and downward compromise in gender was mainly driven by females. Second, upward compromise in social status lowers the probability of dropping out for females.

Discussion

Summary

This paper has aimed to shed light on the relevance of career compromises for dropping out of a first VET position, focusing on two types of compromises that some apprentices must make when entering VET: compromises related to social status and compromises related to gender type. As a major contribution to the literature, we not only assessed the extent but also the direction of these compromises. Using representative and comprehensive longitudinal data on apprentices' first training position and their career aspirations before entering VET, substantial associations between compromises and dropout behavior were found. In line with previous theorizing and research (i.e., [Creed and Blume 2012](#); [Hardie 2014](#)), both types of compromises were related to an increase in dropout behavior. Also, the decision to drop out was found to be time-dependent, pointing to the lower opportunity costs at earlier stages of a training program ([Patzina and Wydra-Somaggio 2020](#)).

Although some of the correlations are small, it is noteworthy that both upward and downward discrepancies in gender type and social status increased the probability that apprentices would drop out. These associations weakened as occupational gender type and social status were introduced into the models, pointing to the intertwining of the attained VET position and the extent of compromise experienced. Hence, the extent of association sizes should be interpreted in light of this interrelatedness. For gender-type compromises, a u-shaped relationship was found for both the unconditional and the conditional model. Hence, gender-type compromises can credibly be interpreted as being independent of other occupational characteristics, pointing to the importance of a cultural dimension of gender-type compromises. The existence of an occupational habitus tied to gender is hence supported by our results ([Bourdieu 1979](#); [Colley et al. 2003](#)).

In line with [Kanter's \(1977\)](#) tokenism approach and theories of gendered working cultures ([Bourdieu 1979](#); [Colley et al. 2003](#)), downward gender compromise turned out to be a particularly strong predictor of dropping out of a first VET position. This is also in line with [Gottfredson's \(2002\)](#) theory of circumscription and compromise, identifying gender type as the most salient aspect of individuals' self-concept. Gender-separated analyses revealed that female apprentices, in particular, respond to downward gender-type discrepancies by dropping out during the first 6 months. Female apprentices who enter male-dominated occupations against their aspirations may hence experience gendered working conditions that they are not willing to accept (e.g., [Makarova et al. 2016](#)). Male apprentices, however, are more inclined to accept VET positions that are more gender-atypical than they had aspired to. These results relate to empirical findings about the favorable treatment of men in female-dominated occupations (e.g., [Williams 1992](#)).

Gender differences in the consequences of social-status discrepancies were also visible, albeit to a smaller extent. Interestingly, the probability of female students dropping out in the first 6 months increased when they experienced downward social-status compromises (i.e., they attained an occupation with a lower social status than expected), but decreased when they attained a higher social status. The directional social discrepancy hypothesis based on rational-choice theory (e.g., [Breen and Goldthorpe 1997](#)) is hence supported for women. Men, on the other hand, showed a slightly higher probability of dropping out irrespective of the direction of compromise, supporting the non-direction hypothesis based on occupational habitus.

The result that women show higher persistence in occupations that exceed their aspirations in comparison to men contradicts the common finding that men place greater value on external aspects related to the social status of occupations in their career choice (e.g., [Busch-Heizmann 2015](#); [Lechner et al. 2018](#); [Quadlin 2020](#)). Women's higher perseverance in light of higher occupational challenges could be explained by women's higher conscientiousness (e.g., [Mac Giolla and Kajonius, 2018](#); [Nguyen et al. 2005](#)), which has been identified as a major mediator of gender gaps in achievement ([Verbree et al. 2022](#)).

Limitations and Future Research

The present study certainly has limitations. First, although our study is one of a few that can identify dropping out as a conscious decision and thus maps individual agency, we do not distinguish which educational or career path the young people chose after leaving their VET position. To comprehensively understand the consequences of compromise, future research should address whether young people drop out of the vocational education system altogether or whether they take an educational path that may be more in line with their previous aspirations (Beicht and Walden 2013; Bessey and Backes-Gellner 2015).

Second, the specific mechanisms underlying the relationship between compromises and dropping out remain an open question for future research. Our results support the existence of occupational cultures. Hence, social integration within occupations or feelings of belonging might identify as potential mediators. Furthermore, job or income satisfaction, and the inability to cope with the training requirements or with the expectations of significant others may mediate the association between occupational compromises and dropping out of VET. Since our results showed that career compromises are related to dropout behavior in a gender-specific way, future research should elaborate on how men and women differently perceive and cope with career compromises in terms of social status and gender type. Multi-group comparisons could shed light on whether the reported relationships vary across further individual, social, or contextual characteristics, such as social status, resources, type of training, or regional labor market demand. For example, it might be easier for some apprentices to find a different apprenticeship in response to experiencing detrimental compromises.

Third, results should be interpreted in light of the fact that gender-type and social-status compromises overlap, i.e., apprentices usually experience both types of compromise at a time (or none of them). Because of this multicollinearity, we cannot estimate the incremental relationship between compromises in social status and dropping out and compromises in gender type and dropping out, since no compromise on one variable usually means no compromise on the other. Relatedly, separating the occurrence of compromises from the characteristics of the attained VET position is methodologically complicated because they are intertwined with each other.

Fourth, there are limitations to the present approach to operationalizing career compromise. We measured career aspirations before respondents entered the VET system, hence capturing compromises based on early aspirations. Using their actual VET applications instead of reported career aspirations might capture a different aspect of career compromise. It is an open question whether such compromises yield stronger associations with dropping out (as applications are more goal-oriented than aspirations) or weaker effects (as applications, since they are adapted to labor market demands, are potentially less well aligned with young people's vocational self-concept).

Conclusion

Our study builds on an important strand of the literature on the consequences of compromise in the transition from school to work and extends it in two ways: first, it examines the relationship between the deliberate choice to drop out of a first VET position and different types of compromise on key occupation-related dimensions—social status and gender—providing a more nuanced picture of the consequences of unmet occupational aspirations. Second, we examine the directionality of the association between such compromises and dropping out.

While both upward and downward compromises in social status and gender type predict dropout behavior from VET, the gender-specific associations are noteworthy. For women, in particular, downward gender compromises are associated with a higher probability of dropping out than for men. This result suggests that women are generally more sensitive to unmet aspirations in gender type and less willing to accept detrimental compromises than are men. Regarding compromises in social status, however, we find that women show a lower probability of dropping out of VET positions that exceed their aspired social status. Women may hence be

more persistent when making upward compromises in social status and facing higher levels of occupational challenge in comparison to their male peers. Future research is needed to identify the mechanisms underlying gender-specific agency related to various occupational dimensions.

These findings illustrate that occupational compromise must be understood as a multifaceted phenomenon that cannot be reduced to the binary distinction between “met” and “unmet” aspirations, nor to downward compromise in social status. The finding that both upward and downward compromises increase the probability of dropping out of a first VET position strengthens the concept of *habitus* as a continuum that may include more or less rigid expressions of social status and gender (Behnke and Meuser 2001; Bourdieu 1979). Moreover, our study suggests that young people who face structural barriers to pursuing their aspirations nonetheless exhibit high levels of agency when their aspirations go unfulfilled and may seek a training position that is more suitable for them.

More generally, our findings relate to the phenomenon that young people’s aspirations have become more concentrated in a small number of occupations that might not always be realistic and attainable (Mann et al. 2018). From a policy perspective, therefore, it may be useful to establish effective counseling strategies that help young people not only in realizing their aspirations but also guide them in exploring and identifying alternative occupational niches that best suit their conceptions of themselves in terms of social status and gender (Rochat 2015). From a structural perspective, equalizing occupations with respect to social status (e.g., by increasing the prestige of what are currently low-status occupations) and gender type (e.g., by achieving a higher gender balance) may reduce the incidence of career compromise, and hence dropout behavior in the long term.

Endnotes

1. More precisely, around half of these dissolutions can be considered as rather unproblematic revisions of educational decisions, with young people changing occupations and remaining within the VET system, while the other half involves leaving the VET system (Bessey and Backes-Gellner 2015; Uhly 2015).
2. These cost-benefit considerations also include other factors, such as potential costs and the expected probability of success. However, we focus on social status which we consider a key factor in rational-choice considerations.

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Supplementary material

Supplementary material is available at Social Forces online, <http://sf.oxfordjournals.org/>.

Declaration of interest

None.

Data availability statement

Analyses are based on data from the National Educational Panel Study (NEPS): starting cohort 4, DOI: [10.5157/NEPS:SC4:10.0.0](https://doi.org/10.5157/NEPS:SC4:10.0.0). Data are available at the Data Center of the Leibniz Institute for Educational Trajectories (LIfBi). Requirement for data access is the conclusion of a Data Use Agreement with the LIfBi. The analysis code can be found in a repository at [10.7802/2544](https://doi.org/10.7802/2544).

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