Causes and consequences of unexpected educational transitions in Switzerland

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Causes and Consequences of Unexpected Educational Transitions in Switzerland

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The present study examines transition patterns of Swiss secondary and tertiary school students. Switzerland’s highly canalized education system allows us to test how tracking affects person–environment fit of students for students who choose a normative versus unexpected downward transition pattern. In addition, we investigate how self-efficacy expectations and personal values affect an unexpected transition choice. Results indicate that students with strong expectancies and personal values can oppose institutional norms and chart their own academic course; however, these students are less likely to perceive a good fit between their own interests and competencies and institutional demands after the transition. Our findings underscore the importance of developmentally appropriate educational environments and systems permeable enough to adapt to developing students’ changing interests.

Switzerland, like most industrialized countries, aims to prepare its youth for a productive adulthood through compulsory schooling (until ninth grade) and upper-secondary general education or vocational education and training (VET). This goal is instantiated through a highly stratified tracking system in secondary and tertiary education. Though students can decide between many school options in transition situations, we can distinguish between normative and unexpected transition patterns. Within school transitions, students who move on to a lower track than they were on before the transition are considered to be following an unexpected downward educational transition because they do not follow a normative educational pathway.

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Successful educational careers reduce risk of future unemployment (Seibert & Solga, 2005) and increase chances of successful employment. However, some students are not able to maintain school success and make unexpected downward educational transitions. These unexpected downward transitions lower students’ chances for an upper-secondary school diploma, possibly shutting them out of the rewards that come with educational success. Understanding what motivates unexpected downward educational transitions will allow us to find early markers for students at risk. Student attitudes, like expectancies and values, are promising markers for educational choices (Eccles & Wigfield, 2002). In addition to the precursors of unexpected downward transitions, such transitions also introduce students to a different—and perhaps ill-fitting—developmental context. This leads to our research question for this article: What motivates these unexpected downward transitions and what are the consequences for students?

School Tracks in Switzerland

The highly channeled educational tracks of the Swiss school system define normative transition processes. At the end of primary school (Grade 6 in most cantons), students are evaluated by teachers according to grades and achievement tests and then recommended for a basic or expanded lower-secondary school track.1 Parents are consulted and, if teachers and parents disagree, a commission decides. The probability of entering a basic or expanded track differs by students’ gender, nationality, and the socioeconomic status; therefore, student achievement is only one determinant of track selection (Kronig, 2005).

The structure of tracking differs between lower-secondary schools and upper-secondary schools (see Figure 1). Lower-secondary schools (Grades 7 to 9; ages 13/14 to 15/16 years) are characterized by either a basic or expanded curriculum. The content of the stratified curriculum is defined at the state level, but its enactment varies by school and classroom. The educational opportunities in upper-secondary education are more heterogeneous than in the lower-secondary education: Based on lower-secondary school track, prior grades, and individual preferences, students choose between one of five pathways into upper-secondary education (Grades 10 to 12/13; ages 15/16 to 18/19/20; Figure 1). Twenty percent enter a Gymnasium (university-bound high school), 7% enter a specialized middle school or a full-time vocational school, 49% of the adolescents enter an apprenticeship in the VET system, 20% complete an intermediate year, and 4% leave school without a diploma (BFS/TREE, 2003).

1 The tracking structure differs among the Swiss Cantons; we focus on Canton Berne, which is typical of the Swiss school organizations (for full description see EDK, 2001, or Swiss Educational Server, 2007). The educational system is state funded with the exception of a few private lower-secondary and upper-secondary schools.
Educational Transitions in Switzerland

For lower-secondary students, “other” includes repeating ninth grade, entering the labor market, dropping out of an apprenticeship within 6 months, or being completely undecided. For upper-secondary school students, “other” includes entering the labor market, repeating the last year of schooling, changing to another high school, dropping out or undecided.

Transition to Upper-Secondary and Tertiary Education

Though tracking is not based solely on academic achievement in Switzerland and in other countries (cf. Feinstein & Vignoles, 2008, for an elaborated analysis in the United Kingdom), students’ choice of upper-secondary educational track is highly related to their primary schooling track (Herzog, Neuenschwander, & Wannack, 2006; arrow “a” in Figure 1). Because educational-track changes are most likely to occur during periods of school transition, we focus on two main academic transitions: (a) transition to upper-secondary school, and (b) transition to tertiary education.

While all students can theoretically choose to enter any upper-secondary education track, the entrance examinations that determine admittance to upper-secondary general education, and the selection procedure to enter prestigious apprenticeships, are strongly based on the curricula of expanded lower-secondary school tracks (Moser, 2004), making transition difficult from one track to another. Moreover, the lower-secondary school tracks are an effective signal for teachers, parents, and students who adapt their expectations and strategies in making recommendations and choices for the future.

To examine the transition process to tertiary education (after graduation from upper-secondary education), we focus on Gymnasium and specialized middle
school (Figure 1). Passing the final examination in a Gymnasium (“matura”) permits entrance to Swiss universities and universities of applied science, though the matura is only required for entrance to university. Some Gymnasium students proceed directly from upper-secondary to tertiary education, but a majority of students do a vocational term after finishing Gymnasium (Herzog, Neuenschwander, & Wannack, 2006). Students who complete a 2 or 3-year specialized middle school may take an entrance exam for a university of applied science or college, start an expanded apprenticeship, transfer to an expanded high school, or complete an intermediate year.

Unexpected Downward Educational Transitions

Although parents and teachers expect students to choose the highest track allowable by their current grades and track, not all students do. We investigated unexpected downward transition patterns as an interaction between school opportunities and individual qualifications and choices (see also, Feinstein & Peck, 2008). For basic-track lower-secondary students, such a transition includes repeating ninth grade, entering the labor market, dropping out of an apprenticeship within 6 months, or being completely undecided. In Figure 1, these unexpected downward transitions are marked with “b.” For expanded-track lower-secondary school students, an unexpected downward transition includes choosing an intermediate year, repeating ninth grade, entering the labor market, dropping out of an apprenticeship within 6 months, or being completely undecided. For Gymnasium students, an unexpected downward transition includes entering an apprenticeship or dropping out of the education system. For specialized middle school students, an unexpected downward pathway includes choosing an intermediate year that does not prepare one for tertiary education or dropping out of the educational system. This classification system gives us a first look at unexpected downward transition patterns in Switzerland.

Self-Efficacy Expectations and Values

We have outlined normative and unexpected educational pathways for students entering upper-secondary and tertiary education; however, we consider students to be active producers of their own development (Lerner & Walls, 1999) and believe that students codetermine their educational choices to fit their own personal educational values and academic self-efficacy beliefs (Eccles & Wigfield, 2002). To understand unexpected downward educational transitions we use the Eccles et al. expectancy-value model of achievement-related choices (Eccles & Wigfield, 2002). Academic self-efficacy expectations and academic task values regulate
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academic choices including course choices (Eccles, Vida, & Barber, 2004; Updegraff, Eccles, Barber, & O’Brien, 1996), college major choices (Garrett, Cortina, & Eccles, 2007), and students’ preference for an educational pathway (Ma, 2001). Academic self-efficacy expectations refer to a student’s perceived ability to succeed in scholastic tasks. Students with high self-efficacy expectations of reaching their future goals and with well-defined goals are more likely to realize those goals (cf. Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Pinquart, Juang, & Silbereisen, 2003). Task values are determined by individual preferences and goals. Adolescents who place a high value on professional and financial success should, theoretically, not choose an unexpected downward trajectory. In contrast, adolescents with a strong family orientation and who are planning to have their own family early have a weaker interest in an academic career and are theoretically more likely to choose a downward unexpected transition (cf. Vondracek, Silbereisen, Reitzle, & Wiesner, 1999). We hypothesize that students’ choice of either the “normative” or an “unexpected” pathway can be predicted by these academic self-efficacy expectations and values including professional and financial success and family orientation.

Students’ educational choices may also be influenced by grades and gender. To enroll in upper-secondary general education after ninth grade, one must have earned sufficiently high grades. As Häberlin, Imdorf, and Kronig (2004) pointed out, the importance of grades in the selection process is not consistent and can primarily be found for expanded-track students who want to enter Gymnasium or join prestigious firms. Research also shows that female and male adolescents have different vocational preferences (Frome, Alfeld, Eccles, & Barber, 2006): Female students are more likely to choose intermediate years of schooling and upper-secondary general education whereas male students are more likely to choose VET (Hupka, 2003). To account for these differences we have included grades and gender in our prediction model.

**Person–Environment Fit after Transition**

School transitions are often described as stressful and challenging (Eccles et al., 1993). Students often encounter problems and challenges during the transition period because they leave their classmates and are confronted with higher achievement demands and new daily routines in the new school environment (Eder, 1989). More demands are placed on students’ time during the transition to a new school (Eder, 1989). Because students encounter an educational environment that is less appropriate after an unexpected downward transition, these students may report even more problems and challenges than after a normative transition. At the same time, these unexpected transitioners report more free time than normative transitioners because they are less involved in challenging educational programs (cf. Herzog et al., 2006).
A successful transition results in a good fit between individual competences and interests and the institutional demands of the new environment (Eccles et al., 1993). The fit refers to the student’s perception of a match between one’s own competence and interests and the new educational environment. A low-perceived fit leads to ineffective learning. A high fit, in contrast, predicts a high commitment to the work (Pinquart, Juang, & Silbereisen, 2003) and high productivity. Perceived fit is facilitated by students’ successful adaptation to the new environment and sufficient school support and flexibility toward individual interests (Eccles, 2004).

There are few studies about person–environment fit in the transition to high school (Isakson & Jarvis, 1999). Students’ adaptation seems to depend on grades and prior family support (Falbo, Lein, & Amador, 2001). After an unexpected transition, we hypothesize that students will be less likely to perceive a good fit. Even if the unexpected transition has been chosen by the students themselves, we hypothesize they will experience some “institutional disadvantage,” and thus a lower person–environment-fit, for not having followed the prestructured pathway. After an unexpected downward transition, students find a less appropriate developmental environment and therefore should perceive a lower fit.

Few studies have examined the person–environment fit during the transition to college in Europe (see Friebertshäuser, 2004, for review; see also Herzog et al., 2006; Watermann, Trautwein, & Lüdtke, 2004). After finishing upper-secondary education, new opportunities and social norms guide the normative transition process; however, these normative pathways are somewhat less strictly defined than those in secondary education. Students are free to make decisions based on their interests. We hypothesize that students will be more likely to perceive good person–environment fit after the transition within this more relaxed normative structure than after the transition to upper-secondary education; however, a higher fit may still be perceived by students on a more normative educational transition pattern than for students making an unexpected downward transition.

To summarize, we make the following hypotheses: (a) unexpected educational pathways to upper-secondary school will be predicted by academic self-efficacy expectations and values including professional/financial success value and family-orientation value; (b) after the transition to upper-secondary school tracks, students who have made an unexpected downward transition will perceive a weaker person–environment fit and report more problems and more time resources than those who make a normative transition; (c) unexpected downward educational transitions to tertiary education will be predicted by academic self-efficacy expectations and financial/professional success and family-related values; (d) students who make an unexpected downward transition to tertiary education will perceive a weaker person–environment fit after the transition, report more problems, and have fewer time resources than those who make a normative transition.
Methods

In this two-part study, we focus on two transition periods (9th grade and 12th grade) and on two levels of academic rigor (basic and expanded). The data were collected as part of a larger longitudinal study (Herzog et al., 2006) with a cohort of lower-secondary school students in 9th grade from two tracks (basic, \( n = 242 \) and expanded, \( n = 296 \); median age = 15 years) and a cohort of secondary school students in the 12th grade from two tracks (Gymnasium, \( n = 138 \), specialized middle school, \( n = 113 \)). Using the definition of normative transitions outlined in the Introduction we defined the “unexpected downward transitioners” from the basic track of lower-secondary school (\( n = 11 \)) as those repeating ninth grade, entering the labor market, dropping out of an apprenticeship within 6 months, or being completely undecided. In the expanded track in lower-secondary school (\( n = 68 \)), “unexpected downward transitioners” were those who chose an intermediate year, repeated ninth grade, entered the labor market, dropped out of an apprenticeship within 6 months, or who were completely undecided. From the Gymnasium to tertiary education (\( n = 24 \)), the “unexpected downward transitioners” included those entering an apprenticeship or dropping out of the education system. From the specialized middle school to tertiary education (\( n = 15 \)), the “unexpected downward transitioners” were those who chose an intermediate year that does not prepare one for tertiary education or who dropped out of the educational system. Although the full sample was large, because unexpected downward transition patterns in the different tracks are rare, these groups were comparably small, requiring a very good prediction model to find significant effects.

Beliefs and Values Measures

When concepts were measured by several items, we used factor analysis to examine the item structure and calculated the mean of the items that were used in the analyses. Academic Self-Efficacy Expectations were measured with seven items (e.g. “I am able to answer the difficult tasks in classroom, when I make an effort” (1 = not true at all, 4 = completely true; \( \alpha = .77 \); cf. Schwarzer & Jerusalem, 1999). Personal values were measured with two scales: Professional/Financial Success (six items including “How important is it to you to move on, to have success,” 1 = not important at all, 4 = very important; \( \alpha = .72 \)) and Family Orientation (two items including “How important is it to you to have children and to raise them,” 1 = not important at all, 4 = very important; \( \alpha = .63 \); cf. Rimann & Udris, 1997).

Student Psychological Outcome Measures

Participants completed scales measuring the predicted outcomes of person–environment fit of their educational placement before and after the transition. We
measured career-related attitudes using items from Bergmann (1996; scale: 1 = not true at all, 4 = completely true) in Waves 2 and 3. Four items, including “I will have less time for my hobbies and the leisure time activities,” measured available Time Resources ($\alpha = .75$). Four items, including “I am looking forward to my new challenges,” measured participants’ Anticipated Problems after the transition ($\alpha = .65$).

After the transition in Wave 3, participants completed three items measuring the perceived person–environment fit of the new scholastic environment with the student’s interests (Fit Interest) and scholastic competences (Fit Competence) (e.g., “the found solution fits with my academic competences,” Scale: 1 = not true at all; 4 = completely true) using items from Herzog et al. (2006).

Results

Part 1: Unexpected Downward Transitions to Secondary Education

To test the hypothesis that unexpected downward transitions can be predicted with academic self-efficacy expectations and values (professional/financial success and family orientation), we used logistic regression analysis. Separately for students from basic and expanded tracks, we estimated transition-group membership (normative vs. unexpected) using students’ academic self-efficacy expectations, values (professional/financial success and family orientation) measured in Wave 1, grades (mean in subjects German, French, math, history, business, social science, music), and gender. To test how students on different pathways adapt to their new environment we used analyses of variances separately for students from basic school tracks and students from expanded school tracks. For students with data in two waves we compared the change trends between the groups (interaction effect).

Prediction of unexpected transition pattern. In both groups, using logistic regression analyses the prediction of an unexpected downward transition was significant (Table 1). In the basic track, students with low academic self-efficacy beliefs and a high family orientation were more likely to follow an unexpected downward transition than the normative transition ($R^2 = 37\%$, Nagelkerke). Gender and grades were not significant. Students in this group reported less confidence that they would get an apprenticeship and planned on having their own family early. Their motivation to move on to upper-secondary education was low.

For expanded-track, lower-secondary school students, low academic self-efficacy expectations, low importance of professional/financial success, and high estimation of family orientation, gender, and grades significantly predicted an unexpected downward transition; the explained variance (19.1% Nagelkerke) was
Table 1. Prediction of Unexpected Transition Pattern after Basic-Track and Expanded-Track Education (Unstandardized Logistic Regression Coefficients)

<table>
<thead>
<tr>
<th></th>
<th>Ninth grade (basic track)</th>
<th>Ninth grade (expanded track)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n normative/unexpected transition</td>
<td>110/9</td>
<td>210/63</td>
</tr>
<tr>
<td>Academic self-efficacy expectation ((t_1))</td>
<td>15.40*</td>
<td>1.41</td>
</tr>
<tr>
<td>Value: Professional / financial success ((t_1))</td>
<td>1.00</td>
<td>1.18</td>
</tr>
<tr>
<td>Value: Family orientation ((t_1))</td>
<td>.04*</td>
<td>.82</td>
</tr>
<tr>
<td>Gender</td>
<td>.49</td>
<td>.18***</td>
</tr>
<tr>
<td>Grades((t_1))</td>
<td>.80</td>
<td>3.53**</td>
</tr>
<tr>
<td>(\chi^2, df = 5)</td>
<td>19.9***</td>
<td>36.9***</td>
</tr>
<tr>
<td>(R^2) (Nagelkerke)</td>
<td>37.0%</td>
<td>19.1%</td>
</tr>
</tbody>
</table>

Note. \(t_1\) = 1st point of measurement; *\(p < .05\), **\(p < .01\), ***\(p < .001\); n = number of students.

smaller than that for basic-track students. Females with low grades had a higher chance of following an unexpected transition than males and those with high grades. Female students often chose a nonnormative additional year of vocational training. Lower grades were significant predictors of unexpected downward transitions, as well. Expectations and values did not reach significance. In contrast to the basic track, in the expanded track, only grades and gender were critical factors in predicting unexpected transitions. In neither track did students’ nationality or family SES explain unexpected downward transition.

**Psychological outcomes of the transition.** First, we compared anticipated problems of basic-track students before the transition with experienced problems after the transition (Table 2). Students did not differ on Experienced Problems by normative or unexpected transitions, nor by time; however, the interaction effect was significant: Ninth graders from the basic track following an normative transition anticipated more problems before the transition \((M = 1.82, SD = .51)\) than they reported after the transition \((M = 1.74, SD = .48)\). In contrast, unexpected transitioners anticipated fewer problems before the transition \((M = 1.85, SD = .34)\) than they reported after their transition \((M = 2.12, SD = .52)\). Finally, looking just at Wave 3 data compared to normative transitioners, unexpected downward transitioners reported a significantly lower perceived fit between their environment and their interests \((\text{normative } M = 3.53, SD = .06, \text{unexpected } M = 2.86, SD = .25)\) and their competences \((\text{normative } M = 3.22, SD = .07, \text{unexpected } M = 2.00, SD = .28)\).

We ran similar analyses with the expanded school track students (Table 2). Time Resources decreased for normative transitioners \((\text{before transition } M = 2.09, SD = .63, \text{after transition } M = 2.02, SD = .73)\), but they increased for unexpected transition students \((\text{before transition } M = 1.99, SD = .65, \text{after transition } M = 2.22, SD = .75)\). Again, the perceived fits between environmental demands and interests and competences at Wave 3 were rated higher by normative transitioners...
Table 2. Psychological Outcomes of Unexpected Pathways: Effects of Analyses of Variances

<table>
<thead>
<tr>
<th>Pathway Type</th>
<th>Anticipated Problems</th>
<th>Time Resources</th>
<th>Fit Interest ($t_3$)</th>
<th>Fit Competences ($t_3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic lower-secondary education</td>
<td>$df_{group}$</td>
<td>$F_{group}$</td>
<td>$df_{time}$</td>
<td>$F_{time}$</td>
</tr>
<tr>
<td>Anticipated problems</td>
<td>1, 118</td>
<td>2.34</td>
<td>1, 118</td>
<td>1.32</td>
</tr>
<tr>
<td>Time resources</td>
<td>1, 116</td>
<td>4.64*</td>
<td>1, 116</td>
<td>2.31</td>
</tr>
<tr>
<td>Fit interest ($t_3$)</td>
<td>1, 124</td>
<td>6.8**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fit competences ($t_3$)</td>
<td>1, 125</td>
<td>17.9***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Expanded lower-secondary education</td>
<td>$df_{group}$</td>
<td>$F_{group}$</td>
<td>$df_{time}$</td>
<td>$F_{time}$</td>
</tr>
<tr>
<td>Anticipated problems</td>
<td>1, 288</td>
<td>1.02</td>
<td>1, 288</td>
<td>3.58</td>
</tr>
<tr>
<td>Time resources</td>
<td>1, 289</td>
<td>.35</td>
<td>1, 289</td>
<td>2.00</td>
</tr>
<tr>
<td>Fit interest ($t_3$)</td>
<td>1, 288</td>
<td>10.5***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fit competence ($t_3$)</td>
<td>1, 288</td>
<td>14.4***</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Specialized middle school</td>
<td>$df_{group}$</td>
<td>$F_{group}$</td>
<td>$df_{time}$</td>
<td>$F_{time}$</td>
</tr>
<tr>
<td>Anticipated problems</td>
<td>1, 104</td>
<td>.04</td>
<td>1, 104</td>
<td>2.88</td>
</tr>
<tr>
<td>Time resources</td>
<td>1, 103</td>
<td>.64</td>
<td>1, 103</td>
<td>.07</td>
</tr>
<tr>
<td>Fit interest ($t_3$)</td>
<td>1, 108</td>
<td>1.71</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fit competence ($t_3$)</td>
<td>1, 106</td>
<td>7.6**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>$df_{group}$</td>
<td>$F_{group}$</td>
<td>$df_{time}$</td>
<td>$F_{time}$</td>
</tr>
<tr>
<td>Anticipated problems</td>
<td>1, 115</td>
<td>1.26</td>
<td>1, 115</td>
<td>3.31†</td>
</tr>
<tr>
<td>Time resources</td>
<td>1, 118</td>
<td>.00</td>
<td>1, 118</td>
<td>6.39*</td>
</tr>
<tr>
<td>Fit interest ($t_3$)</td>
<td>1, 97</td>
<td>3.73</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fit competence ($t_3$)</td>
<td>1, 97</td>
<td>1.46</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. $t_3$ = 3rd point of measurement; *$p < .05$, **$p < .01$, ***$p < .001$.

than unexpected transitioners (interests: normative $M = 3.51$, $SD = .04$, unexpected $M = 3.21$, $SD = .08$; competences: normative $M = 3.33$, $SD = .05$, unexpected $M = 2.94$, $SD = .09$).

Part 2: Unexpected Transitions to Post secondary Schools

The next transition-determining period begins after upper-secondary general education (about 18–19 years old). Gymnasium and specialized middle school are important pathways to tertiary education like university, university of applied science, or college. In the transition to tertiary education, we first tested models to predict unexpected transitions and then we evaluated perceived person–environment fit after the transition.

Prediction of unexpected transitions. We tested the hypothesis that unexpected transitions can be predicted by academic self-efficacy expectation and personal values (professional/financial success and family orientation) in both tracks (Table 3). Grades for the basic-track students were omitted by design because grades are not assigned in specialized middle schools and because grades refer to a heterogeneous mix of topics in gymnasium. For specialized middle school students, unexpected downward transitions could be predicted, $\chi^2 (4) = 8.0, p < .10$;
### Table 3. Prediction of Unexpected Transition Pattern after Specialized Middle School and Gymnasium (Unstandardized Logistic Regression Coefficients)

<table>
<thead>
<tr>
<th></th>
<th>Specialized middle school</th>
<th>Gymnasium</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>94/15</td>
<td>109/24</td>
</tr>
<tr>
<td>Academic self-efficacy expectation ($t_1$)</td>
<td>.24</td>
<td>3.75*</td>
</tr>
<tr>
<td>Value: Professional/financial success ($t_1$)</td>
<td>.22*</td>
<td>.59</td>
</tr>
<tr>
<td>Value: Family orientation ($t_1$)</td>
<td>.93</td>
<td>.88</td>
</tr>
<tr>
<td>Gender</td>
<td>.97</td>
<td>.45</td>
</tr>
<tr>
<td>$\chi^2, df = 4$</td>
<td>8.0†</td>
<td>10.5*</td>
</tr>
<tr>
<td>$R^2$ (Nagelkerke)</td>
<td>12.8%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Note. $t_1$ = 1st point of measurement; † $p < .10$, * $p < .05$; n = number of students.

$R^2 = 13\%$, Nagelkerke. Because of the small sample size we use the 10% level of significance. Students who placed high value on Professional/Financial Success at Wave 1 were less likely to make an unexpected transition. This model was replicated for Gymnasium student, $\chi^2 (4) = 10.5$, $p < .05$; $R^2 = 12\%$, Nagelkerke. Expanded-track students with low academic self-efficacy expectations in Wave 1 were more likely to enter an unexpected transition pattern. Gender, grades, and socioeconomic status of the family were not significant predictors.

**Psychological outcomes of the transition.** In next step we examined the extent to which students perceived a person–environment fit after the transition to tertiary education (Table 2). Neither available time resources nor anticipated problems after the transition differed between groups or transitions. Specialized middle school students reported a significantly better fit between their environment and their competences after a normative transition ($M = 3.38$, $SD = .09$) than after an unexpected transition ($M = 2.69$, $SD = .23$). For expanded-track students, perceived fit between environment and interests did not differ between normative transitions and unexpected transitioners.

**Discussion**

Though pathways across school transitions in Switzerland are highly canalized, students can be motivated to follow unexpected downward transitions. Overall, our findings indicate that students with low academic self-efficacy expectations, low valuing of professional/financial success, and with a strong family orientation often follow an unexpected downward transition, as suggested by the Eccles et al.’s expectancy value model (Eccles & Wigfield, 2002).

However, students’ academic self-efficacy expectations and values vary in predictive power across tracks. In expanded lower-secondary school, grades and gender predict unexpected downward transition, trumping the predictive power of expectancies and values for female students. This effect may be due to female
students with low grades who move on to intermediate 10th grade instead of directly starting Gymnasium, high school, or vocational training (Neuenschwander & Bleisch, 2003).

In the transition out of secondary school, values are stronger predictors of unexpected downward transitions in basic school tracks whereas academic self-efficacy expectations and grades allow better predictions for expanded school tracks. Students are, thus, demonstrating an understanding of the criteria for success in each track: The transition into expanded upper-secondary and tertiary education requires that students pass achievement tests, whereas the successful transition to apprenticeships with low demands and entrance to the labor market strongly depend on individual preferences and attitudes (cf. Häberlin, Imdorf, & Kronig, 2004). Furthermore, strong personal values are important criteria in hiring apprentices. This is especially true for basic-track students who enter a small, less prestigious firm (Imdorf, 2006). For basic-track students low value of professional and financial success and strong family orientation are critical predictors of unexpected downward transitions.

We found large differences between age groups. The transition norms based on federal policy (EDK, 2001) may more deeply canalize the normative transition after lower-secondary school than after upper-secondary school when slightly relaxed norms allow individual attitudes and interests to become more powerful predictors. Federal policy aims for 95% of the students to finish their education with an upper-secondary school diploma (actual rate of completion: 88%). Therefore, students are not only pressed to move on to upper-secondary school but are also supported by the norms and programming sponsored by the state to foster successful transitions (e.g., vocational counseling, public coordination of available apprenticeships, public pressure on firms to offer apprenticeships, intermediate 1-year schooling opportunities for students for those without an upper-secondary schooling opportunity). In contrast, as students transition out of secondary school, they encounter good job opportunities even without tertiary education and perceive less pressure to continue their training.

Of special interest are basic-track lower-secondary school students who have chosen an unexpected downward transition. These students are at risk for dropping out of the educational system before earning a diploma and for poor job prospects (Seibert & Solga, 2005). Basic-track lower-secondary school students’ self-efficacy expectations and professional values are important determinants for downward movement from one track to another (cf. review from Finn, 1989). Students’ educational attitudes seem to be a primary reason for dropping out after compulsory school despite a supportive educational system (cf. Englund, Collins, & Egeland, 2008).

After academic transitions, our participants generally perceive a good fit between their interests and competences and academic environment. Does the transition pattern influence the perception of the person–environment fit after the
transition? Though an unexpected transition is motivated by students’ self-efficacy expectancies and values, these students are less likely to perceive a good fit between their own interests and competences and academic environment after the transition and more likely to perceive problems. This finding could be found in both transition timepoints, after the transition to upper-secondary education and tertiary education.

This finding is in contrast with the suggestion of Messersmith and Schuelenberg (2008) that an unexpected pathway can lead to a better person–environment fit. Possibly, after downward transitions in particular, students encounter fewer appropriate educational environments and report more problems. Students feel disadvantaged by a loss of prestige and decreased educational resources even though they have more time resources. Additionally, Messersmith and Schuelenberg (2008) reported results from the United States; it is possible that the greater canalization of the Swiss system is less supportive of unexpected transitions.

Our findings should be interpreted in light of the relatively short longitudinal span of our data. U.S. studies indicate that self-efficacy expectations and values predict future educational attitudes and college enrollment across several years (Blecker & Jacobs, 2004; Eccles et al., 2004; Neuenschwander, Garrett, & Eccles, 2006). In the ongoing Family-School-Job Study (FASE B), we will continue to examine the long-term effects of transition processes in Switzerland.

We focused on unexpected downward transitions. In Switzerland, upward transition patterns also occur, though rarely. Students from the basic track of lower-secondary school, for example, may move upward to Gymnasium adding 2 years of special gymnasium preparation, training, and passing the entrance examinations. Or basic-track lower-secondary students can enter an apprenticeship and complete a special training to pass the federal matura. These upward transition patterns with additional years of special training allow late-developing students with high motivation to earn a prestigious diploma and enter tertiary education. Future research should explore determinants of unexpected upward transitions in more detail.

Policy Implications

The reported findings suggest several recommendations for how educational systems can be organized to provide optimal support and structure while allowing for flexibility to accommodate individual differences. These recommendations, while based on results from participants in the Swiss national educational system, could be applied to systems with similar structures. Students, who graduate from upper-secondary school and, upon graduation, choose an unexpected downward transition to tertiary education are not principally problematic. Both students on a normative and unexpected downward transition pattern are likely to find acceptable, productive jobs upon graduation.
But students who eschew norms and choose an unexpected downward transition after lower-secondary school are choosing a risky path: They have more difficulty establishing a good fit between their desires and their academic environment and are more likely to drop out of the educational system (Neuenschwander & Süss, 2004). Our findings suggest that federal policy should focus on helping students, particularly those from the basic tracks, to maintain normative transitions after lower-secondary school. Policy strategies focus on both the institutional and individual level:

a) At the institutional level, policy strategies should include reorganization of the ninth grade and first year after transition. Greater permeability between tracks and a more inclusive educational system would allow schools to react to changing students’ interests. More flexible opportunities are required for dropouts to reenter apprenticeships or upper-secondary schools. After transitions, schools should be flexible and adaptive to meet young students’ interests. A stronger coordination between teachers from lower-secondary schools and upper-secondary schools would be helpful to prevent school drop out. The German Youth Institute, for example, has developed projects to help integrate students back into educational programs (cf. Deutsches Jugendinstitut, 2007).

b) At the individual level, policy strategies should include diagnosis of students at risk in early lower-secondary school and interventions aiming to support students’ school-related expectations for success and values (Englund et al., 2008; Janosz, Archambault, & Pagani, 2008). In particular, basic-track lower-secondary school students with low self-efficacy expectations and high family-related values are at risk to choose an unexpected downward transition. Students at risk should be encouraged to consider vocational options and the value of such options, and to realistically assess their potential for success and how to increase that potential. Vocational counselors, with the support of classroom teachers, have the expertise to assist in this vocational decision-making process.

References


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