## PŘÍČINY NEUVÁŽENÉHO KARIÉROVÉHO ROZHODOVÁNÍ V RANÉ ADOLESCENCI

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Abstrakt: Objevování vlastních pracovních možností je jedním z nejdůležitějších úkolů v kariérovém vývoji adolescenta, přičemž nedostatečná orientace v této oblasti je adolescentem vnímána obzvlášť nepříjemně. Tato longitudinální studie se zabývala příčinami neuváženého kariérového rozhodování žáků v rané adolescenci, tj. tendencí k ukvapené volbě povolání bez předchozího poznání všech dostupných možností. V empirické studii bylo zkoumáno 334 švýcarských studentů osmého ročníku. Výsledky ukazují, že nerozvážnou volbu povolání předurčují sociálně-kognitivní proměnné jako jsou obecná sebeúčinnost (GSE), objektivní přesvědčení o vlastních schopnostech, vnímané bariéry a proměnné profesních zájmů. Neuvážené rozhodování, ve srovnání s názorovým rozptylem při profesním výběru u adolescentů, predikuje mužské pohlaví, nižší schopnost ohodnocení vlastních schopností a nižší míra nadhledu. Nejsilnějším prediktorem pozdějšího statusu byla počáteční vývojová role. Na závěr příspěvku jsou diskutovány důsledky pro poradenskou praxi.

Klíčová slova: kariérový vývoj, kariérové poradenství, kariérové rozhodování, volba povolání, raná adolescence

# ANTECEDENTS OF FORECLOSURE IN YOUNG ADOLESCENTS' CAREER DECISION-MAKING

**Abstract:** Exploring one's occupational possibilities is one of the major developmental tasks in adolescent career development and a lack of exploration is considered especially troublesome. This longitudinal study explored antecedents of foreclosure in career decision-making, i.e. the tendency to prematurely commit to a career choice without prior throughout exploration of the available possibilities. Participants were 334 Swiss students in eighth grade. The results show that social-cognitive variables of generalized self-efficacy (GSE), externality of control beliefs, and perceived barriers and vocational interest variables of interest profile differentiation, consistency, and elevation significantly predicted foreclosure compared to achievement or diffusion. Specifically, male gender, less GSE, and less elevation predicted foreclosure compared to achievement. Male gender, less perceived barriers, less differentiation, and less consistency predicted foreclosure compared to diffusion. The initial developmental status was the strongest single predictor of later status. Implications for counseling practice are discussed.

**Key words:** career development, career counseling, career decision-making, foreclosure, early adolescence

One of the major developmental tasks in adolescence is to master the process of career decision-making, resulting in a realistic and appropriate career choice commensurate with an individual's abilities (cf. Super, 1990). Careful exploration of one's occupational abilities is considered essential for choosing of a suitable job and is also connected to subsequent job satisfaction (Blustein et al., 1997; Grotevant, Cooper, Kramer, 1986; Jepsen, Dickson, 2003).

An important aspect of adolescent career development is the tendency of early adolescents to make rash career decisions. The concept of rash decisions draws on Marcia's (1980) work on developmental stages in general identity development which has been successfully applied to adolescent career development (e.g., Raskin, 1989; Vondracek et al., 1995). Within career decisionmaking, unpremeditated choices lack prior thorough exploration of individual's abilities, based on "... desire to commit to important educational and career decisions as soon as possible and adhere to these choices despite they prove unsuitable to an individual's abilities" (Blustein, Ellis, Devenis, 1989, p. 347). As adolescents have to face the concern of their career exploration, the lack of engagement is considered particularly troublesome (Super, 1990). In order to prevent adolescents from unsuitable and rash career choices and tailor specific measures preventing from premature commitment, the knowledge of causes of rash career decisions is essential.

Useful data can be obtained from a research focusing on a career exploration and commitment. Researchers have found, that commitment and decisiveness are positively related to career decision-making self-efficacy (Paulsen, Betz, 2004), belief in personal abilities (Luzzo, Jenkins-Smith, 1998), fewer perceived barriers in career decision-making (Patton, Creed, Watson, 2003), or a reliable link to parents (Lounsbury, Hutchens, Loveland, 2005; Scott, Church, 2001). Career exploration is positively related to career decision-making self-efficacy (Blustein et al., 1989), fewer perceived barriers in career development (Gushue et al., 2006), absence of anxiety (Vignoli et al., 2005), or parental life style and support (Kracke, 2002). However, these studies did not directly focus on rash career decisions and can only provide indirect evidence of potential causes.

On the other hand, several studies examined the links in rash career decicions. Some of their findings show that inadequate and rash decicions are related to career myths young people are stuck to (Ladany et al., 1997; Leal-Muniz, Constantine, 2005), family tolerance to individual relations and self-reliance (Berrios-Allison, 2005), less perceived parental support (Leal-Muniz, Constantine, 2005), greater desire to surpass parents and less identification with parents (Caldera et al., 2003), religiousness (Duffy, Blustein, 2005),

more perceived barriers in career decision-making (Leal-Muniz, Constantine, 2005), and lower cumulative GPAs (Lopez, 1994). However, present research regarding rash career decision causes is almost exclusively restricted to correlation studies, which limits the explanatory power of possible causes. Also, young adolescents, who would find an active career exploration essential and useful, rarely participated at the researches.

## **Present Study and Hypotheses**

The present study aims to establish the causes of rash career decisions in early adolescents' in the course of a long-term research. Based on previous research it assesses social cognitive vocational interest variables as potential causes. There social-cognitive variables perceived barriers and externality of personal abilities beliefs assessed. They proved related to career commitment and career exploration in previous research (e.g., Gushue et al., 2006; Luzzo, Jenkins-Smith, 1998). The study also assesses generalized self-efficacy, significantly related to career judging and career exploratory behavior (Argyropoulou, Sidiropoulou-Dimakakou, Besevegis, 2007), or to confidence in individual's abilities in various themes (Holland, 1997) and career decision-making self-efficacy (Betz, Klein, 1996)—important causes of rash carrer decicions which have not been empirically explored yet.

The assessed vocational interest variables include interest differentiation, consistency, and elevation. *Differentiation* refers to the level of definition or distinctness of a person's interest profile. *Consistency* is an indication of how similar the first two dominant interest types of a person are in relation to Holland's hexagonal RIASEC model. *Elevation* refers to the overall level of the interest profile as having generally high or low values for the different types. According to the theory (Holland, 1997), differentiation and consistency should be positively related to vocational identity development. Profile elevation is assumed to indicate vocational flexibility (Darcy, Tracey, 2003). These variables could thus also play an important role in predicting the causes of a rash career decision.

The study aims to distinguish between students' failure, achievement and discrepancy in future career decision-making, respectively. The two developmental groups provide important contrasts to failure since each of them shares one common aspect with it. Both failure and achievement are characterized by a commitment to a career choice. Students who failed in their career decision-making, however, reached their commitment without prior thorough exploration of possibilities. Failure and discrepancy in career decision-making share one important aspect—students have not explored

their possibilities based on their skills. However, students who failed in their career decision-making are not committed to a choice, while the indecisive ones stay open to other possibilities.

It is supposed that less favorable scores in the social-cognitive and vocational interest variables are significant predictors of failure in career decision-making compared to achievement and discrepancy. Specifically, it is expected that students who fail in their career decision-making, show lower generalized self-efficacy, more external control-beliefs, more perceived barriers, less elevated interests, and lower interest profile differentiation and consistency than students in the other groups.

#### Method

#### **Participants**

The participants consisted of 334 students (49.3 percent female) from a rural area of the North-east of Switzerland. All students were in their eighth grade and ranged from 12 to 16 years (M = 14.09, SD = 0.71). Eighty-two percent (N = 281) were Swiss, while the other students were of other nationalities, mostly from the South-eastern Europe. The eighth grade represents an important turn in the Swiss educational system as students have to apply for specific apprenticeships or high-school studies by the end of the school year.

#### Measures

Engagement in career decision-making. Firstly the engagement was assessed at the combined degree of conducted career planning and career exploration measured with the German language adaptation of the Career Development Inventory (Seifert, Eder, 1985; Super et al., 1981). The inventory monitors the degree of time and activities put into career planning (22 items) at a five-point Likert scale ranking from "very few" to "a lot" with highe scores indicating more engagement in career planning. Career exploration is measured with a twenty-six point scale asking students to indicate, whether they would consult different sources of information for their career development (e.g., father, teacher, job-shadowing) and how much useful information they have already obtained from these sources. Answers follow a five-point Likert scale ranking from "none" to "very much", with higher scores indicating more active career exploration. Studies providing support for the validity of both scales showed positive relations between career decision-making, knowledge about the kind of work, or realizing the subject of university study (e.g. Seifert, 1993; Seifert, Eder, 1985). The sum of the two z-transformed subscales was taken as the degree of an engagement in career decision-making, whereby higher scores indicate more engagement. Reliability (Cronbach's Alpha) of the scale was 90 points.

Secondly the engagement was assessed using a behaviorally oriented career exploration scale based on parts of the Career Exploration Survey by Stumpf, Colarelli, Hartman (1983). The applied scale consists of 4 items assessing self-exploration (e.g., "thinking about personal strengths and skills") and 6 items measuring environmental exploration (e.g., "acquire information about career fields of interest"). Answers are provided at a five-point Likert scale indicating the degree an individual has reached thus reflecting his/her engagement in these behaviors during the last three months, with answers ranging from "seldom/few" to "very much/a lot". Higher scores indicate more engagement in these behaviors during the last months. This scale has the advantage of being behaviorally oriented and monitoring the level of effort an individual has recently undertaken in his/her career decision-making. Significant relations within the present sample to generalized self-efficacy (.18; p = .001), earlier engagement in career decision-making (.42, p < .000), interest profile elevation (.12, p < .05), and current career commitment (.41, p < .000) provide to the criterion validity of the scale. To provide further evidence for the scale validity, 80 students in the eighth class (55.8 percent female) from the same region, which were not part of the present study, completed both the career exploration scale of the German language adaptation of the Career Development Inventory (see above) and the newly conceived exploration scale. The two scales showed a significant (p < .000) correlation of .395. Alpha within the present sample was .83.

Commitment to a career choice. Commitment was measured with the help of a career commitment scale of the German language adaptation of the Career Maturity Inventory (Crites, 1973; Seifert, Stangl, 1986). The scale consists of twelve items (e.g. "I don't know exactly what to do in order to choose the right occupation") and answers are indicated on a four-point scale ranging from "disagree" to "agree completely". For the present study higher scores indicate more commitment. Providing support for construct validity, studies showed positive relations to career planning and applying for an apprenticeship after finishing a school (e.g., Bergmann, 1993; Seifert, 1993). Reliabilities (Alpha) were .87 and .85 at the two measurement points, respectively.

Introducing the phase of career decision-making to students. Based on Marcia's (1980) model the two measures of engagement and commitment were used to assign a student to a developmental phase in career decision-making. Students were split according to their level of engagement and commitment,

respectively. Students with high commitment and low engagement were assigned to failure (T<sub>1</sub> N = 67; T<sub>2</sub> N = 61), high commitment and high engagement to achievement (T<sub>1</sub> N = 106; T<sub>2</sub> N = 86), and low commitment and low engagement to discrepancy (T<sub>1</sub> N = 108; T<sub>2</sub> N = 111).

Generalized self-efficacy (GSE) and externality of belief in personal abilities. The two social-cognitive variables were both assessed with the help of the Inventory for the Measurement of Self-Efficacy and Externality (Krampen, 1991), which is a well-established questionnaire in the German speaking countries. GSE and externality are both measured with sixteen items each (e.g., "I can determine very much of what happens in my life"). Answers are provided at a six-point Likert scale indicating how much these statements apply for oneself, ranging from "very wrong" to "very true". Higher scores indicate more GSE and externality, respectively. The author of the scales provides compelling support to content, and criterion validity (e.g., significant relations to basic personality traits, psychological disorders, or well-being). Alpha was .74 for GSE and .80 for externality.

Perceived barriers. Barrierswere assessed with the respective sub-scale of the German language adaptation of the My Vocational Situation Scale (Holland, Daiger, Power, 1980; Jörin et al., 2004). The six-item scale questioned the students to indicate at a five-point Likert scale how much certain statements about particular barriers resemble their personal situation. Higher scores indicate more perceived barriers. Positive support to content validity of the scale includes negative correlations to vocational identity and positive relations to increased consulting needs, or higher values in neuroticism (Hirschi, 2007; Jörin et al., 2004). Alpha was .71 within the present sample.

Vocational interest development. Vocational interests were assessed with the General Interest-Structure-Inventory- Revised Version (Bergmann, Eder, 2005), which represents a well-established interest inventory based on Holland's (1997) RIASEC model in German speaking countries. Each interest-type is assessed with ten-item scale describing typical activities in the six fields and higher scores at a five-point Likert scale indicate more interest in that field. The authors of the scale reported compelling evidence for construct validity (e.g. significant correlations to traits, values, or abilities) and very satisfactory reliabilities for all six scales ranging from .82 to .87 (Alpha) and from .85 to .92 for a one-month re-test stability.

Based on the interest inventory results, *interest differentiation* was calculated as the difference of the highest to the lowest score of the six RIASEC scales with higher scores indicating more differentiated interest profile. *Interest consistency* was calculated by assigning a number of 1 (= low),  $_2$  (= medium), and  $_3$  (= high) consistency based on the proximity of a stu-

dent's two highest interest codes according to Holland's RIASEC hexagon (cf. Holland, 1997). *Interest profile elevation* was calculated as the sum of the raw scores of each RIASEC scale with higher values indicating more elevated profile.

#### Procedure

Students and their parents were informed about the purpose of the study several weeks prior to data collection. At the beginning of the eighth class and six months later, all participating students completed the above questionnaires under the supervision of their teachers.

At the second measurement point, 31 students (9 percent) could not complete the questionnaires because of their absence on the data collection day. Results from multivariate analyses of variance (MANOVA) showed those students did not vary on the social-cognitive measures (F(3,327) = 0.225, p = .858), the measures of interest development (F(3,337) = 0.806, p = .491), or the two variables to code phase in career decision-making (engagement and career commitment; (F(2,330) = 1.531, p = .218). They also did not vary regarding the gender distribution (U = 4446, p = .392).

## Results

#### Correlations

Table 1 presents the intercorrelations among the measures and their relation to failure in comparison to achievement or discrepancy in career decisionmaking. As the results indicated, male students showed a stronger tendency to foreclosure than females, as indicated by the negative correlations of gender to achievement and discrepancy at T1 and at T2 but only the relation to discrepancy at T1 was statistically significant. For the first measurement point, the results confirm the hypothesis that students who fail in career decision-making show less generalized self-efficacy than students who achieved a decision, while the values regarding more perceived barriers and more externality were in the expected direction but not statistically significant. The study has also confirmed hypothesis, that students who fail in career decision-making show less elevated interests, while interest differentiation or consistency was not significant. As expected, students failing a decision perceived more barriers and had less elevated interests than the indecisive ones. However, on the contrary to the hypothesis, students failing a decision showed more self-efficacy and beliefs in their personal abilities than the indecisive ones.

Table 1 Intercorrelations of the Applied Measures (if not otherwise specified N = 343)

Measures	1	2	3	4
1) Male <sup>1,a</sup>				
2) Perceived Barriers <sup>2</sup>	075			
3) Self-efficacy <sup>2</sup>	.146**	191***		
4) Externality <sup>2</sup>	011	.348***	296***	
5) Differentiation <sup>2</sup>	.089	204***	.180***	083
6) Consistency <sup>2</sup>	.074	141**	107	019
7) Elevation <sup>2</sup>	163**	.046	.166**	003
8) Achievement T1 (N=173) <sup>1,a</sup>	049	081	.330***	055
9) Achievement T2 (N=147) <sup>1,a</sup>	161	.100	.095	040
10) Diffusion T1 (N=175) <sup>1,a</sup>	157*	.379***	205**	.196*
11) Diffusion T2 (N=172) <sup>1,a</sup>	138	.338***	149	.085
12) Foreclosure T1 <sup>b</sup>	.088	164**	043	075
13) Foreclosure T2 <sup>b</sup>	.123*	202***	.017	039

Measures	5	6	7	
1) Male <sup>1,a</sup>				
2) Perceived Barriers <sup>2</sup>				
3) Self-efficacy <sup>2</sup>				
4) Externality <sup>2</sup>				
5) Differentiation <sup>2</sup>				
6) Consistency <sup>2</sup>	.146**			
7) Elevation <sup>2</sup>	142**	020		
8) Achievement T1 (N=173) <sup>1,a</sup>	.092	.026	.332***	
9) Achievement T2 (N=147) <sup>1,a</sup>	.101	.098	.108	
10) Diffusion T1 (N=175) <sup>1,a</sup>	135	.065	.167**	
11) Diffusion T2 (N=172) <sup>1,a</sup>	.030	.096	.036	
12) Foreclosure $T1^b$	.019	040	215***	
13) Foreclosure T2 <sup>b</sup>	031	059	061	

Notes. <sup>1</sup> Spearman, <sup>2</sup> Pearson

Intercorrelations for variables 8 to 13 are not reported because students belong to different groups.

<sup>&</sup>lt;sup>a</sup> Coding: male = 1, female = 0; achievement = 1 or diffusion = 1, foreclosure = 0

<sup>&</sup>lt;sup>b</sup> Coding: foreclosure = 1, achievement, diffusion, and moratorium = 0

<sup>\*</sup> *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001

T1: first measurement point; T2 second measurement point

## Causes of Failure

To evaluate whether the assessed social-cognitive (perceived barriers, generalized self-efficacy, and externality of control) and vocational interest variables (interest profile differentiation, consistency, and elevation) predict a tendency to filure in career decision-making at the first measurement point, binary logistic regression analyses were applied with the dichotomous variables of failure vs. achievement and failure vs. discrepancy as dependent variables (see Table 2). Gender was added in the first step as a control variable. The social-cognitive variables were entered in the second step. Since the theory and research suggest social-cognitive variables predict interest development (Lent, Brown, Hackett, 1994), the vocational interest variables were added in the third step to assess their additional contribution to the distinction above the social-cognitive variables. Finally, for the distinction at T2 the state at T1 was entered in the last step.

#### Failure vs. Achievement

At T1 the social-cognitive variables already explained a significant amount of variance ( $\chi^2(3) = 23.68$ , p < .000) above the non-significant influence of gender. The inclusion of vocational interest variables further significantly increased the model ( $\chi^2(3) = 10.791$ , p < .05). GSE and lower profile elevation were single significant predictors for failure. At T2 a failure was significantly predicted by male gender, but neither the inclusion of the social-cognitive ( $\chi^2(3) = 4.91$ , p = .178) nor the vocational interest variables ( $\chi^2(3) = 3.13$ , p = .372) explained a significant additional amount of variance. However, the stage at T1 was a very strong predictor additional predictor ( $\chi^2(1) = 11.60$ , p = .001).

Failure vs. discrepancy. At T1 the social-cognitive variables explained a significant amount of variance ( $\chi^2(3) = 29.48$ , p < .000) above the already significant influence of gender. The inclusion of the vocational interest variables again further significantly increased the model ( $\chi^2(3) = 11.200$ , p < .05). In case of males, less perceived barriers and lower consistency were a significant single predictor for failure. At T2 the social-cognitive variables again explained a significant amount of variance ( $\chi^2(3) = 12.39$ , p < .01) above the already significant influence of gender. The interest variables did not significantly improve the model ( $\chi^2(3) = 7.385$ , p = .061). In case of males, less perceived barriers, and less differentiated interests emerged a significant single predictors for a failure. Again, the state at T1 was a strong additional predictor of the stage at T2 ( $\chi^2(1) = 18.66$ , p < .000).

Table 2 Binary Logistic Regression Analyses for Different States in Career Decision-Making

		Achievement vs. foreclosure							
Step and variable		T1				T2			
	В	SE B	Wald	$R^2$	В	SE B	Wald	$R^2$	
Step 1									
Male	-0.254	.319	0.635	.005	-0.914	.400	5.226*	.063*	
Step 2									
Barriers	-0.232	.207	1.260		0.329	.248	1.755		
Self-efficacy	0.842	.194	18.866*	**	0.240	.214	1.292		
Externality	0.059	.195	0.090	.182*	**-0.242	.240	1.019	.118*	
Step 3									
Differentiation	0.255	.198	1.291		0.158	.243	0.422		
Consistency	0.120	.185	0.418		0.314	.212	2.191		
Elevation	0.562	.193	8.435*	*.255*	** 0.087	.222	0.153	.152	
Step 4									
State T1					1.588	.484	10.758**	*.269**	

		Diffusion vs. foreclosure							
Step and variable		T1				T2			
	В	SE B	Wald	$R^2$	В	SE B	Wald	$R^2$	
Step 1									
Male	-0.647	.319	4.122*	.033*	-0.836	.411	4.131*	.051*	
Step 2									
Barriers	0.850	.212	16.042*	**	0.836	.265	9.930**	•	
Self-efficacy	-0.356	.208	2.930		-0.068	.268	0.064		
Externality	0.208	.206	1.020	.243*	**-0.256	.262	0.957	.188**	
Step 3									
Differentiation	0.027	.214	0.015		0.664	.295	5.075*		
Consistency	0.535	.204	6.860*	*	0.342	.244	1.961		
Elevation	0.422	.217	3.788	.314*	** 0.177	.252	0.491	.262***	
Step 4									
State T1					2.344	.588	15.865**	*.431***	

*Notes.* Coding: male = 1, female = 0; achievement = 1 or diffusion = 1, foreclosure = 0 Values are for variables when first entered into the equation p < .05; \*\* p < .01; \*\*\* p < .001

## Discussion

The study examined causes of a failure in career decision-making in a group of young adolescents in Switzerland. The study applied a long-term research design to assess the predictive power of gender, three social-cognitive variables (generalized self-efficacy (GSE), perceived barriers, and externality of control), and three vocational interest variables (interest differentiation, consistency, and profile elevation) to distinguish a failure, achievement and discrepancy in career decision-making, both at the beginning and in the middle of a career decision-making process prior to a major vocational/educational transition.

#### Failure vs. Achievement

For the career consulting practice, the distinction between a failure and achievement in career decision-making is particularity important, since these two groups of students can not be easily distinguished by applying standardized measure for career indecision (Brisbin, Savickas, 1994). The results show, that the assessed variables can significantly predict contemporary developmental membership where lower GSE, less interest profile elevation and male gender are significant predictors for a failure. However, their long-term influence is much weaker and mainly indirect thought the strong influence of the earlier stage of career decision-making. Other studies reported GSE being positively related to optimism and self-esteem, as well as to more active coping with various stressful life situations (Luszczynska, Gutiérrez-Doña, Schwarzer, 2005). Also, less elevated interest profiles were shown to be related to less openness, less extraversion, and higher depressive personality traits (e.g., Fuller, Holland, Johnston, 1999). The present study indicate problematic personality dispositions which are also related to few vocational interests in general leading to premature commitment in career decision-making.

The findings within the present sample of young adolescent males in Switzerland show, a stronger tendency to a failure might be explained by the fact that they face fewer difficulties in finding an apprenticeship in Switzerland due to the occupational structure and selection processes of private firms (Haeberlin, Imdorf, Kronig, 2005). Since less perceived barriers also emerged as an important predictor to a failure within the present sample, male students might tend to fail as they do not see many obstacles in their career decision-making process and have fewer difficulties in choosing a vocation within their traditional interest domain than the female students do.

## Failure vs. Discrepancy

The results of the present study show that the assessed variables are also significant predictors of a failure compared to discrepancy. In fact, the distinction between a failure and discrepancy is clearly better predicted by the assessed variables than the one of a failure and achievement. In case of males, less perceived barriers and less consistent and differentiated interests are significant predictors for foreclosure. Again, their influence is weaker from the long-term point of view and particularly the vocational interest variables are non-significant predictors. However, they have an indirect influence at the earlier stage. The result that less perceived barriers predict a failure was not expected yet confirms other studies which showed that fewer barriers are positively related to commitment in career decision-making (Patton et al., 2003) and that some task-specific anxiety towards the career decision-making process can promote more active engagement (Vignoli et al., 2005).

## Summary

Overall, the present study draws the picture of a male student, who is relatively undefined and inconsistent in his vocational interests, expresses low interest towards a variety of activities, has a rather negative believe in his abilities to master various challenging tasks in his live, and is overly optimistic about non-existent barriers in his career decision-making process, as being most endangered to premature commitment to a given career choice.

#### Limitations

A limitation of the present study is the fact that the assessed variables explained a significant, but still restricted amount of variance in the dependent measures which was especially true for their long-term predictive power. Thus the variables, which were not assessed, might have an equal or maybe even stronger influence on a failure. One of such potentially influential variables, which might be assessed within future studies, is perceived social support.

Restricted amount of variance explained by the assessed variables could be taken by the dichotomous separation of the students into developmental groups naturally resulting in a loss of information regarding their actual degree of engagement or commitment. Also, the groups were not evenly distributed across the investigated group of students, since engagement and commitment were significantly correlated with decreasing power of binary logistic regression analyses.

## Implications for Consulting Practice

A major challenge in consulting practice with adolescents is the fact, that students who tend to a failure can not be easily distinguished from students who reached their commitment after thoughtful exploration. Based on the present study, consultants could, however, retrieve valuable information from the interest inventory profile of a student. As the results of the present study suggest, a student who shows an undifferentiated and inconsistent profile with low elevated scores is endangered of a failure in career decision-making. Consultants should also pay close attention during the session to the student's reporting lack of confidence in his or her ability to master various demanding tasks in life and underestimating challenges and possible difficulties in the career decision-making.

Once students who are endangered of a failure are identified, consultants could try to promote interests in various fields and activities by positively influencing the domain-specific self-efficacy and believes of a student (cf. Lent et al., 1994). Competency beliefs in the career decision-making process could be improved by encouraging students by a consultant, providing models of similar students, who successfully mastered the process, and setting challenging still realistic proximal goals in the career decision-making. However, consultanst should also clearly identify challenges and possible difficulties that a career decision-making process presents. In that way, students should be prevented from making rash and inappropriate commitments.

Finally, the results of the present study show, that consulting interventions to preventing a failure in career decision-making should start early in the process, since students who tend to a failure at the beginning of the process are unlikely to become automatically open-minded later during the process by themselves.

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