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SHOULD I STAY OR SHOULD I GO?

STABLE AND TEMPORARY PREDICTORS OF INTENTIONS TO DROP OUT OF EDUCATION

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OVERCOMING VULNERABILITY: LIFE COURSE PERSPECTIVES

OUR PROJECT

- Facing critical events in early adulthood: A normative approach to vulnerability and life course regulation
 - Explore regulation of life transitions as a function of internal and external vulnerability
- Goal of this study: Explore predictors of intentions to drop out of education
 - stable, i.e., person predictors
 - temporary, i.e., time-varying predictors



INTRODUCTION – DROPOUT OF EDUCATION

- Negative consequences of dropping out of education
 - Higher rates of unemployment and incarceration, lower income and life expectancy (Belfield & Levin, 2007)
- Factors found in previous research
 - Educational performance (e.g., grades, Balfanz, Herzog, & Mac Iver, 2007)
 - Behavior (e.g., delinquency, Battin-Pearson et al., 2000)
 - Background (e.g., gender, ethnicity, Laird, Kienzi, DeBell, & Chapman, 2007)
 - Family variables (e.g., SES, Dunham & Wilson, 2007)
 - School variables (e.g., school resources, Loeb & Page, 2000)



INTRODUCTION – ATTITUDES IN DROPOUT RESEARCH

- Little research
 - e.g., expectations, self-esteem, locus of control
- Stress has inconsistent effects
 - direct effect (e.g., Chartrand, 1992), indirect effect (Sandler, 2000), no effect (e.g., Metzner & Bean, 1987)
- Optimism
 - Better coping with stress in academic context (e.g., Brissette, Scheier, & Carver, 2002)
 - Continued enrollment in school (e.g., Chemers, Hu, & Garcia, 2001)



INTRODUCTION – DROPOUT AS PROCESS

Process

- Dropping out "as a process of disengagement over time" (Finn, 1989, p. 133, see also Newmann, 1992; Rumberger & Lim, 2008)
- Study dropout intentions over time
 - investigate time-varying predictors (i.e., stress and optimism)
 - in addition to person characteristics (e.g., gender, SES)
 - extending previous research of <u>who</u> drops out to <u>when</u> do individuals think of dropping out



INTRODUCTION – HYPOTHESES

- Main effects
 - Next to stable person characteristics (i.e., gender, country of birth, SES, educational activity, PISA score), <u>average stress and optimism</u> will predict dropout thoughts.
 - 2. Controlling for average stress and optimism, <u>annually varying stress</u> <u>and optimism</u> will predict dropout thoughts.
- Interaction effects
 - 3. The negative effect of stress (both person and annual) on dropout thoughts will be moderated by optimism (both person and annual).



METHOD - DATA

- TREE survey (since 2001)
- N = 6343
- Years used in this study: 2001-2004
- Students who were in education (vocational or college-track) for at least three out of four years
- N = 4312



METHOD – SAMPLE

- N=4312
- N=2412 women (55.9 % women)
- N=3833 born in Switzerland (89.3 %)

	Compulsory school	Apprenticeship	High school	University	Jop	NEET	Other
2001 (16 years)	273	2147	1640	0	26	10	216
2002 (17 years)	1	2561	1591	8	15	11	125
2003 (18 years)	0	2570	1549	32	11	9	141
2004 (19 years)	0	1535	1097	412	543	149	576



METHOD – MEASURES

- Dropout thoughts (1 item)
 - "What do you generally think of your education lately? As soon as I find something better I will change my education/apprenticeship."
 - Scale from 1 to 7
- Educational stress (5 items)
 - "At school, I often feel out of my depth."
 - Scale from 1 to 5
 - $\alpha = .78 82$
- Optimism (5 items)
 - "Whatever happens, I can see the positive side of it."
 - Scale from 1 to 6
 - $\alpha = .82 85$



METHOD – DATA ANALYSIS

- Multilevel model
 - Individuals at level 2
 - Measurement points at level 1
- Distinction between person and annual variables
 - Person-variable: average over 4 years \rightarrow Level 2
 - Annual-variable: deviation from the person-mean \rightarrow Level 1
- Example:
 - Participant A and B both have stress value of 3 in 2003.
 - Participant A has average stress level of 2, so his annual stress in 2003 is 1 (more than usual).
 - Participant B has average stress level of 3, so his annual stress in 2003 is 0 (same as usual).



RESULTS – MEANS AND STANDARD DEVIATIONS

	Dropout	Stress	Optimism
	Scale 1-7	Scale 1-5	Scale 1-6
2001 (16 years)	1.71 (1.46)	2.44 (0.77)	4.75 (0.79)
2002 (17 years)	1.54 (1.18)	2.41 (0.74)	4.79 (0.79)
2003 (18 years)	1.48 (1.14)	2.38 (0.76)	4.77 (0.79)
2004 (19 years)	1.83 (1.49)	2.39 (0.81)	4.75 (0.80)



RESULTS – MULTILEVEL MODELS

	Model 1		Model 2	
	B (S.E.)	t	B (S.E.)	t
Intercept	1.482 (0.023)	64.41***	1.500 (0.023)	63.83***
Time (linear)	-0.036 (0.011)	-3.42***	-0.044 (0.011)	-4.19***
Time (quadratic)	0.065 (0.010)	6.61***	0.057 (0.010)	5.74***
Men	0.135 (0.026)	5.11***	0.132 (0.027)	4.89***
PISA score	-0.002 (0.000)	-11.22***	-0.002 (0.000)	-10.86***
Education: college track	-0.093 (0.029)	-3.17***	-0.116 (0.030)	388***
Person-stress	0.105 (0.022)	4.89***	0.113 (0.022)	5.12***
Annual-stress			0.179 (0.023)	7.93***
Person-optimism	-0.328 (0.020)	-16.48***	-0.321 (0.020)	-15.87***
Annual-optimism			-0.276 (0.024)	-11.54***



No significant effects for Swiss nationality and SES

RESULTS – MODERATION OF ANNUAL-STRESS WITH PERSON-OPTIMISM



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RESULTS – MODERATION OF ANNUAL-STRESS WITH ANNUAL-OPTIMISM



DISCUSSION

- Dropout as process
 - dropout intentions not linear and may thus be influenced more or less effectively across different periods in time
- Attitudes influence dropout thoughts
 - individual level (e.g., a stressed person thought more about dropping out than a non-stressed person)
 - annual level (e.g., more stress than usual led to more dropout thoughts)
- Buffering effect of optimism
 - Only for annual stress, not for person-stress



DISCUSSION - LIMITATIONS

- Dropout intentions versus actual dropout
 - somewhat different research question
 - insights into dropout process
 - strong association between intentions and dropout (e.g., Sandler, 2000)
- Sample
 - positively biased sample: Young adults who dropped out of education are also more likely to drop out of the survey
 - even in this sample strong within-person variation → dropout thoughts are not limited to marginal groups



CONCLUSION: WHEN INSTEAD OF WHO

- Important to move beyond person characteristics
- Intervention focusing on
 - difficult periods occurring in most people's lives (when)
 - instead of on specific groups of people (who)



THANK YOU FOR YOUR TIME AND ATTENTION

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