Stress and Self-Regulation in Freshmen at the University of Konstanz

The Effects of Trait Self-Control, Perfectionism, and Gender

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Stress in Major Life Changes

Factors of stress in freshmen:

- Organizing one's schedule and classes

- Upcoming presentations and exams

- New financial situation

- Finding a flat and meeting new people

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Stress and Performance in Freshmen

Earlier findings by Aspinwall & Taylor (1992)

- Optimistic freshmen tend to experience less stress during their first three months at college.

- Self-esteem and desire for control were positive predictors for academic performance two years later.

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Self-Regulation Research

- Delay of gratification abilities in 4- to 5-year-olds can serve as predictors for academic success later in life (Mischel, Shoda & Peake, 1988)

- Self-Control Scale (SCS, Tangney, Baumeister & Boone, 2004) correlates strongly with

  - ➢ Academic performance

  - ➢ Psychological well-being

  - ➢ Satisfaction with relationships

  - ➢ Actual performance on various objective measures (Schmeichel & Zell, 2007)

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Perfectionism

- Perfectionism is a multidimensional construct (Flett & Hewitt, 2002) which differentiates between adaptive and maladaptive perfectionism

- The relationship between perfectionism (APS-R Slaney, Slaney, Rice, Mobley, Trippe & Jeffrey, 2001) and achievement:

 Adaptive perfectionism (high standards) correlates with academic adjustment (e.g. Braver, 1996; Wade, 1997)

 Maladaptive perfectionism (high discrepancy) correlates with anxiety, fear of failure, depression, eating disorders (e.g. Hamacheck, 1978)

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Gender

- Girls tend to outperform boys in school (Statistisches Bundesamt, 2007)

- Girls are more vulnerable to stress than boys (Pomerantz, Alternman & Saxon, 2002)

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Aims of the Present Study

The relationship of self control, perfectionism and gender and …

1) … perceived Stress in freshman

2) … earlier academic performance (high school final results)

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Participants

- 141 freshmen (65 male, 76 female)

  - Mean age = 20.31 years, SD = 1.29

- University of Konstanz, Winter 2007/8

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Procedure

- Perceived Stress Scale (PSS; Cohen, Kamarck & Mermelstein, 1982)

- Self-Control Scale (SCS; Tangney, Baumeister & Bone, 2004)

- APS-R (Slaney, Rice, Mobley, Trippe & Jeffrey, 2001)

- Earlier academic performance ("Abitur")

Regression of Gender and Personality Variables on Perceived Stress

R^2 (corrected) = .18   F(4,136)= 9.13, p < .001

	Standardized Regression Coefficient (β)	T-value	Significance
Gender	.13	1.56	n.s.
Self Control	-.21	-2.32	P < .05
P Standards	-.06	-.07	n.s.
P Discrepancy	.34	4.05	P <.001

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Regression of Gender and Personality Variables on Academic Performance

R^2 = .16 $F(4,136)= 7.75, p < .001$

	ß	T-value	p
Gender	-.03	-.43	n.s.
Self Control	-.02	-.17	n.s.
P Standards	-.40	-4.38	P < .001
P Discrepancy	.22	2.59	P < .01

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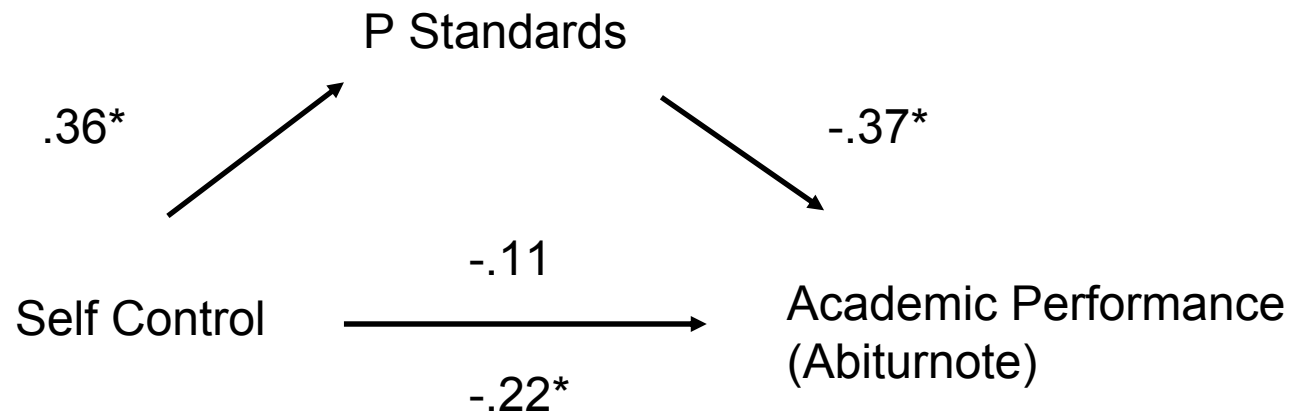
Discussion and Summary

- Self-control and perfectionism are significant predictors of perceived stress in freshmen and earlier academic performance

- There is a clear distinction between adaptive and maladaptive perfectionism; both forms have very different effects.

- Gender had no effect on academic performance and on perceived stress

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Future Research

- Longitudinal design

- Which impact do perfectionist supervisors have on employees' performance and perceived stress?

- Transition from primary school to highschool – self-regulation capacity as a predictor for perceived stress and academic success?

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The Perceived Stress Scale PSS
(Cohen, Kamarck and Mermelstein, 1982)

1. In the last month, how often have you been upset because of something that happened unexpectedly?

2. In the last month, how often have you felt that you were unable to control the important things in your life?
   (5-point Likert scale)

Self Control Scale (Tangney, Baumeister & Boone, 2004)

Included 5 dimensions (self-discipline, deliberative/nonimpusilve action,

health habits, work ethic, reliability)

1. I am good at resisting temptation.

2. People can count on me to keep on schedule.

3. I get carried away by feelings.

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The Revised Almost Perfect Scale APS-R (Slaney, Rice, Mobley, Trippe and Jeffrey, 2001)

1. I have high standards for my performance at work or at school.

2. I have a strong need to strive for excellence.

3. I am hardly ever satisfied with my performance.

4. I am seldon able to meet my own high standards for performance.

(7-point Likert scale)

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Cronbach's Alpha

Scale	Items	Cronbach´s Alpha
Self Control Scale (Baumeister et al., 2004)	36	0,84
Perfectionism Scale (APS-scale; Slaney et al., 2001)		
Standard	4	0,80
Discrepancy	12	0,88
Perceived Stress Scale (Cohen et al. 1988)	10	0,73
Self-Developed Stress Questionnaire		
Study		
Choice of Subject	5	0,73
Study organization	3	0,65
Study demands / accomplishments	3	0,45
Time Management	3	0,69
Financial	3	0,81
Everday Life Coping	4	0,47
Social Contacts	3	0,85
Living situation	5	0,53
Change / Parting	4	0,59

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Descriptive and Correlations

Table 1									
Correlation Matrix of Predictor and Outcome Variables									
Variable	M	SD	1.	2.1	2.2	2.3	3.	4.
1. Self-Control Scale	111,43	15,25	1					
2. Perfectionism								
2.1 High Standards	4,79	0,99	0,36 **	1				
2.2 Order	4,46	1,11	0,36 **	0,31 **	1			
2.3 Discrepancy	3,47	1,09	-0,27 **	0,21 *	0,11	1		
3. Perceived Stress	38,65	4,70	-0,27 **	0,03	0,03	0,35 **	1	
4. Academic Performance	2,04	0,60	-0,22 *	-0,37 *	-0,08	0,14	0,12	1
Note.								

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Perceived Stress by Gender and Subject
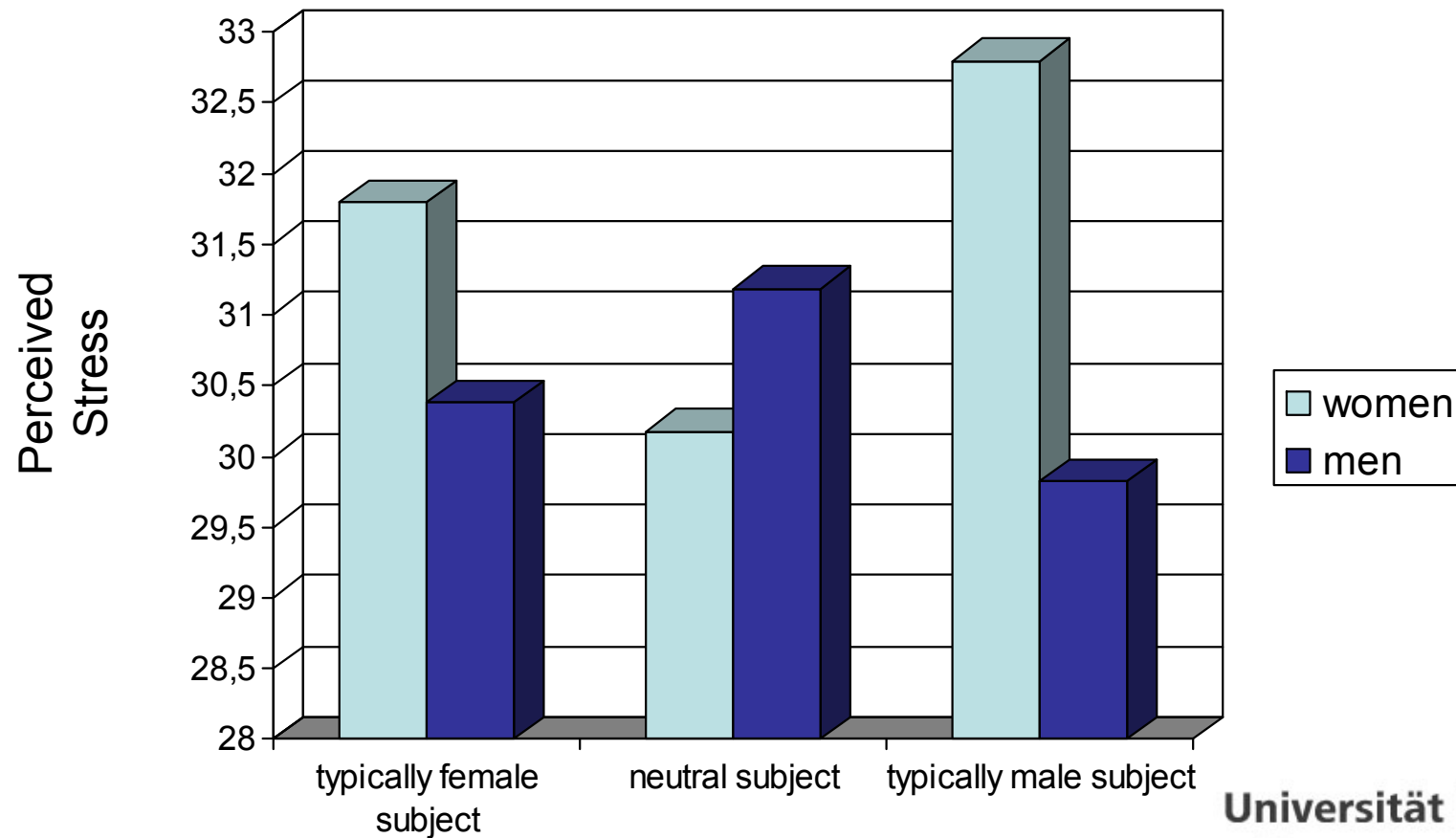
Mean Values of Different Stressors
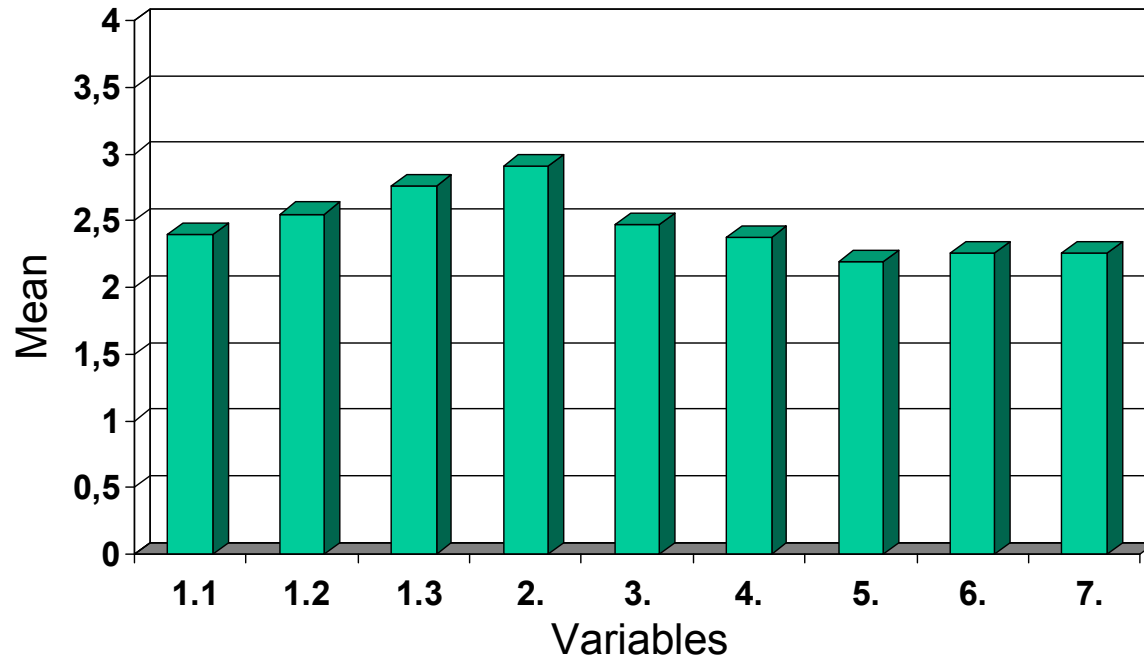
Variables

- Study
1.1 Choice of Subject
1.2 Organization
1.3 Demands / Accomplishments
2. Time Management
3. Financial
4. Everday Life Coping
5. Living Situation
6. (Social) Contacts
7. Change / Parting

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Single Regressions of Gender and Personality Variables on self reported Stress in Different Life aspects

Table 1

Matrix: Stress , N=141	Self control	Perfect Standards	Perfect Discrepancy	Gender
Variable	ß	ß	ß	ß
1. Study				
1.1 Choice of Subject	-0,29	-0,23	0,36	n.s
1.2 Organization	-0,35	-0,17	0,40	n.s
1.3 Demands / Accomplishments	-0,40	-0,26	0,33	n.s
2. Time Management	-0,18	n.s	0,28	n.s
3. Financial	-0,25	n.s	0,27	n.s
4. Everyday Life Coping	-0,21	n.s	0,25	n.s
5. Living Situation	n.s.	n.s	n.s	n.s
6. (Social) Contacts	n.s.	n.s	n.s	n.s
7. Change / Parting	n.s.	n.s	n.s	0,25