

On the interplay of motivational characteristics and academic achievement: The role of
Need for Cognition

Supplementary Tables

Anja Strobel^{1*}, Alexander Strobel^{2*}, Franzis Preckel³, & Ricarda Steinmayer⁴

¹ Department of Psychology, Chemnitz University of Technology, Chemnitz, Germany

² Faculty of Psychology, Technische Universität Dresden, Dresden, Germany

³ Department of Psychology, University of Trier, Trier, Germany

⁴ Department of Psychology, Technical University Dortmund, Dortmund, Germany

Anja Strobel: <https://orcid.org/0000-0002-0313-0615>

Alexander Strobel: <https://orcid.org/0000-0002-9426-5397>

Franzis Preckel: <https://orcid.org/0000-0002-5768-8702>

Ricarda Steinmayr: <https://orcid.org/0000-0002-0294-1045>

§ These authors contributed equally to this work.

Correspondence concerning this article should be addressed to Anja Strobel,
Department of Psychology, Chemnitz University of Technology, 09120 Chemnitz, Germany.
E-mail: anja.strobel@psychologie.tu-chemnitz.de

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Supplementary Tables

Tables 1-4 provide the descriptives and intercorrelations of the variables involved in the correlation analyses for the subjects German, Math, Physics, and Chemistry. For details, see main text.

Table 1

Spearman correlations and descriptive statistics of the variables in the analyses on German grades

	GRD1	ASC1	INT1	HFS1	FOF1	NFC1	GRD2	ASC2	INT2	HFS2	FOF2	NFC2
GRD1	—	.53	.45	.26	-.17	.33	.67	.51	.40	.25	-.18	.35
ASC1		<i>.93</i>	.66	.16	-.13	.18	.58	.76	.60	.08	-.05	.16
INT1			<i>.92</i>	.16	-.11	.23	.44	.54	.63	.17	-.14	.20
HFS1				<i>.86</i>	-.30	.62	.21	.16	.11	.57	-.17	.50
FOF1					<i>.88</i>	-.42	-.20	-.22	-.13	-.29	.59	-.43
NFC1						<i>.89</i>	.35	.21	.16	.62	-.32	.71
GRD2							—	.58	.46	.24	-.21	.41
ASC2								<i>.92</i>	.68	.10	-.13	.25
INT2									<i>.91</i>	.11	-.06	.19
HFS2										<i>.87</i>	-.28	.66
FOF2											<i>.90</i>	-.39
NFC2												<i>.89</i>
Mean	3.24	3.68	3.49	2.92	1.86	4.46	3.36	3.65	3.42	2.72	1.71	4.69
SD	0.79	0.82	0.99	0.57	0.61	0.84	0.80	0.76	0.94	0.56	0.61	0.87
Min	1.00	1.00	1.00	1.14	1.00	2.19	1.00	1.00	1.00	1.00	1.00	2.50
Max	5.00	5.00	5.00	4.00	4.00	6.94	5.00	5.00	5.00	4.00	3.71	6.88
Skew	-0.01	-0.38	-0.33	-0.23	0.45	0.16	-0.13	-0.26	-0.26	-0.02	0.89	0.07
Kurtosis	-0.24	-0.12	-0.37	-0.07	-0.34	0.14	-0.38	0.08	-0.51	0.17	0.47	-0.45

Note. $N = 221$ -259 due to missings; $p < .05$ for $|r_s| > .21$; coefficients in the diagonal are Cronbach's α , bold-faced coefficients give the 53-59 week retest reliability; GRD = Grade German, ASC = Ability Self-Concept German, INT = Interest in German, HFS = Hope for Success, FOF = Fear of Failure, NFC = Need for Cognition at measurement occasion 1, and 2, respectively

Table 2

Spearman correlations and descriptive statistics of the variables in the analyses on Math grades

	GRD1	ASC1	INT1	HFS1	FOF1	NFC1	GRD2	ASC2	INT2	HFS2	FOF2	NFC2
GRD1	—	.68	.56	.24	-.17	.30	.54	.56	.46	.29	-.11	.34
ASC1		.95	.79	.26	-.21	.28	.42	.73	.58	.38	-.19	.26
INT1			.93	.30	-.19	.35	.38	.66	.68	.42	-.20	.31
HFS1				.86	-.30	.62	.16	.24	.30	.57	-.17	.50
FOF1					.88	-.42	-.21	-.22	-.18	-.29	.59	-.43
NFC1						.89	.26	.27	.35	.62	-.32	.71
GRD2							—	.64	.58	.30	-.12	.40
ASC2								.95	.80	.37	-.21	.31
INT2									.94	.45	-.17	.42
HFS2										.87	-.28	.66
FOF2											.90	-.39
NFC2												.89
Mean	3.11	3.20	3.18	2.92	1.86	4.46	3.19	3.37	3.33	2.72	1.71	4.69
SD	1.02	1.01	1.14	0.57	0.61	0.84	1.10	0.98	1.10	0.56	0.61	0.87
Min	1.00	1.00	1.00	1.14	1.00	2.19	0.75	1.00	1.00	1.00	1.00	2.50
Max	5.00	5.00	5.00	4.00	4.00	6.94	5.25	5.00	5.00	4.00	3.71	6.88
Skew	-0.05	-0.12	-0.20	-0.23	0.45	0.16	-0.18	-0.35	-0.39	-0.02	0.89	0.07
Kurtosis	-0.63	-0.65	-0.88	-0.07	-0.34	0.14	-0.61	-0.39	-0.61	0.17	0.47	-0.45

Note. $N = 218$ -259 due to missings; $p < .05$ for $|r_s| > .17$; coefficients in the diagonal are Cronbach's α , bold-faced coefficients give the 53-59 week retest reliability; GRD = Grade Math, ASC = Ability Self-Concept Math, INT = Interest in Math, HFS = Hope for Success, FOF = Fear of Failure, NFC = Need for Cognition at measurement occasion 1, and 2, respectively

Table 3

Spearman correlations and descriptive statistics of the variables in the analyses on Physics grades

	GRD1	ASC1	INT1	HFS1	FOF1	NFC1	GRD2	ASC2	INT2	HFS2	FOF2	NFC2
GRD1	—	.59	.46	.22	-.13	.27	.66	.45	.41	.28	-.13	.28
ASC1		.95	.80	.17	-.09	.25	.45	.65	.65	.32	-.11	.26
INT1			.94	.17	-.08	.23	.36	.64	.71	.31	-.18	.23
HFS1				.86	-.30	.62	.27	.20	.25	.57	-.17	.50
FOF1					.88	-.42	-.10	-.15	-.13	-.29	.59	-.43
NFC1						.89	.39	.25	.32	.62	-.32	.71
GRD2							—	.50	.45	.39	-.15	.41
ASC2								.96	.85	.35	-.23	.23
INT2									.94	.38	-.19	.29
HFS2										.87	-.28	.66
FOF2											.90	-.39
NFC2												.89
Mean	3.11	2.66	2.61	2.92	1.86	4.46	3.07	2.52	2.45	2.72	1.71	4.69
SD	1.03	0.99	1.16	0.57	0.61	0.84	0.93	1.03	1.19	0.56	0.61	0.87
Min	0.00	1.00	1.00	1.14	1.00	2.19	0.00	1.00	1.00	1.00	1.00	2.50
Max	5.00	5.00	5.00	4.00	4.00	6.94	5.25	5.00	5.00	4.00	3.71	6.88
Skew	-0.12	0.10	0.24	-0.23	0.45	0.16	-0.17	0.35	0.52	-0.02	0.89	0.07
Kurtosis	-0.24	-0.70	-0.90	-0.07	-0.34	0.14	0.14	-0.50	-0.69	0.17	0.47	-0.45

Note. $N = 191$ -259 due to missings; $p < .05$ for $|r_s| > .13$; coefficients in the diagonal are Cronbach's α , bold-faced coefficients give the 53-59 week retest reliability; GRD = Grade Physics, ASC = Ability Self-Concept Physics, INT = Interest in Physics, HFS = Hope for Success, FOF = Fear of Failure, NFC = Need for Cognition at measurement occasion 1, and 2, respectively

Table 4

Spearman correlations and descriptive statistics of the variables in the analyses on Chemistry grades

	GRD1	ASC1	INT1	HFS1	FOF1	NFC1	GRD2	ASC2	INT2	HFS2	FOF2	NFC2
GRD1	—	.51	.44	.28	-.25	.32	.72	.44	.40	.37	-.23	.35
ASC1		.96	.82	.23	-.13	.16	.46	.70	.62	.21	-.12	.18
INT1			.95	.18	-.03	.18	.39	.67	.68	.24	-.10	.19
HFS1				.86	-.30	.62	.27	.24	.21	.57	-.17	.50
FOF1					.88	-.42	-.19	-.15	-.06	-.29	.59	-.43
NFC1						.89	.36	.20	.20	.62	-.32	.71
GRD2							—	.52	.49	.36	-.26	.36
ASC2								.96	.86	.26	-.15	.26
INT2									.94	.24	-.08	.26
HFS2										.87	-.28	.66
FOF2											.90	-.39
NFC2												.89
Mean	3.12	2.52	2.48	2.92	1.86	4.46	3.15	2.44	2.37	2.72	1.71	4.69
SD	0.95	1.06	1.20	0.57	0.61	0.84	0.83	1.06	1.21	0.56	0.61	0.87
Min	1.00	1.00	1.00	1.14	1.00	2.19	1.25	1.00	1.00	1.00	1.00	2.50
Max	5.00	5.00	5.00	4.00	4.00	6.94	5.00	5.00	5.00	4.00	3.71	6.88
Skew	0.06	0.34	0.49	-0.23	0.45	0.16	0.20	0.32	0.56	-0.02	0.89	0.07
Kurtosis	-0.59	-0.65	-0.75	-0.07	-0.34	0.14	-0.53	-0.63	-0.74	0.17	0.47	-0.45

Note. $N = 171$ -259 due to missings; $p < .05$ for $|r_s| > .18$; coefficients in the diagonal are Cronbach's α , bold-faced coefficients give the 53-59 week retest reliability; GRD = Grade Chemistry, ASC = Ability Self-Concept Chemistry, INT = Interest in Chemistry, HFS = Hope for Success, FOF = Fear of Failure, NFC = Need for Cognition at measurement occasion 1, and 2, respectively