



Relationships among achievement motivation, grades, and aspirations: English as a foreign language

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Context of our research

- Modern sustainable, democratic societies build on active citizens who participate in and contribute to socio-economic development.
- As people cooperate across countries in a globalised world, the value of English as a lingua franca has increased.
- With the increased importance of English increases the cost of not speaking English (Education First, 2018).
- The learning and instruction of English as a foreign language (EFL) is of growing importance in all educational systems and English became a compulsory language in most of the developed countries.



Motivation in EFL learning

- Motivation is a key factor connected with successful EFL learning and is a central focus of the current research (Boo et al., 2015; Lamb, 2017).
- Motivation studies repeatedly show the connection of motivation to acquired EFL skills (Khodadady & Khajavy, 2013; Pae, 2008).
- They show that motivation differs based on gender, age, school type, and across countries (e.g., You & Dörnyei, 2016).



History of motivation research

- From the fifties until the beginning of the nineties, the motivation research was based on Gardner's socio-educational model of second language acquisition.
 - According to this model, most of the learning outcomes were connected with the integrative motive (Gardner et al., 1976).
- In the nineties, cognitive theories were applied, e.g. selfdetermination theory differentiating between intrinsic and extrinsic motivation (Noels et al., 2000).
- Later, the focus shifted to contextual and dynamic aspects of motivation (Boo et al., 2015) and to the process model of EFL motivation (Dörnyei, 2005).
- Afterwards, L2 motivational self system, currently dominating EFL motivation theory, was introduced (Boo et al., 2015; Dörnyei, 2009).



Research aim

- The identification of the level of student achievement motivation in EFL and its relationship to their grades and other indicators of achievement is an important research task.
- However, findings for Czech students are scarce (Vlčková et al., 2014).
- Our study fills this gap by analysing the level of students' achievement motivation in EFL and its relationship to their grades and aspiration.



Methods

The Achievement Motivation Questionnaire (Hrabal & Pavelková, 2010) was used, measuring the need for achievement (NfA, 7 items) and the need to avoid failure (NtAF, 7 items) on a 5-point response scale.

Examples of items:

- When I should be examined, I am anxious (NtAF)
- I want to have good marks in English (NfA)
- The reported grade in English, receiving a final report card with honours, and aspiration to study at an upper secondary comprehensive school were measured by a questionnaire and analysed as dummy variables.



Sample

- The sample was constructed by using the probability sampling of lower secondary schools in the Czech region of South Moravia and consisted of 26 schools (i.e., 25 9th grade classes, 462 students).
- In this analysis, 324 students were included (172 female) according to the analysed variables.



Data analysis

 Data analysis included logistic regression models computed in software R (glm function with probit specification).



Descriptive statistics of self-evaluation of achievement needs by the respondents

Questionnaire items	Scaled categories (%)				
	1	2	3	4	5
NfA1 (excellent student)	2.5	7.7	32.1	36.7	21.0
NfA2 (good marks)	0.9	3.7	37.7	37.0	20.7
NfA3 (focus in learning)	2.8	9.9	38.0	36.7	12.7
NfA4 (carefulness in learning)	2.2	14.2	54.3	25.3	4.0
NfA5 (raising hand in lesson)	11.1	22.5	36.7	22.5	7.1
NfA6 (getting grades)	5.6	13.9	51.9	25.0	3.7
NfA7 (examination when between grades)	9.3	8.3	19.1	23.5	39.8
NtAF8 (fear of exam)	15.1	17.9	19.4	23.8	23.8
NtAF9 (fear of English subject)	31.5	33.3	22.5	8.6	4.0
NtAF10 (fear of written exam)	20.4	37.3	24.7	9.3	8.3
NtAF11 (fear of exam when insufficient knowledge)	10.8	26.9	27.2	21.6	13.6
NtAF12 (fear of school)	49.1	23.5	14.8	8.6	4.0
NtAF13 (fear of bad grades)	15.7	21.0	34.6	15.7	13.0
NtAF14 (expected grade from a written exam)	9.9	20.7	27.8	23.1	18.5
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Indexes of achievement motivation

	Average	S.D.	Min	Max	N
iNfA – all sample	3.39	0.63	1.43	4.86	324
iNfA – male	3.33	0.62	1.43	4.86	152
iNfA- female	3.45	0.64	1.43	4.86	172
iNtAF – all sample	2.71	0.90	1.00	4.71	324
iNtAF – male	2.51	0.89	1.00	4.57	152
iNtAF – female	2.89	0.88	1.00	4.71	172



Students' grades, aspiration, and gender

Variable	Values				
		0	1		
English grade – 1 (A,					
best)	210	(64.8)	114	(35.2)	
Final report card with					
honours	194	(59.9)	130	(40.1)	
Aspiration to continue					
study at a grammar					
school	251	(77.5)	73	(22.5)	
Gender - male	172	(53.1)	152	(46.9)	



Findings

- The need for achievement (NfA) in EFL was found to be a positive predictor and the need to avoid failure (NtAF) was found to be a negative predictor of student final grade in English, receiving a final report card with honours, and aspiration to study at an upper secondary comprehensive school.
- The effect of the need for achievement (NfA) on all three variables was, on average, lower for males than for females.
- The effect of the need to avoid failure (NtAF) for males was, on average, higher.



Regression coefficients

	Grade in E	inglish – 1	Final report		Aspiration – continuing studying at a grammar school			
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2		
Intercept	-1.723**	-2.851***	-1.569**	-2.566**	-0.916	-1.649*		
	(0.588)	(0.861)	(0.558)	(0.790)	(0.612)	(0.810)		
iNfA	0.827***	1.047***	0.694***	0.850***	0.387**	0.513**		
	(0.142)	(0.204)	(0.132)	(0.181)	(0.139)	(0.181)		
iNtAF	-0.503***	-0.378**	-0.282**	-0.124	-0.335***	-0.232 [†]		
	(0.097)	(0.130)	(0.089)	(0.121)	(0.100)	(0.124)		
Gender - male	-0.426**	1.538	-0.682***	1.117	-0.744***	0.910		
	(0.165)	(1.153)	(0.158)	(1.094)	(0.177)	(1.193)		
Gender – mail x iNfA		-0.392		-0.269		-0.285		
		(0.290)		(0.269)		(0.287)		
Gender – male x iNtAF		-0.251		-0.336 [†]		-0.273		
		(0.199)		(0.185)		(0.217)		

⁽⁾ standard errors *** $n < 0.01 \cdot ** n < 0.1 \cdot * n < 0.5 \cdot † n < 1.0$

Findings

- The probability to get A grade is higher for girl (32.1 %) than boys (28.7 %).
- Boys (13.9 %) had statistically significantly lower chance to get final report card with honours than girls (34.9 %).
- The positive effect of the need for achievement in EFL is lower for boys and negative effect of need to avoid failure in EFL is higher than for girls.
- Boys have lower probability that they will wish to study at a grammer school than girls.



The probabilities

			Grade in EFL – 1		Final report card with honours		Aspiration to study at a grammer school	
	iNfA	iNtAF	Male	Female	Male	Female	Male	Female
1	2	2	11.2	6.5	11.4	13.3	9.8	13.9
2	2	3	3.2	2.9	4.8	10.8	3.6	9.4
3	2	4	0.7	1.2	1.7	8.7	1.1	6.0
4	3	2	28.7	32.1	26.6	39.6	14.4	28.3
5	3	3	11.7	19.9	13.9	34.9	5.8	21.0
6	3	4	3.4	11.1	6.1	30.5	1.9	14.9
7	4	2	53.7	71.9	48.3	72.1	20.2	47.6
8	4	3	29.5	58.0	30.8	67.8	9.0	38.5
9	4	4	12.2	43.1	16.8	63.3	3.2	30.0

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Discussion

- In accordance with previous studies (Khodadady & Khajavy, 2013; Pae, 2008), our findings confirm the relation between reported motivation in EFL and English achievement.
- Also, previous studies conclude that domain-specific instruments predict indicators of achievement in particular domains better than domain-general instruments (Michel et al., 2020).
- Our instrument measuring NfA and NtAF was successfully predicting not only English achievement, but also general learning achievement (i.e. receiving a final report card with honours) and aspiration to study at an elite upper secondary comprehensive school.
- Our further research will consider the scale usage differences among students by using the anchoring vignette method.

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