Foreign Language Classroom Anxiety Scale: Adaptation for the Czech University Setting

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- In my study, which constitutes a part of a study exploring students' attitude to classroom L2 communication, I focus on university students. For this purpose, I adapted one of the most used instruments measuring self-reported communication apprehension the *Foreign Language Classroom Anxiety Scale* (Horwitz et al., 1986).
- The validated instrument will enable the international comparison of data and thus contribute to the international research and insight into the interesting matter.



Foreign Language Classroom Anxiety

- concepts describing the state of mind when entering foreign language communication with fear:
 - communication apprehension,
 - communication anxiety,
 - communication shyness, or
 - communication reticence.
- Foreign language classroom anxiety (Horwitz, Horwitz, and Cope,1986)
- "...a distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process. "(p 128)

- Foreign language classroom anxiety (FLCA) can in certain situations deeply influence communication Yashima (2002).
- Factors studied in relation to FLCA e.g.
 - the fear of making a mistake in from of classmates (Tum, 2015; Yan & Horwitz, 2008),
 - teaching style and teachers' talk (Ballester, 2015),
 - the classroom's dynamics (Yashima et al., 2016) or
 - learning styles and strategies (Yan & Horwitz, 2008).
 - self-evaluation of one's communicative competence (Lee, 2018; Marzec-Stawiarska, 2015; Matsuda & Gobel, 2004, Yashima, 2002)

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Foreign Language Classroom Anxiety Scale (Horwitz et al., 1986)

- 33 items on a 6-point Likert scale measures 3 components:
- communication apprehension (11 items),
- test anxiety (7 items), and
- fear of negative evaluation in the foreign language classroom (15 items).
- The Czech adaptation based on the recommendations of the European Federation of Psychologists' Association (2013) included re-designing the instrument for university students and for the Czech conditions.
- The adaptation included independent parallel translations, multiple cultural and linguistic adaptations, multiple expert reviews, and cognitive interviews with relevant respondents.



Testing the validity and reliability of FLCAS

- Confirmatory factor analysis (CFA) in JASP version 0.14.1, item analysis, estimation of scale reliability, and Exploratory factor analysis (EFA) in STATISTICA 13.3
- The convenience sampling was conducted twice in the academic year 2018/2019 in language courses at the university level (ISECD 6).
- The questionnaire was distributed in a paper form in the second half of the semester by four teachers (n=252). After the elimination of incomplete questionnaires, the total sample consisted of 238 respondents. The minimum of 5 respondents for each item tested for FA purposes was observed and therefore the total of 238 respondents was sufficient to identify individual factors (Bryman & Cramer, 1990 as cited in Cohen, Manion, & Morrison, 2007).

The CFA did not completely comply with the original FLCAS

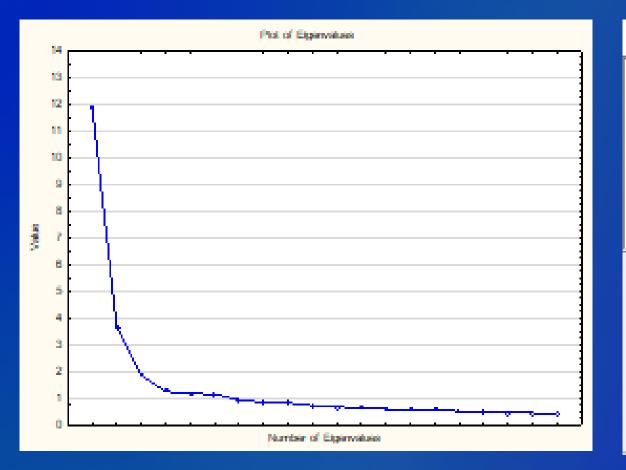
Chi-square test						
Model	X ²	df	р			
Baseline model	4804.099	528				
Factor model	1688.373	492	< .001			

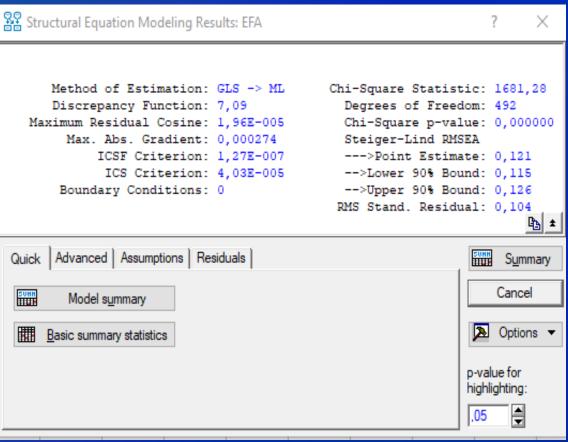
Fit indices				
Index	Value			
Comparative Fit Index (CFI)	.720			
RMSEA 90% CI lower bound	.096			
RMSEA 90% CI upper bound	.106			
RMSEA p-value	.000			
Standardized root mean square residual (SRMR)	.104			

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FLCAS: Factor loadings

Factor loadings							
					95% Confide	nce Interval	
<u>Factor</u>	<u>Indicator</u>	<u>Estimate</u>	Std. Error	<u>p</u>	<u>Lower</u>	<u>Upper</u>	Std. Est. (all)
<u>CA</u>	<u>V24</u>	<u>1.000</u>	0.000	_	<u>1.000</u>	<u>1.000</u>	<u>0.603</u>
_	<u>V27</u>	<u>1.234</u>	<u>0.135</u>	< .001	<u>0.970</u>	<u>1.498</u>	<u>0.719</u>
_	<u>V32</u>	<u>1.497</u>	<u>0.148</u>	< .001	<u>1.207</u>	<u>1.788</u>	<u>0.829</u>
_	<u>V37+</u>	0.423	<u>0.127</u>	< .001	<u>0.173</u>	<u>0.672</u>	<u>0.225</u>
_	<u>V38</u>	<u>0.959</u>	<u>0.125</u>	< .00 <u>1</u>	<u>0.714</u>	<u>1.205</u>	<u>0.568</u>
_	<u>V41+</u>	<u>0.466</u>	<u>0.121</u>	< .00 <u>1</u>	<u>0.229</u>	<u>0.702</u>	<u>0.263</u>
_	<u>V47</u>	<u>-0.774</u>	<u>0.103</u>	< .001	<u>-0.975</u>	<u>-0.572</u>	<u>-0.556</u>
	<u>V50</u>	<u>1.480</u>	<u>0.144</u>	< .001	<u>1.198</u>	<u>1.762</u>	<u>0.851</u>
_	<u>V52</u>	<u>1.214</u>	<u>0.135</u>	< .001	<u>0.949</u>	<u>1.479</u>	<u>0.700</u>
_	<u>V53</u>	0.799	<u>0.126</u>	< .00 <u>1</u>	<u>0.553</u>	<u>1.046</u>	<u>0.455</u>
_	<u>V55+</u>	0.511	<u>0.119</u>	< .00 <u>1</u>	0.278	<u>0.744</u>	<u>0.295</u>
<u>feedback</u>	<u>V25+</u>	1.000	0.000	-	1.000	1.000	0.179
_	<u>V30</u>	<u>3.190</u>	<u>1.194</u>	0.008	<u>0.850</u>	<u>5.531</u>	<u>0.641</u>
<u>_</u>	<u>V36</u>	<u>3.601</u>	<u>1.339</u>	0.007	<u>0.977</u>	<u>6.225</u>	<u>0.705</u>
_	<u>V42</u>	2.124	0.825	0.010	<u>0.507</u>	<u>3.741</u>	<u>0.454</u>
<u>_</u>	<u>V46</u>	<u>3.579</u>	<u>1.336</u>	0.007	<u>0.961</u>	<u>6.197</u>	<u>0.667</u>
<u>_</u>	<u>V54</u>	<u>3.929</u>	<u>1.457</u>	0.007	<u>1.073</u>	<u>6.785</u>	<u>0.735</u>
_	<u>V56</u>	<u>4.666</u>	<u>1.719</u>	0.007	<u>1.297</u>	<u>8.034</u>	<u>0.835</u>
<u>tests</u>	<u>V26</u>	1.000	0.000	_	<u>1.000</u>	1.000	0.818
_	<u>V28+</u>	0.202	0.083	<u>0.015</u>	<u>0.039</u>	<u>0.365</u>	<u>0.161</u>
_	<u>V29</u>	<u>0.157</u>	<u>0.069</u>	<u>0.023</u>	<u>0.022</u>	0.293	<u>0.150</u>
_	<u>V31</u>	0.202	0.078	<u>0.009</u>	<u>0.050</u>	<u>0.354</u>	<u>0.171</u>
<u>_</u>	<u>V33</u>	0.893	0.072	< .00 <u>1</u>	<u>0.752</u>	<u>1.034</u>	<u>0.712</u>
_	<u>V34+</u>	0.038	0.072	<u>0.601</u>	<u>-0.104</u>	<u>0.180</u>	<u>0.035</u>
_	<u>V35</u>	<u>0.903</u>	<u>0.066</u>	<u>< .001</u>	<u>0.774</u>	<u>1.032</u>	<u>0.767</u>
_	<u>V39</u>	<u>0.936</u>	<u>0.065</u>	<u>< .001</u>	0.808	<u>1.065</u>	<u>0.790</u>
<u>_</u>	<u>V40</u>	<u>0.671</u>	0.074	< .001	<u>0.526</u>	<u>0.817</u>	<u>0.553</u>
_	<u>V43</u>	1.005	0.066	< .00 <u>1</u>	<u>0.875</u>	<u>1.135</u>	<u>0.821</u>
<u>_</u>	<u>V44</u>	0.580	0.068	< .00 <u>1</u>	0.447	<u>0.712</u>	<u>0.528</u>
	<u>V45+</u>	0.266	0.073	< .00 <u>1</u>	0.123	0.410	<u>0.237</u>
<u>_</u>	<u>V48</u>	0.614	<u>0.061</u>	< .00 <u>1</u>	0.494	0.733	<u>0.603</u>
_	<u>V49</u>	0.954	0.065	< .00 <u>1</u>	0.826	<u>1.082</u>	<u>0.801</u>
	<u>V51+</u>	0.345	0.074	< .00 <u>1</u>	0.200	<u>0.489</u>	0.302





EFA: one-factor model should be considered as was suggested also by Tóth (2008, s. 70), who states that a foreign language anxiety is:

"...a unidimensional construct, a unique combination of different performance anxieties arising in the process of L2 learning and communication".

Conclusion

- Reduction of items (> .70)
- Different proportion of individual factors
- Internal consistency (.82) is comparable (Horwitz et at., 1986; Aida, 1994; Tóth, 2008).

Factors of FLCAS	Original scale	Adapted scale
Communication apprehension	11 (33 %)	3 (23 %)
Test anxiety	7 (21 %)	6 (46 %)
The fear of negative feedback	15(46 %)	4 (31 %)
	33	13

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