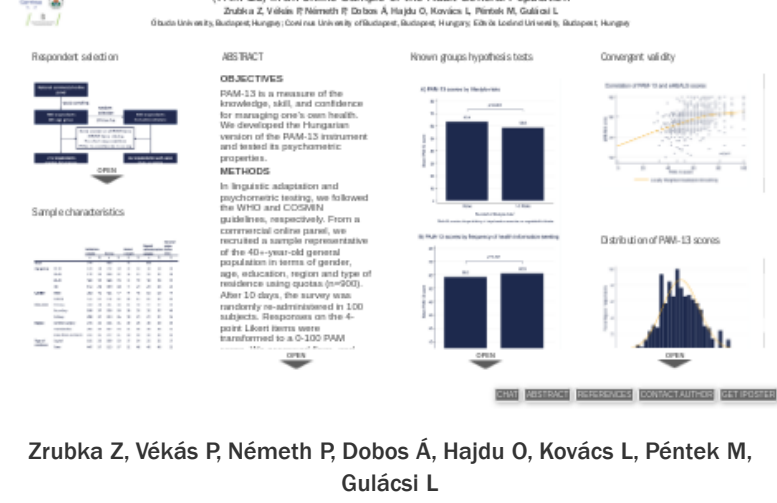
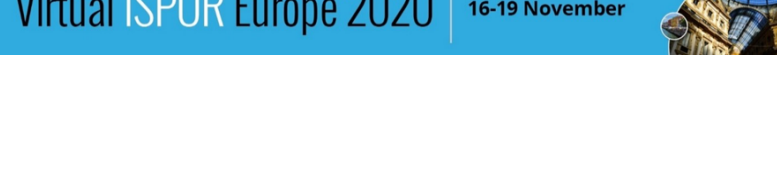


Psychometric Properties of the Hungarian Language Version of the 13-ITEM Patient Activation Measure (PAM-13) in an Online Sample of the Adult General Population

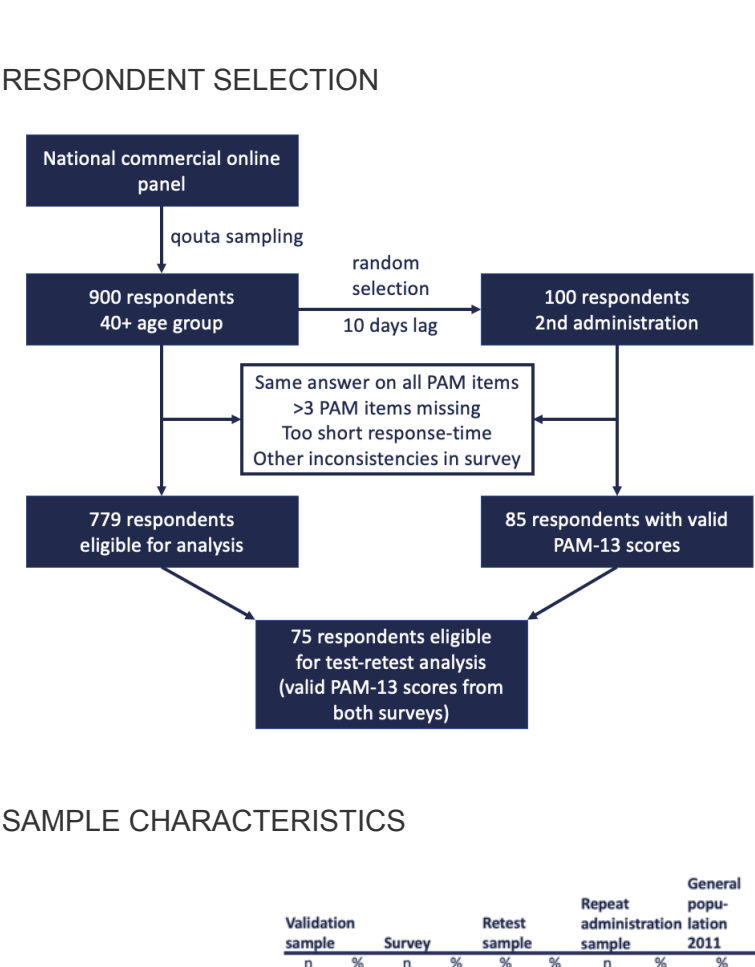


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RESPONDENT SELECTION



SAMPLE CHARACTERISTICS

		Validation sample	Survey	Retest sample	Repeat administration sample	General population 2011	
		n	%	n	%	n	%
Total		779	-	900	-	75	-
Age group	40-49	143	18	173	19	14	15
	50-59	177	23	200	22	14	21
	60-69	306	39	348	39	11	37
	70+	153	20	149	20	9	27
Gender	Male	358	46	425	47	44	49
	Female	421	54	475	53	56	51
Education	Primary	203	26	251	28	62	45
	Secondary	288	37	326	36	28	33
	Tertiary	288	37	323	36	10	21
Region	Central Hungary	276	35	316	35	29	30
	Transdanubia	262	34	307	34	31	36
	Great Plain and North	241	31	277	31	40	35
Type of residence	Capital	181	23	209	23	17	24
	Town	447	57	513	57	52	48
	Village	151	19	178	20	31	28

ABSTRACT

OBJECTIVES

PAM-13 is a measure of the knowledge, skill, and confidence for managing one's own health. We developed the Hungarian version of the PAM-13 instrument and tested its psychometric properties.

METHODS

In linguistic adaptation and psychometric testing, we followed the WHO and COSMIN guidelines, respectively. From a commercial online panel, we recruited a sample representative of the 40+ year-old general population in terms of gender, age, education, region and type of residence using quotas (n=900). After 10 days, the survey was randomly re-administered in 100 subjects. Responses on the 4-point Likert items were transformed to a 0-100 PAM score. We assessed floor- and ceiling effect, test-retest reliability via intraclass-correlation (ICC), factor structure via confirmatory factor-analysis (CFA), internal consistency (Cronbach-alpha), convergent- and discriminant validity via analysing correlation with the eHealth Literacy Scale (eHEALS) age, education and income; and known-groups validity assuming that respondents without major lifestyle-related risks or above-median probability of preventive behaviours (participation in cancer screening, cardio-metabolic monitoring and vaccinations according to national guidelines) or health-information-seeking have higher PAM scores.

RESULTS

Altogether 779 (86.6%) individuals were eligible for the analysis. Mean age was 60.4 (SD=10.6) years, 54.0% were female, 66.5% reported to have chronic disease. Mean PAM score was 59.8 (SD=11.5). No floor- or ceiling effect was detected. Test-retest reliability was assessed in 75 eligible individuals (ICC=0.63). CFA suggested single-factor structure with adequate sample (Kaiser-Meyer-Olkin statistic=0.84) and good fit (RMSEA=0.049). Internal consistency was good (Cronbach-alpha=0.77). PAM scores were positively correlated with eHEALS (r=0.41, p<0.001) but not with age (r=0.02, p=0.49), education (polychoric rho=0.00, p=0.99) or income (r=-0.03, p=0.42). PAM scores were higher in individuals without major lifestyle-related risks (p<0.001) and frequent health-information seekers (p=0.001) but were not associated with preventive behaviours (p=0.21).

CONCLUSIONS

The Hungarian language version of PAM-13 instrument demonstrated good structural and content validity and moderate test-retest reliability.

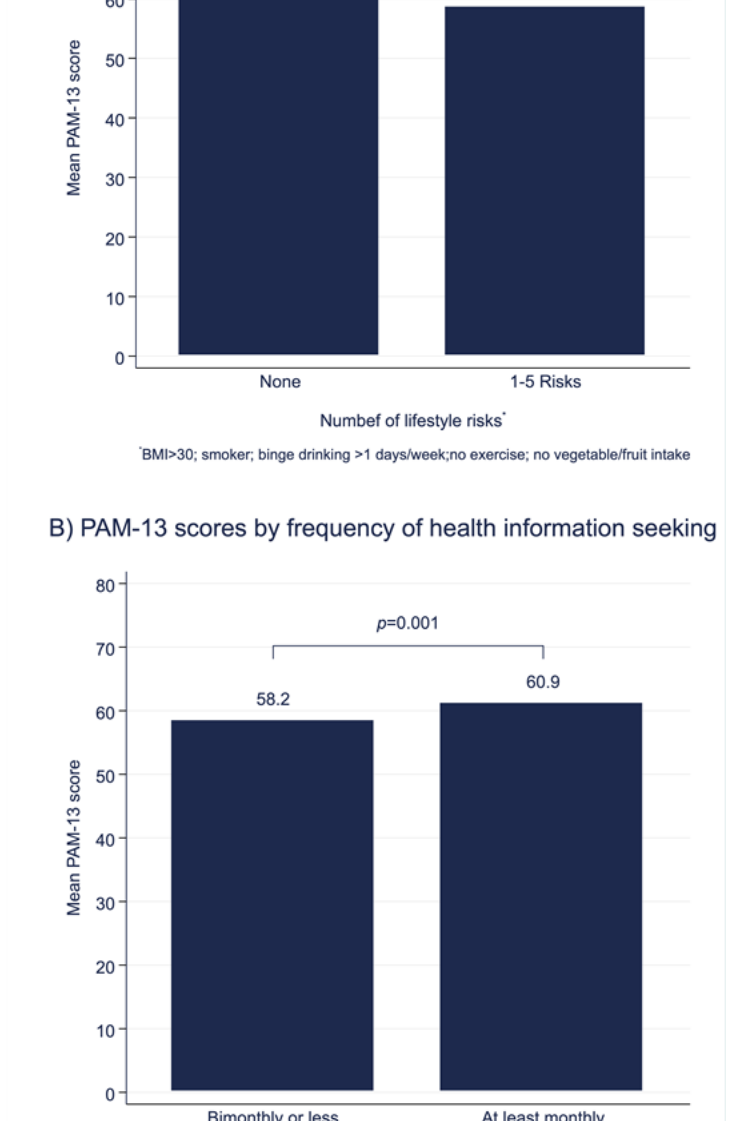
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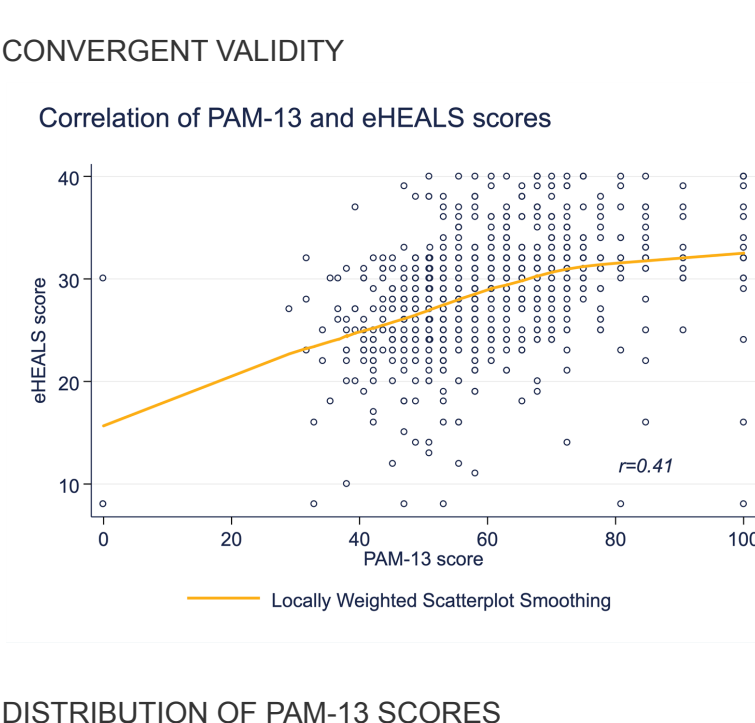
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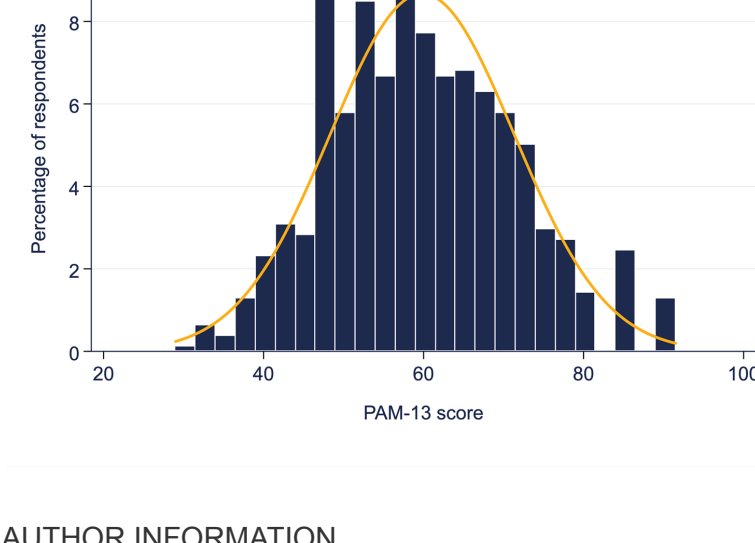
KNOWN GROUPS HYPOTHESIS TESTS



CONVERGENT VALIDITY



DISTRIBUTION OF PAM-13 SCORES



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ABSTRACT

OBJECTIVES : PAM-13 is a measure of the knowledge, skill, and confidence for managing one's own health. We developed the Hungarian version of the PAM-13 instrument and tested its psychometric properties. **METHODS** : In linguistic adaptation and psychometric testing, we followed the WHO and COSMIN guidelines, respectively. From a commercial online panel, we recruited a sample representative of the 40+ year-old general population in terms of gender, age, education, region and type of residence using quotas (n=900). After 10 days, the survey was randomly re-administered in 100 subjects. Responses on the 4-point Likert items were transformed to a 0-100 PAM score. We assessed floor- and ceiling effect, test-retest reliability via intraclass-correlation (ICC), factor structure via confirmatory factor-analysis (CFA), internal consistency (Cronbach-alpha), convergent- and discriminant validity via analysing correlation with the eHealth Literacy Scale (eHEALS) age, education and income; and known-groups validity assuming that respondents without major lifestyle-related risks or above-median probability of preventive behaviours (participation in cancer screening, cardio-metabolic monitoring and vaccinations according to national guidelines) or health-information-seeking have higher PAM scores. **RESULTS** : Altogether 779 (86.6%) individuals were eligible for the analysis. Mean age was 60.4 (SD=10.6) years, 54.0% were female, 66.5% reported to have chronic disease. Mean PAM score was 59.8 (SD=11.5). No floor- or ceiling effect was detected. Test-retest reliability was assessed in 75 eligible individuals (ICC=0.63). CFA suggested single-factor structure with adequate sample (Kaiser-Meyer-Olkin statistic=0.84) and good fit (RMSEA=0.049). Internal consistency was good (Cronbach-alpha=0.77). PAM scores were positively correlated with eHEALS (r=0.41, p<0.001) but not with age (r=0.02, p=0.49), education (polychoric rho=0.00, p=0.99) or income (r=-0.03, p=0.42). PAM scores were higher in individuals without major lifestyle-related risks (p<0.001) and frequent health-information seekers (p=0.001) but were not associated with preventive behaviours (p=0.21). **CONCLUSIONS** : The Hungarian language version of PAM-13 instrument demonstrated good structural and content validity and moderate test-retest reliability.

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