

The Utrecht Management of Identity Commitments Scale: Psychometric Properties on a Sample of Greek and Immigrant Students



Stefanos Mastrotheodoros^{1,2}, Vasilis Pavlopoulos¹, & Frosso Motti-Stefanidi¹
 1. University of Athens, Greece 2. Alexander S. Onassis Public Benefit Foundation



Introduction

Personal identity refers to the choices and decisions one makes regarding their personal goals and plans, preferences etc, in different life domains. It is considered one of the main developmental tasks of adolescence (Erikson, 1968). Different empirical approaches have been developed regarding how identity can better be operationalized.

Crocetti, Rubini, and Meeus (2008) developed a three stage model, where adolescents form initial commitments, which they then further explore, to result in reconsideration and further commitments. The Utrecht Management of Identity Commitments Scale (U-MICS) is a self-report instrument designed to capture these three processes.

The U-MICS has been shown to have good psychometric properties in different contexts and different populations (e.g. Italian, Crocetti, Schwartz, Fermani, & Meeus, 2010; Turkish, Morsunbul, Crocetti, Cok, & Meeus, 2014)

Analyses

- ✓ Parceling: Educational and Relational Identity 26 total items together. Three parcels per factor. Commitment (10 items), Exploration (10 items), Reconsideration of Commitments (6 items).
- ✓ Measurement Invariance: Benjamini-Hochberg Multiple Testing Procedure (Raykov, Markoulides, & Millsap, 2013).
- ✓ Bivariate Correlations.
- ✓ Regressions controlling for age and gender.
- ✓ Mplus (1998-2012), & SPSS (IBM, 2013).

Results

- ✓ Following the Multiple Testing Procedure we located two parameters that were not invariant: intercepts of parcels 6 (loading on In Depth Exploration) and 8 (loading on Reconsideration of Commitments) were left free to vary.
- ✓ This way the partial scalar model showed good fit and insignificant fit changes compared to previous models (see Table 1).
- ✓ Bivariate correlations and standardized beta coefficients were in theoretically predictable directions (see Table 2).

Aims of Study

- To check the measurement invariance of the U-MICS between Greek and immigrant students in Greek schools.
- To test the psychometric properties of the scale by means of internal consistency and convergent validity.

Method

Sample

- 711 adolescents
- 54.1% male
- 12.57 years ($SD=0.49$)
- 328 adolescents (46.1%) from Albania.
- 383 Greek students.
- 7th Grade students.
- Parental Consent: Only 2 parents (0.3%) declined.
- Item-level missingness: 1,5% to 4,6%.
- Full-Information Maximum Likelihood.

Measures

- ❖ Utrecht-Management of Identity Commitments Scale
 - ❖ (Crocetti, Rubini, & Meeus, 2008), α 's (Greek/Albanian): Commitment: .83/.83, In Depth Exploration: .79/.78, Reconsideration of Commitment: .66/.63
- ❖ Self-Efficacy Scale
 - ❖ (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), $\alpha = .90/.89$
- ❖ Strengths and Difficulties Questionnaire
 - ❖ (Goodman, 1997), α 's: Emotional Symptoms: .72/.71, Total Score: .76/.70.
- ❖ The Depression Scale
 - ❖ (Salokangas, Poutanen, & Stengård, 1995), α 's : .83/.79.
- ❖ Big Five
 - ❖ (Asendorpf & van Aken, 2003), α 's: Extraversion: .67/.58 Emotional Stability: .77/.66 Agreeableness: .72/.65 Conscientiousness: .72/.67 Openness: .70/.68
- ❖ Grade Point Average (mean of 5 main courses).

Table 2.

Standardized beta coefficients (and bivariate correlations) for adjustment and personality on identity dimensions, controlling for age and gender.

	Self-Efficacy		SDQ				Depression		GPA	
	Greek	Albanian	Greek	Albanian	Greek	Albanian	Greek	Albanian	Greek	Albanian
			Emotional Symptoms		Total Symptoms					
Commitment	.44*** (.43**)	.38*** (.38**)	-	-	-	-	-	-	-	-
Exploration	.48*** (.48**)	.38*** (.41**)	.10* (.15**)	.14** (.19**)	-	.14* (.15**)	.14** (.15**)	.12* (.14**)	-	-
Reconsideration	.26*** (.23**)	.18** (.16**)	-	.13* (.12*)	.16** (.17**)	.19*** (.19**)	.11* (.11*)	.17** (.15**)	-.15** (-.18**)	-.18*** (-.21**)
	Personality									
	Extraversion		Emotional Stability		Agreeableness		Conscientiousness		Openness to Experience	
	Greek	Albanian	Greek	Albanian	Greek	Albanian	Greek	Albanian	Greek	Albanian
Commitment	-	-	.21*** (.20**)	-	.19*** (.20**)	.15** (.16**)	.20*** (.20**)	.12* (.14*)	.14** (.14**)	.13* (.15**)
Exploration	-	-	.12* (.12*)	-	.11* (.12*)	-	.18*** (.18*)	-	.10* (.10*)	-
Reconsideration	-	-	-	-	-	-.12* (-.14*)	-	-.14** (-.16**)	-.11* (-.12*)	-

Conclusion

1. The U-MICS is a reliable and valid instrument to be used in Greek school context.
2. Metric invariance means the construct has the same meaning across groups.
3. Partial scalar invariance means that mean-scores can be compared only taking into account certain items that don't have equal intercepts.
4. Commitment showed an adaptive outline, whereas In Depth Exploration and Reconsideration seem to be rather maladaptive, at this early adolescent sample.

Table 1.

Measurement Invariance of the U-MICS in Greek and immigrant students.

	χ^2	df	p	χ^2/df	CFI	TLI	RMSEA [90% CI]	SRMR	BIC	AIC	ΔCFI	$\Delta RMSEA$
Model 1: Configural	120.753	46	0	2.62	.956	.931	.068 [.054-.083]	.041	26,643	26,558		
Model 2: Metric	137.515	55	0	2.50	.951	.936	.066 [.052-.079]	.076	26,628	26,556	.005	-.002
Model 3: Partial Scalar	152.899	62	0	2.47	.945	.937	.065 [.052-.078]	.098	26,620	26,557	.006	-.001

References

- Asendorpf, J. B., & Van Aken, M. A. G. (2003). Validity of Big Five Personality Judgments in Childhood: A 9 Year Longitudinal Study. *European Journal of Personality*, 17(1), 1-17. <http://doi.org/10.1002/per.460>
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67(3), 1206-1222. <http://doi.org/10.2307/1131888>
- Crocetti, E., Rubini, M., & Meeus, W. (2008). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence*, 31(2), 207-222. <http://doi.org/10.1016/j.adolescence.2007.09.002>
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581-6. <http://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Morsunbul, U., Crocetti, E., Cok, F., & Meeus, W. (2014). Brief report: The Utrecht-Management of Identity Commitments Scale (U-MICS): gender and age measurement invariance and convergent validity of the Turkish version. *Journal of Adolescence*, 37(6), 799-805. <http://doi.org/10.1016/j.adolescence.2014.05.008>
- Raykov, T., Markoulides, G. A., & Millsap, R. E. (2012). Factorial Invariance in Multiple Populations: A Multiple Testing Procedure. *Educational and Psychological Measurement*, 73(4), 713-727. <http://doi.org/10.1177/0013164412451978>
- Salokangas, R. K. R., Poutanen, O., & Stengård, E. (1995). Screening for depression in primary care: Development and validation of the Depression Scale, a screening instrument for depression. *Acta Psychiatrica Scandinavica*, 92(1), 10-16. <http://doi.org/10.1111/j.1600-0447.1995.tb09536.x>