

ISSN 2579-2504

ԱՐԴԻ ՀՈԳԵԲԱՆՈՒԹՅՈՒՆ
ԳԻՏԱԿԱՆ ՀԱՆԴԵՍ

MODERN PSYCHOLOGY
SCIENTIFIC BULLETIN

АКТУАЛЬНАЯ ПСИХОЛОГИЯ
НАУЧНЫЙ ВЕСТНИК

ԵՐԵՎԱՆ 2023, № 1 (12)

MEASUREMENT INVARIANCE ACROSS AGE GROUPS OF THE ARMENIAN INSTRUMENT OF CULTURAL LOGICS OF HONOR, DIGNITY AND FACE

Grigoryan A. K. (Yerevan State University, Yerevan, Armenia)

ani_grigoryan@ysu.am

Received: 22.03.2023

Revised: 15.05.2023

Accepted: 15.05.2023



This article is part of ongoing studies aimed at validating the measurement model of honor, face, and dignity in the Armenian language. Psychometric equivalence of cultural logics of honor, face, and dignity across age groups was assessed.

In total, 382 participants aged 18 to 47 (Mage=24.03, SD=5.721, 68.5% were women) were included in the analysis. Two age groups (youngsters, aged 18 to 25, n=273 and adults, aged 26 to 47, n=109) were defined for measurement invariance analysis. Multiple group confirmatory analyses were conducted within four model parameters: configural, metric, scalar, and residual invariance. Full invariance was achieved for the cultural logic of face across two age groups. Partial residual invariance was established for the cultural logic of honor. The cultural logic of dignity was partially invariant based on metric and scalar levels.

These findings provide a psychometric basis for the valid comparisons of the means of cultural logics of honor, dignity and face across age groups. This enriches our understanding of the Armenian instrument's performance and makes it a useful tool for social-psychological studies examining the prevalence of these cultural logics and their associations with other variables such as moral values and self-construal. Further analysis can focus on exploring the peculiarities of the non-invariant items.

Key words: *Cultural logics of honor, face and dignity, validation, measurement invariance, multiple group confirmatory analysis.*

ИНВАРИАНТНОСТЬ ИЗМЕРЕНИЯ КУЛЬТУР “ЧЕСТИ”, “ДОСТОИНСТВА” И “ЛИЦА” СРЕДИ ВОЗРАСТНЫХ ГРУПП ПО ОПРОСНИКУ НА АРМЯНСКОМ ЯЗЫКЕ

Григорян А. К. (Ереванский государственный университет, Ереван, Армения)

В статье представлены результаты продолжающихся исследований, направленных на проверку валидности модели измерения культур “честь”, в армянском языке. Оценивалась психометрическая эквивалентность культур “честь”, “достоинства” и “лица” в разных возрастных группах.

Выборка включала 382 участников в возрасте от 18 до 47 лет ($M_{\text{возраст}}=24.03$, $SD=5.721$; 68,5%-женщины). Для анализа инвариантности измерений были определены две возрастные группы (молодежь в возрасте от 18 до 25 лет, $n=273$ и взрослые, в возрасте от 26 до 47 лет, $n=109$). Многогрупповые подтверждающие факторные анализы были проведены по четырем параметрам модели: конфигурационной, метрической, скалярной и остаточной инвариантности. Была достигнута полная инвариантность для культуры “лица” в двух возрастных группах. Частичная остаточная инвариантность была установлена для культуры “честь”. Для культуры “достоинства” была выявлена частичная инвариантность на метрическом и скалярном уровнях.

Эти результаты обеспечивают психометрическую основу для достоверных сравнений средних значений культур чести, достоинства и лица в разных возрастных группах. Это обогащает наше понимание эффективности армянской версии инструмента и делает его полезным инструментом для социально-психологических исследований, изучающих распространенность этих культурных логик и их связи с другими переменными, такими как моральные ценности и конструалы. Дальнейший анализ может быть сосредоточен на изучении особенностей неинвариантных утверждений опросника.

Ключевые слова: «Культура достоинства», «культура гордости» и «культура лица», валидность, инвариантность измерений, многогрупповой подтверждающий факторный анализ.

«ՊԱՏՎԱՍԻՐՈՒԹՅԱՆ», «ԱՐԺԱՆԱՊԱՏՎՈՒԹՅԱՆ» «ԴԵՄՔԸ
ԶՎՈՐՑՆԵԼՈՒ» ՄՇՎՎՈՒԹԱՅԻՆ ԶԱՓՈՒՄՆԵՐԻ ՀԱՅԱԼԵԶՈՒ
ՀԱՐՑԱՐԱՆԻ ԶԱՓՄԱՆ ԻՆՎԱՐԻԱՆՏՈՒԹՅՈՒՆԸ՝ ԸՍՏ ՏԱՐԻՔԱՅԻՆ
ԽՄԲԵՐԻ

Գրիգորյան Ա. Կ. (Երևանի պետական համալսարան, Երևան, Հայաստան)

Հոդվածը «Պատվասիրության», «Արժանապատվության» և «Դեմքը չկորցնելու» մշակութային չափումների հայալեզու հարցարանի վալիդացիային նվիրված շարունակական ուսումնասիրությունների մաս է կազմում, որում գնահատվել է վերոնշյալ չափումների հոգեչափողական համարժեքությունն՝ ըստ տարիքային խմբերի:

Ընդհանուր առմամբ, վերլուծվել են 382 մասնակիցների տվյալներ (M տարիք=24.03, SD=5.721; 68,5%-կին): Չափման ինվարիանտության ստուգման համար ընտրանքը բաժանվել է երկու խմբերի (երիտասարդներ՝ 18-ից 25 տարեկան, n=273 և մեծահասակներ՝ 26-ից 47 տարեկան, n=109): Իրականացվել է բազմախմբային հաստատող գործոնային վերլուծություն՝ չորս մոդելների հիման վրա. կոնֆիգուրալ, մետրիկ, սկալյար և մնացորդային ինվարիանտություն: Ամբողջական ինվարիանտություն հաստատվել է «Դեմքը չկորցնելու» մշակութային չափման համար երկու տարիքային խմբերում: «Պատվասիրության» մշակութային չափումը մասնակիորեն ինվարիանտ է՝ ըստ մնացորդային մոդելի, իսկ «Արժանապատվության» մշակութային չափումը մասնակիորեն ինվարիանտ է՝ ըստ սկալյար և մետրիկ մոդելների:

Այս արդյունքները հոգեչափողական հիմք են ապահովում «Պատվասիրության», «Արժանապատվության» և «Դեմքը չկորցնելու» մշակութային չափումների արտահայտվածությունների համեմատական վերլուծությունների համար: Բացի այդ, վերջինս հարստացնում է մեր գիտելիքը հայալեզու հարցարանի արդյունավետության վերաբերյալ՝ դարձնելով այն օգտակար կիրառական գործիք սոցիալ-հոգեբանական տարբեր ուսումնասիրությունների համար, հետազոտելու արժեքային կողմնորոշումների տարածվածությունը կամ կապերը այլ գործոնների հետ (օրինակ՝ բարոյական արժեքներ, կոնստրուալներ և այլն): Հետագա ուսումնասիրությունները կարող են ուղղվել հարցարանի ոչ ինվարիանտ պնդումների առանձնահատկությունների ուսումնասիրմանը:

Հանգուցային բառեր՝ «Պատվասիրության», «Արժանապատվության» և «Դեմքը չկորցնելու» մշակութային չափումներ, վալիդություն, չափման ինվարիանտություն, բազմախմբային հաստատող գործոնային վերլուծություն:

Introduction

Recently, the cultural logics of honor, dignity, and face have been proposed as an alternative way of conceptualizing cultural differences, beyond the traditional framework of individualism and collectivism. This new approach is based on the view that cultural differences stem from the interactions between different types of people and different types of situations that are commonly encountered in a particular cultural context [13]. Cultural logics of honor, face, and dignity help to describe various social contexts related to concepts of personal worth [9].

Leung and Cohen [8] define the cultural logic of dignity as an inalienable value of a person that does not depend on the evaluations of other people. It is not granted by others and cannot be taken away. In dignity cultures, persons act based on their internal standards rather than situational impulses, and guilt is considered more important than shame. In contrast to the culture of dignity, honor requires the primacy of internal and external qualities. It is “the value of a person in his own eyes, but also in the eyes of his society” [p.3]. The culture of face, similar to honor, emphasizes the importance of others. However, these cultural logics differ in their origin: honor arises in competitive environments, while face is a characteristic of hierarchical system. In a system of face, a person can demand respect based on their position in the hierarchy. Shame is the punishment for a bad behavior in a system of face [p.4].

There have been many theoretical studies that explored and compared the cultural logics of honor, dignity, and face [2; 5]. Additionally, some empirical studies have attempted to measure one or more of these cultural logics [11]. However, despite these efforts, there is still a lack of a widely accepted and validated measurement model for this new cultural framework.

Since 2019, our works have been aimed at adapting the measurement model of cultural logics of honor, face, and dignity in the Armenian language. It is worth mentioning that our studies are among the few [14; 15] in the field of cultural psychology that have attempted to assess all three cultural logics together. Moreover, if the items for cultural logics were based on perceived norms (researchers obtained ratings of the cultural logics that were perceived to be prevalent in the participant’s local context) in those studies, our instrument was based on self-report according to which people evaluate different social situations related to the three logics from their personal position. An attempt to assess the validity and reliability of this measurement model is novel.

Our first study was a part of a larger cross-cultural collaboration [13], in which we explored the psychometric performance of the measurement of the cultural logics of honor, dignity and face [7]. Given that some of the items for

dignity had lower performance, we revised the Armenian version of the questionnaire and carried out two more studies [12; 6]. Based on the results of exploratory and confirmatory factor analyses, we proposed two-subscale structures for the cultural logics of honor and dignity: “self-orientated honor” and “family-orientated honor”; and “relation-orientated dignity” and “self-orientated dignity” confirming that the cultural logics of honor and dignity have two dimensions and the cultural logic of face has one dimension.

Current research

The main purpose of this study was to assess psychometric equivalence of cultural logics of honor, face and dignity across age groups in order to understand whether respondents from different age groups interpret a given measure in a conceptually similar or different manner.

Measurement invariance was tested in a structural equation modeling (SEM) framework implementing multigroup confirmatory factor analysis (MG-CFA). Bifactor models for cultural logics of honor and dignity and the unidimensional model for face were considered in the analysis based on our previous findings [6].

Method

Participants

In total, 382 participants aged 18 to 47 (mean age=24.03, SD=5.721, 68.5% were women) were included in the analysis. For the measurement invariance analysis, we defined two age groups: youngsters, aged 18 to 25, n=273 and adults, aged 26 to 47, n=109 taking into account the unique characteristics of young adulthood. Young people are particularly sensitive to value formation and changes due to social-psychological characteristics of this age, such as identity exploration, attempts at self-determination, and self-realization [1].

Participants were recruited individually using snowball sampling. Data collected through an online questionnaire.

Measure

A 30-item questionnaire was used: nine items quantified honor (3-items for “self-oriented honor” and 6 items for “family-oriented honor”); eight items quantified face and thirteen items dignity (5 items for “relation- oriented dignity” and 8 items for “self-oriented dignity”). Participants were asked to assess a series of difficult situations on 6-point Likert-type scales indicating how bad they would feel in each situation (ranging from 1 - "not bad at all" to 6 - "extremely bad").

Data analysis and results

Multiple group confirmatory factor analyses (MGCFA) were conducted via SPSS AMOS(v21) to evaluate measurement invariance for the cultural logics of honor, face, and dignity within four model parameters: configural, metric, scalar, and residual invariance. The models were evaluated in a hierarchical manner, starting with the assessment of configural invariance (Model 1), followed by metric invariance (Model 2), scalar invariance (Model 3), and residual invariance (Model 4).

Model 1 (unconstrained/configural invariance) assessed whether the same subsets of items were associated with the same constructs in each group. If there was configural non-invariance, instrument's factor structure could not be applied equally for each group. Model 2 (equivalence of the item factor loadings/metric invariance) determined the strength of the associations between items and their underlying constructs assessing whether each item contributed to the latent construct equally across groups. Any source of metric non-invariance was investigated within backward approach by sequentially releasing factor loading constraints and retesting the model until a partially invariant model was achieved. Model 3 (equivalence of item intercepts/scalar invariance) assessed whether all items indicated the same mean differences in the latent construct across two age groups. Any source of scalar non-invariance was investigated using backward approach by sequentially releasing item intercept constraints and retesting the model until a partially invariant model was achieved. Model 4 (residual invariance) was the final step in establishing measurement invariance, evaluating the equivalence of measurement errors between two age groups. Any source of residual non-invariance was investigated by sequentially releasing item residual constraints and retesting the model until a partially invariant model was achieved. [4; 10].

The model fit was assessed using multiple fit statistics [3] including chi-square (χ^2) significance test, root mean square error of approximation (RMSEA <0.08), the comparative fit index (CFI >0.9), and Tucker–Lewis index (TLI >0.9). Measurement invariance was evaluated using the CFI difference test ($\Delta\text{CFI}<0.01$) [4].

Figure 1 illustrates the graphical representation of the cultural logics that were utilized in the MGCFA, as shown in the CFA models.

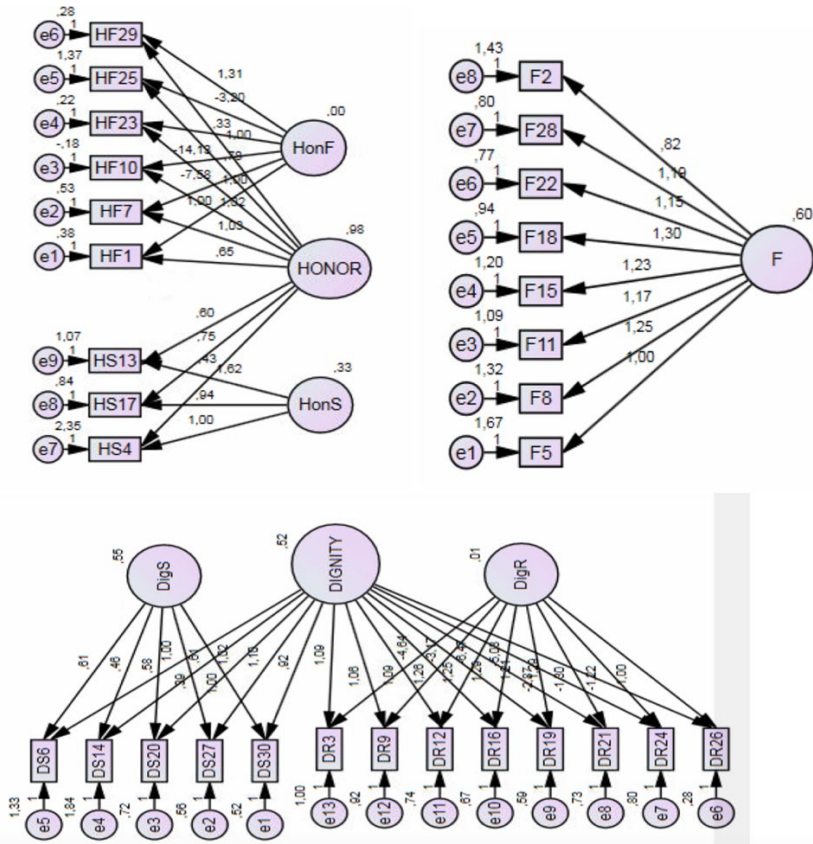


Figure 1. Graphical representation of the CFAs for the cultural logics of honor, dignity and face. Fit indices for the CFAs: Cultural logic of Honor ($\chi^2=73.806(17)^{***}$, CFI=0.970; TLI=0.940; RMSEA=0.09; SRMR=0.0406); cultural logic of Face ($\chi^2=94.702(20)^{***}$, CFI=0.926; TLI=0.896; RMSEA=0.09; SRMR=0.0467); Cultural logic of dignity ($\chi^2=141.052(52)^{***}$, CFI=0.961; TLI=0.942; RMSEA=0.067; SRMR=0.0342).

Note. HF= items for “family-oriented honor”, HS=items for “self-oriented honor”, HonF= “family-oriented honor” factor, HonS= “self-oriented honor” factor, F=items for Face, DR- items for “Relation-oriented dignity”, DS=items for “self-oriented dignity”, DigR=“relation-oriented dignity” factor and DigS= “self-oriented dignity” factor.

Table 1 shows the results of MGCFA for all cultural logics. Full invariance based on all four levels was achieved for the cultural logic of face across two age groups. Partial invariance was established for the cultural logic of honor with one item (“If my family had a bad reputation”) showing residual invariance across age groups. The cultural logic of dignity was partially invariant based on

metric and scalar levels. One item (“If I had failed to speak my mind”) presented different patterns of factor loadings across age groups, and another item (“If I had lied to others”) showed non-equivalence of intercepts between age groups.

Table 1

Fit indices for gender MGFA for the cultural logics of honor, dignity and face.

Invariance level	$\chi^2(df)$	CFI	TLI	RMSEA	ΔCFI
Cultural logic of honor					
Configural	82.460(36)***	0.975	0.949	0.058	-
Metric	111.120(51)***	0.967	0.954	0.056	0.008
Scalar	121.486(60)***	0.966	0.960	0.052	0.001
Partial residual ^a	142.511(68)***	0.959	0.957	0.054	0.009
Cultural logic of dignity					
Configural	218.015(104)***	0.950	0.924	0.054	-
Partial metric ^b	268.069(126)***	0.937	0.922	0.054	<0.001
Partial scalar ^c	321.729(138)***	0.919	0.908	0.059	0.002
Residual	329.646(151)***	0.921	0.918	0.056	0.002
Cultural logic of face					
Configural	130.149(40)***	0.908	0.871	0.077	-
Metric	142.526(47)***	0.903	0.884	0.073	0.005
Scalar	157.299(55)***	0.896	0.894	0.070	0.007
Residual	165.353(63)***	0.896	0.908	0.065	<0.001

^a Exception of the residuals associated with the item of “If my family had a bad reputation”.

^b Exception of the loadings associated with the item of “If I had failed to speak my mind”.

^c Exception of the intercepts associated with the item of “If I had lied to others”.

Discussion and conclusion

The present research aimed to assess the psychometric equivalence of the cultural logics of honor, dignity and face across two age groups (youngsters and adults). Full measurement invariance was achieved for the cultural logic of face, whereas partial invariance was found for the cultural logics of honor and dignity across age groups. These findings provide a psychometric basis for the valid comparisons of the means of cultural logics of honor, dignity and face across age groups. Further analysis can focus on exploring the peculiarities of the non-invariant items.

This analysis is part of ongoing studies aimed at validating the measurement model of honor, face and dignity. Our findings provide evidence that the Armenian version of the 30-item scale for measuring the three cultural logics has acceptable psychometric performance. This makes it a valuable tool for social-psychological studies investigating the prevalence of cultural logics

and their associations with other variables, such as moral values and self-construal.

In our studies, we tested measurement invariance across gender and age groups, but other demographics (e.g., social class, place of residence, etc.) can also be considered for a comprehensive validation of the instrument of cultural logics of honor, dignity and face.

References

1. Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press, 270 p.
2. Aslani, S., Ramirez-Marin, J., Semnani-Azad, Z., Brett, J. M., & Tinsley, C. (2013). Dignity, face, and honor cultures: Implications for negotiation and conflict management. In M. Olekalns & W. L. Adair (Eds.), *Handbook of research on negotiation*: 249–282. Northampton, MA: Edward Elgar Publishing.
3. Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: The Guilford Press.
4. Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233–255. https://doi.org/10.1207/S15328007SEM0902_5
5. Friedrichs, J. (2016). An intercultural theory of international relations: How self-worth underlies politics among nations. *International Theory*, 8(1): 63–96.
6. Grigoryan A., Khachatryan, N., Smith, P.B. (in review for IACCP 2022 Proceedings). Two dimensions of dignity and honor: From adaptation to the development of measurement in the Armenian language.
7. Khachatryan N., Grigoryan A. The experience of adaptation of cultural dimensions by examining Dignity, Honour and Face cultures // (Retrieved from <https://www.elibrary.ru/item.asp?id=43007810&pf=1> 13.02.2023).
8. Leung, A. K.-Y., & Cohen, D. (2011). Within- and between-culture variation: Individual differences and the cultural logics of honor, face, and dignity cultures. *Journal of Personality and Social Psychology*, 100(3), 507–526. <https://doi.org/10.1037/a0022151>
9. Maitner, A. T., DeCoster, J., Andersson, P. A., Eriksson, K., Sherbaji, S., Giner-Sorolla, R., ... Wu, J. (2022). Perceptions of Emotional Functionality: Similarities and Differences Among Dignity, Face, and

- Honor Cultures. *Journal of Cross-Cultural Psychology*, 53(3–4), 263–288. <https://doi.org/10.1177/00220221211065108>
10. Putnick, D. L., & Bornstein, M. H. (2016). Measurement Invariance Conventions and Reporting: The State of the Art and Future Directions for Psychological Research. *Developmental review* : DR, 41, 71–90. <https://doi.org/10.1016/j.dr.2016.06.004>
 11. Rodriguez Mosquera, P. M. R., Manstead, A. S., & Fischer, A. H. 2002. The role of honour concerns in emotional reactions to offences. *Cognition & Emotion*, 16(1): 143–163.
 12. Serobyan A., Grigoryan A., Khachatryan N. And'i dispozitional gc'er & social-mshakowt'ayin koghmnoroshowmner. hogechap'oghakan gorc'iqneri teghaynacowm: Gitamet'odakan d'er'nark. -Er., EPH hrat., 2021, 128 e'j.
 13. Smith, P. B., Easterbrook, M. J., Koc, Y., Lun, V. M.-C., Papastilianou, D., Grigoryan, L., ... Chobthamkit, P. (2021). Is an emphasis on dignity, honor and face more an attribute of individuals or of cultural groups? *Cross-Cultural Research*, 55(2–3), 95–126. <https://doi.org/10.1177/1069397120979571>
 14. Smith, P.B., Easterbrook, M.J., Blount, J., Koç, Y., Harb, C., Torres, C.V., ... Rizwan, M.A. (2017). Culture as perceived context: An exploration of the distinction between dignity, face and honor cultures. *Acta de Investigación Psicológica*, 7, 2568–2576.
 15. Yao, J., Ramirez-Marin, J.Y., Brett, J.M., Aslani, S., & Semnani-Azad, Z. (2017). A measurement model for dignity, face, and honor cultural norms. *Management and Organization Review*, 13, 713 - 738.

Information about the authors

1. Ani Grigoryan – PhD student, “Personality and Social context” research laboratory, Yerevan State University, Armenia, ani_grigoryan@ysu.am