ACROSS-CULTURAL ADAPTATION OF A PUBLIC HEALTH LEADERSHIP COMPETENCY FRAMEWORK IN ALBANIA

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INTRODUCTION

Currently, it is argued that there is a pressing need to develop strong leadership skills and competencies among public health professionals [1]. From this perspective, competencies in the area of public health leadership are considered as a vital component which should be enhanced among public health professionals operating at all levels in different countries [1].

As a matter of fact, so far, there have been established several competency frameworks in the area of public health leadership as well as medical leadership [2-5], which tend to include the main principles and concepts of leadership [6,7]. In addition, the frameworks which have been currently developed are considered useful for professional training purposes and continuous medical education in particular, and continuous professional development in general [6,7].

Despite the efforts devoted to the establishment of leadership competencies in the medical field and public health arena, current frameworks are considered rather generic and not sufficiently specific to adequately enhance and foster the educational curriculum and training models for public health professionals in Europe and beyond [1].

In order to fill this void, recent attempts were made to establish a specific public health leadership competency framework with the aim to considerably enhance and support the competency-based European public health leadership curriculum [1]. As reported previously, this framework was designed in the context of the Leaders for European Public Health (LEPHIE) Erasmus Multilateral Curriculum Development Project, supported by the European Union Lifelong Learning Programme [1].

The information about public health leadership in Albania and other transitional countries in Southeast Europe is scant. Notwithstanding the recent establishment of a national School of Public Health in Albania, the cur-

BACKGROUND: The aim of our study was to validate an international instrument addressing the leadership competency level of public health professionals in Albania, a post-communist country in the Western Balkans.

METHODS: A sample of 53 public health professionals operating at different levels were interviewed twice in May 2014 in Tirana (25 men and 28 women; median age: 44 years, inter-quartile range: 35-55 years). A structured questionnaire was administered [and subsequently re-administered after two weeks (test-retest)] to all participants aiming at self-assessing the current level of leadership competencies and the required/desirable level of leadership competencies for their current job position. The questionnaire included 52 items organized into 8 subscales/domains. Answers for each item of the tool ranged from 1 ("minimal competency level") to 5 ("maximal competency level"). An overall summary score (range: 52-260) and a subscale summary score for each domain were calculated for the test and the retest procedures. Cronbach's alpha was used to assess the internal consistency for both the test and the retest procedures, whereas Spearman's rho was employed to assess the test-retest reliability of the instrument.

RESULTS: Cronbach's alpha was 0.89 for the test and 0.86 for the retest procedure. Overall, Spearman's rho was 0.97 (P<0.001). The overall summary score for the 52 items of the instrument was 136.1±12.9 for the test and 136.4±11.9 for the retest. Essentially, all the subscale summary scores were similar for the test and the retest procedures.

CONCLUSION: We validated in the Albanian context a recently established international framework which measures the level of the current leadership competencies possessed by public health professionals, as well as the required level of leadership competencies for their current job position. Future research should apply this instrument to a large representative sample of public health professionals at different levels and in different regions of Albania.

Keywords: competency, cross-cultural adaptation, framework, leadership, validation.

riculum of both undergraduate and postgraduate public health students is deemed inappropriate with regard to fostering of strong leadership skills for future health care professionals.

In this context, the aim of our study was to validate an international instrument addressing the leadership competency level of public health professionals in Albania, a post-communist country in the Western Balkans currently undergoing a difficult period of political and socioeconomic transition associated with negative health effects [8].

METHODS

A cross-sectional study was conducted in Tirana in May 2014 including a sample of 53 public health professionals operating at different levels of the health care system (25 men and 28 women; median age: 44 years, inter-quartile range: 35-55 years).

A structured questionnaire was administered and subsequently re-administered after two weeks (test-retest) to all participants aiming at self-assessing the

current level of leadership competencies and the required/ desirable level of leadership competencies for their current job position.

The questionnaire consisted of 52 items grouped into the following eight competency domains (subscales) [1]:

- Systems thinking
- Political leadership
- Collaborative leadership: building and leading interdisciplinary teams
- Leadership and communication
- Leading change
- Emotional intelligence and leadership in team-based organizations
- Leadership, organizational learning and development
- Ethics and professionalism

Each domain (subscale) corresponds to one educational session within public health leadership curriculum [1,9].

Answers for each item of each subscale of the instrument ranged from 1 ("minimal competency level") to 5 ("maximal competency level"). An overall summary score (range: 52-260) and a subscale summary score for each domain were calculated for the test and the retest procedures.

In addition, the questionnaire included demographic data (age and sex of participants), working institution, as well as current job position and duration (years of working experience) in the current job position.

The original English version of the leadership competency questionnaire was translated into the Albanian language by experts following the standard methods of translation and cross-cultural adaptation of the questionnaires [10]. Authoritative experts have demonstrated that the process of cross-cultural adaptation is essential in order to provide a version of the measuring instrument which is conceptually as close as possible to the original questionnaire [10], considering though the perspective and the context of the Albanian public health professionals. As a matter of fact, the procedures of translation and back-translation of the questionnaire did not reveal any changes from the original (English) version of the instrument, except the contextualization of background information relevant and applicable in the Albanian context (e.g. institutional structure, or job positions).

Cronbach's alpha was used to assess the internal consistency for both the test and the retest procedures [11]. On the other hand, Spearman's rho was employed to assess the test-retest reliability of the instrument. Furthermore, Mann-Whitney U-test was used to compare mean values of the overall score of the instrument among male and female participants and individuals holding different job positions

– a procedure which enables the assessment of construct validity of the measuring instrument, as reported from similar validation studies [12].

RESULTS

In this sample of 53 public health professionals in Tirana (25 men and 28 women), the overall mean age was 44.4±10.1 years. About 57% (N=30) of participants included in this validation study were working in high-level positions compared with 43% (N=23) who were operating in mid-level positions. Overall, median duration of work experience in the current job position was 16 years (interquartile range: 10-21 years) [data not shown in the tables].

The internal consistency of the whole scale (52 items) was Cronbach's alpha=0.89 for the test and Cronbach's alpha=0.86 for the retest procedure (Table 1). For both the test and the retest procedures, Cronbach's alpha was the lowest for the "leadership, organizational learning and development" subscale (0.62 for the test and 0.61 for the retest) and the highest for the "political leadership" domain (0.94 and 0.92, respectively).

Overall, the instrument exhibited a very good stability over time: Spearman's rho=0.97, P<0.001 (Table 2). Essentially, the test-retest reliability was high for all the subscales ranging from rho=0.90 (for the "ethics and professionalism" domain) to rho=0.97 (for the "systems thinking" and "political leadership" subscales).

Mean value of the overall summary score for the 52 items of the instrument was 136.1±12.9 for the test and 136.4±11.9 for the retest procedure (Table 3). In general, mean values of all the subscale summary scores were similar for the test and the retest procedures. Mean value of the overall summary score of the tool was comparable among males and females for both the test (135.3±12.2 vs. 136.7±13.7, respectively) and the retest procedures (135.6±11.2 vs. 137.0±12.7, respectively). On the other hand, mean value of the overall summary score of the instrument was slightly higher among participants working in high-level positions compared with their counterparts working in mid-level positions (for the test procedure: 137.3±10.1 vs. 134.5±16.0) [data not shown in the tables].

DISCUSSION

This validation exercise (alias cross-cultural adaptation), based on a newly established international instrument, was conducted in a sample of 53 public health professionals in Tirana working in various leadership positions and different levels of care.

On the whole, this international tool showed a good internal consistency for both the test and the retest procedures in this sample of Albanian public health professionals. However, Cronbach's alpha was somehow low for the "leadership, organizational learning and

Table 1. Internal consistency of the instrument for the test and the retest procedures in a sample of public health professionals in Tirana (N=53)

Domain (subscale)	Cronbach's alpha	
	Test	Retest
Overall scale *(52 items)*	0.89	0.86
Systems thinking *(7 items)*	0.86	0.84
Political leadership *(8 items)*	0.94	0.92
Collaborative leadership: building and leading interdisciplinary teams *(5 items)*	0.86	0.80
Leadership and communication *(7 items)*	0.64	0.62
Leading change *(6 items)*	0.69	0.64
Emotional intelligence and leadership in team-based organizations *(6 items)*	0.87	0.83
Leadership, organizational learning and development *(7 items)*	0.62	0.61
Ethics and professionalism *(6 items)*	0.64	0.62

Table 2. Stability over time (test-retest reliability) for each domain (subscale) of the leadership competency instrument

Domain (subscale)	Spearman's rho	P-value
Overall scale *(52 items)*	0.97	<0.001
Systems thinking *(7 items)*	0.97	<0.001
Political leadership *(8 items)*	0.97	<0.001
Collaborative leadership: building and leading interdisciplinary teams *(5 items)*	0.95	<0.001
Leadership and communication *(7 items)*	0.95	<0.001
Leading change *(6 items)*	0.95	<0.001
Emotional intelligence and leadership in team-based organizations *(6 items)*	0.95	<0.001
Leadership, organizational learning and development *(7 items)*	0.91	<0.001
Ethics and professionalism *(6 items)*	0.90	<0.001

Table 3. Summary score of each domain (subscale) of the leadership competency instrument for the test and retest procedures

Domain (subscale)	Mean values ± standard deviations	
	Test	Retest
Overall scale *(score range: 52-260)*	136.1±12.9	136.4±11.9
Systems thinking *(score range: 7-35)*	20.6±3.4	20.5±3.2
Political leadership *(score range: 8-40)*	19.7±4.9	19.8±4.7
Collaborative leadership: building and leading interdisciplinary teams *(score range: 5-25)*	11.4±2.6	11.5±2.4
Leadership and communication *(score range: 7-35)*	16.4±2.3	16.6±2.3
Leading change *(score range: 6-30)*	16.8±2.4	16.7±2.4
Emotional intelligence and leadership in team-based organizations *(score range: 6-30)*	17.7±2.9	17.5±2.9
Leadership, organizational learning and development *(score range: 7-35)*	16.6±2.3	17.0±2.3
Ethics and professionalism *(score range: 6-30)*	16.8±2.4	16.6±2.5

development", "leadership and communication", "ethics and professionalism" and "leading change" subscales (range of Cronbach's alpha: 0.61-0.69). Conversely, the internal consistency was quite high for the other domains of the instrument (range of Cronbach's alpha: 0.80-0.94).

On the other hand, the questionnaire exhibited very high test-retest reliability for the overall scale and for each of the subscales, a finding which points to a rather satisfactory stability over time of this measuring instrument.

On a different issue, inclusion of public health professionals pertinent to various leadership positions in the process of cross-cultural adaptation enabled the assessment of potential differences regarding specific dimensions of the leadership competency framework. Hence, the level of self-perceived leadership competencies was somehow higher among participants working in high-level positions compared with individuals working in mid-level positions.

As noted above, the public health leadership competency-based curriculum was developed in the framework of the LEPHIE project [1]. As argued elsewhere, the description of the competencies supports the curriculum design and it can be used as a self-assessment instrument for students and public health professionals, helping them to reflect and identify gaps in their knowledge, skills and competencies [1].

In conclusion, we validated in the Albanian context a recently established international framework which measures the level of the current leadership competencies possessed by public health professionals in Tirana, as well as the required/desirable level of leadership competencies for their current job position. After the initial validation (pretesting) of the leadership competency framework in this sample of public health professionals in Tirana, the instrument will be administered to a large nationwide representative sample of public health professionals in Albania. Eventually, this cross-culturally adapted measuring tool will assess the level of the current leadership competencies possessed by public health professionals in Albania, as well as the required/desirable level of leadership competencies for their current job position. This will help to recognize potential gaps in the level of existing leadership competencies and the required leadership competencies, which will ultimately inform the public health curricula about necessary content adjustments.

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References

1. CZABANOWSKA K, Smith T., KÖNINGS, K.D., SUMSKAS, L., OTOK, R. BJEGOVIC-MIKANOVIC, V., BRAND, H.,- *In search for a public health leadership competency framework to support leadership curriculum-a consensus study.* Eur J Public Health; [Epub ahead of print]. DOI: 10.1093/eurpub/ckt158, 2013 Oct 11;
2. *Maintenance of Certification Competencies and Criteria.* American Board of Medical Specialties, (USA). Available at: http://www.abms.org/Maintenance_of_ Certification/ MOC_competencies.aspx (accessed: 22 May 2014);
3. Accreditation Council on Graduate Medical Education. General Competences for Residents. Chicago, IL: *Accreditation Council on Graduate Medical Education*; 2007;
4. GREINER, A.C., KNEBEL, E., editors.-*Health Professions Education: A Bridge to Quality*. Washington, DC: Institute of Medicine; 2003;
5. Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century. Washington*, DC: The National Academies Press; 2001;
6. *Tier 1, Tier 2 and Tier 3 Core Competencies for Public Health Professionals.* Washington, DC: Council on Linkages Between Academia and Public Health Practice, Public Health Foundation; 2010;
7. *ASPHER. Provisional Lists of Public Health Core Competencies*. Brussels: Association of Schools of Public Health in the European Region; 2008;
8. BURAZERI, G., KARK, J.D. -*Hostility and acute coronary syndrome in a transitional post-communist Muslim country: a population-based study in Tirana, Albania.* Eur J Public Health 2011; 21:469-76, 2011;
9. CZABANOWSKA, K., SMITH, T., De JONG, N., et al.-L*eadership for Public Health in Europe*. Nominal Plan. Maastricht: Maastricht University; 2013;
10. SPERBER, A.D., DEVELLIS, F.R., BOEHLECKE, B. -*Cross-cultural translation: methodology and validation.* J Cross Cult Psychol;25:501-24.
11. CRONBACH, L.J.-*Coefficients and the internal structure of tests*. Psicometrica 1951;16:297-334, 1994;
12. DeVON, H.A., BLOCK, M.E., MOYLE-WRIGHT, P., et al.-*A psychometric toolbox for testing validity and reliability*. J Nurs Scholars;39:155-64, 2007.