

## Spanish Version of the Death Attitude Profile-Revised (DAP-R): A Study on Nursing Students

Enrique Sáez<sup>1\*</sup>, Pilar Barreto<sup>2</sup>, Pilar Medrano<sup>1</sup>, Marián Pérez<sup>2</sup>, Amparo Oliver<sup>2</sup> and Laura Galiana<sup>2</sup>

<sup>1</sup>Catholic University of Valencia, Carrer de Quevedo, 2, 46001, Valencia, Spain.

<sup>2</sup>University of Valencia, Av. Blasco Ibañez, 21, 46010, Valencia, Spain.

### \*Correspondence:

Enrique Sáez, MA, Catholic University of Valencia, Carrer de Quevedo, 2, 46001, Valencia (Spain), Telephone: +34 963637412.

**Received:** 15 November 2020; **Accepted:** 08 December 2020

**Citation:** Sáez EJ, Barreto P, Medrano P, et al. Spanish Version of the Death Attitude Profile-Revised (DAP-R): A Study on Nursing Students. *Nur Primary Care*. 2020; 4(5): 1-6.

### ABSTRACT

*The aim of current research is to present the Spanish version of the DAP-R, using confirmatory techniques. The sample was composed of 286 nursing undergraduate students. The confirmatory factor analysis tested offered an appropriate overall fit, internal consistency of the subscales was adequate, and most of the correlations among the DAP-R and the CL-FODS dimensions were statistically significant and, in the direction, expected. Conclusions pointed out: (1) The appropriate psychometric properties of the DAP-R when used in Spanish nurses' sample, and (2) the importance of three concrete death attitudes for professionals' well-being: fear of death, escape acceptance and neutral acceptance.*

### Keywords

Assessment, Death and dying, Nurse education, Quality of life.

### Introduction

Health professionals are confronted by death on a daily basis, which can have potential harmful effects for their well-being [1]. Deffner and Bell [2] and Burguete [3] or Sáez [4], for instance, found that nurses have difficulties when facing the dying patient, experiencing feelings of anxiety, impotence, and sadness. Sinclair [5] has pointed out how the absence of abilities to integrate death and the contact with the end-of-life can led to professionals' stress. More recently, Melvin [6] has shown that having to work with patients' suffering increases professionals' stress, burnout, and compassion fatigue. In this context, many researchers have claimed for the attention to those abilities that help health care professionals' well-being, which will also increase their efficacy as healing agents [7,8]. Coping with death and, thereby, attitudes towards death are, without doubt, a key element on this study.

Several investigations have studied the role that professionals' attitudes towards death play on their quality of life. Cevick and Kav

[9], in a study on Turkish nurses, have found a positive association between negative attitudes towards death and a fear and avoidance of death. Sansó et al. [7], for instance, have shown how coping effectively with death can reduced compassion fatigue and burnout and enhance professionals' satisfaction with compassion. In the specific context of nursing training, there is also an important bulk of research pointing to the need of forming in death attitudes so that to promote nurses' work abilities, their well-being, and even the progress in their studies [10,11]. Attitudes towards death are, then, a key point when nurses' education is attended.

Death anxiety, death attitudes, or coping with death, are such interrelated constructs that along literature have led to a wide range of measurement instruments. Among the instruments developed for their assessment, we can distinguish between the unidimensional and the multidimensional ones [12]. Examples of unidimensional measurement instruments are the Death Anxiety Scale (DAS) [13] or the Coping with Death Scale (CDS) [14,15]. The DAS measures death anxiety, and consists of 15 yes/no-questions. Its Spanish version has shown adequate psychometric properties both in general [16] and HIV populations [17]. The CDS was developed for the assessment of professionals' competence for

---

copied with death, specifically after education programs [14,18]. It is composed of 30 items assessing how health care professionals address different situations related with patients' death and process of dying. Its Spanish version has shown appropriate psychometric properties when used in palliative care professionals [19].

From the multidimensional approach, some of the well-known instruments are the Collett-Lester Fear of Death Scale (CL-FODS) [20], the Death Anxiety Inventory (DAI) [21,22], or the Death Attitude Profile-Revised (DAP-R) [23]. The CL-FODS assesses four dimensions of the attitudes towards death, distinguishing between death and the process, related to oneself or to others. This scale has several versions, of 36 [20], 32 [24,25] and 28 items [26]. It has been adapted to Spanish via exploratory factor analysis [27], showing appropriate psychometric properties. The DAI is a shorter scale, formed by 17 items, developed to assess four dimensions of anxiety towards death: death acceptance, externally generated death anxiety, death finality, and thoughts about death. This scale was originally developed in Spanish, and has been used in Arabic participants [28]. The DAP-R is a multidimensional measure of death acceptance and death avoidance, together with fear of death. This instrument is composed of 32 items, and assesses five attitudes towards death: fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance. Although fear of death and death anxiety have been interchangeably used along literature, fear of death is defined as the conscious and specific concerns about the loss of self and fear of suffering and pain [23]. Death avoidance does also imply a negative attitude toward death but implying a component of defense mechanism (avoid thinking or talking about death). The three additional dimensions that compose the scale are derived from a three-component model of death acceptance. This model comprises: neutral acceptance, an attitude implying belief in a happy afterlife [29]; approach acceptance, in which death is considered as an integral part of life [23]; and escape acceptance, a welcoming attitude towards death, derived from a perception of life as full of pain and misery. The DAP-R has been translated to several languages, for example, Chinese [30], Greek [31], or Spanish [32], and has been recently used in the nursing literature [1,33]. However, as far as we know, no Spanish studies on its psychometric properties have been developed.

In sum, many studies have found a close relation between health care workers' well-being and quality of life and their attitudes towards death [5-8], and, specifically, between nurses' well-being and these attitudes [2,10,11]. Within this research corpus, several instruments have been used to study professionals' death attitudes, and although most of them have been translated into Spanish, the studies on their properties are mostly done via exploratory analyses. The DAP-R, however, has not been, until yet, presented in its Spanish version. At this point, the aim of this study is to present the Spanish version of the DAP-R, using confirmatory techniques, the recommended procedure for studying the factorial validity of instruments with a priori structures.

## Method

### Design and Data Collection

Data come from a cross-sectional survey of undergraduate nursing students from the Catholic University of Valencia (Spain). The sampling scheme was incidental. The questionnaires were distributed during classes. Students volunteered to participate. The fulfillment of the survey took approximately 20 minutes. The students self-completed the survey, with the assistance of researchers, who only gave standard instructions. The sample was composed of 286 students. Mean age was 21.38 ( $SD = 5.79$ ). 73.30% were women.

Together with socio-demographic data, the following scales were used:

- a) The Death Attitude Profile-Revised (DAP-R; Wong et al., 1994) [23]. The Spanish version of the scale used was the one developed by Neimeyer [32]. The scale psychometric properties along the Results section.
- b) The Fear of Death Scale (CL-FODS; Collett & Lester, 1969) [20], in its Spanish version [27]. The CL-FODS assesses four dimensions of the attitudes towards death: death of one-self, death of others, one-self's process of death, and others' process of death. Alpha in this sample was .91.
- c) The Brief Resilience Coping Scale [34], in its Spanish version [35]. This is a four-item scale, with each item is rated on a five-point scale, from 1 (totally agree) to 5 (totally disagree). Higher scores indicate greater resilience. Cronbach's alpha was .71.
- d) The Ryff's Psychological Well-being scales [36], in its Spanish version [37]. These scales measure six well-being interdependent dimensions: self-acceptance, personal relationships with others, autonomy, environmental mastery, personal growth, and purpose in life (believing one's life is meaningful) [36]. The instruments have a 6-point Likert scale, from 1 ("totally disagree") to 6 ("totally agree"). Alpha was .90.

### Data analyses

In order to study the factorial structure of the Spanish version of the DAP-R, a confirmatory factor analysis was estimated. As in the structure proposed by the original authors of the scale [23], an *a priori* structure of five interrelated latent factors was tested, including: fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance. In order to assess model's fit, several fit criteria were used [38]: (a) chi-square statistic; (b) the comparative fit index of more than .90 (and, ideally, greater than .95); and (c) the root mean squared error of approximation (RMSEA) of .05 or less indicating appropriate fit.

Additionally, analyses included internal consistency estimates for the scale (Cronbach's alpha, Rho, and GLB). Although, alpha is the most used index, with estimations of .70 or highest considered as moderate, and estimations of .80 or highest interpreted as high [39], it is also influenced by the scale's length and only appropriate for tau-equivalent items, being a lower bound for true reliability [40]. Thus, indices offered in the structural equation model framework, such as Rho and GLB, were also estimated.

Discriminant validity was obtained relating the dimensions of the DAP-R with the four scales of the Collett-Lester Fear of Death Scale. Additionally, criterion-related validity was studied with the correlations between the DAP-R and other related constructs: well-being and resilience.

### Results

The confirmatory factor analysis tested for the Spanish version of the DAP-R offered an appropriate overall fit:  $\chi^2(454) = 864.888$  ( $p < .001$ ), CFI = .944, RMSEA = .057 (90% confidence interval = .051-.062). When studying the analytical fit, results were also adequate, with all factor loadings statistically significant ( $p <$

.001), and ranging from .42 (item 2, “The prospects of my own death arouses anxiety in me”) to .87 (item 7, “I am disturbed by the finality of death”) for fear of death; from .66 (items 12, “I always try not to think about death”, and 26, “I try to have nothing to do with the subject of death”) to .82 for death avoidance; from .40 (item 30, “Death is neither good nor bad”) to .83 (item 14, “Death is a natural aspect of life”) for neutral acceptance; from .49 (item 22, “I look forward to a reunion with my loved ones after I die”) to .91 (item 16, “Death brings a promise of a new and glorious life”) for approach acceptance; and from .47 (item 5, “Death will bring an end to all my troubles”) to .78 (item 23, “I view death as a relief from earthly suffering”) for escape acceptance (Figure 1).

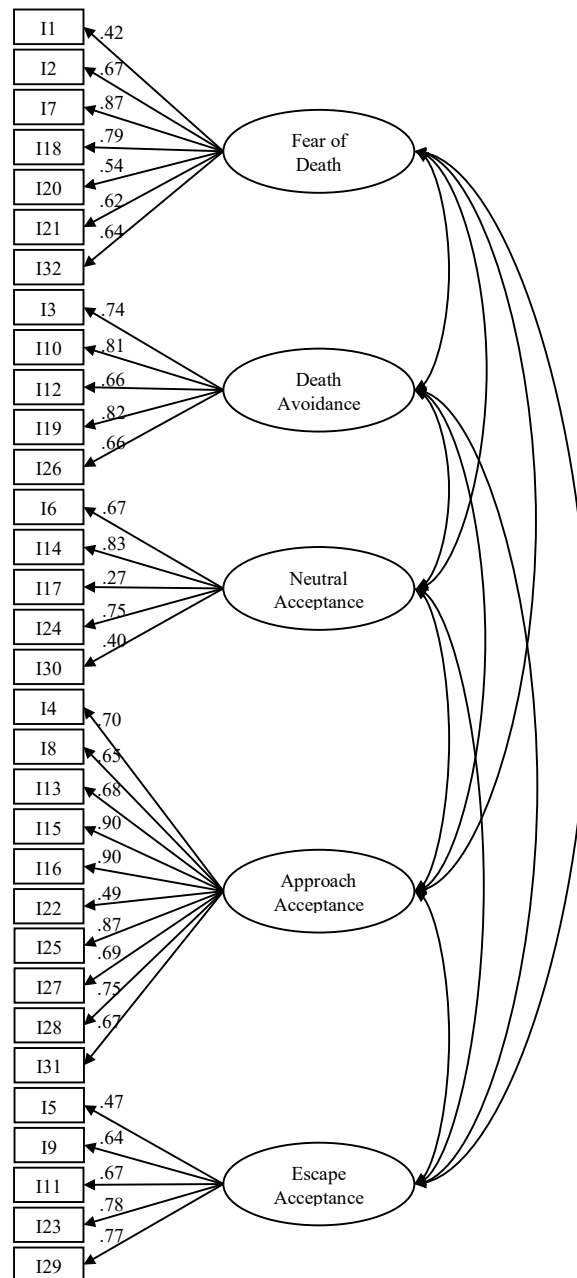


Figure 1: Factorial loadings of the CFA estimated for the DAP-R.

Notes: All factor loadings were statistically significant ( $p < .010$ ). For the sake of clarity, standard errors are not shown. Correlations among factors can be consulted in Table 1.

As regards the correlations among the five dimensions, fear of death and death avoidance were positive and significantly related between them, and negative and significantly related with neutral acceptance. Approach acceptance and escape acceptance shown a positive, statistically significant correlation. A detail of these relations can be consulted in Table 1.

Internal consistency of the subscales was adequate, with values of alpha of .817, .857, .712, .921, and .802; values of G1b of .855, .874, .798, .947, and .849; and values of Rho of .821, .859, .733, .923, and .804, for fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance, respectively.

As regards the correlations among the DAP-R and the CL-FODS dimensions, positive, and statistically significant relations were found between fear of death and death avoidance and the CL-FODS. That is, the higher fear of death and death avoidance the participants had, the more they feared the death of self, the dying of self, the death of others, and the dying of others. On the contrary, higher scores on neutral acceptance were negatively and statistically significant related to the CL-FODS dimensions. Approach and escape acceptance were not related to the CL-FODS, except for two positive relations found between approach acceptance and fear of death of self and fear of death of others. All this information can be consulted in Table 1.

Finally, correlations among the DAP-R and well-being measures, including the Ryff's Psychological Well-being scales and the Brief Resilience Coping Scale, showed a pattern of negative and statistically significant relations between fear of death, escape approach, and the dimensions of well-being and resilience. In turn, positive correlations between neutral acceptance and all the variables under study, except for positive relations. Death avoidance only showed negative and statistically significant relations with autonomy and personal growth; and approach acceptance only correlated positively and statistically significant with purpose in life. For details of these relations (Table 1).

	1	2	3	4	5
<b>1 Fear of death</b>	1.00				
<b>2 Death avoidance</b>	.607**	1.00			
<b>3 Neutral acceptance</b>	-.363**	-.223**	1.00		
<b>4 Approach acceptance</b>	.110	.000	-.058	1.00	
<b>5 Escape acceptance</b>	.023	.032	-.041	.279**	1.00
<b>Fear of death of self</b>	.700**	.344**	-.230**	.125*	-.029
<b>Fear of dying of self</b>	.463**	.244**	-.232**	.089	-.006
<b>Fear of death of others</b>	.399**	.246**	-.147*	.180**	.000
<b>Fear of dying of others</b>	.298**	.245**	-.194**	.024	.015
<b>Self-acceptance</b>	-.230**	-.045	.211**	.076	-.229**
<b>Positive Relations</b>	-.197**	-.043	.072	.004	-.173**
<b>Autonomy</b>	-.140*	-.123*	.173**	-.083	-.178**
<b>Environmental Mastery</b>	-.208**	-.058	.168**	.021	-.227**
<b>Personal Growth</b>	-.221**	-.151*	.285**	.001	-.181**
<b>Purpose in Life</b>	-.113	-.050	.202**	.134*	-.196**
<b>Resilience</b>	-.125*	-.103	.202**	.078	-.049

**Table 1:** Correlations among the dimensions of the DAP-R, the CL-FODS, the Ryff's Psychological Well-being scales, and the Brief Resilience Coping Scale.

## Discussion

The aim of this study was to present, for the first time, the Spanish version of the DAP-R, via confirmatory factor analysis. This is of crucial importance, as professionals' attitudes towards death and, more specifically, nurses' attitudes death have shown a closer relation with well-being and quality of life [2,5-7,10,11].

Results presented in current research have shown the expected factorial structure for the DAP-R. That is, five latent factors, fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance have been found, as posed by the original authors. It has to be borne in mind that, as far as we know, this is the first time this scale is studied with a confirmatory methodology. With CFA *a priori* hypotheses can be tested, taking into account measurement error. In this sense, it is the recommended procedure for non-experimental research [41], as no other multivariate techniques can offer these advantages.

As regards results of internal consistency, reliability of the different subscales of the measure ranges from adequate (i.e., for the neutral acceptance dimension) to high (i.e., for the approach acceptance dimension), with values over .70 in every case. Our estimations are in line to those offered in previous studies. For example, in both the original study of Wong et al. [23] and the Chinese adaptation from Ho et al. [30], neutral acceptance was the dimension with the lower estimation (.65 and .66, respectively). In these studies, as in the current one, approach acceptance was the dimension with higher internal consistency, with estimations of .97 for Wong et al. [29] and of .87 for Ho et al. [30].

When relations among the DAP-R and the CL-FODS were analyzed, positive and big relations were found among the dimension of fear of death and death avoidance and the four dimensions of the CL-FODS. This is a great example of concurrent validity of the Spanish version of the DAP-R, as it is expected that the fear of death, which is usually accompanied with an attitude of death avoidance, will lead to a fear of death of self and others, and a fear of the process of dying. Opposite relations were found with neutral acceptance, which means that this attitude is the one that distinguish those professionals with lower fear of death.

These three dimensions, together with escape acceptance, were also the ones related to well-being. Whereas fear of death, death avoidance, and escape acceptance were negatively related to well-being, neutral acceptance was positively related. These results support recent findings, such as the ones presented by Edo-Gual et al. [11], in which self-esteem was close, negatively related to fear of death, when measured by the CL-FODS. As regards resilience, again, fear of death and neutral acceptance were the dimensions that showed statistically significant relations with this variable, and they did it in the same line as with well-being: fear of death was negatively related to resilience; meanwhile, neutral acceptance was positively related with it.

The results obtained in this work with a sample of Spanish nursing undergraduates lead to two main conclusions. First, evidence has

---

pointed out the appropriate psychometric properties of the DAP-R when used in Spanish nurses' sample. Results have shown both adequate validity and reliability. Thus, this instrument offers guarantees for death attitudes' assessment in Spanish contexts. The second main result is the importance of three concrete death attitudes for professionals' well-being: fear of death, escape acceptance and neutral acceptance. Whereas attitudes of fear or escape towards death are linked to lower levels of well-being, nurses with a neutral attitude are those with higher levels of well-being, including self-acceptance, autonomy, environmental mastery, personal growth, and purpose with life.

As the rendezvous of death and dying with the healthcare setting is a common one, there is a need of training in social and emotional competences for nurses. This training, as stated in current research, should include death attitudes, as this will improve nurses' well-being [18]. Consequently, interventions which minimize fear of death and escape acceptance, and promote death neutral acceptance, will serve to promote both professionals and patients' quality of life. As stated by Edo-Gual et al. [11], "by equipping [nurses] with these skills, nurses would be better placed to offer compassionate and patient-centred care, while also establishing limits and managing their own emotional well-being" (p. 2436).

## References

1. Peters L, Cant R, Payne S, et al. Emergency and palliative care nurses' levels of anxiety about death and coping with death a questionnaire survey. *Australasian Emergency Nursing Journal*. 2013; 16: 152-159.
2. Deffner JM, Bell SK. Nurses' death anxiety, comfort level during communication with patients and families regarding death, and exposure to communication education a quantitative study. *Journal for Nurses in Staff Development*. 2005; 21: 19-23.
3. Burguete MD, Sáez E, Dalla C, et al. Sufrimiento moral en el personal de enfermería. *Cultura de los cuidados*. 2017; 11: 210-218.
4. Sáez, E, Burguete MD, García-Oliver V, et al. Trastorno de estrés postraumático en el personal de enfermería. *Revista Presencia*. 2018; 4.
5. Sinclair S. Impact of death and dying on the personal lives and practices of palliative and hospice care professionals. *CMAJ*. 2011; 183: 180-187.
6. Melvin C. Professional compassion fatigue What is the true cost of nurses caring for the dying. *International Journal of Palliative Nursing*. 2012; 18: 606-611.
7. Sansó N, Galiana L, Oliver A, et al. Palliative Care Professionals' Inner Life Exploring the Relationships Among Awareness Self-Care and Compassion Satisfaction and Fatigue Burnout and Coping With Death. *Journal of Pain & Symptom Management*. 2015; 50: 200-207.
8. Sáez E, Barreto P, Marín A. Actitudes hacia la muerte y el bienestar. *Health Aging and End of life*. 2017; 2: 99-112.
9. Cevik B, Kav S. Attitudes and experiences of nurses toward death and caring for dying patients in Turkey. *Cancer Nursing*. 2013; 36: E58-E65.
10. Aradilla-Herrero A, Tomás-Sabado J, Gómez-Benito J. Death attitudes and emotional intelligence in nursing students. *OMEGA Journal of Death and Dying*. 2012-2013; 66: 39-55.
11. Edo-Gual M, Monforte-Royo C, Aradilla-Herrero A, et al. Death attitudes and positive coping in Spanish nursing undergraduates a cross-sectional and correlational study. *Journal of Clinical Nursing*. 2015; 24: 2429-2438.
12. Neimeyer RA, Wittkowski J, Moser RP. Psychological research on death attitudes an overview and evaluation. *Death Studies*. 2004; 28: 309-340.
13. Templer DI. The construction and validation of a Death Anxiety Scale. *Journal of General Psychology*. 1970; 82: 165-177.
14. Bugen LA. Coping Effects of death education. *OMEGA Journal of Death and Dying*. 1980-1981; 11: 175-183.
15. Camaño R, Medrano P, Sáez E, et al. An assessment of the Bugen scale of competence about death. *Nursing and Palliative Care*. 2020; 5.
16. Miaja M, Moral J. Propiedades psicométricas de la escala de ansiedad ante la muerte en personas con VIH y población general Psychometric properties of the Death Anxiety Scale in people with HIV and general population. *Revista de Psicopatología y Psicología Clínica*. 2012; 17: 107-122.
17. López-Castedo A, Calle-Santos I. Psychometric properties of the Death Anxiety Scale DAS among HIV/AIDS patients. *Psicothema*. 2008; 20: 958-963.
18. Bugen LA. Human grief a model for prediction and intervention. *American Journal of Orthopsychiatry*. 1977; 47: 196-206.
19. Galiana L, Oliver A, Sansó N, et al. Validación confirmatoria de la Escala de Afrontamiento de la Muerte en profesionales de cuidados paliativos. *Medicina Paliativa*. 2017; 126-135.
20. Collett L, Lester D. The fear of death and the fear of dying. *Journal of Psychology*. 1969; 72: 179-181.
21. Tomás-Sábado J, Gómez-Benito J. Construction and Validation of the Death Anxiety Inventory DAI. *European Journal of Psychological Assessment*. 2005; 21: 108-114.
22. Tomás-Sábado J, Gómez-Benito J, Limonero JT. The Death Anxiety Inventory A revision. *Psychological Reports*. 2005; 97: 793-796.
23. Wong PT, Reker GT, Gesser G. Death Attitude Profile-Revised A multidimensional measure of attitudes toward death. In R. A. Neimeyer Ed *Death anxiety handbook Research instrumentation and application*. Series in death education, aging, and health care. Philadelphia Taylor & Francis. 1994; 121-148.
24. Lester D. The Collett-Lester Fear of Death Scale The original version and a revision. *Death Studies*. 1990; 14: 451-468.
25. Lester D. The Collett-Lester Fear of Death Scale. In R. A.

- 
- Neimeyer Ed. Death anxiety handbook Research instrumentation and application. Series in death education aging and health care. Philadelphia: Taylor & Francis. 1994; 121-148.
26. Lester D, Abdel-Khalek A. The Collett-Lester Fear of Death Scale a correction. *Death Studies*. 2003; 27: 81-85.
  27. Tomás-Sábado J, Limonero JT, Abdel-Khalek AM. Spanish adaptation of the Collett-Lester Fear of Death Scale. *Death Studies*. 2007; 31: 249-260.
  28. Abdel-Khalek AM, Tomás-Sábado J. Anxiety and death anxiety in Egyptian and Spanish nursing students. *Death Studies*. 2005; 29: 157-169.
  29. Dixon R, Kinlaw B. Belief in the existence and nature of life after death A research note. *OMEGA Journal of Death and Dying*. 1983; 13: 287-292.
  30. Ho AH, Chan CL, Chow AY, et al. Psychometric properties of the Chinese version c-dap-r of the Death Attitude Profile-Revised. *Illness Crisis & Loss*. 2010; 18: 95-110.
  31. Zyga S, Malliarou M, Lavdaniti M, et al. Greek renal nurses' attitudes towards death. *Journal of Renal Care*. 2011; 37: 101-107.
  32. Neimeyer RA. Métodos de Evaluación de la ansiedad ante la muerte Assessment methods for the death anxiety. Paidós Barcelona. 1997.
  33. Marcysiak M, Dąbrowska O, Marcysiak M. Acceptance of death as a life attitude for nurses and nursing students. *Progress in Health Sciences*. 2013; 3: 104-110.
  34. Sinclair VG, Wallston KA. The development and psychometric evaluation of the Brief Resilient Coping Scale. *Assessment*. 2004; 11: 94-101.
  35. Tomás JM, Sancho P, Melendez JC, et al. Resilience and coping as predictors of general well-being in the elderly a structural equation modeling approach. *Aging & Mental Health*. 2012; 16: 317-326.
  36. Ryff CD. Happiness is everything or is it Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*. 1989; 57: 1069-1081.
  37. Díaz D, Rodríguez-Carvajal R, Blanco A, et al. Adaptación española de las escalas de bienestar psicológico de Ryff. *Psicothema*. 2006; 18: 572-577.
  38. Hu L, Bentler PM. Cut-off criteria for fit indexes in covariance structure analysis Conventional criteria versus new alternatives. *Structural Equation Modeling A Multidisciplinary Journal*. 1999; 6: 1-55.
  39. Cicchetti DV. Guidelines criteria and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*. 1994; 6: 284-290.
  40. Raykov T. Behavioral scale reliability and measurement invariance evaluation using latent variable modeling. *Behavioral Therapy*. 2004; 35: 299-331.
  41. Bentler PM. Multivariate analysis with latent variables Causal modeling. *Annual Review of Psychology*. 1980; 31: 419-456.