

ARTICLES/ARTÍCULO

Factor Structure and Reliability of the Youth Self-Care Practice and Management Questionnaire (YPM) in a Sample of Secondary School Students

Estructura factorial y fiabilidad del cuestionario Práctica y Gestión del Autocuidado Juvenil (PGJ) en una muestra de estudiantes de secundaria

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ABSTRACT

Self-care is the main element involved in the prevention of the disease or its care. Measuring the agency capacity of self-care becomes essential, since it identifies self-care deficits and allows strategies to be designed to alleviate them. The objective of this work is to evaluate the factor structure and reliability of the Self-Care Practice and Management questionnaire. The questionnaire is created around three practical dimensions (physical, psychological, social) and another management one. The research is carried out in Almeria with 290 high school students, who showed their willingness to participate. The results show high percentages with respect to the Total Explained Variance (TEV). The exploratory factor analysis reveals four factors for each dimension, except for management, which only breaks down one. The temporal stability of the scale was confirmed ($r=0.801$) and the correlation with the reference scale offered criterion validity. In conclusion, the YMP questionnaire is a valid and consistent tool to measure self-care in the youth population, and, therefore, it should be used in educational centres to evaluate the agency capacity of students over their well-being.

KEYWORDS: self-care practice; self-care management; health; students; secondary; factor analysis; reliability analysis.

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RESUMEN

El autocuidado es el principal elemento que interviene en la prevención de la enfermedad o su atención. Medir la capacidad de agencia del autocuidado se convierte en imprescindible, puesto que identifica los déficit del autocuidado y permite diseñar estrategias para paliarlo. El objetivo de este trabajo es evaluar la estructura factorial y fiabilidad del cuestionario Práctica y Gestión del Autocuidado. El cuestionario se crea en torno a tres dimensiones prácticas (física, psicológica, social) y otra de gestión. La investigación se desarrolla en la provincia de Almería con 290 alumnos de secundaria que mostraron su voluntad de participar. Los resultados manifiestan porcentajes altos respecto a la Varianza Total Explicada (VTE). El Análisis Factorial Exploratorio desprende cuatro factores para cada dimensión, excepto para la gestión, que solo desglosa uno. La estabilidad temporal de la escala se confirmó ($r = 0,801$) y la correlación con la escala de referencia ofreció validez de criterio. En conclusión, el cuestionario PGJ es una herramienta válida y consistente para medir el autocuidado en población juvenil, y, por tanto, debería ser utilizado en los centros educativos para evaluar la capacidad de agencia del alumnado sobre su bien salud.

PALABRAS CLAVE: práctica del autocuidado; gestión del autocuidado; salud; estudiantes; secundaria; análisis factorial; análisis de fiabilidad.

1. Introduction

Self-care refers to the series of intentional actions that a person takes to control the factors that compromise their well-being and health (Berbiglia *et al.*, 2022; Orem, 1999). As such, a self-care deficit occurs when a person is subject to limitations that make them incapable of providing themselves with continuous care or that render said care ineffective or incomplete (Taylor *et al.*, 2000).

These concepts are common knowledge among health professionals, whether involved in disease prevention or treatment of those already manifested, although they require further exploration in the field of social sciences. Therefore, in medicine, nursing and psychology, prevention programmes are developed at the institutional level (see, among others, Regional Government of Andalusia, 2023; Spanish Ministry of Health, 2023) at public and private universities alike. Emphasising the importance of self-care, they are based on the idea that by offering people information on the methods and reasons for caring for themselves, they will improve their practices and, as a result, their health and well-being (see, among others, Cabrera *et al.*, 2013; López and Rodríguez, 2017; Ruiz-Aquino *et al.*, 2021).

However, despite prevention campaigns, particularly those aimed at young people, the rates of overweight and obesity, eating disorders, drug and alcohol use and sexual risk behaviours, among other issues, are on the rise (Digennaro and Iannaccone, 2023; Sanmartín *et al.*, 2022). The Spanish Association of Paediatrics (AEP) (2020), for example, points out that adolescents have a proactive attitude towards healthy practices in relation to food, exercise, leisure, drug use and sexual relations; however, this attitude is not exactly reflected in their behaviour (AEP, 2020). This highlights the need for instruments to uncover the reasons underpinning this situation, since most research on prevention focuses on analysing behavioural profiles—by verifying the actions of the subjects (see, among others, De Valenzuela *et al.*, 2021; Hernández-Serrano *et al.*, 2013; Iglesias *et al.*, 2023; Rimón and Castro, 2016)—rather than the factors that determine these behaviours.

Consequently, it is evident that the Self-Care Practice and Management questionnaire, conducted in the youth population, will help us gain a more profound understanding of both the direct actions and the factors that influence them, which is essential to be able to intervene, when necessary, and prevent or help remedy self-care deficits. The first step towards doing so is to check the validity of the instrument and then verify its temporal stability.

In short, in this article we first provide a brief overview of the different self-care management models and the instruments used. Then, we outline the objectives we set for ourselves and the methodological decisions taken to achieve them, before displaying the results of the tests performed to analyse the factor structure and reliability of the questionnaire. We end this article with a discussion and our conclusions.

1.1. Self-care management and measurement models

Since its founding in 1948, the World Health Organization (WHO) has defined health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Hoyo *et al.*, 2021; La Valle, 2017; WHO, 1948). This has given rise to authors unrelated to the biomedical sciences, such as Durkheim (1985), having a holistic view of human behaviour, in which the different systems and organs work together, each performing their own function while influencing the functioning of the others. In addition, more specifically to the field of health, Dean (1989) posits that not all care activities are rational, since some of them have a socially learned meaning.

However, despite there being general consensus regarding the definition of health, this is not the case with care management, mainly as a result of the application of professional judgements that promote personal health and well-being. This human process adheres to Orem’s (1999) self-care theory in two ways: firstly, through the learned behaviours that humans pick up during their lifetime and, secondly, through the interaction between caregiver and care receiver. It is a process that involves both adapting one’s behaviour and using material and financial resources to guarantee continuity of care (Zárate, 2004).

At present, self-care management models have two differing approaches. On the one hand we have those that are focused on analysing achievements and errors in the treatment of different diseases and pathologies resulting from shared practices, habits, behaviours and/or ailments (see, among others, Achury and Konato, 2023; Alania-Chávez, 2021). In this type of management model, interdisciplinary teams centre their efforts on encouraging self-care and health promotion (Santiago, 2022; De la Torre, 2016; Pool-Góngora *et al.*, 2023), especially among the vulnerable and those who are already sick (Nuño-Solinis *et al.*, 2013; Reyes and Guadarrama, 2022). Moreover, its actions primarily involve interventions in health centres.

On the other hand is a model in the early stages of development that implements self-care measures in a healthy population, although it is mainly concerned with the physical and biological aspects of potential diseases. A number of instruments are used for this, including: Self-Care Ability Scale for the Elderly (SASE), Self-Care of Home-Dwelling Elderly (SCHDE), Lorensen's Self-Care Capability Scale (LSCS), Denyes Self-Care Agency Instrument (DSCAI), Denyes Self-Care Practice Instrument (DSCPI-90), Exercise of Self-Care Agency (ESCA), Self-as-Carer Inventory (SCI), Appraisal of Self-Care Agency Scale (ASA-A) and the Perceived Self-Care Agency Questionnaire (PSCAQ) (Matarese *et al.*, 2016).

However, as part of this second model, research is being done into the social and psychological factors of self-care (Campos *et al.*, 2018; León and Gómez, 2020; Videra and Reigal, 2013), although this has the drawback of using a contrasted unified scale that favours multi-causal analysis.

Management models in the field of prevention, particularly those concerning young adolescents, utilise multiple tools to measure practice and agency (Slusher *et al.*, 1999), but they fail to take into account the social and personal issues present in self-care, thus preventing analyses of the circumstances that determine and explain actions.

In Andalusian schools, self-care management programmes are developed by the school's nurse (Bernedo *et al.*, 2023; García and Langa, 2012). Despite their work arousing great interest and benefiting the educational community (Rodríguez and Hernández, 2018), their interventions are based on standardised assumptions for the whole community that are formed by qualitative analyses of each school's situation. In other words, they do not consider the subjects' self-care agency capacity, i.e., the material resources, knowledge and other elements that enable individuals to enjoy a state of optimal health and well-being. As a result, it is necessary to understand and measure this capacity and detect the elements and factors that cause a self-care deficit to materialise.

1.2. Objectives and working hypotheses

There are plenty of research projects that study the functionality of self-care in the medical sciences, as we saw earlier; in the social sciences, however, it is merely a fledgling phenomenon, given that the study of self-care is limited and visibly non-existent. What's more, this research has been rendered absolutely necessary by the complete absence of literature on self-care dynamics in young people and adolescents that addresses risk practices and the criteria that may be returned by assessment instruments. This would mark the first time that research of this kind has been conducted in Spain. In addition, some authors, such as Campos-García *et al.* (2018) and Galiana *et al.* (2015), promote a three-dimensional structure of self-care practice that comprises the physical, mental and social aspects. However, a standardised scale that allows these three facets to be measured in conjunction has yet to be developed.

The objective of this work is to describe the factor structure of the YPM questionnaire in a sample of secondary school students from Almería, and to analyse its reliability

in terms of internal consistency and temporal validity. Therefore, we base our work on the following key hypotheses: a) the factor structure and fit of the YPM questionnaire present several factors that can be measured independently and completely in a single-factor model (see, among others, Campos *et al.*, 2018; Díaz *et al.*, 2016) and facilitate the design of suitable interventions; b) there is significant internal consistency ($\alpha > 0.7$) between the different factors of the YPM questionnaire and acceptable stability ($r > 0.5$) as a result of measurements being taken at two different moments.

2. Method

2.1. Design

This study comprises an instrument design of the psychometric properties of the YPM questionnaire, including a factor structure analysis of the items, reliability testing (internal consistency of the scores) and a temporal stability analysis. The questionnaire was initially composed of 88 items covering four dimensions and corresponding to two approaches: one from a management perspective (Santiago, 2022; Pool-Góngora *et al.*, 2023) and another from practice, based on physical, mental and social actions (Campos-García *et al.*, 2018; Galiana *et al.*, 2015).

Physical self-care is the set of skills used to improve physical functioning and to prevent or control disease, exhibited as certain exercise, eating and hygiene habits, and the prevention of bodily harm (Butler *et al.*, 2019; Corral *et al.*, 2017).

Psychological self-care promotes practices that address life-altering emotional conditions (Vidal-Blanco *et al.*, 2019). Loving ourselves, having a high self-worth and learning to manage the different moments we experience all play an important role in self-care (Cerna, 2023). Furthermore, spiritual practice promotes prayer or meditation activities, which in turn improve our psychological health (Puchalski *et al.*, 2019; Steinhorn *et al.*, 2017).

The social dimension is the least studied of the three. Some studies, like Márquez-Teraza's (2022), have shed light on the types of social relationships that exist between care receivers and caregivers, who may be a family member or professional who imparts information or actively participates in care activities, such as hygiene, treatment, exercise, etc. However, there is a dearth of research into the social and relational perspective of self-care agency, although there is some evidence that points to a link between adequate social health and the prevention of psychological (depression, anxiety, ADHD) and physical diseases (overweight, obesity, etc.) (see, among others, De los Ángeles-Páramo, 2011; Lacunza *et al.*, 2013; Rondon and Angelucci, 2021; Torrel and Delgado, 2016).

2.2. Participants

The sample consisted of 290 secondary school students from the province of Almería. The sample was chosen from a total target population of 38,051 12- to 17-year-olds (Spanish Statistical Office, 2019) (confidence interval = 95%; margin of error = 5.7%).

In our sample, 61.9% said that they were female, with 36.5% male and 1.6% choosing not to answer, and the mean age was 16.07 years (SD = 1.89). Of the chosen students, 12.7% were in the first year of compulsory secondary education, 10.7% in the second, 10.6% in the third and 18.3% in the fourth, while 12.7% were in the first year of post-16 secondary education, and the remaining 35% in the final year of post-16 secondary education.

2.3. Procedure

This work forms part of the project entitled “Role of the Family in the Perception of Self-Care among Young Andalusians. Pre- and Post-COVID-19 Habits”, which is subsidised by the Andalusian Studies Centre under its 2023/2025 call for projects.

Participants were chosen from among secondary school students in the province of Almería using non-probability sampling, and they all voluntarily opted to participate in the project. In addition, their parents and/or legal guardians were required to sign a letter of informed consent regarding participation and dissemination of the resulting data. The questionnaire was managed using the LimeSurvey platform. IBM SPSS Statistics 27 statistics software was used to process and analyse the data.

2.4. Instrument

The YPM questionnaire initially comprised a set of 88 questions (see Table 1), and the students expressed their answers to each question on a five-point Likert scale, consisting of: 1: never; 2: almost never; 3: occasionally; 4: almost always; 5: always.

The goal of the questionnaire was to assess respondents' self-care practices (physical, psychological and social) and their general self-care management. This division is proposed, firstly, based on the published literature on risk habits and behaviours of young people (see, among others, Boraita *et al.*, 2022; Lacave *et al.*, 2022; Rosales, 2022; Sánchez *et al.*, 2022; Vallejo and Jiménez, 2022), and secondly, on questionnaires concerning overall self-care management (Díaz *et al.*, 2012; 2016) and studying the concept of self-care agency capacity (López-Díaz *et al.*, 2000; Orem, 1999), understood to mean the resources that the subject uses to achieve an optimal level of health and well-being.

Regarding the psychometric properties of this first version of the questionnaire, internal consistency of $\alpha = 0.71$ was recorded. However, despite the adequate result, we ultimately decided to reduce the number of items and only include those with a factor loading value greater than 0.5. This resulted in a 60-item questionnaire (the first 60 items shown in Table 1) with internal consistency of $\alpha = 0.84$ and acceptable fit indices: $S-B \div 2/df = 2.68$ ($S-B \div 2 = 80.41$ $df = 30$), CFI = 0.90.

Table 1
Items on the scale

Item	Description	Variable
Physical factor		
1	How many days a week do you attend sports classes? (Organised sport)	Physical activity
2	How many days a week do you participate in unorganised sport with friends and/or classmates?	Physical activity
3	How many days a week do you engage in moderate physical activity? (Walking, dancing, exercising, cycling, etc.)	Physical activity
4	How many days a week do you sleep at least eight hours?	Rest
5	How many days a week do you fall asleep before 11 o'clock at night?	Rest
6	You do everything you can to keep the environment where you live clean	Hygiene
7	You shower regularly to keep yourself clean	Hygiene
8	You try to maintain your weight by taking care of what you eat and/or the exercise you do	Physical activity
9	You get enough sleep to feel well-rested	Rest
10	You consume beer or other alcoholic beverages*	Risk behaviours
11	You use tobacco*	Risk behaviours
12	You use cannabis or another drug*	Risk behaviours
13	You wear your seat belt or helmet	Risk behaviours
14	You drive under the influence of alcohol and/or drugs*	Risk behaviours
15	You engage in violent fights*	Risk behaviours
16	You have unprotected sex*	Risk behaviours
17	You self-harm*	Risk behaviours
Social practice factor		
18	You spend quality time with your family	Family
19	Your family tries to help you	Family
20	Your friends try to help you when you need it	Friends
21	You can count on your friends when things go wrong	Friends
22	You can talk about your problems with your family	Family
23	You have friends with whom you can share your sorrows and joys	Friends
24	Your family is willing to help you make decisions	Family
25	You can talk about your problems with your friends	Friends
26	Your family provides you with the help and emotional support you need	Family
27	There is a special person who truly comforts you (family member)	Family
28	There is a special person who truly comforts you (friend)	Friends
29	There is a special person who truly comforts you (partner)	Partner
30	There is a special person who truly comforts you (professional)	Professional
31	There is a special person with whom you can share your sorrows and joys (family member)	Family
32	There is a special person with whom you can share your sorrows and joys (friend)	Friends
33	There is a special person with whom you can share your sorrows and joys (partner)	Partner
34	There is a special person with whom you can share your sorrows and joys (professional)	Professional
35	There is a special person in your life who cares about your feelings (family member)	Family
36	There is a special person in your life who cares about your feelings (friend)	Friends
37	There is a special person in your life who cares about your feelings (partner)	Partner
38	There is a special person in your life who cares about your feelings (professional)	Professional
Psychological practice factor		
39	You have felt too tired or exhausted to take proper care of yourself*	Emotional management
40	You have lost control of your emotions*	Emotional management
41	When you get angry, it's hard to stop and calmly reflect*	Emotional management
42	You are satisfied with the person you are	Self-esteem
43	You think you're useless*	Self-esteem
44	You think you're a failure*	Self-esteem
45	You think positively about yourself	Self-esteem

Item	Description	Variable
46	You would like to look like someone else*	Self-esteem
47	You have wanted to change who you are*	Self-esteem
48	You feel satisfied with the life you have	Life satisfaction
49	You meditate or pray	Spirituality
50	Your faith or belief in a higher being helps you overcome the challenges you face in life	Spirituality
51	You think that helping others is a positive spiritual value	Spirituality
52	You believe in yourself or live in harmony with yourself	Spirituality
53	You try to maintain and strengthen relationships with others as part of your faith	Spirituality
Management factor		
54	You are self-aware and interested in knowing if the activities you practise are good for your health	Self-care management
55	You seek help when you have health issues	Self-care management
56	You seek help if you can't take good care of yourself	Self-care management
57	Your health comes first	Self-care management
58	You try to find out more information when there's something you don't understand about your health	Self-care management
59	You have managed to change deeply rooted habits in order to improve your health	Self-care management
60	You know how to evaluate how your lifestyle influences your health	Self-care management
Items excluded by the factor analysis		
61	You consume any of the following products more than three times a week: pastries, fried snacks, fast food, sugary soft drinks and energy drinks	
62	You eat fruit and vegetables every day	
63	You eat five meals a day	
64	You eat alone more than once a day	
65	You are concerned with how what you eat affects your health	
66	You sit down for more than four hours at a time outside of school hours	
67	You are concerned with exercising to improve your health	
68	You spend more than three hours a day sat down browsing social media or using an electronic device	
69	You care about your rest	
70	You know who to contact to find out more information when you have a health problem	
71	You have daily contact with your friends (in person or via social media)	
72	When you have to take a medicine, you have someone to tell you about the effects of taking it	
73	You try not to let harmful situations change the way you are	
74	You pause to reflect on your feelings and emotions	
75	You don't know how to identify the emotion you feel	
76	You blame yourself for the problems that often happen to you	
77	You're not comfortable with your body	
78	You don't like the way you are	
79	Your outlook on most things is pessimistic	
80	You don't enjoy life	
81	There is a special person (family member) who is there when you need them	
82	There is a special person (friend) who is there when you need them	
83	There is a special person (partner) who is there when you need them	
84	There is a special person (professional) who is there when you need them	
85	You would like to do more activities related to improving your health throughout the day than you currently do	
86	You are conscious that you can take better care of your health than you are currently doing	
87	You examine your body to see if there are any changes	
88	You find it difficult to find the time to perform activities related to your health due to your daily schedule	

The items marked with * have been recoded in order to obtain positive scores with respect to the scale.
Source: own research.

The correction factor for the standard deviation (SD) of each of the three dimensions was 0.75 ($M - 0.75 * SD$ for the left-hand limit and $M + 0.75 * SD$ for the right-hand limit).

The KMO adequacy for the physical practice dimension was 0.740 (sig. < 0.001). Four variables make up 53.875% of the total explained variance (TEV): 1) risk behaviours; 2) hygiene; 3) physical activity; 4) rest. In this dimension, the scores range from 17 to 85 (low ≤ 36 < medium ≤ 56 < high).

The KMO adequacy for the social practice dimension is 0.860 (sig. < 0.001). and comprises four components, which account for 74.633% of the TEV: 1) family; 2) friends; 3) partner; 4) professional. In this dimension, the scores range from 21 to 105 (low ≤ 53 < medium ≤ 73 < high).

The KMO adequacy for the psychological practice dimension is 0.809 (sig. < 0.001). and comprises four components, which account for 65.979% of the TEV: 1) spirituality; 2) self-esteem; 3) life satisfaction; 4) emotional management. In this dimension, the scores range from 15 to 75 points (low ≤ 38 < medium ≤ 52 < high).

The KMO adequacy value for the management dimensions is 0.844 (sig. < 0.001). and comprises a single factor that makes up 51.912% of the TEV. In this dimension, the scores range from 7 to 35 (low ≤ 16 < medium ≤ 26 < high).

2.5. Analysis of the results

First, a descriptive analysis of the questionnaire items, distribution (kurtosis and skewness) and multivariate normality was carried out. Subsequently, the item-dimension correlation was observed, which would be removed if $r(i-tc) = < 0.20$ (Kline, 1986; 2011). Secondly, exploratory factor (EFA) and confirmatory factor (CFA) analyses were performed to verify the factor structure of the YPM.

During the EFA, we: a) calculated sampling adequacy using the Kaiser-Meyer-Olkin (KMO) test, with a value close to 1 being considered adequate; b) assessed applicability using Bartlett's test of sphericity (χ^2), with statistical significance of $p < 0.005$ being expected; c) analysed communality (h_2), with items with a value of less than $h_2 < 0.50$ being excluded; d) extracted the factors, using the principal component extraction (PCE) function; and e) rotated the items using the varimax method.

The CFA comprised the following calculations: a) CFA estimation using the principal axis factoring method; b) absolute fit indices using the χ^2 test, with no significance ($p > 0.05$) (Batista-Fogueta *et al.*, 2004); c) the goodness-of-fit index (GFI), with values of over 0.80 (Gómez-Guadix *et al.*, 2014).

Lastly, internal consistency was calculated using Cronbach's alpha (α)—with values equal to or greater than $\alpha = 0.70$ denoting high reliability—and the reliability of the instrument, taking temporal stability as a reference by using the test-retest method.

In addition, Pearson's correlation coefficient was used to measure the strength of the relationship between the life satisfaction scale, used as a reference (Diener *et al.*, 1985), and the dimensions of the scale, thus corroborating the reliability criterion.

3. Results

3.1. Initial analysis of the items

In the preliminary analysis, we sought to gain an understanding of the characteristics found in the questionnaire items (Table 2). Item 1, "How many days a week do you attend sports classes? (organised sports)", returned the lowest mean score on the scale ($M = 1.80$), while item 12, "You use cannabis or another drug", recorded the highest ($M = 4.68$). In the skewness and kurtosis analysis, all items met the multivariate normality acceptance criteria of ± 1.5 . Finally, the item-test correlation returned results ranging from $r(i-tc) = 0.60$ (item 26, "Your family provides you with the help and emotional support you need") and $r(i-tc) = 0.21$, displayed by items 14, 33 and 37 ("You drive under the influence of alcohol and/or drugs", "There is a special person with whom you can share your sorrows and joys [partner]" and "There is a special person in your life who cares about your feelings [partner]", respectively).

Table 2

Descriptive analysis of the items, final scale used in the YPM questionnaire (60 items)

Item/dimension	Mean	SD	Skewness	Kurtosis	$r(i-tc)$
1 PP	1.80	2.59	1.119	-0.334	0.26
2 PP	2.36	2.67	0.710	-1.048	0.25
3 PP	3.21	2.71	0.171	-1.488	0.36
4 PP	4.58	2.62	-0.563	-1.216	0.27
5 PP	2.90	2.87	0.243	-1.617	0.26
6 PP	4.20	1.21	-1.749	2.593	0.34
7 PP	4.62	0.90	-2.993	9.740	0.29
8 PP	3.34	1.52	-0.653	-0.644	0.34
9 PP	3.46	1.31	-0.463	-0.759	0.42
10 PP	4.15	1.15	-1.406	1.547	0.24
11 PP	4.12	1.53	-1.417	0.380	0.27
12 PP	4.68	0.95	-3.151	9.421	0.28
13 PP	3.96	1.60	-1.320	0.271	0.31
14 PP	4.62	1.13	-3.141	8.882	0.21
15 PP	4.47	1.04	-2.353	5.621	0.29
16 PP	3.91	1.68	-1.242	-0.018	0.21
17 PP	4.43	1.26	-2.451	5.130	0.24
18 SP	3.81	1.16	-0.543	-0.759	0.49
19 SP	4.33	1.09	-1.625	1.764	0.52
20 SP	4.14	1.07	-1.136	0.457	0.49

Item/dimension	Mean	SD	Skewness	Kurtosis	r(i-tc)
21 SP	4.04	1.14	-0.983	-0.008	0.37
22 SP	3.73	1.40	-0.674	-0.934	0.48
23 SP	4.22	1.12	-1.355	0.934	0.32
24 SP	4.18	1.14	-1.261	0.542	0.51
25 SP	4.10	1.17	-1.044	-0.004	0.36
26 SP	3.98	1.28	-0.952	-0.405	0.60
27 SP	4.31	1.15	-1.689	1.848	0.54
28 SP	4.07	1.23	-1.116	0.096	0.39
29 SP	2.43	1.75	0.583	-1.482	0.26
30 SP	2.57	1.61	0.429	-1.413	0.49
31 SP	4.29	1.14	-1.537	1.278	0.59
32 SP	4.22	1.07	-1.318	0.913	0.48
33 SP	2.48	1.77	0.525	-1.572	0.21
34 SP	2.42	1.53	0.608	-1.119	0.49
35 SP	4.41	1.04	-1.733	2.015	0.57
36 SP	4.16	1.17	-1.264	0.565	0.48
37 SP	2.62	1.79	0.366	-1.698	0.21
38 SP	2.45	1.54	0.543	-1.212	0.45
39 PsP	3.03	1.27	-0.136	-0.947	0.29
40 PsP	2.99	1.23	0.159	-0.796	0.23
41 PsP	3.26	1.31	-0.093	-1.126	0.30
42 PsP	3.59	1.30	-0.452	-0.970	0.30
43 PsP	2.15	1.25	0.763	-0.515	0.28
44 PsP	2.12	1.27	0.845	-0.366	0.22
45 PsP	3.40	1.24	-0.214	-0.954	0.41
46 PsP	2.22	1.39	0.773	-0.734	0.24
47 PsP	2.44	1.44	0.477	-1.147	0.41
48 PsP	3.77	1.28	-0.843	-0.322	0.33
49 PsP	2.55	1.51	0.470	-1.195	0.45
50 PsP	2.84	1.52	0.121	-1.413	0.39
51 PsP	3.58	1.39	-0.599	-0.868	0.45
52 PsP	3.37	1.32	-0.354	-0.952	0.37
53 PsP	3.13	1.40	-0.148	-1.138	0.40
54 OD	3.45	1.25	-0.371	-0.775	0.51
55 OD	3.59	1.21	-0.366	-0.772	0.46
56 OD	3.50	1.32	-0.426	-0.938	0.49
57 OD	3.77	1.20	-0.573	-0.698	0.42
58 OD	3.62	1.20	-0.410	-0.747	0.51
59 OD	3.37	1.31	-0.234	-0.995	0.53
60 OD	3.52	1.20	-0.389	-0.612	0.46

r(i-tc) = corrected item-test correlation. PP = physical practices. SP = social practices. PsP = psychological practices. OD = overall dimension.

Source: own research.

3.2. Factor structure of the YPM questionnaire dimensions

The adequacy of the items was evaluated using the KMO and Bartlett's sphericity tests in order to form the factors of each dimension. The communality analysis (h_2) found that the values were neither extremely high—which would be indicative of multicollinearity or redundancy ($h_2 < 0.95$)—nor low ($h_2 < 0.2$), so it was not necessary to remove any items.

More specifically, in the physical practice dimension, the lowest communality value was found in item 3, “How many days a week do you engage in moderate physical activity?” ($h_2 = 0.344$) and the highest, with a value of $h_2 = 0.728$, in item 10, “You consume beer or other alcoholic beverages” (see Table 3).

Table 3

Varimax-rotated physical practice dimension factor matrix

Item	h_2	F1	F2	F3	F4
1	0.512				0.745
2	0.413				0.834
3	0.344				0.760
4	0.528			0.748	
5	0.632			0.745	
6	0.425		0.738		
7	0.348		0.705		
8	0.711		0.583		
9	0.625			0.658	
10	0.728	0.511			
11	0.455	0.555			
12	0.801	0.762			
13	0.344		0.568		
14	0.457	0.679			
15	0.532	0.597			
16	0.416	0.587			
17	0.344	0.611			

Explained variation: F1: 0.20; F2: 0.15; F3: 0.11; F4: 0.08. KMO = 0.74; Bartlett: $X_{2(153)} = 947.173$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

In Table 4 we can see that the lowest communality value is displayed by item 38, “There is a special person in your life who cares about your feelings (professional)” ($h_2 = 0.3142$), while the highest, with a value of $h_2 = 0.776$, was recorded by item 31, “There is a special person with whom you can share your sorrows and joys (family member)”.

Table 4

Varimax-rotated social practice dimension factor matrix

Item	h_2	F1	F2	F3	F4
18	0.735	0.706			
19	0.529	0.774			
20	0.366		0.766		
21	0.214		0.784		
22	0.625	0.799			
23	0.365		0.771		
24	0.686	0.834			
25	0.686		0.824		
26	0.411	0.892			
27	0.589	0.773			
28	0.336		0.797		
29	0.342			0.950	
30	0.475				0.891
31	0.776	0.844			
32	0.700		0.798		
33	0.377			0.960	
34	0.431				0.937
35	0.652	0.780			
36	0.425		0.802		
37	0.701			0.929	
38	0.314				0.920

Explained variation: F1: 0.36; F2: 0.15; F3: 0.12; F4: 0.10. KMO = 0.86; Bartlett: $X_{2(210)} = 3.582.230$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

The lowest communality value ($h_2 = 0.310$) among the psychological practice factors appears in item 51, “You think that helping others is a positive spiritual value”, and the highest, with a value of $h_2 = 0.739$, in item 40, “You have lost control of your emotions” (see Table 5).

Table 5*Varimax-rotated psychological practice dimension factor matrix*

Item	h ₂	F1	F2	F3	F4
39	0.529				0.783
40	0.739				0.839
41	0.397				0.636
42	0.326			0.780	
43	0.597		0.748		
44	0.466		0.753		
45	0.531			0.753	
46	0.644		0.795		
47	0.517		0.787		
48	0.701			0.808	
49	0.641	0.789			
50	0.563	0.850			
51	0.310	0.678			
52	0.480	0.664			
53	0.644	0.792			

Explained variation: F1: 0.31; F2: 0.18; F3: 0.10; F4: 0.08. KMO = 0.81; Bartlett: $X_{2(105)} = 1,207.854$; $p < 0.001$.

Note: Extraction method: principal component analysis.

Source: own research.

Table 6, regarding the self-care management dimension, reveals that the lowest communality is shown by item 60, “You know how to evaluate how your lifestyle influences your health” ($h_2 = 0.447$), and the highest by item 58, “You try to find out more information when there’s something you don’t understand about your health”, which recorded a value of $h_2 = 0.645$.

Table 6*Self-care management dimension factor matrix*

Item	h ₂	F1
54	0.518	0.720
55	0.556	0.746
56	0.523	0.723
57	0.463	0.680
58	0.645	0.803
59	0.481	0.694
60	0.447	0.669

Variance explained with a single factor. F1: 0.52. KMO = 0.84; Bartlett: $X_{2(21)} = 488.841$; $p < 0.001$.

Source: own research.

And for the questionnaire as a whole, the following dimensions were attained by using the principal component extraction method with varimax rotation: overall man-

agement with 37.14% of the TEV, physical practice with 27.87% of the TEV, social practice with 24.17% of the TEV and psychological practice with 10.70% of the TEV.

In the confirmatory analysis, we can see from the CFA values that the model with the best fit comprised 13 factors (self-harming behaviours, hygiene, physical activity, rest, relationship with family, relationship with friends, relationship with partner, contact with professionals, spirituality, self-esteem, life satisfaction, emotional management and self-care management), which correspond to four correlating dimensions, as shown in Table 7: physical, social and psychological practices and overall management, which explain 72.3% of the TEV, KMO = 0.84. In addition, the results of the goodness-of-fit test determine that the model is acceptable ($X^2 = 0.94$).

Table 7

Correlations between YPM scale dimensions, total score and reference scale

	Physical practice	Social practice	Psychological practice	Self-care management	Total score	Life satisfaction*
Physical practice	1	0.368**	0.309**	0.705**	0.736**	0.229**
Social practice	0.368**	1	0.423**	0.812**	0.816**	0.449**
Psychological practice	0.309**	0.423**	1	0.712**	0.710**	0.379**
Self-care management	0.705**	0.812**	0.712**	1	0.995**	0.490**
Total score	0.736**	0.816**	0.710**	0.995**	1	0.479**
Life satisfaction*	0.229**	0.449**	0.379**	0.490**	0.479**	1

*Reference scale.

Source: own research.

3.3. Analysis of internal consistency, temporal stability and measurement objective

The reliability analysis shows that in both physical practice, with 17 items, and psychological practice, with 15 items, reliability is moderate, and that internal consistency in social practice, with 21 items, and management, with 15 items, is also moderate (see Table 8). Thus, the reliability levels of the different dimensions of the YPM questionnaire can be considered consistent and suitable for evaluating the practice and management of self-care among adolescents. What's more, as confirmed by the data in Table 7, when there are correlations between the dimensions, the four-dimensional model is again confirmed.

Table 8*Internal consistency of the YPM questionnaire*

Dimensions	Alpha	Items	r
Physical practice	0.700	17	0.000
Social practice	0.903	21	
Psychological practice	0.719	15	
Self-care management	0.845	7	

Source: own research.

In order to discern the temporal stability of the YPM questionnaire, the test-retest method was applied to 56 participants ten months following the initial study. The Kolmogorov-Smirnov test returned a normal distribution ($p = 0.200$) and Pearson correlation ($r = 0.801$) confirmed the temporal stability of the scale.

A Pearson correlation coefficient was employed to check the criterion and convergent validity, measuring the correlation between the different dimensions of the scale, the total score and the reference scale (Diener *et al.*, 1985). As can be seen in the results, there is strong correlation between the dimensions and the reference scale (see Table 7). More specifically, the management and social practice dimensions show the strongest correlation with the “Total score” variable, although all dimensions returned significant values and have scores of $r > 0.40$.

If we look at the correlation between the different dimensions and the reference scale, we can see that all of them have a high level of significance ($p < 0.001$), with psychological practice, management and total score recording the highest coefficients.

In summary, the questionnaire was created around four dimensions that correlate with one other ($p < 0.001$) and with a reliability of $\alpha = 0.84$. The exploratory factor analysis of each dimension found that there were four factors for physical practice (KMO = 0.740; TEV of 53.87%), four for psychological practice (KMO = 0.809; TEV of 65.979%), four for social practice (KMO = 0.860; TEV of 74.633%) and one for management (KMO = 0.844; TEV of 51.912%). Finally, a value of $r = 0.801$ was attained, thus confirming the temporal stability of the scale, and the criterion was validated by correlating with the reference scale ($p < 0.001$).

4. Discussion

The main objective of this research was to gain a deeper understanding of the structure of the YPM questionnaire, conducted in a sample of 12-to-17-year-old students in compulsory secondary education, and identify its reliability in terms of internal consistency, criterion validity and time.

We discovered that the structure comprised four dimensions that correlated with one other. KMO and Bartlett’s sphericity tests indicated the suitability of the composition

of the questionnaire's factors and dimensions. In addition, by excluding items with a communality value lower than 0.50, the study was ultimately performed on 60 items. Meanwhile, all dimensions recorded an internal consistency value of greater than $\alpha = 0.70$. Temporal stability, on the other hand, was proven with the confirmatory factor analysis by administering the questionnaire again ten months later.

These findings confirm the hypotheses proposed regarding the possibility of creating a multidimensional questionnaire that is able to measure both the level of self-care practice and management and, more specifically, each dimension at the same time. In other words, the data demonstrated the affinity of the factors and dimensions with the phenomenon subject to analysis. In addition, these results allow us to offer more detailed information regarding which dimension(s) should be prioritised in intervention processes (Chavarría, 2019; Fernández-Sánchez *et al.*, 2023), and to establish relationships between the questionnaire's different dimensions (Cosano, 2021; Poblete and Baldrich, 2012).

Consequently, it is worth highlighting the important role that self-care management plays, both independently and in relation to the rest of the dimensions, something that is indicated by the EFA, which underlines the importance of measuring this dimension in order to gain a general overview of the state of the matter. What's more, this coincides with the different applications and versions of management questionnaires that have been carried out to date (Matarese *et al.*, 2016). Furthermore, the existence of significant relationships between this dimension and those obtained from the practical content only serves to reaffirm the value of the measurement instrument, not just for use in other research, but also as a tool that can be used by public and/or private bodies responsible for ensuring the health of the youth (AEP, 2020; Bernedo *et al.*, 2023; Boraita *et al.*, 2022; Regional Government of Andalusia, 2023).

Similarly, by explaining the distribution of physical practice in three correlated dimensions, based on the assumptions of the previous scientific literature (Campos-García *et al.*, 2018; Galiana *et al.*, 2015), we were able to perform a wider and deeper analysis and thus establish a unified study method. Although there are not many studies on this issue, as we have already mentioned, some research has found that people who practise physical self-care behaviours report benefits in their mental health, self-esteem and management of emotions (Sansó *et al.*, 2015; Monserrat *et al.*, 2023). The opposite is also true: caring for emotional health can have an impact on the practice of healthy physical activities (Díaz *et al.*, 2019; Olea *et al.*, 2020). Also, the inclusion of spirituality, as a measure for managing psychological health, shows that these results concur with those of previous studies (Heidari *et al.*, 2017; Sharif Nia *et al.*, 2017).

Works studying the social dimension of care tend to focus on the relationships between caregiving and the social network of caregivers, i.e., those who assist in treatment, exercise, hygiene, etc. (Márquez-Terraza, 2022), while there is a considerable lack of research on social self-care agency, which links adequate social health to the prevention of psychological diseases (such as depression, anxiety, eating disorders) and physical diseases (overweight, obesity, etc.) (Lacunza *et al.*, 2013; Rondon and Angelucci, 2021; Torrel and Delgado, 2016).

Given the stability of the instrument in the young population, new studies are needed to establish whether these results can be generalised, both nationally and internationally, if we take into consideration not just age and gender, but also other educational levels and personal and family socio-demographic characteristics, since the intervention method may have varying effects depending on these types of variables (Marsh, 1996).

In short, the findings of this work, which centres on the youth population, can serve as a basis for future research covering a wider range of subjects and geographical areas, even opening the door for it to be adapted to other languages in order to further confirm the functional mechanisms of self-care (Badia and Baro, 2001; Gusi *et al.*, 2009).

5. Conclusions

The findings of this study have significant implications, since it has found that the YPM questionnaire devises a consistent and reliable scale that yields valid results for a segment of the population (between 12 and 17 years old). Thus, it is suitable for use as an instrument for measuring young people's self-care practice and management. However, since the results have been obtained from a unified sample from a specific province (Almería), they should be taken with caution, since they require further studies to confirm them for other contexts.

In addition, since the YPM questionnaire has convergent validity with both a reference instrument and over time, it is suitable for use in research and in interventions. In other words, the results obtained from its application reveal data on behaviour, in terms of defined practices (physical, psychological and social), and its relationship with overall management (Ayes *et al.*, 2020). Consequently, it also demonstrates the multidisciplinary nature of self-care, both as a prevention practice and as a treatment resource.

6. Bibliography

- Achury-Saldaña, D. M. & Kato, N. P. (2023). Adaptación cultural del Cuestionario de autocuidado en pacientes con asistencia ventricular definitiva. *Enfermería global*, 22(2), 234-245. <https://doi.org/10.6018/eglobal.526611>
- Alania, M. (2021). Gestión de conocimiento y autocuidado en pacientes trasplantados de células progenitoras hematopoyéticas, trabajo final de máster. Lima: INEN. <https://hdl.handle.net/20.500.12692/72343>
- Asociación Española de Pediatría (2020). Los adolescentes españoles tienen una percepción muy optimista de su estado de salud, según la encuesta «te cuidas tanto como crees», de la Asociación Española de Pediatría. https://www.aeped.es/sites/default/files/20201026_np_encuesta_adolescentes.pdf

- Ayes, C. B., Ruiz, A. L. & Estévez, G. A. (2020). Autocuidado: una aproximación teórica al concepto. *Informes psicológicos*, 20(2), 119-138. <https://doi.org/10.18566/infpsic.v20n2a9>
- Badía, X. & Baró, E. (2001). Cuestionarios de salud en España y su uso en atención primaria. *Atención primaria*, 28(5), 349-356. [https://doi.org/10.1016/S0212-6567\(01\)70387-3](https://doi.org/10.1016/S0212-6567(01)70387-3)
- Batista-Fogueta, M. J., Coenders, G. & Alonso, J. (2004). Análisis factorial confirmatorio. Su utilidad en la validación de cuestionarios relacionados con la salud. *Medicina Clínica*, 122, 21-27. <https://doi.org/10.1157/13057542>
- Berbiglia, V. A. & Thuy, L. T. (2022). Dorothea E. Orem: teoría del déficit de autocuidado en enfermería. In M. Raile Alligood (Ed.), *Modelos y Teorías en Enfermería* (pp. 198-212). Barcelona: Elsevier.
- Bernedo-García, M. C., Quiroga-Sánchez, E., García-Murillo, M. Á., Márquez-Álvarez, L., Arias-Ramos, N. & Trevisson-Redondo, B. (2023). La necesidad de la Enfermería Escolar: una revisión integradora de la literatura. *Enfermería Global*, 22(72), 490-516. <https://dx.doi.org/10.6018/eglobal.560501>
- Boraita, R. J., Ibort, E. G., Torres, J. M. D. & Alsina, D. A. (2022). Factores asociados a un bajo nivel de actividad física en adolescentes de La Rioja (España). *Anales de Pediatría*, 96(4), 326-333. <https://doi.org/10.1016/j.anpedi.2021.02.011>
- Butler, L. D., Mercer, K. A., McClain-Meeder, K., Horne, D. M. & Dudley, M. (2019). Six domains of self-care: attending to the whole person. *Journal of Human Behavior in the Social Environment*, 29, 107-124. <https://doi.org/10.1080/10911359.2018.1482483>
- Cabrera, A. R., Ramos, G. S., Palú, M. E. C. & Cáceres, B. P. (2013). Estrategia educativa sobre promoción en salud sexual y reproductiva para adolescentes y jóvenes universitarios. *Revista Cubana de Salud Pública*, 39(1), 161-174.
- Campos-García, A., Oliver, A., Tomás, J. M., Galiana, L. & Gutiérrez, M. (2018). Autocuidado: Nueva evidencia sobre su medida en adultos mayores. *Revista Española de Geriatría y Gerontología*, 53(6), 326-331. <https://doi.org/10.1016/j.regg.2018.01.010>
- Cerna Leon, Y. L. (2023). *Nivel de autoestima y prácticas de autocuidado en adolescentes de una institución educativa*. Lima: Universidad de Lima.
- Chavarría-Carranza, C. Y. (2019). Estilos de atribución causal. Importancia para la investigación e intervención profesional en la etapa adolescente. *Revista Costarricense de Psicología*, 38(1), 1-16. <http://dx.doi.org/10.22544/rcps.v38i01.01>
- Corral, V., Caso, J. & Frías, M. (Dirs.) (2017). *Psicología del cambio climático. Mitigación y adaptación conductual ante el calentamiento global*. México: Pearson.
- Cosano, P. S. (2021). El impacto de la pandemia en los jóvenes: una aproximación multidimensional. *Panorama social*, 33, 109-125.
- De la Torre Pinela, S. V. (2016). *Gestión de los cuidados de enfermería al niño con síndrome de down en su domicilio*. Guayaquil: Universidad de Guayaquil.

- De los Ángeles Páramo, M. (2011). Factores de Riesgo y Factores de Protección en la Adolescencia: Análisis de Contenido a través de Grupos de Discusión. *Terapia psicológica*, 29(1), 85-95. <https://doi.org/10.4067/S0718-48082011000100009>
- De Valenzuela Bandín, Á. L., García, R. M. & Arias, D. M. E. (2021). Prácticas de ocio y tiempo libre de los adolescentes en Galicia: análisis y reflexiones en clave socioeducativa. *Bordón: Revista de Pedagogía*, 73(1), 161-180. <https://doi.org/10.13042/Bordon.2021.83201>
- Dean, K. (1989). Conceptual, theoretical and methodological issues in self-care research. *Social Science & Medicine*, 29(2), 117-123. [https://doi.org/10.1016/0277-9536\(89\)90159-7](https://doi.org/10.1016/0277-9536(89)90159-7)
- Díaz, J. R., Fernández, C. A., Cabo, A. P., Pino, L. P. & Gómez, C. A. (2019). Motivaciones y hábitos de actividad física en alumnos universitarios. *Retos*, (36), 446-453.
- Díaz, V. L., Rojas, P. A., Barboza, Y. B., Sancho, E. C., Marín, M. C. & Guido, Y. W. (2012). Capacidad de agencia de autocuidado en las personas adultas que padecen artritis reumatoide. *Enfermería Actual en Costa Rica*, (22), 5-11.
- Díaz, V. L., Vargas, K. C., Gutiérrez, Y. P., Villegas, T. R. & Wong, I. S. (2016). Validación de la Escala de Apreciación de Agencia de Autocuidado (ASA) para Costa Rica, para población con enfermedad crónica. *Revista Enfermería Actual en Costa Rica*, (31), 12.
- Diener, E., Emmons, R., Larsen, R. & Griffin, S. (1985). The satisfaction with Life Scale. *Journal of Personality Assessment*, 49. https://doi.org/10.1207/s15327752jpa4901_13
- Digennaro, S. & Iannaccone, A. (2023). Check Your Likes but Move Your Body! How the Use of Social Media Is Influencing Pre-Teens Body and the Role of Active Lifestyles. *Sustainability* 15, 3046. <https://doi.org/10.3390/su15043046>
- Durkheim, É. (1985). *Las reglas del método sociológico*. Madrid: Akal.
- Durkheim, E. (2020). *Historia de la educación y de las doctrinas pedagógicas: la evolución pedagógica en Francia*. Madrid: Morata.
- Fernández-Sánchez, H., Guzmán-Facundo, F. R., Herrera-Medina, D. & Sidani, S. (2023). Importancia del estudio piloto en un proyecto de intervención. *Index de enfermería*, 32(1), 1132-1296. <https://dx.doi.org/10.58807/indexenferm20233776>
- Galiana, L., Oliver, A., Sansó, N. & Benito, E. (2015). Validation of a new instrument for selfcare in Spanish palliative care professionals nationwide. *The Spanish Journal of Psychology*, 18, 1-9. <https://doi.org/10.1017/SJP.2015.71>
- Gámez-Guadix, M., Villa-George, F. & Calvete, E. (2014). Psychometric Properties of the Cyberbullying Questionnaire (CBQ) Among Mexican Adolescents. *Violence and Victims*, 29, 243-246. <https://doi.org/10.1891/0886-6708.VV-D-12-00163R1>
- García, N. G. & Langa, N. L. (2012). Antecedentes históricos y perfil de la enfermera escolar. *Metas de Enfermería*, 15(7), 50-54. <https://doi.org/10.2307/j.ctv25tnwp5.4>

- Gusi, N., Badía, X., Herdman, M. & Olivares, P. R. (2009). Traducción y adaptación cultural de la versión española del cuestionario EQ-5D-Y en niños y adolescentes. *Atención Primaria*, 41(1), 19–23. <https://doi.org/10.1016/j.aprim.2008.04.005>
- Heidari, S., Rezaei, M., Sajadi, M., Ajorpaz, N. M. & Koenig, H. G. (2017). Religious practices and self-care in Iranian patients with type 2 diabetes. *Journal of Religion and Health*, 56(2), 683–696. <https://doi.org/10.1007/s10943-016-0320-x>
- Hernández Serrano, O., Espada Sánchez, J. P., Piqueras Rodríguez, J. A., Orgilés Amorós, M. & García-Fernández, J. M. (2013). Programa de prevención del consumo de drogas Saluda: evaluación de una nueva versión en adolescentes españoles. *Health and Addictions/Salud y Drogas*, 13(2), 135–144. <https://doi.org/10.21134/haaj.v13i2.210>
- Hoyo, D. E. H., Losardo, R. J. & Bianchi, R. I. (2021). Salud plena e integral: un concepto más amplio de salud. *Revista de la Asociación Médica Argentina*, 134(1), 18–25.
- Iglesias, M. L., Tapia-Frade, A. & Velasco, C. M. R. (2023). Patologías y dependencias que provocan las redes sociales en los jóvenes nativos digitales. *Revista de Comunicación y Salud*, 13, 1–22. <https://doi.org/10.35669/rcys.2023.13.e301>
- Junta de Andalucía (2023). <https://www.juntadeandalucia.es/organismos/saludyconsumo/areas/salud-vida/programas-salud/paginas/creciendo-salud.html>
- Kline, P. (1986). *A handbook of test construction: Introduction to psychometric design*. London: Methuen.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- La Valle, R. (2017). Sobre la definición de salud. *Archivos de medicina familiar y general*, 14(2).
- Lacave, T. T., Vázquez-Barrio, T. & Álvarez, R. S. (2022). Experiencias de ciberacoso en adolescentes y sus efectos en el uso de internet. *Icono14*, 20(1), 7. <https://doi.org/10.7195/ri14.v20i1.1624>
- Lacunza, A. B., Caballero, S. V., Salazar, R., Sal, J. & Filgueira, J. (2013). Déficit sociales en adolescentes con sobrepeso y obesidad. *Ciencias Psicológicas*, 7(1), 25–32. <https://doi.org/10.22235/cp.v7i1.1094>
- León-Larios, F. & Gómez-Baya, D. (2020). Diseño y validación de un cuestionario sobre conocimientos de sexualidad responsable en jóvenes. *Revista Española de Salud Pública*, 92, e20180628.
- López Díaz, A. L. & Guerrero Gamboa S. (2006). Perspectiva internacional del uso de la teoría general de Orem. *Investigación Educativa en Enfermería*, 24(2), 90–100.
- López, L. G. & Rodríguez, G. M. (2017). El autocuidado y las apps, agentes de cambio en enfermedades como sobrepeso, obesidad y diabetes. *Revista Digital Universitaria*, 18(8). <https://doi.org/10.22201/codeic.16076079e.2017.v18n8.a3>
- Márquez-Terraza, A. V. (2022). Representaciones sociales en las personas mayores y su influencia en el autocuidado. *Revista Cuidarte*, 13(2), e2107. <https://doi.org/10.15649/cuidarte.2107>

- Marsh, H. W. (1993). *Physical Self-Description Questionnaire*. Australia: University of Western Sydney.
- Matarese, M., Lommi, M. & De Marinis, M. G. (2017). Systematic review of measurement properties of self-reported instruments for evaluating self-care in adults. *Journal Advance Nursing*, 73(6), 1272-1287. <https://doi.org/10.1111/jan.13204>
- Ministry of Health (2023). <https://www.sanidad.gob.es/campañas/portada/home.htm>
- Monserrat Hernández, M., Arjona Garrido, Á., Checa Olmos, J. C., Casimiro Andújar, A., Artés Rodríguez, E. M. & Salguero García, D. (2023). Influence of the practice of physical exercise and healthy eating on the Vigour of university lectures. *Frontiers in Sports and Active Living*, 5, 1228668. <https://doi.org/10.3389/fspor.2023.1228668>
- National Statistics Institute (2019). Continuous Register Statistics as of January 1, 2019. Data by municipalities. <https://www.ine.es/jaxi/Datos.htm?path=/t20/e245/p05/a2019/l0/&file=00004001.px>
- Nuño-Solinis, R., Rodríguez-Pereira, C., Piñera-Elorriaga, K., Zaballa-González, I. & Bikandi-Irazabal, J. (2013). Panorama de las iniciativas de educación para el autocuidado en España. *Gaceta Sanitaria*, 27, 332-337. <https://doi.org/10.1016/j.gaceta.2013.01.008>
- Olea, L. N. S., Ampudia, M. G. L., Cárdenas, R. I. S. & Martínez, B. M. (2020). Nivel de autocuidado en estudiantes universitarios de cinco licenciaturas del área de la salud. *Cuidarte*, 5(10), 32-43. <https://doi.org/10.22201/fesi.23958979e.2016.5.10.69114>
- Orem, D. (1999). *Nursing: Concepts of practice*. St. Louis: Mosby.
- Poblete, F. & Baldrich, F. (2012). Evaluación multidimensional de los servicios de salud para adolescentes en centros de Atención Primaria en una comuna de Santiago. *Revista Médica de Chile*, 140(9), 1145-1153. <https://doi.org/10.4067/S0034-98872012000900007>
- Pool-Góngora, R. A., Balam-Gómez, M. & Tuyub-Itza, M. Y. (2023). Planes de cuidados de enfermería: propuesta para padres con escolares que padecen sobrepeso u obesidad. *Sanus*, 8. <https://doi.org/10.36789/revsanus.vii.320>
- Puchalski, C. M., Sbrana, A., Ferrell, B., Jafari, N., King, S., Balboni, T., Miccinesi, G., Vandenhoeck, A., Silbermann, M., Balducci, L., Yong, J., Antonuzzo, A., Falcone, A. & Ripamonti, C. I. (2019). Interprofessional spiritual care in oncology: a literature review. *ESMO Open*, 4(1), 1-12. <https://doi.org/10.1136/esmoopen-2018-000465>
- Reyes, A. L. G. & Guadarrama, J. D. S. (2022). Valoración de enfermería en el autocuidado y estilo de vida del paciente con enfermedad crónica asociada a la obesidad. *Dilemas contemporáneos: Educación, Política y Valores*. <https://doi.org/10.46377/dilemas.v9i2.3154>
- Rimón, M. G. & Castro, M. M. (2016). Hábitos de vida saludable desde la adolescencia. *Revista de Estudios de Juventud*, (112), 107-116.

- Rodríguez, H. D. & Hernández, M. A. (2018). Necesidad percibida del profesorado de educación infantil, primaria y secundaria sobre formación en salud e implantación de la figura de la enfermera escolar. *Metas de Enfermería*, 21(9), 5-12.
- Rondón Bernard, J. E. & Angelucci Bastidas, L. (2021). Relación entre depresión y adherencia al tratamiento en diabetes tipo 2, considerando la red de apoyo social, las estrategias de afrontamiento y el sexo. *Revista costarricense de psicología*, 40(2), 215-242. <https://doi.org/10.22544/rcps.v40i02.08>
- Rosales, R. A. (2022). *Efectos adversos asociados al consumo de drogas y otros comportamientos de riesgo en la población adolescente*. Alicante: Universidad de Alicante.
- Ruiz-Aquino, M. M., Díaz-Lazo, A., Ortiz-Aguí, M. L. & Ida, V. C. E. (2021). Conductas de autocuidado frente a la prevención del contagio de la COVID-19 en pobladores peruanos. *Revista Cubana de Medicina General Integral*, 36(4).
- Sánchez, J. G. S. & Riba, S. S. (2022). Predictores asociados al consumo de tabaco en adolescentes: una revisión sistemática. *Retos: nuevas tendencias en educación física, deporte y recreación*, (46), 1065-1072. <https://doi.org/10.47197/retos.v46.93114>
- Sanmartín, A., Ballesteros, J. C., Calderón, D. & Kuric, S. (2022). *Barómetro Juvenil 2021. Salud y bienestar: Informe Sintético de Resultados*. Madrid: Centro Reina Sofía sobre Adolescencia y Juventud, Fundación FAD Juventud. <https://doi.org/10.5281/zenodo.6340841>
- Sansó, N., Galiana, L., Oliver, A., Pascual, A., Sinclair, S. & Benito, E. (2015). 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 and Symptom Management*, 50(2), 200-207. <https://doi.org/10.1016/j.jpainsymman.2015.02.013>
- Santiago, M. (2022). *Programa de formación sobre el autocuidado y gestión de emociones del profesional sanitario en la unidad de cuidados paliativos pediátricos*. Zaragoza: Universidad de Zaragoza. <https://zaguan.unizar.es/record/112626>
- Sharif Nia, H., Pahlevan Sharif, S., Goudarzian, A. H., Allen, K. A., Jamali, S. & Heydari Gorji, M. A. (2017). The relationship between religious coping and self-care behaviors in Iranian medical students. *Journal of Religion and Health*, 56(6), 2109-2117. <https://doi.org/10.1007/s10943-017-0376-2>
- Slusher, I. (1999). Self-care agency and self-care practice of adolescents. *Comprehensive Pediatric Nursing*, 22(1), 49-58. <https://doi.org/10.1080/014608699265383>
- Steinhorn, D. M., Din, J. & Johnson, A. (2017). Healing, spirituality, and integrative medicine. *Annal Palliative Medicine*, 6, 237-247. <https://doi.org/10.21037/apm.2017.05.01>
- Taylor, S. G., Compton, A., Donohue-Eben, J., Emerson, S., Nergess, N. & Marriner-Tomey, A. (2000). Introducción al análisis de las teorías de enfermería. In M. Raile (ed.), *Modelos y teorías en enfermería* (pp. 9-13). España: Elsevier.

- Torrel, M. & Delgado, M. (2016). Funcionamiento familiar y depresión en adolescentes de la IE Zarumilla-Tumbes, 2013. *Ciencia y desarrollo*, 17(1), 47-53. <https://doi.org/10.21503/cyd.v17i1.1102>
- Vallejo, A. G. & Jiménez, M. A. (2022). Influencia de la Actividad Físico-Deportiva en el rendimiento académico, la autoestima y el autoconcepto de las adolescentes: El caso de la isla de Tenerife. *Retos: nuevas tendencias en educación física, deporte y recreación*, (46), 120-128. <https://doi.org/10.47197/retos.v46.93496>
- Vidal-Blanco, G., Oliver, A., Galiana, L. & Sansó, N. (2019). Quality of work life and self-care in nursing staff with high emotional demand. *Enfermería Clínica*, 29(3), 186-194. <https://doi.org/10.1016/j.enfcli.2018.06.004>
- Videra-García, A. & Reigal-Garrido, R. E. (2013). Autoconcepto físico, percepción de salud y satisfacción vital en una muestra de adolescentes. *Anales de Psicología*, 29(1), 141-147. <https://doi.org/10.6018/analesps.29.1.132401>
- White, M. L. & Myers, S. (2013). Development of a spiritual self-care practice scale. *Journal of Nursing Measurement*, 21(3), 450-462. <https://doi.org/10.1891/1061-3749.21.3.450>
- World Health Organization (1948). Definition of health. International Sanitary Conference, held in New York from June 19 to July 22, 1946, signed on July 22, 1946 by the representatives of 61 States (Official Records of the World Health Organization, 2, p. 100).
- Zárate-Grajales, R. (2004). La gestión del cuidado en enfermería. *Index de Enfermería*, 13(44-45), 42-46. <https://doi.org/10.4321/S1132-12962004000100009>

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