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Agency for self-care of health in university students: characteristics and differences

Agencia de autocuidado de la salud en universitarios: características y diferencias

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Abstract:

The objective of this study was to determine the characteristics and differences of university students in relation to self-care. A quantitative methodology was used, with ex post facto cross-sectional design with descriptive scope. Data were collected in an intentional non-probabilistic sample of 400 students from the Autonomous University of Coahuila, 64.3% women and 35.8% men, with an average age of 21 years, 36.5% from the Torreón unit, 30% from the North unit and 33% from Saltillo. The Appraisal of Self-Care Agency Scale (ASA) was applied, data collection was carried out electronically through the SurveyMonkey platform. The results show that the self-care analyzed from the sociodemographic characteristics studied are similar in the three campuses, the prevalence of physical and mental illnesses was analyzed, highlighting mental health diseases such as anxiety, reported in almost a third of the sample and depression, reaching more than 20%. It is concluded from the characteristics of self-care reported that it is important to identify and understand the barriers experienced by young people, this to promote better practices of health care and self-care, which allow healthy lifestyles for the benefit of greater well-being in university students, although self-care practices must be learned continuously. It is during adolescence and youth that these practices become less frequent, which constitutes a risk factor for this sector of the population

Keywords:

Self-care, university students, health, illness

Resumen:

El objetivo del presente estudio fue determinar las características y diferencias de los estudiantes universitarios en relación con el autocuidado. Se utilizó una metodología cuantitativa, con diseño ex post facto de tipo transversal con alcance descriptivo. Se recolectaron datos en una muestra no probabilística intencional de 400 estudiantes de la Universidad Autónoma de Coahuila, 64.3% mujeres y 35.8% hombres, con una edad promedio de 21 años, 36.5% de la unidad Torreón, 30% de la unidad Norte y 33% a Saltillo. Se aplicó la Escala de Agencia de Autocuidado (ASA), La recolección de los datos se llevó a cabo de manera electrónica mediante la plataforma SurveyMonkey. Los resultados muestran que el autocuidado analizado a partir de las características sociodemográficas estudiadas es similar en las tres unidades, se analizó la prevalencia de enfermedades físicas y mentales, destacando las enfermedades de salud mental como la ansiedad, reportada en casi un tercio de la muestra y la depresión, alcanzando más del 20%. Se concluye a partir de las características del autocuidado reportadas que, es importante identificar y comprender las barreras que experimentan los jóvenes, esto para promover mejores prácticas de atención a la salud y autocuidado, que permitan tener estilos de vida saludables en beneficio de un mayor bienestar en los universitarios, si bien, las prácticas de autocuidado deben aprenderse de forma continua, ya que es durante la adolescencia y juventud que estas prácticas se vuelven menos frecuentes, lo que constituye un factor de riesgo para este sector de la población.

Palabras Clave:

Autocuidado, universitarios, salud, enfermedad.

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INTRODUCCIÓN

Historically, self-care has been rooted in the field of nursing, first introduced in the late 1950s. It was defined by Orem (1959) as learned, positive, and practical activities performed by individuals on their own time. As a process, the concept of self-care involves returning health responsibility to the individual, focusing on disease-related needs, and learning to live with illness.

Later, the World Health Organization (WHO, 1984) defined self-care as "the activities that individuals, families, and communities undertake with the intention of enhancing health, preventing disease, limiting illness, and restoring health." Several key areas were outlined: hygiene (both general and personal), nutrition (type and quality of food intake), lifestyle (exercise, leisure, etc.), environmental factors (living conditions, social habits), socioeconomic elements (income level, cultural beliefs), and self-medication—all recognized as important components of self-care (WHO, 1998).

Self-care gained significant visibility and prominence during the COVID-19 pandemic as people around the world began to practice hand hygiene, wear face masks, and conduct self-assessments at home. There is a growing body of evidence supporting the effectiveness of self-care interventions across communicable diseases, non-communicable diseases, mental health, and sexual and reproductive health rights (Narasimhan, Aujla & Van Lerberghe, 2022), demonstrates that self-care is a dynamic process that evolves over time (Conley et al., 2022).

Given this context, self-care interventions are among the most promising strategies for improving health and well-being. They represent a significant step toward greater self-determination, self-efficacy, autonomy, and engagement in health, and they encourage active participation by individuals (WHO, 2022). A meta-analysis highlights three core attributes that should be included in the definition of self-care: the ability to care for oneself through awareness, self-regulation, and self-reliance to achieve, maintain, or promote optimal health and well-being (Martínez et al., 2021).

Culture, values, beliefs, social norms, religion, gender roles, and customs can all influence self-care behaviors (Yeom et al., 2022). Much of the literature has focused on self-care in the context of non-communicable diseases (Wada & Wallace, 2022), where decision-making must account for disease-specific factors, side effects, comorbidities, and mental health (Ranieri et al., 2022).

In chronic diseases (Yildiz & Özlü, 2021), positive correlations have been reported between self-care and quality of life, for example, among patients undergoing hemodialysis (Pakaya et al., 2021). Among diabetic patients, self-care was prominent in areas like dietary modification and physical activity, though gaps persist in problem-solving, risk reduction, and healthy coping behaviors (Chittooru et al., 2022).

Self-care has also been assessed in the context of mental health conditions such as depression (McCusker et al., 2022; Wick, 2022) and anxiety (Patrick et al., 2022), particularly in individuals living with chronic degenerative diseases. Self-care is essential in managing chronic illnesses and holds substantial relevance across all dimensions of health and levels of care (Alqahtani & Alqahtani, 2022).

Typically, self-care is situated in the home; that is, it is a domestic process integrated into the everyday lives of individuals (WHO, 2019). Engaging in self-care behaviors can be demanding and stressful and may negatively impact quality of life—this is especially relevant during adolescence, a critical period of development. Self-care behaviors, coping strategies, and self-efficacy are often interrelated as part of individual response factors. Personal and social factors can significantly affect self-care, especially among adolescents and young adults with health conditions (Montali et al., 2022).

Adolescence is a pivotal phase during which individuals seek to define themselves. Although it is considered a transitional stage in normal development, health promotion and disease prevention should be central to adolescent healthcare. Establishing personal care behaviors during this time is key, as they will influence health status in adulthood (McCaleb & Cull, 2000).

Research on self-care among healthy adolescents and young adults remains limited. Some studies have explored the impact of self-care on juvenile offenders (Ervin, 1998), the role of beliefs held by adolescents, parents, and healthcare providers regarding self-care perceptions and barriers in type 1 diabetes (Palladino & Helgeson, 2013), and motivation as a protective factor for self-care among young people with diabetes (Austin et al., 2013).

Significant social behavior changes occur during adolescence: sexuality and romantic interests begin to emerge, and adolescents spend more time with peers and less with parents and family (Nelson et al., 2005). The closure of schools and the imposition of social distancing measures during the COVID-19 pandemic had a particularly strong impact on this age group. Post-pandemic efforts should focus on helping adolescents develop academic skills, access physical and mental health resources, and manage interpersonal relationships. It is also likely that the effects of the pandemic were not experienced equally among all students (Scott et al., 2021).

In this same vein, the risk of developing depression is three times higher for adolescents who experience social isolation and loneliness. These factors are also associated with poorer health outcomes up to nine years later (Loades et al., 2020). One study found that perceived declines in support from friends and family during COVID-19 were associated with more depressive symptoms and a greater sense of conflict and loneliness (Rogers et al., 2021). Therefore, it is crucial to prepare for a potential increase in mental health issues within this population.

No studies have been identified that focus specifically on university students as the target population. For this reason, the present research becomes particularly relevant, as it seeks to identify the characteristics and differences related to self-care among university students.

METHOD

Study design

This research followed a quantitative approach with a cross-sectional ex post facto design (Ato et al., 2013), aiming for a descriptive scope based on demographic variables through convenience sampling.

Participants

A non-probabilistic, purposive sample of 400 university students from the three academic units of the Universidad Autonoma de Coahuila was used. Of the total sample, 64.3% were women and 35.8% were men, ranging in age from 18 to 64 years (M = 21.21, SD = 5.48). Approximately 36.5% of the participants were from the Torreón campus, 33% from Saltillo, and 30.5% from the Northern campus. Additionally, 87% were undergraduate students and 13% were enrolled in graduate programs. At the time of the survey, 88% of respondents were single, followed by those who were married (7.8%) and those in a domestic partnership (3.5%).

Measures

The Self-Care Agency Scale (ASA) was used, an instrument originally developed by Evers (1989) and most recently validated in Spanish by Díaz De León et al. (2022). The scale assesses the individual's capacity to perform estimative, transitional, and productive self-care operations, grouped into three dimensions: Self-Care, Self-Care Deficit, and the total scale score, which represents Self-Care Agency. The scale consists of 24 items with a five-point ordinal response format (1 = strongly disagree to 5 = strongly agree, with higher values indicating greater agreement). Each participant can obtain a total score ranging from 24 to 120 points.

Procedure

Data collection was conducted electronically through the SurveyMonkey platform. The survey link was distributed via institutional social media channels, as well as through the Institutional Tutoring Program and the Tutoring Coordinators of the schools and faculties at the Universidad Autónoma de Coahuila. The response window remained open for two months. Informed consent was obtained electronically through a dedicated section of the instrument; respondents who declined consent were automatically exited from the survey.

RESULTS

One important aspect to consider regarding self-care behaviors is the presence of various physical and mental health conditions among individuals (Table 1). In this study, 34.5% of participants reported having been diagnosed with anxiety during 2022, while 22.8% reported a diagnosis of depression. Additionally, 7.8% experienced asthma, pneumonia, or another respiratory illness; 1.5% were diagnosed with hypertension; nearly 5% reported having a kidney or urinary tract condition; and 5.3% had ulcers, gastritis, or other peptic disorders.

Table 1

Frequency Distributions of Disease Prevalence Within the Sample

Health Condition Experienced During 2022	*f*	%
Diabetes	4	1
Hypertension	6	1.5
Asthma, Pneumonia, or Respiratory Disease	31	7.8
Urinary Tract Infections	16	4
Kidney Diseases	3	0.8
Ulcers, Gastritis, or Peptic Disorders	21	5.3
HIV	2	0.5
Depression	91	22.8
Anxiety	138	34.5
Total	312	78

Self-care was assessed across four performance levels and analyzed for the full scale as well as across two dimensions: Self-Care Deficit and Self-Care Agency (Table 2). Among the total sample, 28% were classified as having low self-care capacity, 25% as very low, 23% as very high, and slightly more than 22% as having high self-care capacity.

When analyzed by academic unit and subscale, students from the Torreón campus of the Universidad Autónoma de Coahuila reported the highest percentage of cases falling into the high and very high self-care capacity categories, which together represented 47.6% of that unit's sample. The Northern campus followed closely with 47.4% of its students classified in the high or very high self-care categories, while the Saltillo campus ranked third.

The highest percentage of Self-Care Deficit was also reported at the Torreón campus (19.4%), followed by Saltillo (16.2%) and the Northern campus (14.9%). Self-Care Agency, which reflects the overall score by combining self-care and self-care deficit, showed the highest prevalence of high agency capacity in the Torreón campus, where 25% of respondents from that unit fell into this category. Both the Saltillo and Northern campuses had nearly identical levels of high self-care agency, each with 22% of respondents falling in that range.

Table 2

Frequency by ASA Score Categories by Academic Unit of UA de C

Scale/Subscale		UA de C Academic Unit of Affiliation			
		Saltillo	Torreón	Northern	Total
Self-Care	Very Low Capacity	30 (25.6%)	37 (29.8%)	24 (21.1%)	91 (25.6%)
	Low Capacity	38 (32.5%)	28 (22.6%)	36 (31.6%)	102 (28.7%)

Scale/Subscale		UA de C Academic Unit of Affiliation			
		Saltillo	Torreón	Northern	Total
	High Capacity	26 (22.2%)	26 (21.0%)	28 (24.6%)	80 (22.5%)
	Very High Capacity	23 (19.7%)	33 (26.6%)	26 (22.8%)	82 (23.1%)
Self-Care Deficit	Very Low Deficit	37(31.6%)	35(28.2%)	41(36.0%)	113(31.8%)
	Low Deficit	35 (29.9%)	33(26.6%)	31(27.2%)	99(27.9%)
	High Deficit	26(22.2%)	32(25.8%)	25(21.9%)	83(23.4%)
	Very High Deficit	19(16.2%)	24(19.4%)	17(14.9%)	60(16.9%)
Self-Care Agency	Very Low Capacity	32 (27.4%)	40 (32.3%)	26 (22.8%)	98(27.6%)
	Low Capacity	33 (28.2%)	30 (24.2%)	33 (28.9%)	96(27.0%)
	High Capacity	26 (22.2%)	23 (18.5%)	29 (25.4%)	78(22.0%)
	Very High Capacity	26 (22.2%)	31 (25.0%)	26 (22.8%)	83(23.4%)
Total		117 (100%)	124 (100%)	114 (100%)	355(100%)

The results in the three self-care subscales were tabulated by academic unit and gender (Table 3). The sample from the Torreón campus had the highest number of female participants with high self-care capacity, representing 54% of the sample from that unit. In contrast, for male participants, the highest number of cases with high or very high self-care capacity were reported at the Northern campus. On the other hand, the highest frequency of women with low self-care capacity was found at the Saltillo campus, with 30% of the female sample. The same percentage was found for male participants, with 30% reporting low self-care capacity.

Table 3

Distribution of Self-Care Levels by Gender and Academic Campus

Level of self-care	Saltillo		Torreon		Northern	
	Woman	Man	Woman	Man	Woman	Man
Very low capacity	25 (30.9%)	7 (30.4%)	18 (20.9%)	12 (25.5%)	20 (27%)	11 (25.6%)
Low capacity	17 (21%)	5 (21.7%)	18 (20.9%)	11 (23.4%)	13 (17.6%)	8 (18.6%)
High capacity	36 (44.4%)	11 (47.8%)	47 (54.7%)	24 (51.1%)	39 (52.7%)	23 (53.5%)
Very high capacity	3 (3.7%)	0 (0%)	3 (3.5%)	0 (0%)	2 (2.7%)	1 (2.3%)
Total	81(100%)	23 (100%)	86(100%)	47(100%)	74(100%)	43(100%)

On the other hand, the highest levels of self-care deficit among the female participants were observed in the Torreón and Northern campuses (Table 4). The lowest level of deficit—which serves as a protective factor for women—was also reported at the Torreón campus. Among male participants, the highest proportion with a high self-care deficit was found at the Northern campus, while those reporting the lowest levels of deficit were from both the Torreón and Northern campuses

Table 4

Distribution of Self-Care Deficit by Gender and Academic Unit of Affiliation

Level of self-care deficit	Saltillo		Torreon		Northern	
	Woman	Man	Woman	Man	Woman	Man
Very low deficit	14 (17.3%)	5 (21.7%)	18(20.9%)	11 (23.4%)	18 (20.9%)	11 (23.4%)
Low deficit	21 (25.9%)	5 (21.7%)	19 (22.1%)	14 (29.8%)	19 (22.1%)	14 (29.8%)
High deficit	23 (28.4%)	9 (39.1%)	18 (20.9%)	11 (23.4%)	18 (20.9%)	11 (23.4%)
Very high deficit	23 (28.4%)	4 (17.4%)	31 (36%)	11 (23.4%)	31 (36%)	11 (23.4%)
Total	81(100%)	23(100%)	86 (100%)	47(100%)	86(100%)	47(100%)

Finally, regarding self-care capacity (Table 5), female participants from the Torreón campus reported the highest percentage of cases with high and very high self-care behaviors. In contrast, women from the Saltillo and Northern campuses showed the lowest levels of self-care capacity. Among male participants with high self-care capacity, the highest percentages were found at the Saltillo campus; similarly, the lowest capacity levels among men were also reported in this same unit.

Tabla 5
Distribution of Self-Care Agency by Gender and Academic Campus

	Saltillo		Torreon		Northern	
Self-Care Agency Level	Woman	Man	Woman	Woman	Man	Woman
Very low capacity	24 (29.6%)	6 (26.1%)	23 (26.7%)	11 (23.4%)	22 (29.7%)	11 (25.6%)
Low capacity	18 (22.2%)	5 (21.7%)	14 (16.3%)	11 (23.4%)	14 (18.9%)	8 (18.6%)
High capacity	20 (24.7%)	6 (26.1%)	20 (23.3%)	16 (24%)	22 (29.7%)	14 (32.6%)
Very high capacity	19 (23.5%)	6 (26.1%)	29 (33.7%)	9 (19.1%)	16 (21.6%)	10 (23.3%)
Total	81(100%)	23 (100%)	86 (100%)	47 (100%)	74 (100%)	43 (100%)

DISCUSSION

Mental health issues among young people appear to be more prevalent than expected. In the sample, high rates of depression and anxiety were observed. Previous studies have identified several psychological components affecting youth, including the breakdown of regular social relationships, uncertainty about the future, low levels of emotional support, increased emotional crises, sadness, and disruptions in self-esteem and self-care. There has also been a notable rise in depression, anxiety, and stress, which has been attributed to family problems, the loss of loved ones, limited support networks, and social isolation (Buitrago et al., 2021; Medina et al., 2022). The total scores on the self-care scale reported by students show a distribution across all four levels (very low, low, high, and very high). However, those with low levels of self-care capacity exhibit a higher risk index, accounting for just over half of the respondents. A study conducted across 140 countries identified key risk factors such as insufficient fruit and vegetable intake and physical inactivity (Biswas et al., 2022). Another study from Canada developed guidelines for optimal health among children and adolescents, emphasizing light to moderate physical activity, sedentary behaviors (primarily caused by screen time), and healthy sleep habits (Tremblay et al., 2016).

Students from the Torreón campus reported the highest percentages of very high self-care capacity among the three university units. This highlights the need to understand the contextual and cultural factors influencing self-care behaviors. Studies in Mexico indicate that even individuals who express responsibility for their health struggle to adopt healthy lifestyles. These challenges are often due to infrequent physical activity and the increasing symptoms of stress, particularly following the COVID-19 lockdown (García-García et al., 2022).

Research on gender and age in decision-making suggests that women tend to focus more on uncertainty, doubt, and the dynamic elements involved in decision-making, whereas men emphasize the potential consequences of their decisions. Moreover, behavior is influenced not only by environmental stimuli but also by personal factors, particularly beliefs, judgments, and prior experiences (Sanz de Acedo-Lizarraga et al., 2007). Young people, in general, tend to undervalue the factors that affect their decision-making processes. Therefore, identifying the cognitive, behavioral, and environmental components that contribute to low self-care levels among male and female university students remains a critical challenge in promoting and sustaining healthy behaviors.

Other studies examining self-care maintenance and sex differences have been conducted in contexts involving illness, such as among patients with chronic conditions (Mei et al., 2019), type 1 diabetes (Shah et al., 2018), and type 2 diabetes (Hazrati-Meimaneh et al., 2020), as well as within pandemic-related settings in specific populations (García et al., 2022). However, there is a lack of research exploring sex differences in self-care behaviors in the general population. Additionally, in the present study, hypothesis testing using the Chi-square coefficient did not reveal any significant sex-based differences. Regarding self-care deficits—defined as behaviors that are not operational or suitable for addressing self-care demands—particular attention is drawn to university students who exhibited high or very high levels of deficit, which corresponds to just over half of the sample. This underscores the importance of decision-making capacity and the ability to choose whether to engage in self-care. A study involving adolescents with cystic fibrosis and based on Orem's theory indicates that self-care predictors lie in components such as ego strength (providing motivation for self-care) and health orientation (providing focus for self-care). The latter was found to be the strongest predictor, as motivation and focus alone are insufficient—knowledge is essential to understand the illness process and make better health-related decisions (Baker & Denyes, 2008).

CONCLUSIONS

This study presents initial findings on self-care among students from the Saltillo, Torreón, and Norte campuses of the Universidad Autónoma de Coahuila (UAdeC). The sociodemographic characteristics examined were similar across the three campuses. The analysis included the prevalence of physical and mental health conditions, with mental health issues standing out—anxiety was reported by nearly one-third of the sample, and depression by just over 20%.

Self-care was evaluated across four performance levels and analyzed according to two dimensions: self-care deficit and self-care agency. Approximately one-third of UAdeC students showed a very low level of self-care deficit, suggesting a need for interventions to promote self-care practices. These may include the establishment of healthy routines, encouragement of rest and recreation, improvement of social relationships, and effective emotional expression.

A descriptive analysis of gender, campus affiliation, and self-care levels revealed that women tend to report slightly higher very high self-care capacity compared to men, whereas men are more likely to show very low levels in this regard. Additionally, the data suggest that approximately half of both male and female students display high self-care capacity, except for those at the Saltillo campus, where slightly lower percentages were observed. Promoting self-care among university students not only helps establish lifelong habits but also contributes to the prevention of risk behaviors.

Identifying and understanding the barriers that young people face is essential for planning and systematizing better practices in health care and self-care, ultimately fostering healthier

lifestyles and improving university students' overall well-being. While self-care practices must be learned continuously, guided by regulatory needs and goal-oriented behaviors, these practices tend to decline during adolescence and young adulthood. The aim is for young people to develop strategies that enable them to regularly engage in self-care activities, thereby reducing risk factors through the promotion and maintenance of specific actions that raise awareness of their own health status.

This research is still in its initial phase. Further analysis is needed to identify the demographic characteristics that influence self-care and self-care deficits. The goal is to generate predictive models that explain students' awareness levels, personal traits, environments, and learned behaviors, ultimately empowering them to take ownership of their health processes and become self-care agents capable of maintaining health and enhancing their quality of life.

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