



## **REVIEW**

# Sense of coherence in young adults: An integrative review

## Sentido de coherencia en adultos jóvenes: revisión integrativa

# Senso de coerência em adultos jovens: uma revisão integrativa

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#### Resumen

**Introducción:** La teoría salutogénica presenta un enfoque diferente para el estudio de la salud, el cual es el movimiento que toma la persona hacia el extremo de la salud en la línea de un continuum bienestarmalestar. Esta teoría posee dos conceptos claves, el sentido de coherencia y los recursos generales de resistencia. El sentido de coherencia es considerado útil en el afrontamiento y en la adaptación a las necesidades específicas de las diferentes etapas de la vida. **Objetivo:** Identificar el rol del sentido de coherencia y los factores que influyen en los adultos jóvenes. **Metodología:** Revisión integrativa, con metodología de 6 etapas, según Botelho, Cunha, Macedo, la búsqueda de artículos se realizó en bases de datos; WOS, SCOPUS, PubMed y SciELO, durante Julio del 2020, utilizando los descriptores; Sense of coherence OR Salutogenesis AND Young adult. De los 1161 artículos potenciales encontrados se seleccionaron 11. **Resultados:** Se evidenció un sentido de coherencia fuerte en los adultos jóvenes, que fue influido por la cultura, sexo, nivel educativo, ingreso económico y apoyo social. **Conclusiones:** El sentido de coherencia tiene un rol protector en los adultos jóvenes, dado que reduce el impacto de los eventos estresantes. Las evidencias analizadas respecto a los factores asociados no son concluyentes, ya que, se requiere de mayores estudios con rigor metodológico.

Palabras clave: Salutogénesis; Sentido de coherencia; Adulto joven (DeCS).



#### Abstract

**Introduction:** The salutogenic theory presents a different approach for the study of health, which is the movement that takes towards the extreme ends in the line of the well-being-discomfort continuum. This theory has two key concepts: sense of consistency and general resources of resistance. The sense of coherence is considered useful in coping and in adapting to the special needs of the different stages of life. **Objective:** Identify the role of sense of coherence and influencing factors in young adults. **Methodology:** Revisão integrativa, com metodologia de 6 etapas, segundo Botelho, Cunha, Macedo, a busca de artigos foi realizada nas bases de dados WOS, SCOPUS, PubMed e SciELO, durante o mês de julho de 2020, utilizando os descritores Sense of coherence OR Salutogenesis AND Young adult. Of the 1161 potential articles found, 11 were selected. **Results:** A strong sense of coherence was evidenced in young adults, which was influenced by culture, sex, educational level, economic income, and social support. **Conclusion:** The sense of coherence has a protective role in young adults, given the fact that it reduces the impact of stressful events. The evidence analyzed regarding the associated factors is not conclusive, therefore, further studies with methodological rigor are required.

Key words: Salutogenesis; Sense of coherence; Young adult (DeCS).

#### Abstrato

**Introdução:** A teoria salutogênica apresenta uma abordagem diferente para o estudo da saúde, que é o movimento que leva aos extremos na linha do contínuo bem-estar-desconforto. Essa teoria tem dois conceitos-chave: senso de consistência e recursos gerais de resistência. O senso de coerência é considerado útil no enfrentamento e na adaptação às exigências das diferentes fases do curso de vida. **Objetivo:** Identificar o papel do senso de coerência e fatores de influência em adultos jovens. **Metodologia**: Revisão integrativa, com metodologia em 6 etapas, segundo Botelho, Cunha, Macedo, a busca dos artigos foi realizada nas bases de dados; WOS, SCOPUS, PubMed e SciELO, durante o mês de julho de 2020, utilizando os descritores; Sense of coherence OR Salutogenesis AND Young adult. Dos 1161 artigos potenciais encontrados, 11 foram selecionados. **Resultados:** Um forte senso de coerência foi evidenciado em adultos jovens, que foi influenciado pela cultura, sexo, nível educacional, renda econômica e apoio social. **Conclusões:** O senso de coerência tem um papel protetor em adultos jovens, pois reduz o impacto de eventos estressantes. As evidências analisadas com relação aos fatores associados não são conclusivas, portanto, são necessários mais estudos com rigor metodológico.

Palavras-chave: Salutogênese; Senso de coerência; Adulto jovem. (DeCS).

## Introduction

The Salutogenic theory performed by Aaron Antonovsky in the late 1970s developed a significant and radical

approach to the study of health and disease <sup>(1)</sup>, generating a change from the pathogenic perspective to the

conceptualization of health, emphasizing the causes of health, its maintenance and enhancement, and not

what causes disease <sup>(2)</sup>. From this point of view, Antonovsky defines health as the movement of the person

along the wellbeing-illness continuum (3); in order to optimize this wellbeing it is necessary to identify the

resources, conditions and factors aimed to generate health <sup>(4)</sup>. This theory has two key constructs, that is, the generalized resistance resource (GRR) and the sense of coherence (SOC).

The GRR are a set of features showed by an individual, group or community that allow them to effectively face the stressors that daily life presents, helping to promote the development and strengthening of the SOC, such as money, knowledge, social relationships, beliefs, religion, self-esteem, meaning of life, among others <sup>(5-6)</sup>. The SOC is the orientation that an individual takes to manage and adapt to the course of life, and stay healthy <sup>(5)</sup>. The SOC is made up of three integrally cohesive dimensions, that is, comprehensibility, which is a cognitive component where the individual perceives the complex and changing organization of his life and environment; Manageability, which is a behavioral component that means the ability to identify and mobilize available resources; and meaningfulness, a motivational component and force that gives meaning to the challenges faced by people in their lives, considering that life has meaning <sup>(3, 5, 7-8)</sup>. When an event occurs, people has to understand, learn how to handle, and give meaning to such an event.

The SOC is considered useful in coping and adapting to the requirements of different stages of the life course. Recent studies have observed that SOC increases over the years, and this is consolidated from adolescence onwards, which will contribute to moderating adverse events in the next stage of adulthood <sup>(5,8)</sup>. The approach from a positive vision of health is essential to act in the young adult population, considered a stage of risk <sup>(9)</sup>, due to the increasing exposure to stress in daily life, both because of the changes that transcend in the process of their social development, as well as in their susceptibility to the social environment <sup>(10)</sup>. From this approach, the potential of people of this age can be increased in order to transform those aspects considered stressful or negative, into challenges that enrich the various areas that make people to be better, since the evidence shows that when the SOC is stronger, the people feels their life has a better quality and their mental health is better, in addition to a healthier behavior, predisposition to do physical activity, and choose healthy foods. Similarly, it favors the development of positive coping strategies, lower consumption of alcohol, tobacco, and drugs <sup>(5,11)</sup>.

Therefore, the SOC is essential to approach health from a positive viewpoint, as it provides the ability to act to act flexibly and constructively in the face of negative events and challenges that people constantly face in today's world <sup>(12)</sup>. Therefore, it is essential to investigate the SOC in young adults in the various situations they face on a daily basis as it is considered a coping resource <sup>(5)</sup>. This coping resource has an important health-promoting effect on people and generates strategies by the nursing professional, in conjunction with other health professionals, thus forming a multidisciplinary health team in favor of the health of this group. Therefore, the objective of this review was to identify the role of the sense of coherence and the factors that influence young adults.

#### Methodology

Integrative review <sup>(13)</sup> conducted during July 2020, with a 6-stage methodology according to Botelho, Cunha, Macedo <sup>(14)</sup>. The PICO guiding question was: What is the role of the SOC and what factors influence young adults? For the search strategy, these English descriptors were used: Sense of coherence, Salutogenesis, Young Adult, with Booleans OR and AND, in databases, such as: Web of Science (WOS), Elsevier's abstract and citation database (SCOPUS) and United States National Library of Medicine (PubMed), and Scientific Electronic Library Online (SciELO); in the latter one, the descriptor sense of coherence, in Spanish, was used. Subsequently filters were applied regarding time (last 5 years), type of article and language (English, Spanish, and Portuguese) in each of them.

For the selection, the inclusion criteria were: articles published in the last 5 years that addressed the SOC in young adults, available in full text, in Portuguese, English, or Spanish, and the exclusion criteria were: literature reviews, articles that did not state the type of design, and gray literature. A total of 3507 publications were identified in the databases (WOS= 2573; PubMed= 429; SCOPUS= 475; SciELO= 30), and when applying filters it yielded 1161 potential publications (Table 1).

Table 1. Descriptors and Booleans used in the databases, 2020.

Database Descriptors and Booleans

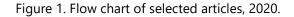
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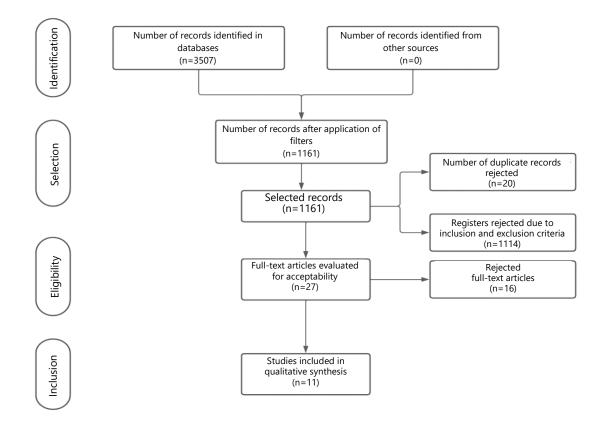
WOS	Sense of coherence OR Salutogenesis AND Young	2573
SCOPUS	Adult Sense of coherence OR Salutogenesis AND Young Adult	475
PubMed	Sense of coherence OR Salutogenesis AND Young Adult	429
Scielo	Sentido de coherencia	30

Source: Self-Development

Based on stage 3 of identification of the pre-selected studies according to Botelho <sup>(14)</sup>, the title, abstract and key words were read to verify the inclusion/exclusion criteria and the elimination of duplicate publications, of which 27 articles were subject to critical reading, based on the adaptation of a brief guide proposed by Cobos <sup>(15)</sup>, leaving a sample of 11 articles <sup>(16-26)</sup>, (Figure 1).

For the collection of data from the published articles, a matrix was prepared to synthesize the relevant data, which included: Article title, authors, key words, place, year, objective, methodology (design, sample, instruments), results, and relevant conclusions, which were analyzed independently by the authors.





Source: Self-Development

#### Results

The temporal distribution of the articles was 55% from 2019 <sup>(21-26)</sup>, 36% from 2016 <sup>(16-19)</sup> and 9% from 2018 <sup>(20)</sup>. Regarding the geographical distribution the articles were concentrated in the European continent <sup>(16-18,21,26)</sup>, the rest were distributed in the Asian continent <sup>(19,25)</sup> and American <sup>(22,24)</sup>, only two articles were developed in students of two nationalities, contrasting the Asian culture with the European one <sup>(20,23)</sup>. The design of the articles was varied, with a quantitative approach predominating <sup>(16,19-25)</sup> over qualitative <sup>(18)</sup>, and 18% of the articles used mixed design <sup>(17,26)</sup>, (Table 2).

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Authors	Year	Country	Design	Sample	Age range
Perenc, Radochanski (16)	2016	Poland	Transverse	1706	19-26
Aho, Hultsjö, Hjelm <sup>(17)</sup>	2016	Sweden	Mixed	14	20-30
Apers, Rassart, Luyckx, Oris, Goossens, Budts, et al <sup>(18)</sup>	2016	Belgium	Qualitative Exploratory	12	18-21
Chu, Khan, Jahn <sup>(19)</sup>	2016	China	Transverse	1853	20
Niiyama, Kontkanen, Paavilainen, Kamibeppu <sup>(20)</sup>	2018	Japan / Finland	Transverse	1658 (762 Japanese / 896 Finns)	18-25
Fernández-Martínez, López-Alonso, Marqués-Sánchez, Martínez- Fernández, Sánchez-Valdeón, Liébana- Presa <sup>(21)</sup>	2019	Spain	Descriptive Transverse	463	20
Escobar-Castellanos, Cid-Henríquez, Juvinya, Sáez-Carillo <sup>(22)</sup>	2019	Mexico	Descriptive Transverse	300	19-25
Mayer, Louw, Von der Ohe (23)	2019	China/ Germany and	Transverse	356 (255 Chinese/ 101 Germans)	Under-graduate students
Escobar-Castellanos, Cid-Henríquez, Sáez, Buelna-Barrueta, Contreras- Murrieta, Godínez-Morales, et al. <sup>(24)</sup>	2019	Mexico	Correlational	44	19-29
Yano, Kase, Oishi <sup>(25)</sup>	2019	Japan	Transverse	430	20
Kindermann, Jenne, Schmid, Bozorgmehr, Wahedi, Junne <sup>(26)</sup>	2019	Germany	Mixed	62	23

Table 2. Characterization of articles according to author, year, country, design, sample and age range. 2020, (n=11).

Source: Self-development

Most of the research was conducted in a healthy university population <sup>(16,19-26)</sup>, while others addressed SOC in a young adult population with degenerative and congenital pathologies <sup>(17-18)</sup>. The objectives of these consisted of measuring SOC and its dimensions <sup>(16,19-26)</sup>, identifying the relationships with various psychological factors of well-being <sup>(16,20,21,26)</sup>, and discomfort <sup>(19,25,26)</sup>, lifestyles <sup>(22,24)</sup>, and others aimed to understand the perceptions and coping strategies of young adults <sup>(17-18)</sup>. To quantify it, 3 versions of the SOC scale were used; 55% of the investigations used the 13-item version <sup>(17,20-22,24,25)</sup>, 27% of 29 items <sup>(16,23,26)</sup>, and 9% of 9 items <sup>(19)</sup>, ranging from high <sup>(16,20,22,23,26)</sup> to medium <sup>(17,20,21,23,25)</sup> scores.

Among the discoveries, it was found that a strong SOC exerts a protective role in young people <sup>(16-26)</sup>, since it is related to the different coping strategies <sup>(16-18, 21)</sup> and to the health-promoting lifestyle <sup>(22,24)</sup>, characterized by less stress, depression and distress <sup>(25,26)</sup>. Finally, it should be noted that this may be influenced by certain factors, such as gender <sup>(16,23)</sup>, educational level <sup>(16,22)</sup>, economic income <sup>(17,19)</sup> and social support <sup>(17-19)</sup>.

## Discussion

Based on the objective of identifying the role of SOC and the factors that influence young adults, it has been shown that, in terms of geographic distribution, the countries that developed the most research on SOC in young people were China, Japan and Germany <sup>(19,20,23,25,26)</sup> and there is also a growing study of this topic on the Latin American continent <sup>(22,24)</sup>. One of the interesting discoveries in this study was the cultural contrasts of SOC in young adults, in which it was identified that there was a difference in the strength of SOC among European young people versus Asian young people. Thus, some researchers compared the SOC of Japanese and Finnish students <sup>(20)</sup>, and in Chinese and German university students <sup>(23)</sup>, resulting in both studies that young Europeans have higher scores compared to Asians. Several studies in young people found different levels of SOC, suggesting that SOC may vary according to country of origin <sup>(10,17,21,22,26-28)</sup>. In contrast, one study showed that there were no statistically significant cultural differences when comparing the SOC of young adults of different nationalities; Australians, Finns and Turks <sup>(29)</sup>. Given these results, analysis of a larger sample of different nationalities is necessary to ensure the presence or absence of influence of culture on SOC.

Among the variables that influenced the SOC of young adults, it was identified that men had significantly higher SOC scores than women <sup>(16)</sup>. Likewise, it was evidenced that SOC according to sex, independent of nationality the score was significantly higher in Chinese and German women with respect to men of both nationalities <sup>(23)</sup>, these results diverge from other studies, in which no significant difference was observed with respect to sex <sup>(21-22,24,28-30)</sup>.

Furthermore, according to educational level, those young people who had postgraduate studies had significantly higher SOC scores <sup>(16)</sup>, as well as those with more years of studies had higher scores, however, they were not statistically significant <sup>(22)</sup>, i.e., the level of studies could influence the development of SOC. In view of this, the level of study was related to the field of knowledge, a characteristic that is framed in the GRRs, which enhance and develop SOC <sup>(5)</sup>.

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Social support <sup>(5)</sup> was another factor identified, a variable that can contribute to the development of SOC <sup>(19)</sup>, similar to the results of several studies <sup>(17, 31)</sup> where the capacity of people to receive and be satisfied with social support contributed to their level of SOC. This is evidenced in the results presented by researchers <sup>(18, 19)</sup>, in which young people with strong SOC possessed a large support base and good relationships with their peers. In other words, social support influenced the development of SOC and, at the same time, this provides the ability to manage their relationships.

Regarding economic income, several authors identified that those young people who had a paid job were associated with a strong SOC <sup>(17)</sup>, likewise young people who had sufficient economic income were positively associated with higher levels of SOC <sup>(19)</sup>, which is similar to what was mentioned in a study where it was established that, within the GRR, money was also found to be a factor <sup>(6)</sup>.

Young adults who presented a strong SOC were characterized by being; positive, resilient, sociable, perceived good health and lower stress, were able to cope with adverse situations with adaptive coping, had better academic performance, high awareness about their health and nutrition, focusing on healthy lifestyles and sought professional mental health help when needed <sup>(16-26)</sup>.

Finally, it is worth mentioning that, given the rise of the positive approach to health in recent years, the temporal distribution of SOC studies in young adults increased during 2019, with the main focus being on the university population, a situation that is explained by the fact that universities play an important role as organizations for the promotion of health and well-being <sup>(26)</sup>.

The limitations of the present review were the limited analysis of studies with respect to temporality, as well as language. It is worth mentioning that the observational design of some studies did not allow the interpretation of the factors associated with SOC, as well as the credibility and transfer of knowledge was reduced in those studies that worked with a small sample.

## Conclusions

According to the studies analyzed, the SOC of young adults is associated with various factors, such as country of origin, culture, financial income, educational level, and social support. However, the results are not consistent. Therefore, further studies of methodological quality are required to allow an objective analysis of the factors associated with SOC.

There is no doubt that it is important to strengthen the SOC in young adults, as it plays a protective role in the face of the various adverse and/or stressful situations they face, whether in their daily or educational environment or even in the health-disease cycle.

Considering the above, the nursing professional, who has the advantage of being in contact with people throughout their life cycle, should approach the young adult from this innovative orientation, through the implementation of health promotion strategies, since this not only focuses on health, but also sees the ability of people to transform negative experiences into positive experiences, which will aim to direct them towards the well-being and, therefore, to a better quality of life.

## **Conflicts of Interest**

The authors stated no conflicts of interest.

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## References

1. Rodríguez A, Casas D, Contreras G, Ruano L.\_De la enfermología a la salutogénesis: conceptos teóricos en la búsqueda de la salud como derecho universal. Revista Médica de la UCR [Internet]. 2015 [cited 23 ago 2020];9(2):1-8. Available at: <u>https://revistas.ucr.ac.cr/index.php/medica/article/view/21988</u>

2. Juvinya-Canal D. Salutogénesis, nuevas perspectivas para promover la salud. Enferm Clin [Internet]. 2013 [cited 23 ago 2020];23(3):87-88. Available at: <u>http://dx.doi.org/10.1016/j.enfcli.2013.03.004</u>

3. Forbech H, Langeland E, Bul T. Aaron Antonovsky's development of salutogenesis, 1979 to 1994. En: Mittelmark M, Sagy S, Eriksson M, Bauer G, Pelikan J, Lindström B, et al, editors. The Handbook of salutogénesis. 1a ed. Suiza: Springer Internacional Publisher; 2017. p. 25-40.

4. Antonovsky A. The structure and properties of the sense of coherence scale. Soc Sci Med [Internet]. 1993[cited23ago2020];36(6):125-733.Availableat:https://www.sciencedirect.com/science/article/pii/027795369390033Z

5. Lindström B, Eriksson M. Guía del autoestopista salutogénico. Camino salutogénico hacia la promoción de la salud. 1ª ed. Girona: Documentia Universitaria; 2011.

6. Idan O, Eriksson M, Al-Yagon M. The salutogenic model: The role of generalized resistance resources, En: Mittelmark M, Sagy S, Eriksson M, Bauer G, Pelikan J, Lindström B, et al, editors. The Handbook of salutogénesis. 1a ed. Suiza: Springer Internacional Publisher; 2017. p. 57-69.

7. Rivera F, Ramos P, Moreno C, Hernán M. Análisis del modelo salutogénico en España:Aplicación en salud pública e implicaciones para el modelo de activos en salud. Rev Esp Salud Pública [Internet]. 2011 [cited 08 ago 2020];85:129-139. Available at: <u>http://scielo.isciii.es/scielo.php?script=sci arttext&pid=S1135-57272011000200002</u>

8. Menezes V, Vilela M. Senso de coerência e adolescência: uma revisão integrativa de literatura. Cien Saude [Internet]. 2014 [cited 01 ago 2020];19(3):819-827. Available at: <u>https://doi.org/10.1590/1413-81232014193.20712012</u>

9. Varela-Arévalo MT, Ochoa-Muñoz AF, Tovar-Cuevas JR. Tipologías de estilos de vida en jóvenes universitarios. Rev Univ. Salud [Internet]. 2016 [cited 02 ago 2021];18(2):246-256. Available at: <u>https://doi.org/10.22267/rus.161802.35</u>

10. Mato M, Tsukasaki K. Factors promoting sense of coherence among university students in urban areas of Japan: Individual-level social capital, self-efficacy and mental health. Glob Health Promot [Internet]. 2019 [cited 02 ago 2020];26(1):60-68. Available at: <u>https://doi.org/10.1177/1757975917691925</u>

11. Mittelmark M, Bauer G. The meanings of salutogenesis. En: Mittelmark M, Sagy S, Eriksson M, Bauer G, Pelikan J, Lindström B, et al, editors. The Handbook of salutogénesis. 1a ed. Suiza: Springer Internacional Publisher; 2017.p 7-13.

12. Rivera E. Camino salutogénico: estilos de vida saludable. Rev Digit Postgrado [Internet]. 2019 [cited 01 ago 2020];8(1):153-159. Available at: <u>http://docs.bvsalud.org/biblioref/2019/10/1022825/16111-144814484303-1-sm-3.pdf</u>

13. Guirao S. Utilidad y tipos de revisión de literatura. Ene[Internet]. 2015 [cited 04 ago 2020];9(2). Available at: <u>http://dx.doi.org/10.4321/S1988-348X2015000200002</u>

14. Botelho L, Cunha C, Macedo M. O método da revisão integrativa nos estudos organizacionais. Gestão e Sociedade [Internet]. 2011 [cited 30 jul 2021];5(11):121-136. Available at: <u>https://doi.org/10.21171/ges.v5i11.1220</u>

15. Cobos H. Lectura crítica de investigación en educación médica. Inv Ed Med [Internet]. 2016 [cited 03 ago 2020];15(18):115-120. Available at: <u>http://dx.doi.org/10.1016/j.riem.2016.01.024</u>

16. Perenc L, Radochonski M. Psychological predictors of seeking help from mental health practitioners among a large sample of polish young adults. Int. J. Environ. Res. Public Health [Internet]. 2016 [cited 30 jul 2020];13:1040-1049. Available at: <u>https://doi.org/10.3390/ijerph13111049</u>

17. Aho A, Hultsjö S, Hjelm K. Health perceptions of young adults living with recessive limb-girdle muscular dystrophy. J Adv Nurs [Internet]. 2016 [cited 30 jul 2020];72(8):1915-1925. Available at: <u>https://doi.org/10.1111/jan.12962</u>

18. Apers S, Rassart J, Luyckx K, Oris L, Goossens E, Budts W, et al. Bringing Antonovsky's salutogenic theory to life: A qualitative inquiry into the experiences of young people with congenital heart disease. Int J Qual Stud Health Well-being [Internet]. 2016 [cited 30 jul 2020];11(1):3-15. Available at: https://doi.org/10.3402/qhw.v11.29346

19. Chu JJ, Khan MH, Jahn HJ, Kraemer A. Sense of coherence and associated factors among university students in China: cross-sectional evidence. BMC Public Health [Internet]. 2016 [cited 02 ago 2020];16:325-336. Available at: <u>https://doi.org/10.1186/s12889-016-3003-3</u>

20. Niiyama H, Kontkanen I, Paavilainen E, Kamibeppu K. A comparison of personality maturity among Japanese youth and Finnish young adult students: a cross-sectional study using Erikson psychosocial stage inventory and sense of coherence scale. Int J Adolesc Youth [Internet]. 2018 [cited 02 ago 2020];23(4):482-495. Available at: <a href="https://doi.org/10.1080/02673843.2018.1435418">https://doi.org/10.1080/02673843.2018.1435418</a>

21. Fernández-Martínez E, López-Alonso A, Marqués-Sánchez P, Martínez-Fernández M, Sánchez-Valdeón L, Liébana-Presa C. Emotional intelligence, sense of coherence, engagement and coping: A Cross-sectional study of university students' health. SustainabilityInternet]. 2019 [cited 02 ago 2020];11:3-14. Available at: <a href="https://doi.org/10.3390/su11246953">https://doi.org/10.3390/su11246953</a>

22. Escobar-Castellanos B, Cid-Henríquez P, Juvinya CD, Sáez-Carillo K. Estilo de vida promotor de salud y sentido de coherencia en adultos jóvenes universitarios. Hacia. Prom. Salud [Internet]. 2019 [cited 02 ago 2020];24(2):107-122. Available at: <u>https://doi.org/10.17151/hpsal.2019.24.2.9</u>

23. Mayer C-H, Louw L, Von der Ohe H. Sense of coherence in chinese and german students. Health SA [Internet]. 2019 [cited 03 ago 2020]; 24(0):140-151. Available at: <u>https://doi.org/10.4102/hsag.v24i0.1151</u>

24. Escobar-Castellanos B, Cid-Henríquez P, Sáez CK, Buelna-Barrueta V, Contreras-Murrieta D, Godínez-Morales B, et al. Sentido de coherencia y estilo de vida promotor de salud en estudiantes del noroeste de México. Av Enferm [Internet]. 2019 [cited 03 ago 2020];37(3):313-322. Available at: https://doi.org/10.15446/av.enferm.v37n3.78060

25. Yano K, Kase T, Oishi K. The effects of sensory-processing sensitivity and sense of coherence on depressive symptoms in university students. Health Psychology Open [Internet]. 2019 [cited 03 ago 2021];6(2):1-5. Available at: <u>https://doi.org/10.1177/2055102919871638</u>

26. Kindermann D, Jenne MP, Schmid C, Bozorgmehr K, Wahedi K, Junne F, et al. Motives, experiences and psychological strain in medical students engaged in refugee care in a reception center– a mixed-methods approach. BMC Med Educ [Internet]. 2019 [cited 04 ago 2020];19:288-302. Available at: https://doi.org/10.1186/s12909-019-1730-8

27. Kadriye P, Gulgin B, Omer U. Factors related to sense of coherence among dental students at Istanbul university. J Dent Educ [Internet]. 2012 [cited 06 ago 2020];76:774-782. Available at: <u>https://pubmed.ncbi.nlm.nih.gov/22659707/</u>

28. Vega M, Frías A, Del Pino R. Validez y confiabilidad de la escala de sentido de coherencia en estudiantes de grado de enfermería de una universidad española. Gac. Sanit [Internet]. 2019 [cited 08 ago 2020];33(4):310-316. Available at: <u>https://doi.org/10.1016/j.gaceta.2018.02.009</u>

29. Lajunen T. Cross-Cultural evaluation of Antonovsky's orientation to life questionnaire: Comparison between australian, finnish, and turkish young adults. Psychol Rep [Internet]. 2018 [cited 10 ago 2020];0(0):1-17. Available at: <a href="https://doi.org/10.1177/0033294118765420">https://doi.org/10.1177/0033294118765420</a>

30. Fernández-Martínez E, Liébana-Presa C, Morán C. Relación entre el sentido de coherencia y cansancio emocional en estudiantes. Psychology, Society & Education [Internet]. 2017 [cited 20 ago 2020];9(3):393-403. Available at: <u>https://doi.org/10.25115/psye.v9i3.861</u>

31. Volanen S, Lahelma E, Silventoinen K, Suominen S. Factors contributing to sense of coherence among men and women. Eur J Public Health [Internet]. 2004 [cited 25 ago 2020];14:322-330. Available at: <u>https://doi.org/10.1093/eurpub/14.3.322</u>

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