

# Sense of coherence and health assets in a youth center for minors

JJ Paredes-Carbonell<sup>1,2,3</sup>, JM Agulló-Cantos<sup>1</sup>, EJ Vera-Remartínez<sup>4</sup>,  
M Hernán-García<sup>5</sup>

1) Universidad Católica de Valencia

2) Universitat de València

3) Centro Superior de Investigación en Salud Pública (CSISP-FISABIO)

4) Centro Penitenciario de Castellón

5) Escuela Andaluza de Salud Pública (EASP)

## ABSTRACT

**Objectives:** To determine the Sense of Coherence (SOC) amongst young people at 2 Youth Detention Centres in Valencia, the views of professionals on SOC and how young people identify health assets.

**Materials and methods:** 45 young people answered the SOC-13 test. Categorical variables were expressed as absolute and relative frequencies, while the quantitative ones were expressed via means with confidence intervals (CI) at 95%. We designed and conducted a group interview with 5 teenage inmates and an open-ended questionnaire for six professionals. We performed an analysis based on content and categories.

**Results:** Mean SOC score is 54.4 (95% CI 53.9 to 59.8). Regarding the size of the test, manageability, 17.6 (95% CI 16.5 to 18.8); comprehensibility, 19.6 (95% CI: 18.1, 21.1) and meaningfulness, 17.1 (95% CI: 16.0 to 18.2). Young people identify internal assets such as “sport” and “being positive” and external assets such as “persons (family and friends)” and “spaces related to physical activity”. Professionals believe that SOC places value on aspects that are relevant to the life of the centre and that young people obtain a moderate score.

**Discussion:** The SOC level obtained is moderate and similar to other populations. The results show limitations linked to acquisition of the sample, but also indicate scope for further research on SOC, and on the differences between youth cultures, SOC and identified health assets. Assets could be given further impetus by young people themselves with support from professionals, family and the community environment.

**Keywords:** Health promotion; Mental health; Adolescent health; Prisons; Education; Social medicine; Sense of coherence; Public health.

Text received: 31-01-2013

Text accepted: 11-05-2013

## INTRODUCTION

“Health promotion” is “the process of enabling people to increase control over, and to improve, their health”<sup>1</sup>. Some years before the Ottawa Charter provided this definition, Aaron Antonovsky put forward the following as a key concern: ¿what creates health?, and proposed the “salutogenesis” model and theory, which focuses on the “origin” of health and well-being<sup>2</sup>. The main concepts he developed are the Generalized Resistance Resources (GRRs) and the Sense of Coherence (SOC). GRRs are biological, material and psychosocial factors which enable individuals

to acknowledge their lives as coherent, orderly and comprehensible<sup>3</sup>. Holding these resources is not as important as being able to make use of them. SOC is an individual disposition to assessing life events as “comprehensible”, “manageable” and “meaningful”; it is the ability to cope with and assess events in order to behave in a constructive way. To measure SOC, Antonovsky put together a questionnaire splitting the concept into three factors: comprehensibility, manageability and meaningfulness<sup>4-5</sup>. Comprehensibility refers to the extent to which individuals feature a cognitive sense and endure circumstances in an orderly, consistent, structured and clear way. Manageability

depicts the degree to which individuals understand that certain adequate resources are available to cope with surrounding demands. Meaningfulness denotes the value allocated by individuals to events regardless of how things occur; acknowledging that life is worth living, that challenge deserves our effort and merits our commitment<sup>6</sup>.

Morgan and Ziglio<sup>7-9</sup> suggest implementing the health assets model to conceptually revitalize health promotion. Assets are “factors or resources which enhance the ability of individuals, groups, communities, populations, social systems and/or institutions to maintain and sustain health and well-being and to help to reduce health inequities”<sup>7</sup>. For the past years, a trend towards developing health promotion theory and practice from this “half full glass”<sup>8-9</sup> points of view have taken shape.

In Spain, several studies feature this new perspective regarding children and teenager population<sup>10-13</sup>, the elderly<sup>14</sup>, vulnerable population<sup>15</sup> and prisons<sup>16</sup>. Offence acts committed in our country before age of majority and which entail internment are served in Youth Detention Centres (Centros de Menores, CM in Spanish)<sup>17</sup>. If it is considered convenient for reinsertion by the court, these facilities can host interns up to 23 years old. In 2011, 29.397 infraction acts committed by minors were processed<sup>18</sup>. 64.8% of the cases consisted of criminal offence and 35.2% of contraventions. Measures most frequently adopted by judges that same year were probation (34.8% of all cases), community service (21.3%) and semi-open internment (12.4%). Closed regime internment represented 3.1% of the total number of sentences. The minor offender profile corresponds to 17 year old Spanish males, involved in robbery using threat or violence<sup>18</sup>. The Valencian Autonomous Community holds 8 so-called “Minor Re-education Centres”, where freedom deprivation measures are implemented, with capacity for 389 interns<sup>19</sup>.

Minor offenders face legal problems and, more particularly, social integration issues<sup>20</sup>; they have undergone traumatic vital experiences but at the same time, and because of their age, they feature ability to change and develop their potentialities. Therein lays the interest to determine their SOC and identify health assets to consequently introduce a positive health point of view in interventions. Besides, provided that procedures mainly focus on deficits, risk factors and problems, it is compelling to recollect opinions coming from professionals who work in these minor facilities (CM) as far as these perspectives and their implementation in their re-education work are concerned.

This study is aimed at settling SOC levels amongst 16-21 year-old youngsters subject to CM internment. Additionally, it intends to encourage CM youth to identify “health assets”, along with prompting professionals to manifest their opinion concerning SOC, its three dimensions (comprehensibility, manageability and meaningfulness) and the extent of its implementation in activities and in the facility’s education project.

## METHODS

Work was carried out in two different stages. The first one consisted of a descriptive transversal study accomplished by means of a self-administered questionnaire, based on an adaptation of SOC-13<sup>21-22</sup> for intern youngsters in Valencian CMs. The second stage comprised a qualitative study carried out through group interviews with youngsters and an open-questionnaire for professionals in one of the minors’ facilities.

Two Valencian CMs were intentionally chosen because of their easy access and permit availability. It seems better not to provide the name of these facilities in order to ensure informant anonymity. Consequently we will refer to both facilities as CM “A” and CM “B”. Interns, excluding those whose ages were below 16, were provided with the SOC-13 in March 2012. 38 out of 40 youngsters (all male) from CM “A”, along with 7 out of 60 interns (54 male, 6 female) from CM “B” participated. Finally, 2 interns from CM “A” could not participate because they were penalized at the time being. The 7 youngsters from CM “B” were all 17 year-old male interns.

The choice of the two facilities was opportunism based: the questionnaire implementation in CM “A” was carried out by a member of the research team who, during field work, had the opportunity to request the authorization to do so. This enabled obtaining the pertinent permits. Questionnaires and youth interviews, along with interviews aimed at professionals in CM “B”, were carried out by the same member of the research team at a different time and due to the disposition manifested by the facility. In CM “A” no qualitative interviews were put forward amongst youngsters and professionals due to the problems faced when requesting authorization.

In stage 1, implementation was sustained by putting into practice the SOC-13<sup>21</sup>, which consists of 13 items with Likert-type scale answers ranging from 1 up to 7. 5 questions refer to comprehensibility; 4 to manageability and another 4 to meaningfulness. The test features 91 as maximum score and regarding test

size, 35 questions are related to comprehensibility, 28 to manageability and 28 to meaningfulness. The age variable was taken into consideration. Both absolute and relative frequencies were calculated for categorical variables and for quantitative ones, measured with the pertinent confidence intervals.

In stage 2, and taking Aviñó's work as starting point, a group interview was designed and conducted (Table 1), with the participation of 5 teenagers from CM "B" and addressing the following questions: health perception; asset types and definition; asset identification at a personal level (internal assets) and regarding both CM and their neighbourhood or city (external assets). An open-answer questionnaire was designed in order to gather the individual opinion of 6 professionals from CM "B" regarding SOC (Table 1).

The group interview targeted at youngsters and the question submission to professionals took place in April 2012 in CM "B". The 5 participants were summoned and selected by the facility management board, all were 17 years old, Spanish, and none had completed their compulsory secondary education studies. The group interview lasted for two hours. Participants' age was chosen as indicated by the management board, for all 5 participants were subject to internment in the same department ("home") and according to management services, this could enhance conducting the interview, for participants would therefore be more collaborative and, during a second study phase, the study could be extended to include other minors. When the interview took place, 2 youngsters amongst the total 7 were under penalization and hence only 5 could participate (although the 7 teenagers

completed the SOC questionnaire and this data was added to the CM "A" results).

After the group interview, the answers were recorded and both a thematic and a category<sup>23</sup> analysis were put together, identifying discourse formulation which matched health assets and classifying them according to their nature as internal or external assets. Internal assets are those related to youngsters' personal characteristics, while external assets correspond to environmental resources. Internal assets were subsequently classified into subcategories: assets related to knowledge, attitudes and behaviour; along with external assets, which were grouped as follows: assets regarding people, groups or location, which were in turn assorted in two different categories: a) inside the CM, and b) outside. Analysis was performed separately by two different researchers who later agreed upon the classification.

Amongst the CM staff members, 6 professionals were summoned by the administration board to take part in a meeting: the warden, two members of the technical team (1 psychologist and 1 social worker) and three members of the education team (educator coordinators). The board considered that, initially, it seemed adequate to summon only some management staff members and coordinators. After presenting the study, the written SOC-13 questionnaire was provided, along with SOC definitions and dimensions. They were encouraged to read all documents and to provide an individual written answer to all questions (Table 1) in a session which lasted one hour and a half. The professional participants' profile is described on Table 3. Those professionals participating in the

Table 1. Questionnaire script for young offenders and open-ended questions for professionals

#### Young Offenders

1. What is health for you? What is a health asset? What types of health assets are there?
2. What good positive... things do I have myself that can be important to improve my health? Why?
3. What good positive... things do I have myself that can be important to improve the center's health? Why?
4. What good positive... things does our group have that can be important to improve the center's health? Why?
5. What people, groups and places (within the center, in the neighborhood, in the city or elsewhere) do we know that are (or can be) good, positive and important for our health?

#### Professionals

Please carefully read the SOC questionnaire that we have administered the young offenders in this center. Please answer individually and in writing the following questions:

1. What do you think about the concept? \* As an educator, do you believe that it is important for the people hosted in this institution? Why?
2. To what extent do you think that the people hosted in this institution have incorporated this concept into the everyday life of the center?
3. In some way, do you think that the concept is incorporated into the center's educational project? How?
4. Please make a suggestion to work on this concept in the center

\* Questions 1 to 4 refer to the concepts of comprehensibility, manageability and meaningfulness.

interview interact with youngsters when necessary, around 10 hours weekly per professional. Analysis regarding thematic content as well as according to categories<sup>23</sup> was carried out by two researchers, as it has already been mentioned, attending to the following stages: 1) Reading answers in detail; 2) Identifying relevant subjects and grouping them into categories: opinion regarding SOC, interest for youngsters, SOC perception amongst interns; SOC implementation in the facility's projects and proposals; 3) Assembling the different codifications and agreeing upon classification; 4) Identifying together differences and points in common of all documents by means of comparing informants' answers.

Authorization from the facilities' management boards was obtained after putting together and presenting the study's protocol, and previously providing the test and the interview's questions and outline, taking into consideration the current legal background<sup>24</sup>. Accordingly, all participants were asked for their permission, and access to results was granted.

## RESULTS

CM "A" and CM "B" youngsters, all male, feature a 17 year-old average age (min. 16, max. 21). The SOC score is 54,4 (95% CI from 52,2 to 56,6). Regarding the three aspects, the scores reached 19,6 (95% CI from 18,1 to 21,1) as far as comprehensibility is concerned, 17,6 (95% CI from 16,5 to 18,8) with reference to manageability and 17,1 (95% CI from 16,0 to 18,2) regarding meaningfulness (See Table 4).

5 youngsters identify as personal or internal assets (Table 5) certain knowledge, attitudes and behaviour. They regard the following as assets: knowing that sport and hygiene provide benefits, along with playing sports and a positive attitude towards life. Youngsters consider that these assets are important in order to improve health both regarding themselves and the facility, for they provide optimism: "I always see the glass half full instead of half empty" (Youngster 1 or Y1), "being cheerful, positive...helps me to feel better" (Y2), "I always try to be happy with

Table2. Professionals who answered the open-ended questions

	Whole Staff	Participants
Professionals from the Youth Center "B"	1 Manager	1 Manager
	2 Assistant Managers	np
	3 Psychologists	1 Psychologist
	9 Coordinators	3 Coordinators
	1 Social Worker	1 Social Worker
	48 Educators	np
	1 Administrative assistant	np
	1 Doctor	np
	1 Nurse	np
	1 Psychiatrist	np
	1 Jurist	np
	6 Kitchen workers	np
	1 Laundry worker	np
np= does not participate		

Table 3. Profile of professional participant sample

Identification	Gender, age	Experience with young offenders (in years)
Professional 1 (E1)	Male, 38	11
Professional 2 (E2)	Female, 30	4
Professional 3 (E3)	Male, 31	8
Professional 4 (E4)	Female, 27	2
Professional 5 (E5)	Female, 38	10
Professional 6 (E6)	Male, 37	9

Table 4. Average Punctuation in the SOC- 13 item scale (95% Confidence Interval)

Items in the SOC scale: (Likert Scale 1-7)	Minors (n=45)	95% CI
Q1. Do you have the feeling that you really don't care about what is going on around you? (1-Never, rarely, 2, 3, 4, 5, 6, 7-very often)	4.1	3.5-4.7
Q2. Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well? (1-Never, 2, 3, 4, 5, 6, 7-always)	3.9	3.4-4.3
Q3. Has it happened that people whom you counted on disappointed you? (1-Never, 2, 3, 4, 5, 6, 7-always)	4.5	3.9-5.0
Q4. Until now your life has had: (1-no clear goals, 2, 3, 4, 5, 6, 7 - very clear goals and purpose)	4.1	3.6-4.6
Q5. Do you have the feeling that you are being treated unfairly? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	4.4	3.8-5.1
Q6. Do you have the feeling that you are in an unfamiliar situation and don't know what to do? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	4.3	3.7-4.9
Q7. Doing the things you do every day is: (1-a source of deep pleasure and satisfaction, 2, 3, 4, 5, 6, 7 - a source of pain and boredom)	4.3	3.8-4.8
Q8. Do you have very mixed-up feelings and ideas? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	3.8	3.3-4.4
Q9. Does it happen that you experience feelings that you would rather not have to endure? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	3.8	3.2-4.4
Q10. Many people, even those with a strong character, sometimes feel like losers in certain situations. How often have you felt this way in the past? (1-Never, rarely, 2, 3, 4, 5, 6, 7-very often)	4.4	3.9-4.9
Q11. When certain events occurred, have you generally found that: (1-you overestimated or underestimated their importance, 2, 3, 4, 5, 6, 7 - you assessed the situation correctly?)	3.8	3.2-4.3
Q12. How often do you have the feeling that there is little meaning in the things you do in your daily life? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	4.6	4.1-5.1
Q13. How often do you have feelings that you are not sure you can control? (1- Very often, 2, 3, 4, 5, 6, 7-Very rarely or never)	4.4	3.7-5.0
MANAGEABILITY (Behaviour component) (Average punctuation on questions Q3, Q5, Q10, Q13)	17.6	16.5-18.8
COMPREHENSIBILITY (Cognitive component) (Average punctuation on questions Q2, Q6, Q8, Q9, Q11)	19.6	18.1-21.1
MEANINGFULNESS (motivational component) (Average punctuation on questions Q1, Q4, Q7, Q12)	17.1	16.0-18.2
TOTAL SOC (average punctuation on the three aforementioned components)	54.4	52.2-56.6

myself and with others" (Y3). They reckon that this optimism has an influence on others and on CM life: "I am always smiling, because if others see me happy I communicate my positive feelings" (Y2) "by participating in the centre's tasks, we enjoy the facilities better" (Y4). They relate health to reflection and anticipating behaviour: "one must think things over before doing them" (Y4); as well as to playing sports and competitiveness: "I like playing and sports, and I challenge people to play with me" (Y5). In a similar way, external assets are also identified both within the internment facility and in youngsters' neighbourhoods and cities (Table 5). These assets are people such as the CM doctor or the cook; as well as friends and family

members from their communities. They also mention "groups", such as the technical and education teams at the facility, or the community health centre and the school. In addition to this, they identify "places", such as the playground, the soccer field at the facility or the gym found outside the CM grounds.

As it can be seen in Table 6, professionals regard the comprehensibility concept as important (Citation 2 [C2], C5, C6), positive (C4) and necessary for youngsters (C3); they mention problems in its approach (C2, C4) as well as the low ability amongst youngsters to apprehend it (C1). Some refer to the need of reflection amongst them (C4), in order to work on it both inside and outside the facility (C5)

in order to find reality and avoid isolation (C6). As far as the level of comprehensibility is concerned, they regard it as high (C19), although they stress that it might be so once internment has concluded (C21, C22), while one professional states that it is “lower than the average” (C23).

Concerning manageability, they consider it necessary to approach this aspect (C7, C8, C9, C12). They remark variability regarding the manageability level amongst youngsters and believe it depends on their family environment (C11). There are two observations related to the low manageability featured by interns (C7, C8), which they attribute to external locus of control, low responsibility and self-control abilities, as well as to a lack of awareness concerning the resources at their disposal and the way to put them

into practice. Some answers formulate the positive consequences of manageability (C9, C12) in terms of conveying autonomy and being able to address the demands of life and to solve vital complications. One answer mentions the concept being difficult to understand by youngsters (C10). As far as the manageability level is concerned, two answers consider that it can be attained (C27, C28), with time and, probably, after internment has concluded. An answer remarks that youngsters already possess manageability, but they have made inadequate use of it (C29). Finally, some formulations indicate a lack of resources within the facility to achieve it and, more in particular, to maintain it once internment ends (C24, C25).

Regarding meaningfulness, its significance and the need to approach this aspect amongst minors has

Table 5. Health assets identified by young offenders (n) number of people who mentioned the asset

Internal Assets	Statements (n)	
Knowledge	“Sport and hygiene bring benefits” (5) “To know what you must eat” (2) “To know when you need help” (1)	
Attitude	“To be positive” (4) “To participate” (3) “To be happy” (2) “To be calm” (2) “To cooperate and to be sociable” (1)	
Behavior	“Do sport” (5) “Help the rest” (2) “Smile” (1) “Eat everything” (1) “Clean” (1)	
External Assets	Youth Center	Neighborhood-City
People	Doctor (5) Cook (3) Cleaning lady (1)	Friends (5) Family (5) Doctors (5) Girlfriend (4) Police officers (3) Social educator (1) Teachers (1)
Groups (associations or institutions)	Technical team (5) Educative team (5) Coordinator (5) Security (5)	Primary Care center (4) School (3) High School (2) Social Services (1)
Places (physical space and facilities)	Outdoor area (5) Football field (5) Dining room (3) Bedroom (2)	Gym (5) Park (4) Beach (4) Sports center (3) Phone shop (3) River (3) Social center (2) Museums (1) Church (1)

Table 6: Professionals opinion on the SOC and its three components

	Opinion on the concept and its relevance (Quotes 1 to 17)	To what extent do you think that the people hosted in this institution have incorporated this concept? (Quotes 18 to 35)	Specific aspects in the educational project which incorporate the concept (Quotes 36 to 51)
COMPREHENSIBILITY	Quote 1: "A great deal of the young offenders in this center lack a high level of comprehension regarding both concepts as well as explanations on any other matter" (E1)	Quote 18: "We try to make them aware and responsible of all the activities and actions in the Center" (E1)	Quote 36: "Straightforward regulations and constant explanations by the educational staff" (E1)
	Quote 2: "It is important, but as far as young offenders are concerned, there can be some degree of distortion, from here they have comprehension of facts and they learn to listen, to receive..." (E2)	Quote 19: "In my opinion, there's a quite high degree of acceptance and comprehensibility, since we try to provide them with this concepts" (E2)	Quote 37: Yes, it is incorporated. We work with values and we employ them in everyday matters: active listening, empathy, relationships between equals, respect" (E2)
	Quote 3: "I think it is important to provide young offenders with a series of cognitive structures so that they can acknowledge and deal with the circumstances that they are confronted with on their own" (E3)	Quote 20: When minors are provided with a normative environment with schedules, activities and tasks they can get to understand the consequences of breaching what's established" (E3)	Quote 38: "I think that mostly in the stages of admission and adaptation of the minor to the center this concept of comprehensibility would be most reflected since what we try is to provide a structured environment" (E3)
	Quote 4: "The concept is good and well adapted but they take a couple of days to accommodate themselves to the new conditions and they need thorough reflection to understand it" (E4)	Quote 21: "It takes them a lot to understand what's happening around them and when a change takes place they don't really get to understand it. Eventually they adapt to the circumstances and fully understand it" (E4)	Quote 39: "The Center and the system itself are adapted so that they have a stable environment which provides them with safety and trust" (E4)
	Quote 5: "It is very important and we always try that young offenders develop the concept during their stay in the center and eventually outside, since it will always be some kind of guidance" (E5)	Quote 22: "It depends on what minor and what circumstances, most of them eventually do so but it takes them a lot at the beginning" (E5)	Quote 40: "Yes, ever since the first day and until the last, by means of activities and different educative and psychological interventions" (E5)
	Quote 6: "I understand and observe that it is a very important concept to "find one's place" within reality and, if not applied, one can live completely apart" (E6)	Quote 23: We count upon a very heterogeneous population in many ways. But I'd say that less than the global average do so" (E6)	Quote 41: "Of course, it is part of our everyday work" (E6)
MANAGEABILITY	Quote 7: "I believe that young offenders in this center should be able to improve their degree of manageability because since they all share this conception of external control they don't really control or are responsible for what's actually happening to them" (E1)	Quote 24: "They have all the manageability that a structured resource can provide. But they are empowered so that they can easily get along" (E1)	Quote 42: "We try to provide them with the necessary tools so that they can take them to the open environment" (E1)
	Quote 8: "... minors don't know how to put it into practice, they aren't aware of what they have, many don't have the necessary resources to better develop the sense of coherence" (E2)	Quote 25: "The problem is when they finish their detention and our monitoring ends, since it then depends more on their family circumstances and the degree of involvement achieved. They still have what they have learnt and the resources are still there" (E2)	Quote 43: "When minors finally understand their situation at the Center and they are provided with the necessary resources they start building their autonomy and they are able to get along in the facility without the constant supervision of educators" (E3)
	Quote 9: "If we provided minors with the appropriate tools they could deal with the environment's demands and solve every day situations by themselves" (E3)	Quote 26: "They are daily provided with resources to enhance their autonomy so that they can deal themselves with problems" (E3)	Quote 44: "From here, we try to promote the concept of internal control in a coherent and manageable way, so that they can put away the external control factor entailed by the religious or philosophical field" (E4)
	Quote 10: "I think that it's far too conceptual and that they won't get to understand it. But I do like the religious thing because they really believe" (E4)	Quote 27: It takes them a lot to believe in themselves and be able to weather difficult situations. But when they pass an exam, and they do, they are very proud of having conquered their objective. Yes, eventually they do" (E4)	Quote 45: "Yes, all throughout the educative process by means of courses, programs and activities" (E5)
	Quote 11: "Not all minors deal with it in the same way, it depends on their environment and family context. The Center helps them by means of different programs to improve their manageability" (E5)	Quote 28: "As in the previous case, by the end of detention they have better accepted the concept but it's not always like that and it depends of each individual minor; hence the importance of the programs which are developed with them" (E5)	Quote 46: "Yes, in all everyday and extraordinary activities" (E6)
	Quote 12: Correspondingly, if they lack this, they can't get along and "succeed" in the world around them" (E6)	Quote 29: "About manageability, I'd say that rather than not having implemented the concept they have done so in a wrong way" (E6)	

MEANINGFULNESS	Opinion on the concept and its relevance (Quotes 1 to 17)	To what extent do you think that the people hosted in this institution have incorporated this concept? (Quotes 18 to 35)	Specific aspects in the educational project which incorporate the concept (Quotes 36 to 51)
	<p>Quote 13: The motivational disposition in the concept is very important since minors in this center really need to work on it to change some of their habits (drugs, adrenalin driving, etc.) (E1)</p> <p>Quote 14: After all, I think we need to teach them how to be autonomous and this entails changing their lifestyle. By promoting a responsible and independent way of life they will be able to answer questions such as why? or what for? (E3)</p> <p>Quote 15: "They'd need more specific meaningfulness stimulus, and incentives better adapted to their life area. It is very important since they will be able to solve problems if they find a goal and a series of objectives" (E4)</p> <p>Quote 16: "We'd be in the same place as in the previous concept, although this is sometimes more complicated since depending on the age and personal circumstances of minors, this are concepts which they don't consider even if they are important and they are encouraged to do so in here". (E5)</p> <p>Quote 17: "Without meaningfulness the individual drifts aimlessly on empty or mistaken ideas, with no desire to improve or without knowing in what sense to do so" (E6)</p>	<p>Quote 30: "A lot of work is carried out on a group basis but mostly on an individual approach" (E1)</p> <p>Quote 31: And the question that they raise ("what for?") too. We have provided them with tools and helped them put into practice" (E2)</p> <p>Quote 32: "By providing them of the resources and acting as active agents in the educational process rather than passive ones, minors can have enthusiasm for what they want and how they want to change their life" (E3)</p> <p>Quote 33: "At the end they act meaningfully and fight for achieving what they want, especially with exams in school" (E4)</p> <p>Quote 34: "That concept is incorporated to a lesser extent, few have done so" (E5)</p> <p>Quote 35: "As in the previous, less than the average"</p>	<p>Quote 47: "They work on this in individual sessions with psychologists and in groups with educators" (E1)</p> <p>Quote 48: "In pre-employment workshops and in different activities offered to minors they can get an overall view or create a motivation regarding what they intend to achieve" (E3)</p> <p>Quote 49: "The Center gets them to achieve a coherent meaning to what they do and to be able to solve their issues" (E4)</p> <p>Quote 50: "Throughout their stay coherence is sought regarding their situation and their objectives in life and they are prepared to do so by means of training, orientation, reinsertion, etc." (E5)</p> <p>Quote 51: "In all aspects developed in the center, both ordinary and extraordinary activities" (E6)</p>

been indicated (C13, C15). Some professionals relate it to motivation, as well as to renouncing risk behaviour practices (C13), acquiring autonomy and introducing changes in lifestyle (C14). They think that finding a goal and objectives can contribute to problem solving (C15), to orientation and to finding a sense to what one thinks and does (C17). As an exception, approaching the concept has been regarded as complex, taking into account minors' age and circumstances (C16). In general, professionals believe that it is an aspect which youngsters have already assimilated (C30, C31, C32, C33), although some disagree (C34 and C35).

Professionals think that SOC dimensions are included in the CM's education project, in everyday activities, stipulating that it is implemented "since admission up until release". While aiming to be specific, comprehensibility would be approached by means of rules and daily explanations (C36), through the values which the staff members aim to communicate: "active listening, empathy, relationship between equals, respect" (C37). One of them remarks that they work on comprehensibility especially during admission and the subsequent adaptation period (C38), while another reflects on modifying certain environmental aspects in order to achieve a stable atmosphere which pro-

vides youngsters with security and confidence (C39). As far as manageability is concerned, they add that youngsters are dispensed tools and resources which they can transfer to an open environment (C42, C43), by means of classes, programs and activities (C45, C46). Regarding meaningfulness, they state that it is approached through individual sessions conducted by psychologists and group sessions conducted by educators (C47), workshops prior to employment (C48) and problem solving (C49).

## DISCUSSION

SOC scores amongst youngsters is moderate: 54,4<sup>21</sup> and matches the level attributed to them by some professionals. These consider the three dimensions to be relevant and believe that they are approached by means of the work carried out in the facility, although sometimes they do not specify in what terms this is done. These answers could be under the influence of social desirability bias, and affected by the fact that both the group of professionals and youngsters were summoned by the CM direction board.

Despite them being populations which cannot be compared, by means of using the same SOC-13 test,



these young interns feature scores higher than those obtained by Norwegian secondary education students: 52,11<sup>25</sup>; but lower than those obtained by Spanish students at a secondary education school: 56,9<sup>26</sup> and by unemployed adult population: 56,6<sup>27</sup>; and distinctly lower than scores obtained by Spanish university students: 63,7<sup>26</sup> and those attained by Spanish nursery professionals: 67,4<sup>28</sup>.

These differences in global scores coincide when analysing the three different dimensions separately (manageability, comprehensibility and meaningfulness) both amongst CM interns and population samples with the same age range but from different contexts<sup>25-26</sup>.

Enclosed domains, such as CMs and prisons, act as environments which can create health regarded as a “resource for life”<sup>1</sup>. They constitute an opportunity to access a population which also belongs to the community and, as it has been proven, they can host health potentialities development (16)(29). For the most part, at a community level, this positive approach regarding practices, will be more fruitful if efforts are focused on key moments or stages in life in which learning how to lead a healthier life can be achieved, such as childhood and adolescence<sup>30-32</sup>. The key question is discovering how to attain truly salutogenic CMs, understanding what role do key agents play and revealing how to reinforce SOC in order to improve health amongst these youngsters. According to Antonovsky<sup>3</sup>, stress factors which appear in relation to traumatic experience, such as freedom deprivation, might lead to positive or beneficial consequences. SOC can moderate stress sources inherent to this sort of environment<sup>33</sup> and act as a protection factor regarding negative life events. Those in charge can implement measures aimed at turning them into places which enhance comprehensibility, manageability and meaningfulness in order to create health. ¿How can this be achieved? This is the challenge initially put forward by this study. It would be recommendable to be able to detect the salutogenesis sensitivity featured by the education projects at these facilities, as well as to discover how it can be modified so it creates more health. This approach would require not only relating to a pathological or preventive point of view, and to analyzing health problems and risk factors (drug-dependence, self-harm, violent behavior); but also providing a positive vision aimed at connecting personal, group and community skills and addressing health determinants. This array of skills which youngsters have identified as assets in the study is what Alvarez-Dardet and Ruiz-Cantero depict as “health heritage”, encouraging its development through salutogenic policies<sup>35</sup>.

Identifying the SOC level amongst youngsters becomes interesting not considering it as an individual assessment, but as data connected to the considerations from professionals and youngsters who can identify assets. As it happens with other studies, they regard optimism, responsibility and decision-making skills, physical activity, participation in the facility’s tasks, a good relationship with parents and family, positive social values and school as assets. On the other hand, they do not mention self-esteem or any positive adult models. More distinctly, they do not regard any group or association which works at the CM or outside it as assets. Relating to community groups such as sport and free time associations, youth musical ensembles, clubs, etc. entail a positive influence on teenage development which should be encouraged by CMs.

Limitations in research have been found due to obtaining the sample in an opportunist way while measuring SOC, along with training and selecting the groups of both youngsters and professionals for the qualitative study. Results would be more relevant and feature a higher validity provided broader representation from both population groups. Anyway, the information from the quantitative study comes from the total number of youngsters from 1 of the 8 internment facilities in the Valencian Community, and the population subject to study represents 11.5% of the total close regime intern population in the Community<sup>19</sup>. Taking the qualitative study into consideration, the interviewees’ age profile, 17 years old, matches the age of the vast majority of minor interns<sup>18</sup>. Lack of resources regarding field work and both accessibility and authorization problems did not enable a design with a broader sample representativeness and hence the information featured in the qualitative study comes from only one group of youngsters and a reduced percentage of professionals, with scarce representation regarding educators, who comprise the collective with more members and which spends more time with interns. Some studies approach SOC differences related to age and gender, indicating that males feature a higher SOC which decreases with ageing. In a similar way, the relationship between identified assets and youngsters’ sociodemographic and educational profile could have been analyzed, along with the “internment duration” variable, in order to assess SOC according to youngsters’ progress during internment and even to compare the scores of both interns who have been longer in the CM and those who have just arrived. Regardless of these improvements which could be introduced in future studies, it is relevant that CM youngsters understand and answer to the SOC-13 test questions and identify internal and

external health assets without problems; professionals participating also bring forth a favorable opinion concerning SOC and regard the dimensions it assesses as relevant. Rather than focusing on the results representativeness, the study intends, despite the limitations previously mentioned, to raise awareness regarding the key concepts of these positive health models, by making them available for youngsters and professionals and granting that the former become the main characters in processes of change. Thus, the next step would be trying to connect this whole potentiality array and putting together, in depth and featuring a higher precision level, an asset map and, as it has been recently done in the community, launching participatory projects based on invigorating those skills and assets which youngsters desire to reinforce.

#### ACKNOWLEDGEMENTS

To Carlos Álvarez-Dardet and Ana Molina Barceló for their comments and suggestions while writing this article.

#### CORRESPONDENCE

Joan J. Paredes-Carbonell  
Centre de Salut Pública de València  
Avda. Catalunya, 21. 46020 València  
Email: [paredes\\_joa@gva.es](mailto:paredes_joa@gva.es)

#### BIBLIOGRAPHICAL REFERENCES

1. Conferencia Internacional sobre Promoción de la Salud. Carta de Ottawa para la Promoción de la Salud. *Rev Sanid Hig Pública*. 1987; 61: 129-33.
2. Lindström B, Eriksson M. Guía del autoestopista salutogénico: camino salutogénico hacia la promoción de la salud. Girona: Documenta Universitaria. Cátedra de Promoción de la Salud, Universitat de Girona; 2011: 29.
3. 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*. 2011; 85: 137-47.
4. Lindström B, Eriksson M. Guía del autoestopista salutogénico: camino salutogénico hacia la promoción de la salud. Girona: Documenta Universitaria. Cátedra de Promoción de la Salud, Universitat de Girona; 2011:29-30
5. Health Promotion Research Team, Folkhälsan Research Centre. SOC questionnaire. Helsinki: Folkhälsan Research Centre; 2010.
6. Fernández-Martínez ME, Mayo L, García-Mata MA, Liébana C, Fernández-García D, Vázquez-Casares AM. Sentido de Coherencia y salud percibida en alumnos universitarios de ciencias de la salud. [Internet] 2011 [citado 11 octubre de 2012]. Disponible en: [http://www.anesm.net/anesm/contents/html.php?archivo=\\_congresos\\_premio-salamanca1](http://www.anesm.net/anesm/contents/html.php?archivo=_congresos_premio-salamanca1)
7. Morgan A, Ziglio E. Revitalising the evidence base for public health: An assets model. *Promotion&Education*. 2007; 14: 17-22.
8. Morgan A, Ziglio E. Revitalising the Public Health Evidence Base: An Asset Model. In: Morgan A, Davies M, Ziglio E, editors. *Health Assets in a Global Context: theory, methods, action*. New York: Springer; 2010, p. 3-16.
9. Hernán M, Lineros C. Los activos para la salud. Promoción de la salud en contextos personales, familiares y sociales. *Revista Fundesfam* [Internet]. 2010 [citado 10 octubre 2012] Disponible en: <http://www.fundesfam.org/REVISTA%20FUNDESFAM%201/007revisiones.htm>
10. Oliva A, Pertegal MA, Antolín L, Reina MC, Ríos M, Hernando A, et al. El desarrollo positivo adolescente y los activos que lo promueven, un estudio en centros docentes andaluces. Sevilla: Junta de Andalucía; 2010.
11. Botello BR, Hernán M. Opiniones de los jóvenes sobre la salud mental en Huelva según el modelo de activos. *Gaceta Sanitaria*. 2009; 33: 96.
12. Sánchez DY, Lineros C, Hernán M, Potenciales activos para la salud de la juventud Nicaragüense captados por la primera encuesta nacional de juventud. *Gaceta Sanitaria*. 2009; 33: 303.
13. Perez Wilson, P. Opiniones de adolescentes sobre los activos en salud en el barrio El Zaidín, Granada: trabajo final del Master de Salud Pública y Gestión Sanitaria. Granada: EASP; 2011.
14. Virues-Ortega J, Martínez-Martín P, del Barrio JL, Lozano LM. Validación transcultural de la Escala de Sentido de Coherencia de Antonovsky (OLQ-13) en ancianos mayores de 70 años. *Med Clin (Barc)*. 2007;128:486-92.
15. Aviñó A. Mapeando los activos en salud en un barrio en situación de vulnerabilidad social: trabajo de investigación Master Sociología i Antropologia de les Polítiques Públiques. València: Facultat de Ciències Socials Universitat de València; 2011.
16. Equip Vincles Salut. Guía para la promoción de la salud mental en el medio penitenciario. Madrid:

- Ministerio del Interior. Secretaría General de Instituciones Penitenciarias; 2011. 198 p.
17. Iborra I, Rodríguez A, Serrano A, Martínez-Sánchez P. Situación del menor en la Comunitat Valenciana: víctima e infractor. Valencia: Centro Reina Sofía; 2008.
  18. INE-Nota de prensa. Estadística de Condenados / Estadística de Menores, Resultados Provisionales [Internet]. 2011 sept [Citado 22 enero 2013]; Disponible en: <http://www.ine.es/prensa/np736.pdf>
  19. Más de 1.800 menores cumplen medidas de reeducación en centros públicos de la Generalitat. Levante – EMV [Internet]. 2012 Abr [Citado 22 enero 2013]; [aprox. 2 p.]. Disponible en: <http://www.levante-emv.com/comunitat-valenciana/2012/04/12/1800-menores-cumplen-medidas-reeducacion-centros-publicos-generalitat/896631.html>.
  20. Fernández-Molina E. El internamiento de menores, una mirada hacia la realidad de su aplicación en España. Revista Electrónica de Ciencia Penal y Criminología [Internet]. 2012 [citado 21 enero 2013]; 14-18:1-20. Disponible en: <http://criminol.ugr.es/recpc/14/recpc14-18.pdf>
  21. Antonovsky A. The structure and properties of the sense of coherence scale. *Social Science and Medicine*. 1993; 6: 725-33.
  22. Eriksson M, Lindström B. Validity of Antonovsky's sense of coherence scale: A systematic review. *J. Epidemiol Community health*. [Internet]. 2005 [cited 2012 oct 10]; 59: 460-66: [about 2 p.]. Available from: <http://jech.bmj.com/cgi/reprint/59/6/460>.
  23. Conde F. Análisis sociológico del sistema de discursos. *Cuadernos Metodológicos CIS*. 2009; 43: 23-32.
  24. Ley Orgánica 15/1999, de 13 de diciembre, de Protección de Datos de Carácter Personal. [Boletín Oficial del Estado nº 298, de 14/12/1999].
  25. Mellem LS. Sense of coherence as a mediator of stress among high school students in Tromsø: Master Thesis in Psychology. Tromsø: Faculty of Social Sciences University of Tromsø; 2008.
  26. Agulló-Cantos JM. Salutogénesis y activos en salud en un centro de menores: trabajo de investigación Master de Educación y Prevención de Conductas Adictivas. Valencia: Universidad Católica de Valencia; 2012.
  27. Stankūnas M, Kalėdienė R, Starkuvienė S. Sense of coherence and its associations with psychosocial health: results of survey of the unemployed in Kaunas. *Medicina (Kaunas)* [Internet]. 2009 [cited 10 octubre 2012]; 45(10): [about 2 p.]. Available from: <http://medicina.kmu.lt/0910/0910-08e.pdf>
  28. Malagón MC, Juvinyà D, Bonmatí A, Fernández R, Bosch C, Bertran C, et al. Sentido de Coherencia de las enfermeras y validación del cuestionario SOC-13. *Metas de Enferm*. 2012; 15(9): 27-31.
  29. Paredes-Carbonell JJ. Promoción de salud en el medio penitenciario. En: Colomer C, Alvarez-Dardet C. Promoción de salud y cambio social. Barcelona: Masson; 2001. p. 173-89.
  30. Hernán M. Activos para la Salud y Salutogénesis; emergentes en Salud Pública. Bepsalut [Internet]. 2012 sept [citado 10 octubre 2012];4: [aprox. 2 p.]. Disponible en: <http://www.udg.edu/catedres/PromociodelaSalud/bepSALUT/Articulos/tabid/18779/Article/492/language/es-ES/activos-para-la-salud-y-salutogenesis-emergentes-en-salud-pblica.aspx>
  31. Palacios J, Paniagua G. Educación infantil: respuesta educativa a la diversidad [Internet]. Madrid: Alianza Editorial; 2005 [citado 10 octubre 2012]. Disponible en: <http://dialnet.unirioja.es/servlet/libro?codigo=255590>.
  32. IUHPE. The evidence of health promotion effectiveness. Brussels: European Commission; 1999.
  33. Palacios-Espinosa X, Restrepo-Espinosa MH. Aspectos conceptuales e históricos del sentido de coherencia propuesto por Antonovsky: ¿una alternativa para abordar el tema de la salud mental? *Informes Psicológicos*. 2008; 10 (11): 275-300.
  34. Jorgensen RS, Frankowski JJ, Carey MP. Sense of coherence, negative life events and appraisal of physical health among university students. *Personality and Individual Differences*. 1999; 27: 1079-89.
  35. Álvarez-Dardet C, Ruiz MT. Patrimonio de salud ¿Son posibles las políticas salutogénicas? *Rev Esp Salud Pública*. 2011; 85: 123-7.
  36. Scales PC, Leffert N. Developmental assets: A synthesis of the scientific research on adolescent development. Minneapolis, MN: Search Institute; 1999.
  37. Moksnes UK, Espnes GA, Lillefjell M. Sense of coherence and emotional health in adolescents. *Journal of Adolescence* [Internet] 2012 Apr. [cited 2013 jan 27]; 35(2):433-41: [about 1 p.]. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21831417>.