

# Effect of Sence of Coherence and Health Promoting Behavior on Overall Health

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## ABSTRACT

Psychological well-being and health promoting behaviour is an important aspect of human health and well-being. Health promoting behaviours and psychosocial wellbeing are crucial determinants of health status and quality of life. Health promoting activities seek to strengthen the host through a variety of approaches in the form of health education, lifestyle modification, behaviour change, environment modification and nutrition intervention. The individual taking responsibility for his or her health, while at the same time ignoring the social and environmental circumstances which conspire to make them ill. The salutogenic notion focuses on components or circumstances that assist a person in coping with stress, other physical and psychological issues, or even pathogenic exposure. This model seeks to explain why some people are able to maintain and even improve their health in stressful life situations. The Sense of Coherence Measure (SOC) is a scale that examines how people see life and tries to uncover how people may utilise their resources to overcome obstacles and maintain and enhance their health, according to Harvard Health. The scale was developed based on three concepts comprehensibility, manageability and meaningfulness. Sense of Coherence scale was developed based on interviews in detail with the person who has undergone traumatic events with measure consequences in life. Antonovsky further introduced a sense of coherence scale with 13 items i.e. shorter version in which 5 items measure comprehensibility, 4 items measure manageability and 4 items measure meaningfulness. In this scale the score ranges from 13 to 91 points. Antonovsky hypothesized that a high SOC is a prerequisite for successful adaptation to a stressful situation which leads to better health and well-being (quality of life) which has been supported in many studies.

**Key words:** Sense of coherence, Health promoting behaviour, Psychological well being

**HOW TO CITE THIS ARTICLE:** Pooja Gomase, Kumar Gaurav Chhabra, Priyanka Paul Madhu, Amit Reche, Shivani Kharpate, Gauri Bandre, Effect of Sence of Coherence and Health Promoting Behavior on Overall Health, J Res Med Dent Sci, 2021, 9(11): 162-166

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**Received:** 18/10/2021  
**Accepted:** 03/11/2021

## INTRODUCTION

A significant component of human health and well-being is psychological well-being and health-promoting behaviour. Psychosocial well-being and health-promoting behaviours are important factors in determining health status and quality of life. To enhance the host, wellness-promoting programmes, such as health promotion, dietary enhancement, behaviour change, environmental modification, and diet intervention are used [1].

### Sense of coherence

Aaron Antonovsky coined the term "sense of coherence" (SOC) in 1979 to describe why some individuals get sick under stress while others stay well. It has been widely applied and accepted all over the world. The scale was developed based on three concepts comprehensibility, manageability and meaningfulness. Sense of Coherence

scale was developed based on interviews in detail with the person who has undergone traumatic events with measure consequences in life. He created profiles based on Gutmann's facet design based on these interviews that highlighted strong and weak SOC. Facet theory (FT) is a meta-theory used in the behavioural sciences to build structural and other theories. The foundational assumptions of FT are that social and behavioural concepts are complex constructions that require a methodical approach to defining observations and analysing the connection between them and the theory [2-4].

Comprehensibility is the extent to which one perceives internal and external stimuli as rationally understandable. Manageability refers to the degree where one feels that there are resources at one's disposal that can be used to meet the requirements of the stimuli an individual is bombarded by Antonovsky, et al. Meaningfulness, the motivational dimension, refers to the extent to which one feels that life has an emotional meaning, that at least some of the problem faced are worth commitment and dedication, and are seen as challenges rather than as

burdens. [5]. The more these principles are grasped, the better a person's chances of successfully coping with the situation or sickness become. High SOC is linked to a sense of well-being and predicts a favourable health outcome [6]. Antonovsky created the 29-item Orientation to Life Questionnaire, which included 11 items measuring comprehensibility, 10 items indicating manageability, and 8 things measuring meaningfulness. Antonovsky further introduced a sense of coherence scale with 13 items i.e. shorter version in which 5 items measure comprehensibility, 4 items measure manageability and 4 items measure meaningfulness. In this scale the score ranges from 13 to 91 points [7]. This scale has been translated into more than 33 languages and tested in a variety of settings, including health-care and general-population cohorts in a variety of nations. According to the hypothesis behind SOC, it develops through adulthood (until around 30 years of age), after which it stabilises and only fluctuates when major life events occur. Adults' fluctuations over time are minimal, according to several studies. However, some research implies that SOC includes a component that is dependent on a person's physical and mental state, which can alter over time. Antonovsky proposed that a high SOC is necessary for successful adaptation to a stressful environment, which leads to improved health and well-being (quality of life), a hypothesis that has been supported by several researches. Several writers suggest that a low SOC score reflects primarily psychiatric morbidity such as anxiety or depression, while others claim that a high SOC score signifies more than just the lack of psychopathology.

Although it has been demonstrated that a high SOC score has a mediating or moderating effect on the impact of stressful life events on self-reported well-being and health, the number of studies demonstrating this effect is limited [3].

### Health promoting behaviour

Health-promoting activities use a number of ways to enhance the host, including health education, lifestyle modification, behaviour modification, environmental modification, and nutrition intervention.

### Health promoting behaviour consist of six components

- Health responsibility.
- Physical activities.
- Nutritional habits.
- Stress management.
- Interpersonal relationship.
- Spiritual growth.

The conventional emphasis in disease prevention has been on finding the "causes of disease." This traditional approach has recently been augmented by the quest for the 'origin of health.' Instead of focusing on what causes illness, the focus has turned to what produces health [1].

### What is salutogenesis?

Salutogenesis is the name given to this process. Salutogenesis is made up of the words 'Salus,' which means 'health,' and 'genesis,' which means 'creation.' Salutogenesis is a notion that focuses on aspects or influences that assist a person in dealing with stress, other physical and psychological issues, or even pathogenic exposure. It also investigates the origins of self-healing and regeneration. This paradigm tries to explain why certain people are able to keep their fitness, if not strengthen it, in the face of adversity. In salutogenic model individuals adaptation to new circumstances is emphasise. Salutogenic Model is a complement to Pathogenic Model, and it draws attention to the Pathogenic Models of Health Care Practitioners' overlooked Aspects. Salutogenic theory involves two concept i.e. 1.General resistance resources and 2. Sense of coherence [1]. The desire to use emotional, affective, and instrumental mechanisms to enhance stress coping capability is closely related to that individual's sense of coherence. As a result, the Sense of coherence serves as an essential focal point for interventions aimed at changing one's lifestyle and improving one's health.

### Correlation between SOC and Health promoting behaviours in north Indian students

Senjam et al. conducted a study on SOC and health-promoting behaviour in North Indian students and found that female students consult doctors for health problems more often than male students, and that female students had a greater sense of health obligation overall. Male students preferred physical activities, while female students mostly studied Yoga. In terms of stress management, there was no statistical disparity between male and female responses. Half of the students watch television, go to the movies, or go shopping. More than half of students say they sleep (65%), share feelings with friends (59%) and meditate on a daily basis (21%) [1].

According to a study trained youth in North India have a positive attitude toward health promotion. In comparison to males, females have a stronger sense of health obligation. This was attributed to a higher number of female students consulting with physicians. They often wash their hands before meals, indicating that women were more concerned with their wellbeing and hygiene [1]

### Interpersonal relationship and SOC

Three elements are included in the segment of the Interpersonal relationship subscale: 1) Maintain positive relationships with friends, 2) Find opportunities to meet your mate, and 3) Listen to your friends. Female students scored higher on all of the above criteria, and they have more confidence in God than male students. Female students, in comparison to male students, understood what was necessary in life. After analysing all of the results, it was discovered that in terms of overall health-promoting behaviour and SOC ranking, there was no statistically meaningful difference between male and

female students. The study discovered no connection between HPLP and a person's gender, religion, father's education, or form of accommodation [1].

#### **Correlation between SOC and age**

Two individual variants, sense of coherence and age, were discovered through statistical analysis. A connection between a person's sense of coherence and their age was also discovered. It was discovered that HPLP and sense of coherence had a positive relationship [1].

#### **Correlation between SOC and physical activity**

Several related studies have been performed, with one involving Finnish polytechnic students showing a strong correlation between soc and physical activity [1].

#### **Correlation between SOC and socioeconomic status**

A cohort study of Norfolk residents found a clear connection between socioeconomic status and healthy behaviour preferences, regardless of education or social class. Another research found that having a high self-rated health score and having access to health-promoting services that help people develop a healthy subjective state of health were also closely linked to soc [1].

#### **Correlation between SOC and mental disorders**

A longitudinal research in Finland found a clear link between soc and a lower risk of mental disorders [1].

#### **Correlation between SOC and high risk behaviours**

Higher soc was associated to less high-risk behaviours such as intravenous substance usage, repeated casual intercourse, or a history of sexually transmitted disease in a research performed by drug-addicted black women or homeless women. Weak soc has been attributed to chronic cannabis use in a survey of sexually assaulted women. However, if the care soc score rose to the same range as the usual control group after 6 weeks, it was considered a success [8].

#### **Correlation between SOC and tobacco usage**

Tobacco is one of the leading cause of social and health problem according to national sample survey organisation of government of India. About twenty million children of age 10 -14 years are estimated to be tobacco addicted. Alcohol, nicotine, and areca nut chewing are the most significant contributing factors for the prevalence of oral disorders, including cancer [2]. Tobacco and alcohol produce free radicals and reactive oxygen species, all of which accelerate lipid peroxidation [3]. Worldwide tobacco usage is considered to be addictive behaviour which leads to psychological dependence on nicotine [9-11].

#### **Correlation between SOC and cigarette smoking and drinking**

Another research found that having a high level of soc was linked to a lower rate of cigarette smoking and drinking. A Swedish study found a strong connection between the soc and adults' healthy eating habits. In a study conducted in pregnant women, different soc score was found between smoking and non-smoking women. Women with weaker soc tend to relapse more frequently on smoking and are poor in manageability component. According to a recently released longitudinal report, in originally stable subjects, a poor soc combined with smoking and alcohol intake resulted in a pathogenic mechanism following a negative life event [6,7].

Soc was shown to be inversely correlated with injury risk in a prospective sample of Helsinki Heart Clinical Trial participants. It has been suggested that a stable social system is linked to higher levels of income and education. Strong soc has a favourable relationship with psychosocial traits like self-esteem, locus of control, and self-motivation inventory, but it has a negative relationship with depression, psychological pain, and anxiety.

Regardless of age, sex, race, or nationality, SOC was highly linked to perceived health, especially mental health. The research design was discovered in a systematic analysis that included 458 scientific articles and 13 doctoral dissertations, and it was able to forecast health, resulting in the conclusion that SOC is a significant contributor to the growth and preservation of people's health [4].

#### **Correlation between SOC and quality of life**

According to Erickson et al. (2007) in a systematic review, SOC has an effect on quality of life. The higher the SOC, the better the quality of life and demographic studies support the SOC's value as a predictor of good health [5]. Men have a marginally higher SOC than women, according to the results of other research, but the variations are small [6].

#### **Connection between SOC and suicide and suicidal risk**

Higher levels of SOC were related to a higher risk of suicide, which was one of the most intriguing findings. It's worth remembering that the correlation with SOC held stable even when depressive symptom severity was taken into account, implying that SOC is a strong indicator of suicide risk regardless of depressive symptoms. There has been a lot of discussion about the connection between SOC and suicide and suicidal risk [12].

#### **Stress in college students**

College life is a time of transformation it provides enormous possibilities and perspectives for a person to develop themselves as an individual. Since students are occupied with the academic and extra-curriculum activities their healthy lifestyles get disturbed

unintentionally. Therefore, the evaluation of health promotion and sense of coherence is essential in students of various field [7,8].

### Stress in dental education

It is observed in one of a study [8] that Dental education is significant source of stress among dental students. It was found in many literatures that as the student's year of studies increases there is an increase in stress level. In a systematic review of ALZAHM and his colleagues suggested that stressors are categorized in five groups i.e., accommodation, educational environment, personal, academical and clinical factors. In one of the studies conducted in Saudi. Sex, year of study, marital status, and first choice of entry, financial difficulties, living conditions, tests, grades, workload, and patients are among the most common sources of stress for dental students, according to Arabia. Another survey of the Swedish population found that high stress levels are linked to depression. Low and moderate stress have been linked to anxiety.

Dentistry is a demanding environment in which students are under pressure to perform above average, as well as added pressure from new knowledge that students must gain and new academic skills that they must master. Dental school, according to previous studies, is more stressful than other medical education [7,8].

### Anxiety stress and depression in medical and dental students

In a previous study done on medical and dental students noted high occurrence of depression, anxiety and stress among dental students than medical students and it is observed in more than half of the dental students. According to previous studies medical students entering medical school have same level of depression as same as that of general population. But their level of depression increases significantly as their course progresses. Dental students have more psychological problems and have as high as three times depression level than medical students.

Years of research into stress levels has shown that higher levels of stress can lower academic achievement and have a detrimental effect on the physical and mental health of students, as well as reduce clinical efficacy by limiting focus, concentration, decision-making skills, and the ability to establish positive clinician-patient relationships.

Increased students' ability to cope with stress is vital for successful stress control and will aid them in their future clinical practise. Stress management and fitness workshops for students, including stress management, time management, and setting practical expectations, should be introduced, according to Kay and Lowe. The role of sleep, fitness, food, and stress relievers like yoga and meditation should be addressed for students' overall wellbeing. These practises have shown to have a positive effect.

Not only the students but also professionals of different fields are unaware regarding these topics and its importance in day-to-day life. This makes it Essential to create awareness and provide a fresh perspective for individuals. As a result, these experiments are being conducted in India to introduce the idea of sense of coherence and health promotion.

The fact that only 18 percent of students used the website on a daily basis to look for health-related content indicated that health was not a top priority for students when it came to using the internet or newspapers. Similarly, they did not make it a habit to participate in or initiate health-related programmes or events. It was not a big problem for them [7].

Female students expressed greater confidence in God than male students, which may be attributed to their disposition and the Indian cultural ethos, in which females are more involved in prayers and other religious practises. The Pew Forum on Religion & Public Life in the United States and the American Religious Identification Survey released a study on October 6, 2010 with similar results.

Stronger SOC, higher education, lower stress has been found to be the important predictors for positive OHB in an individual in this present study. The Salutogenic theory is a valuable resource. In the area of health promotion for people of all ages, with prevention options that go beyond oral health clinical specialties As a result, it can be used to encourage oral hygiene in public health policies [8]. So more research should be conducted on dental and medical student and their correlation with sense of coherence and health promoting behaviour.

### CONCLUSION

Several authors have claimed that a low score on the SOC scale mainly reflects psychiatric morbidity such as anxiety or depression while others conclude that a high score on the SOC scale represents more than just the absence of psychopathology. The ability of a high SOC score to have a mediating or moderating effect on the impact of stressful life events on self-reported well-being and health has been demonstrated; still the number of studies showing such an effect is limited. Hence according to many authors it is concluded that low Sence of Coherence is associated with high risk behaviours such as tobacco usage, smoking, alcohol usage, and drug abuse etc. with poor stress management and poor quality of life with poor health.

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