

Italian university students' self-perceived health and satisfaction of life

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Abstract

Introduction. Health is defined as a state of complete physical, social and mental well-being, therefore, it should not be considered as simply the absence of disease. In this light, the assessment of self-perceived health and life satisfaction plays an important role as it allows addressing the subjective perception of physical health, as well as mental health and social functioning.

Material and methods. This study analyzed data from 8516 university students enrolled in the "Sportello Salute Giovani" project ("Youth Health Information Desk"). In particular, it addressed self-perceived health and life satisfaction, reported somatic and psychological symptoms and ability to cope with daily problems of university students from 18 to 30 years old.

Results. Overall, 77.1% of students declared to have a good or very good health and the mean score of life satisfaction was 7.46. In respect to somatic and psychological symptoms, 25.8% of students reported to suffer almost daily of at least one among headache, stomach pain, back pain, tiredness, nervousness, dizziness and troubles falling asleep. Results varied on the basis of sex, with women showing lower self-perceived health compared to men and reporting more symptoms. Furthermore, self-perceived health was shown better in younger students and in those belonging to higher socio-economic level.

Discussion. The survey showed that concern exists with respect to university students' self-perceived health, which is different from that arising from other evidence. Female students had a significant lower self-perceived health and reported somatic and psychological symptoms more commonly than men. On the other hand, results about life satisfaction seem to be aligned with the literature.

Conclusion. One of the most important implications of the study is the need to address self-perceived health and reported symptoms in university students in order to monitor them and initiate interventions aimed at improving well-being and controlling inequalities.

Key words

- health
- life satisfaction
- university student
- self-perceived health

INTRODUCTION

Health can be evaluated objectively through clinical examinations brought forth by qualified personnel but it can also be studied subjectively through questionnaires designed to reveal self-perceived health.

In fact, alongside objective and measurable methods, it is important to also take into account the subjective component of health, that is expressed by the subjects' self-perception of their health status. This latter is the result of several factors closely associated to self-perception, such as the quality of life, the physical environment and individual lifestyles [1, 2].

Health is considered by the World Health Organization (WHO) as a fundamental human right and, as a consequence, all people should have access to the basic resources necessary for health. Health is defined as a

state of complete physical, social and mental well-being, and not merely the absence of disease [3]. For this reason, health status is more and more often evaluated through tools aimed at testing both its objective and subjective components. In particular, the importance of the subjective component is growing since there is evidence showing that young people are increasingly affected by stress and depression, which may in turn deeply influence the self-perception of health [2].

According to data provided by the HBSC study in 2010 [4], the percentage of young Italians who considered themselves in good or very good health was above 85%, a percentage that decreased with the increase in age. Females declared lower self-perceived health than males and the gap increased with age: among 15 years old, nearly 93% of males declared a good or very good

health compared to 85% of females. Furthermore, 31.6% of 11 years old males and 35.4% of 11 years old females suffered every day of at least one of the following symptoms: headaches, stomach pain, back pain, trouble falling asleep, dizziness, irritability or sadness, and nervousness. In particular, females reported to suffer from two or more of these symptoms more than once per week [4].

Data collected from the general population aged 14 years or older showed that, in 2012-2013, 7.3% declared to feel bad or very bad and that this percentage grew up to 20.1% among the elderly. Again, women showed worse results [5].

The relationship between self-perceived health and clinical conditions and outcomes is widely known [6] also because the self-assessment of health is considered the result of physiological deregulations such as inflammatory processes [7]. Reliable and increasing evidence also exists as regards to the importance of self-assessment of health and of quality of life [8, 9] in many chronic diseases such as cancer [10] and coronary heart disease [11].

Alongside self-perceived health, another important indicator is the overall satisfaction of people towards their lives. According to a survey of the Italian National Institute of Statistics (ISTAT) on population health and access to health services, it was observed that from 2005 onward in the population of 14 years of age or older there was an improvement in perceived physical health and a decrease in psychological health. In 2013, in the overall population the percentage of people who declared high levels of satisfaction (a score between 8 and 10 on a scale from 0 to 10) was 35.0%. A higher percentage of young people reported a high level of satisfaction, with the exception of the age group 20-24 [12]. In fact, the HBSC survey showed that more than 80% of children aged 11, 13 and 15 years old declared a fair to high level of satisfaction with their lives.

The self-assessment of well-being can be interpreted as the result of the individual evaluation of personal skills (work, social, emotional, etc.) and of the environment in which they live. The obtainment of well-being currently is being increasingly advocated in the treatment of patients affected by chronic diseases. In fact, it has been observed that alongside physical health, also mental health and social functioning are noticeably worse in patients with chronic conditions as compared to those without them. Subjective well-being is mostly influenced by some specific diseases, such as heart disease and gastrointestinal disorders. Furthermore, patients with comorbidities show a greater decrease in functioning and well-being in comparison to those with only one disease [13].

As described, evidence is already available on self-perceived health and well-being, measured through life satisfaction, in very young people and in the general population. On the other hand, this contribution deals with self-perceived health, reported symptoms and life satisfaction of Italian university students from 18 to 30 years of age.

MATERIALS AND METHODS

The information regarding the study population and study design, including the development process of the

“Sportello Salute Giovani” (“Youth Health Information Desk”) questionnaire, the questionnaire contents, the data entry and cleaning, the codification of variables and the sample characteristics, have been previously covered in another paper in this same monograph [14].

In this part of the study, questions from 66 to 76 were taken into consideration in order to describe self-perceived health, reported symptoms and life satisfaction among students aged 18 to 30 years old. Life satisfaction was assessed on a quantitative scale with values ranging from 0 to 10. On the contrary, all the remaining questions relied on Likert scales, with the exception of that on restfulness of the sleep, which was, in fact, dichotomous.

In particular, this study takes into consideration data coming from the following questions:

- headache frequency in the last 12 months (question 66);
- stomach pain frequency in the last 12 months (question 67);
- back pain frequency in the last 12 months (question 68);
- frequency of tiredness (question 69);
- frequency of nervousness and irritability (question 70);
- frequency of dizziness (question 71);
- frequency of trouble in falling asleep (question 72);
- restfulness of sleep (question 73);
- self-perceived health (question 74);
- ability to cope with problems (question 75);
- life satisfaction (question 76).

Data were elaborated by means of descriptive statistics.

The chi-squared test was performed in order to evaluate the association between given answers and sex, age class and socio-economic status. Results were considered significant if the p-value was < 0.05.

RESULTS

The complete tabular presentation of the data regarding this section, including stratification by sex, age class and socio-economic status, can be found in the Appendix which is available online as Supplementary Material at www.iss.it/anna.

In the study sample, 77.1% of responders declared to be in good or very good health, 20.3% to have a fair level of health and 2.6% to have a poor health.

With respect to life satisfaction, the mean score was 7.46 in a scale of 10 (standard deviation, SD, 1.43; median, 8; interquartile range, 1; mode: 8). Furthermore, 92.5% of the 8847 university students who answered the question, indicated a score of at least 6.

At the question “How good do you think you are in coping with your problems?” 63.9% replied “reasonably good”, 25.2% “very good”, 9.6% “not very good” and only 1.3% “totally unable”.

With respect to somatic and psychological symptoms, 24.8% and 16.7% of the students reported to suffer more than once per week or almost daily from nervousness and tiredness respectively. Furthermore 12.3% reported sleeping problems and 11.4% suffered from headache more than once per week or almost daily

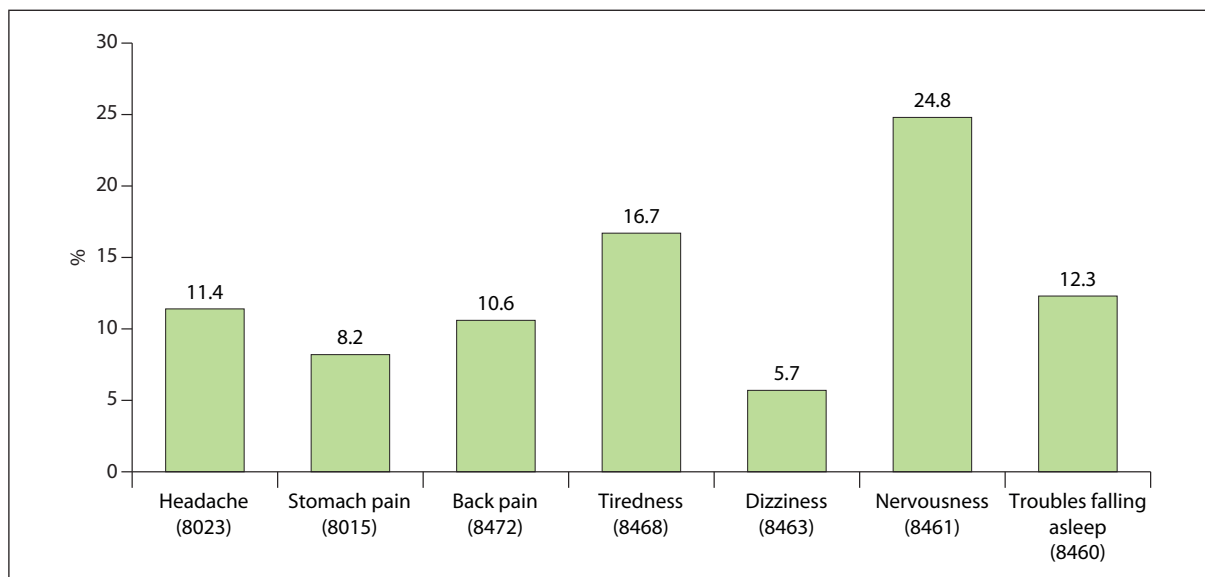


Figure 1
Percentage of university students reporting to suffer different symptoms more than once per week or almost daily.

(Figure 1). Overall, 25.8% of students reported to suffer from at least one symptom almost daily. Finally, of 8470 students that answered, 80.3% considered their sleep to be restful.

Differences related to sex, age group or socio-economic level are discussed in the following paragraphs.

Stratification by sex

As far as differences related to sex are concerned, it may be concluded that women appeared to have a significant lower self-perceived health and life satisfaction. In fact, 80.8% of men compared to 75.2% of women declared to have a good or very good health, and the mean score of life satisfaction was 7.55 (SD 1.52) in men and 7.42 (SD 1.38) in women. Men were also more able to cope with problems. Significant differences were also observed with respect to the frequency of somatic and psychological symptoms as reported in Table 1.

Stratification by age group

Self-perceived health, as well as life satisfaction, showed a significant decreasing trend with the increase in age. In particular, considering the 18-21 and 25-30

years old groups the percentage of university students considering themselves in good or very good health decreased from 78% to 73%. Similarly, the mean score of life satisfaction dropped down from 7.56 (SD 1.38) to 7.20 (SD 1.58). On the contrary, no significant differences were shown with respect to the ability to cope with problems.

As far as somatic and psychological symptoms are concerned, older students showed more commonly tiredness and dizziness; 18.5% in the 25-30 years old group suffered from dizziness more than once per week or almost daily in comparison to 17.2% in the 18-21 years old group. Also the quality of sleep differed among age groups with 81.4% of students having a restful sleep in the 18-21 years old group and 75.2% in the 25-30 years old one.

Stratification by socio-economic level

Self-perceived health and life satisfaction, as well as the ability to cope with problems, showed an association with socio-economic level with the worst results observed in the lower class and the best ones in high and middle-high classes.

Table 1
Differences in somatic and psychological symptoms between sexes

Symptoms (almost daily or more than once per week)	Females (%)	Males (%)	p
Headache (8023)	13.9	6.7	< 0.01
Stomach pain (8015)	10.1	4.6	< 0.01
Back pain (8472)	12.2	7.5	< 0.01
Tiredness (8468)	19.6	10.8	< 0.01
Nervousness (8461)	27.6	19.4	< 0.01
Dizziness (8463)	6.7	3.8	< 0.01
Troubles falling asleep (8460)	12.5	11.9	n.s.

(Responders); n.s.: not significant

The frequency of somatic and psychological symptoms tended also to increase in lower socio-economic classes. In fact, 3.6% and 8.6% of students complained about headache more than once per week respectively in the high and low socio-economic classes. Percentages were respectively 0.9% and 7.6% for stomach pain, 5.0% and 6.4% for back pain, 6.8% and 12.6% for tiredness and 3.8% and 4.9% for dizziness. Furthermore, 15.2% and 18.1% suffered from nervousness almost daily respectively in high and low socio-economic classes; 8.9% and 9.9% respectively complained about trouble falling asleep almost daily and sleep was judged restful in 76.9% and 73.2% of students belonging to the high and low socio-economic class respectively.

DISCUSSION

This study took into account indicators of self-perceived health and life satisfaction, together with somatic and psychological reported symptoms in order to describe university students' health.

They survey showed that 77.1% of university students considered themselves to be in good or very good health. This percentage is higher than that observed in the general adult population across European countries which is 66% [15] and in the same Italian population 18 years old or older which is 68.5% [16] albeit the result is expected because of the age composition of our sample. Notwithstanding this, the percentage is lower than the one yielded by the HBSC study performed on 11, 13 and 15 years old children [4]. Furthermore, it is not in line with a study on university students from 23 countries, in which 87.7% and 90.4% of students of Central-Eastern and Western European countries respectively evaluated their own health to be at least "good" [17]. Also, the PASSI project, which assessed approximately 151 000 individuals from all of the Italian Regions, reported that the percentage of population considering their own health as "good" or "very good" was 88% among 18-34 years old [16].

As also suggested by international and national data [15, 16], males are more likely than females to rate their health as good. Even though this indicator is subjective and is not immediately comparable between and within countries because of differences in culture, age, education and poverty, evidence shows that the personal evaluation of one's health may be used as an indicator in health care and as a predictor of mortality [18-20]. As a consequence, it is of utmost important to timely and rightly identify the individuals who judge their health to be poor in order to intervene. Interventions in this sense should be promoted also because the proportion of population that assesses own health to be (very) good is one of the indicators monitored by the European Community Health Indicators Monitorings (ECHIM).

Based on the WHO definition of health, it is necessary to investigate not only the physical well-being, which is closely related to self-perceived health, but also the social and mental well-being in order to have a complete understanding of individuals' health.

The level of satisfaction in life was high in university students since 50% of the students indicated a score between 7 and 9 and 92.5% expressed a fair-high level of satisfaction (score ≥ 6). Life satisfaction has been demonstrated to be associated with indicators of population mental health [21] as well as to Attention-Deficit/Hyperactivity Disorder and other related problems [22]. More importantly, life satisfaction has been shown to be a strong predictor of self-perceived health [23] and to be positively associated with not smoking, physical exercise, using sun protection, eating fruit, and limiting fat intake [24]. This last aspect was demonstrated in a sample of 17 246 students 17-30 years old from 21 countries after adjustment for age and sex [24]. The same study showed that the percentage of students moderately or very satisfied of their life was 79% with a slight difference between males (77%) and females (79%) [24]. Results are lower than those observed in our study probably because of the difference in country of origin of students. In fact, Grant et al. showed a higher percentage of moderately and very satisfied students in Western Europe and USA (84%) than in Central and Eastern Europe (78%) or in Pacific Asia (60%) [24].

The most commonly reported symptom was nervousness, which affected 1 out of 4 students once per week or almost daily, followed by tiredness reported by 16.7%. The percentage of university students reporting to suffer from at least one symptom almost daily was lower than that observed in 11, 13 and 15 years old students [5]. It is interesting to observe that literature has proven that the number of these symptoms is a predictor of self-perceived health [22].

With the exception of the difficulty falling asleep, females showed a 1.5-2 increase in the frequency of somatic and psychological symptoms. Finally, both reported symptoms and self-perceived health appeared to be worse in lower socio-economic classes, yet this result is in line with other studies [25].

CONCLUSION

In conclusion, Italian university students seem to have constraints in self-perceived health whereas good results have been shown with respect to life satisfaction. Furthermore, approximately 1 out of 4 university students suffers almost daily from one of the following symptoms: headache, stomach pain, back pain, tiredness, nervousness, dizziness and trouble falling asleep. Female students expressed lower levels of self-perceived health and were affected by somatic and psychological symptoms more often than men. Self-perceived level of health and frequency of reported symptoms should both deserve attention because of their important predictive role with respect to morbidity and mortality.

Conflict of interest statement

None.

Submitted on invitation.

Accepted on 16 April 2015.



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