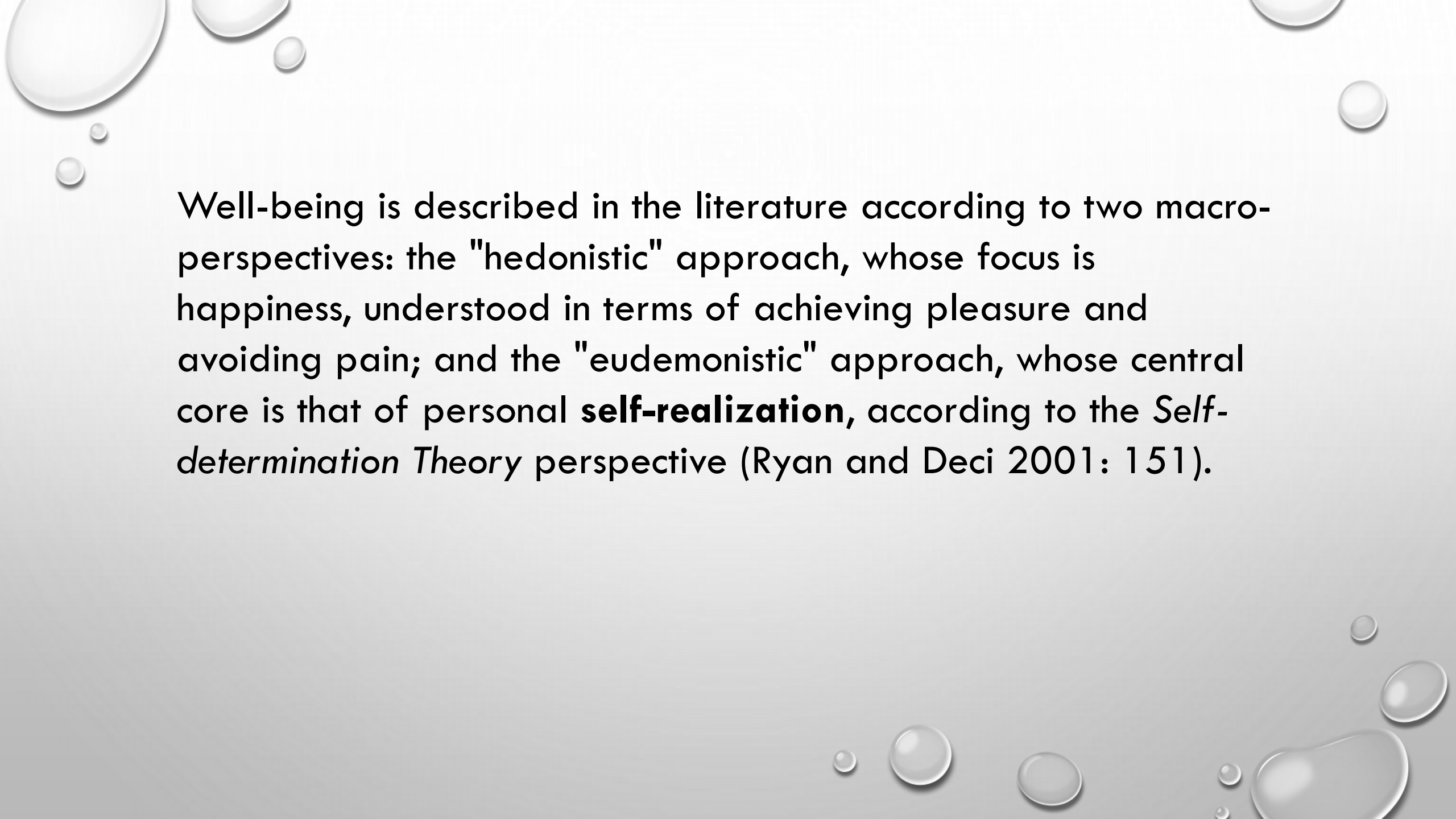# STRESS IN UNIVERSITY. ITALIAN CASE STUDIES

PROF. MAURIZIO ESPOSITO

UNIVERSITY OF CASSINO AND SOUTHERN LAZIO
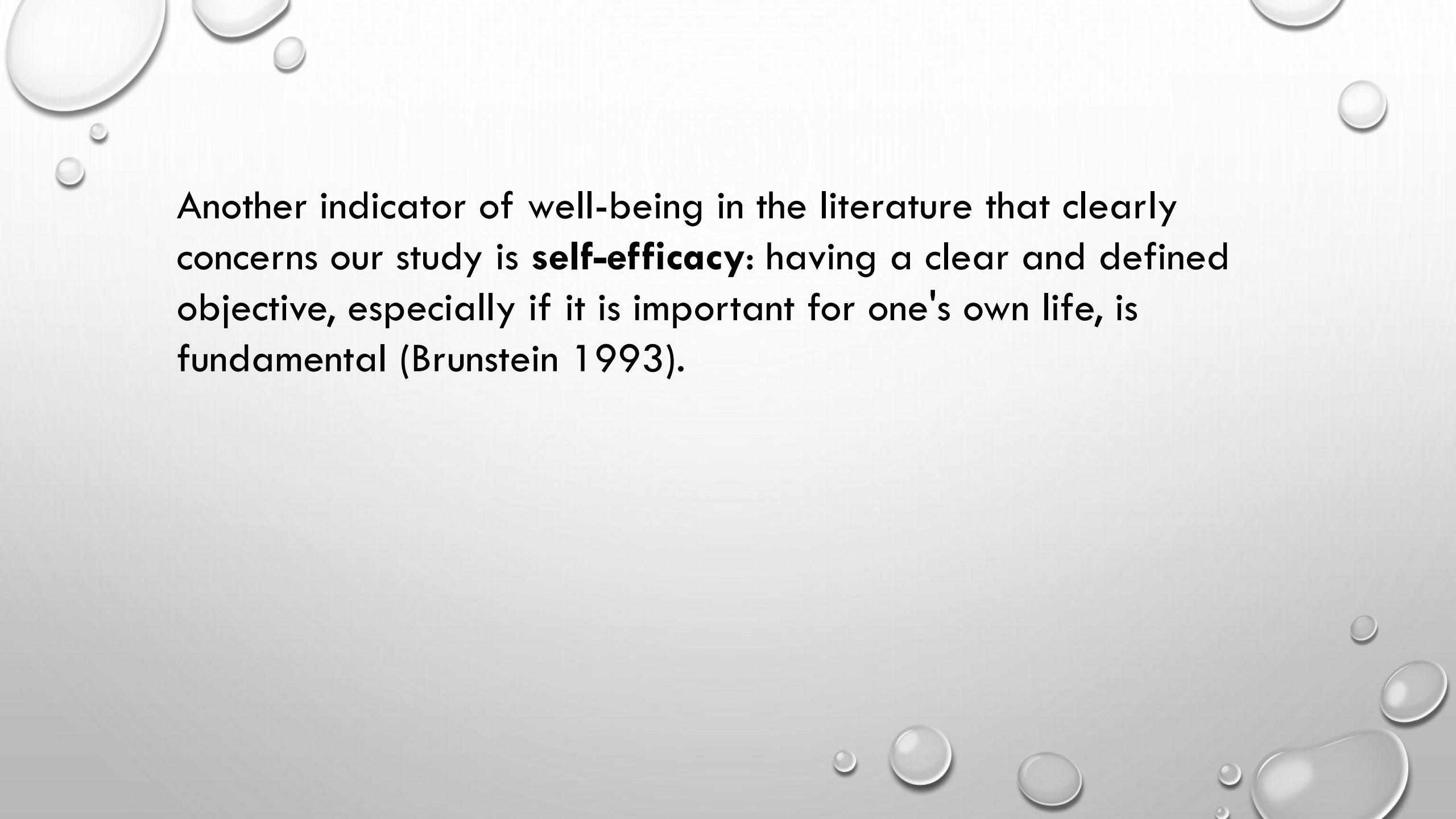## ITALY
MAIL TO: M.ESPOSITO@UNICAS.IT

Introduction

Stress is to be understood as a response of the organism to tasks of different kinds that can be evaluated by the individual as immeasurable. We can however distinguish the **eustress**, which is the most positive aspect, which allows us to face daily "challenges", from the **distress**, to be understood as "negative stress".
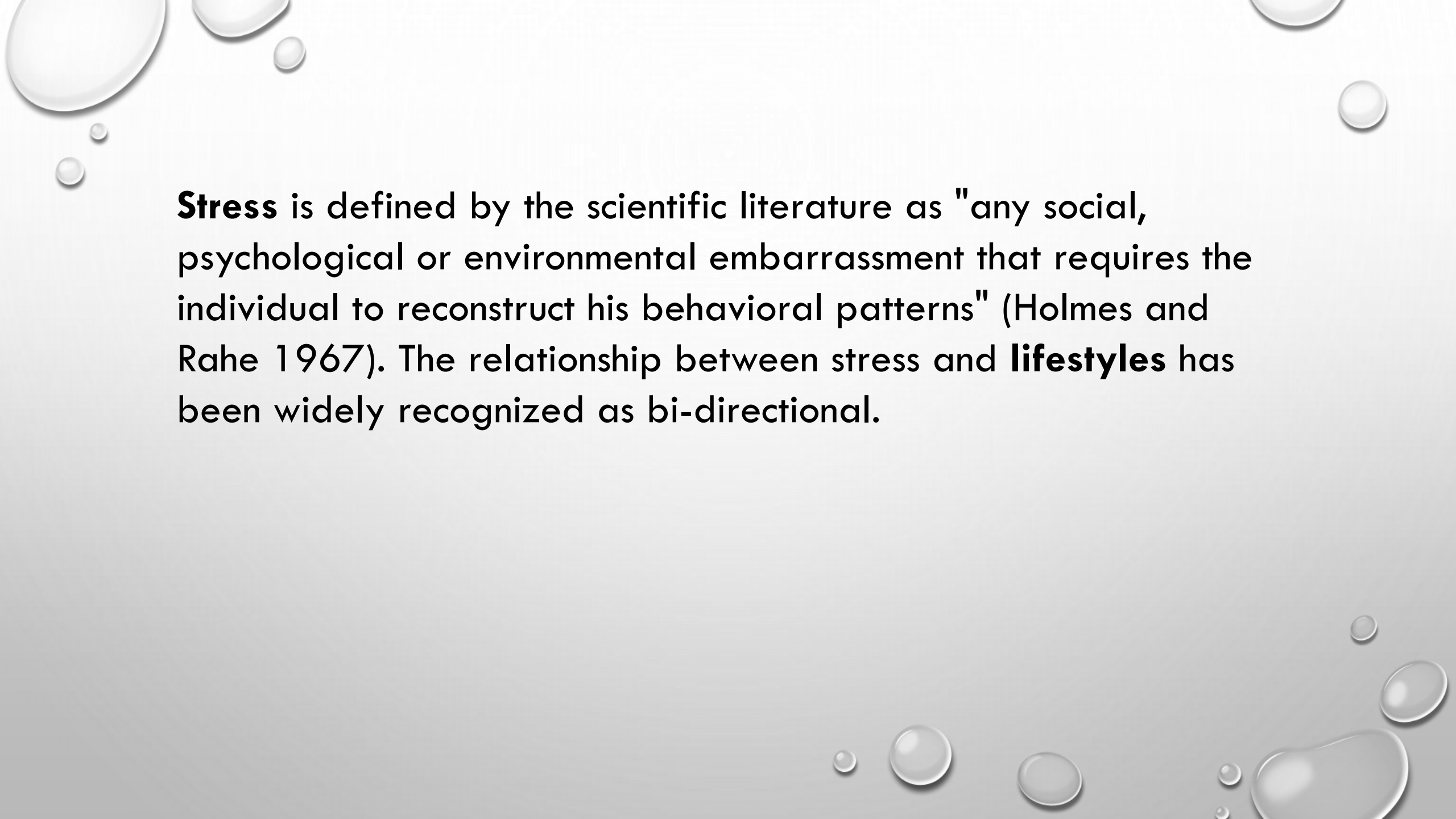
Well-being is described in the literature according to two macro-perspectives: the "hedonistic" approach, whose focus is happiness, understood in terms of achieving pleasure and avoiding pain; and the "eudemonistic" approach, whose central core is that of personal **self-realization**, according to the *Self-determination Theory* perspective (Ryan and Deci 2001: 151).

A significant indicator of well-being, especially from the eudemonistic point of view, is **relationality**: the quality and continuity of relationships are in fact fundamental for achieving individual and social well-being. Relationality is also one of the most important factors influencing **happiness** (Argyle 1987). The **quality** of relationships is then a more important and influential indicator than quantity: people seem to experience a greater level of relationality and therefore of happiness when they feel understood and enjoy the relationship with the others (Reis et al., 2000).

Another indicator of well-being in the literature that clearly concerns our study is **self-efficacy**: having a clear and defined objective, especially if it is important for one's own life, is fundamental (Brunstein 1993).
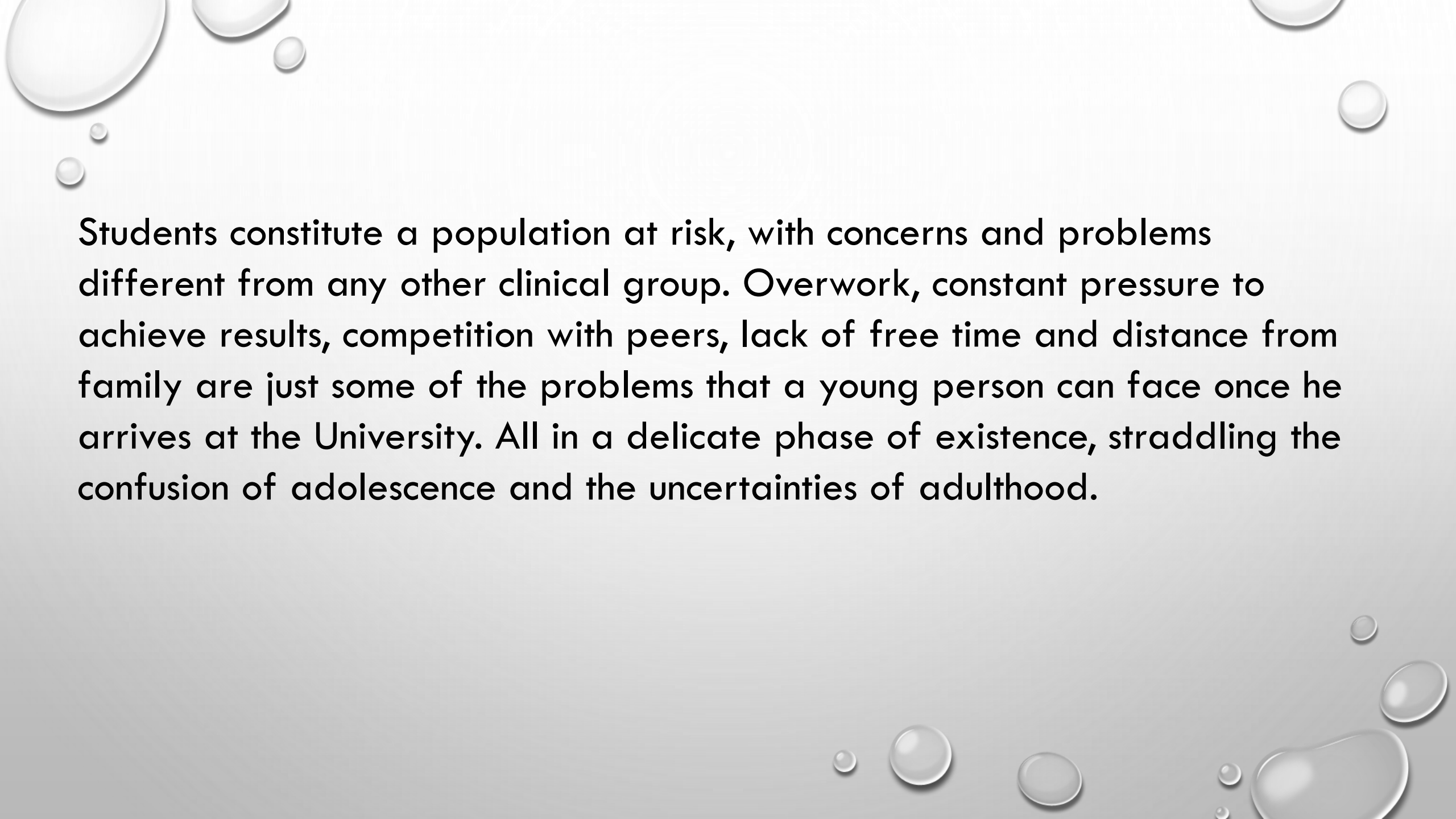
Stress is defined by the scientific literature as "any social, psychological or environmental embarrassment that requires the individual to reconstruct his behavioral patterns" (Holmes and Rahe 1967). The relationship between stress and **lifestyles** has been widely recognized as bi-directional.

Selye, already in 1956, proposed an interesting analytical model, according to which the body responds to external stress in order to reestablish homeostasis, not on the nature of stress but rather in a univocal and regular way, through three phases that prescind from the stressor stimulus:

• alarm phase,
• coping phase,
• fatigue phase.

A stressful event, therefore, can harm the individual "either directly, when it overcomes his ability to adapt, or indirectly, as a result of the processes put in place in defense against the stressful agent" (Zani, Cicognani 2000: 112).

One of the most stressful moments in the student's life is the **transition** from high school to university. For this reason, in 2016 an Anglo-Saxon study (Denovan & Macaskill, 2016) investigated some features that can facilitate university adaptation among students. In particular, the study examined the relationship between stress and perceived well-being, highlighting how optimism mediates the relationship between stress and negative emotions. The level of **resilience**, or the ability of an individual to cope with a severe difficulty, can be a strong factor of protection against stress. In fact, low levels of stress are associated with high levels of resilience in students enrolled in degree courses, especially in Medicine and Psychology (Bacchi & Licinio, 2016).

Students constitute a population at risk, with concerns and problems different from any other clinical group. Overwork, constant pressure to achieve results, competition with peers, lack of free time and distance from family are just some of the problems that a young person can face once he arrives at the University. All in a delicate phase of existence, straddling the confusion of adolescence and the uncertainties of adulthood.

A group that appears to be specifically exposed to stress is that of medical students. The high stress they are subjected to, determined by the workload they have to deal with and the exposure to emotionally traumatic stimuli (such as wounds, corpses and various sufferings), can cause the so-called **"medical student syndrome"**. Those suffering from this pathology tend to identify themselves with the diseases that daily study and observe, developing a series of psychosomatic symptoms that can be associated with behavioral alterations and other psychiatric disorders. Although less studied, it is reasonable to assume that this also occurs for students of other clinical faculties, such as psychology and nursing.

OECD 2017

Italian university students are prey to anxiety, often extreme consumers of the Internet, overall moderately happy, but with peaks of dissatisfaction for life more than in other countries. 56% becomes nervous when preparing for a test (average 37%) and 70%, even prepared, is very anxious (average 56%), a level among the highest of the entire OECD (only in the Netherlands and the United Kingdom is greater).
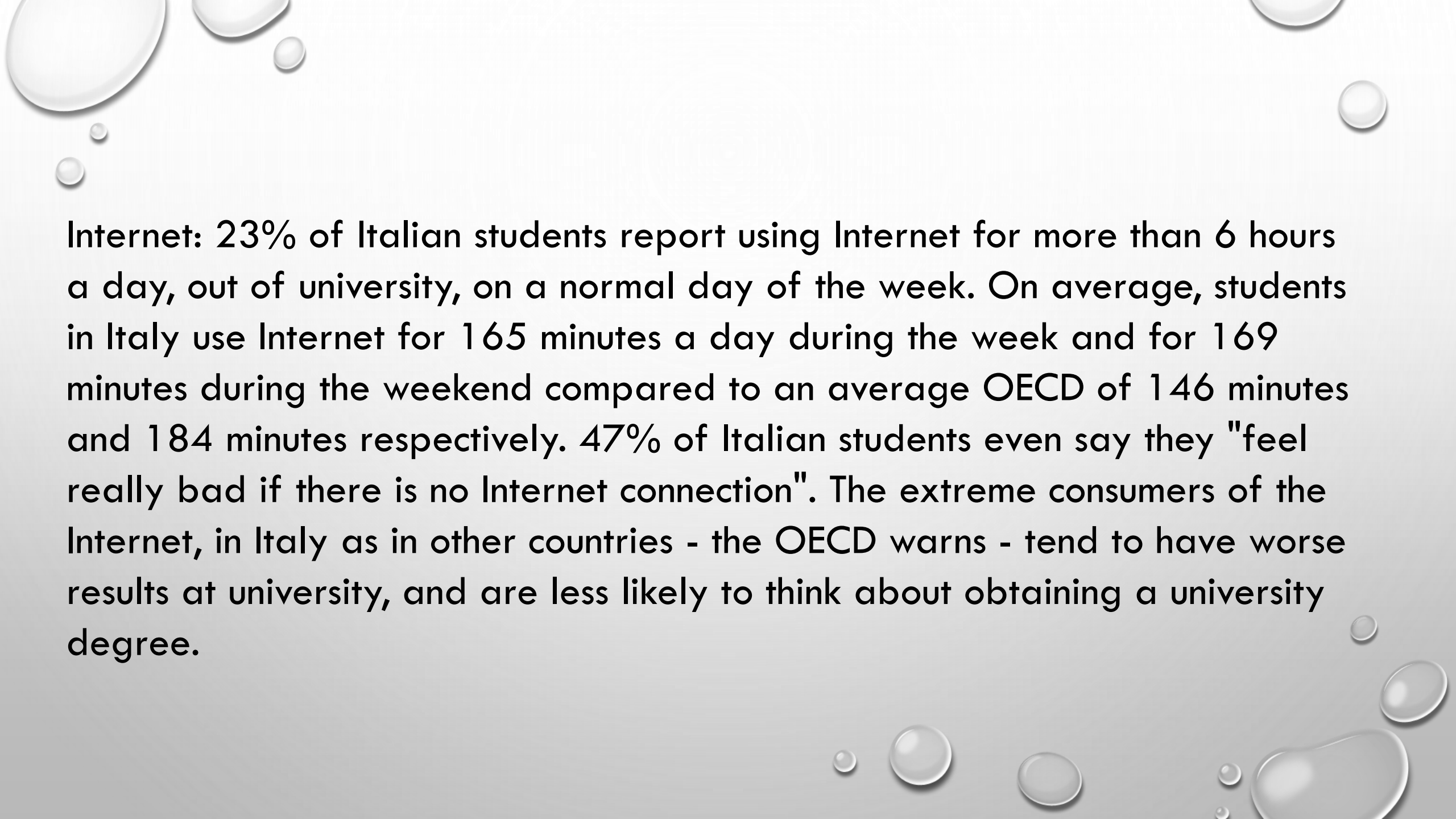
Anxiety is one of the factors associated with poor life satisfaction. Students in Italy reported on average a level of 6.9 on a scale that measures life satisfaction from 0 to 10, a data lower, but not too far, from the OECD average (7.3). Only 24% of Italian students, however, say they are very satisfied with life (average 34%), and almost 15% say they are little or nothing satisfied (average 11.8%), one of the highest percentages among the 35 OECD Countries.

The study also shows that students in Italy perceive good support from their parents. 96% of students report that parents are interested in their study activities (OECD average 93.5%) and 89% report that parents support them when they face difficulties at the University (OECD average 91%)…

Tanguy effect?

Internet: 23% of Italian students report using Internet for more than 6 hours a day, out of university, on a normal day of the week. On average, students in Italy use Internet for 165 minutes a day during the week and for 169 minutes during the weekend compared to an average OECD of 146 minutes and 184 minutes respectively. 47% of Italian students even say they "feel really bad if there is no Internet connection". The extreme consumers of the Internet, in Italy as in other countries - the OECD warns - tend to have worse results at university, and are less likely to think about obtaining a university degree.
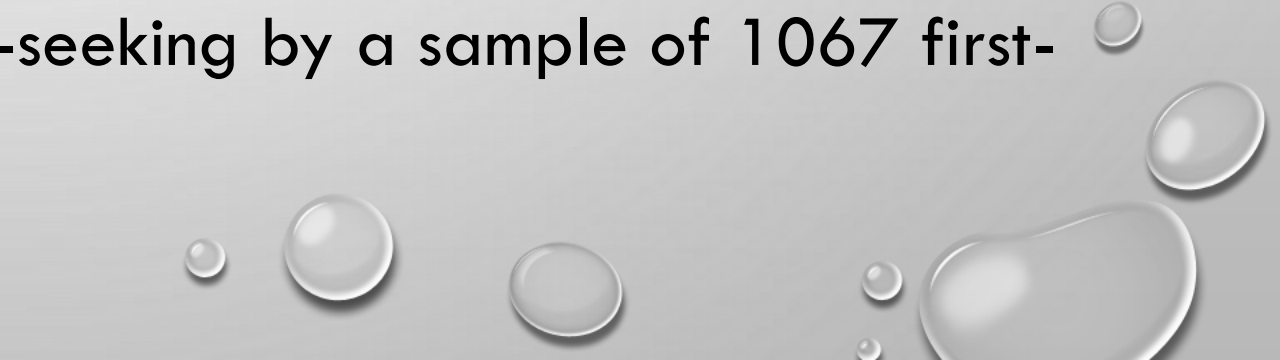
Italian Case Studies

ADN Kronos Salute 2018: *The university can hurt your health. Especially problems such as headache, stomach ache, backache, fatigue, nervousness, dizziness and difficulty falling asleep. This is reported by 25.8% of the university students interviewed, especially women, as part of the research promoted by the Faculty of Medicine and Surgery of the Catholic University of Rome and the Higher Institute of Health. However, there is a positive result: 77.1% of university students said they had good or very good health. The results vary according to gender, highlight the report. In fact, women show a perceived lower well-being than men, and they report more frequently somatic and psychological disorders.*
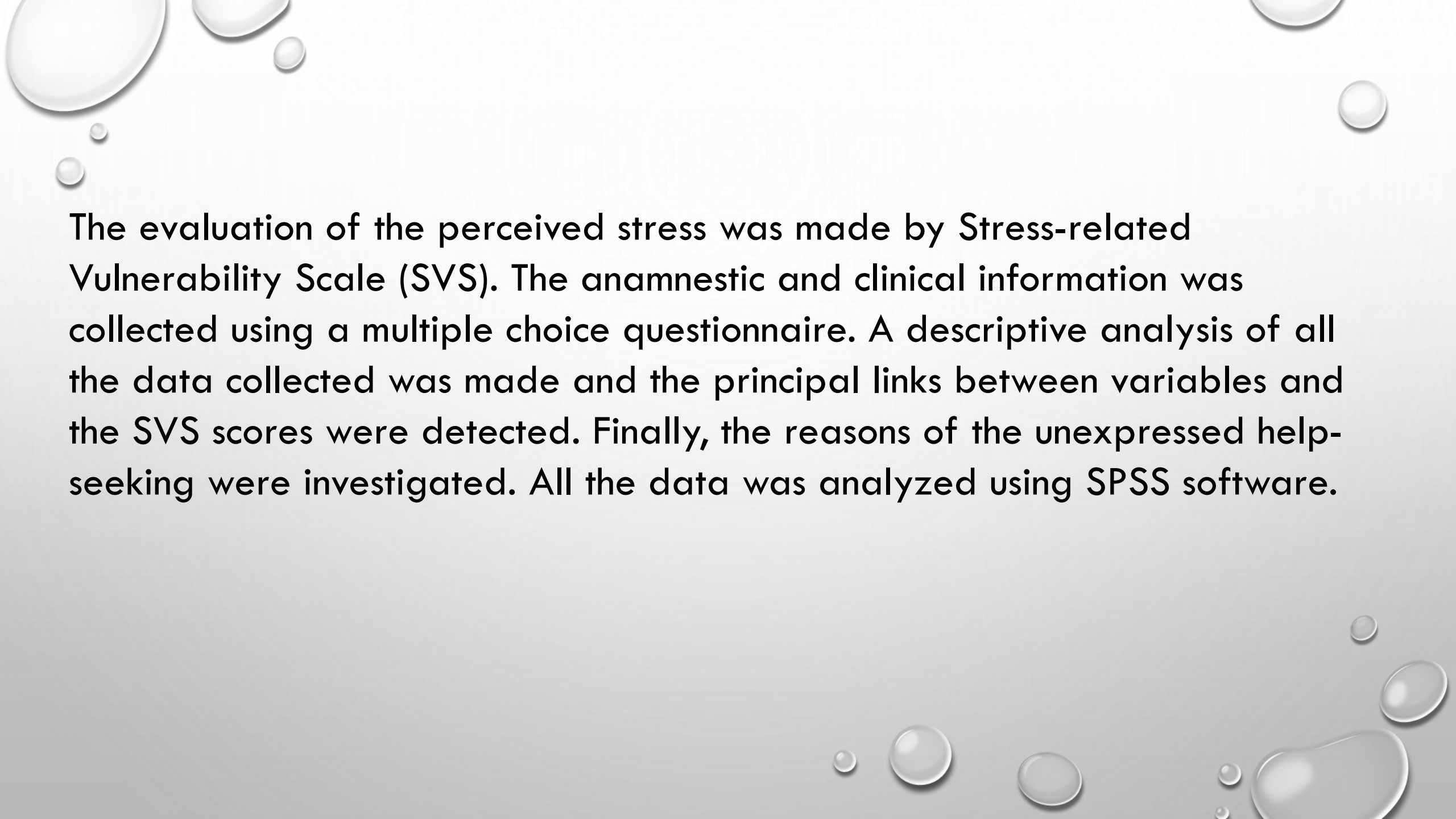
Research "Evaluation of mental uneasiness and perceived stress between university students"
University Sapienza and Tor Vergata - Rome

The principal aims of this study are: to find the stress levels and the psychological uneasiness perceived in the sample; to draw a profile of the subjects more vulnerable to psychological stress; to find what has more influence on the development of psychological uneasiness; to find the main causes that lead to a delay in the help-seeking by a sample of 1067 first-year university students.

The evaluation of the perceived stress was made by Stress-related Vulnerability Scale (SVS). The anamnestic and clinical information was collected using a multiple choice questionnaire. A descriptive analysis of all the data collected was made and the principal links between variables and the SVS scores were detected. Finally, the reasons of the unexpressed help-seeking were investigated. All the data was analyzed using SPSS software.

About 5% of the sample showed a pathological level of stress using the SVS, 40.3% perceived in the last year such a psychological uneasiness to feel the need of a psychological/psychiatric support but just 43% of them went to a psychiatrist/psychologist.

The variables associated with high level of stress and psychological uneasiness, between the other, are the status of "non-resident student" and a conflictual family atmosphere.
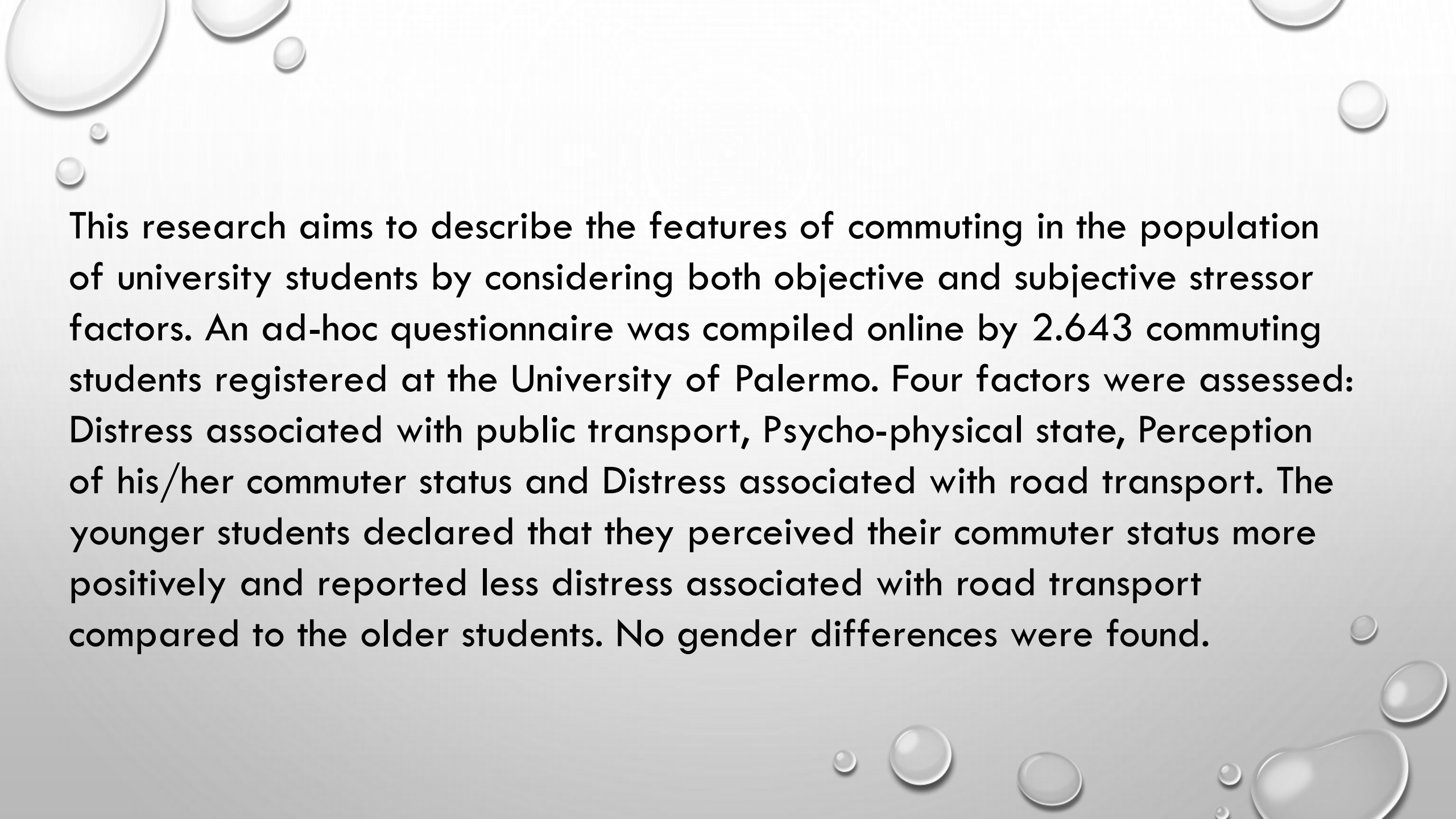
Perception of commuting stress in University students: An observational study

Francesco Boz, Antonino Lo Burgio e Marta Ghisi

Psicoterapia Cognitiva e Comportamentale – Vol. 18 – n. 3 • 2012 (pp. 285-301)

The commuter's routine is characterised by a series of discomforts and inconveniences, which in the long term can have a negative impact on health and the quality of life. To-date, particular attention has been devoted to the objective stressors associated with commuting (distance travelled, journey time); nevertheless, the crucial role played by subjective stressors, which depend on how the commuter perceives his/her condition, is undeniable.

This research aims to describe the features of commuting in the population of university students by considering both objective and subjective stressor factors. An ad-hoc questionnaire was compiled online by 2.643 commuting students registered at the University of Palermo. Four factors were assessed: Distress associated with public transport, Psycho-physical state, Perception of his/her commuter status and Distress associated with road transport. The younger students declared that they perceived their commuter status more positively and reported less distress associated with road transport compared to the older students. No gender differences were found.
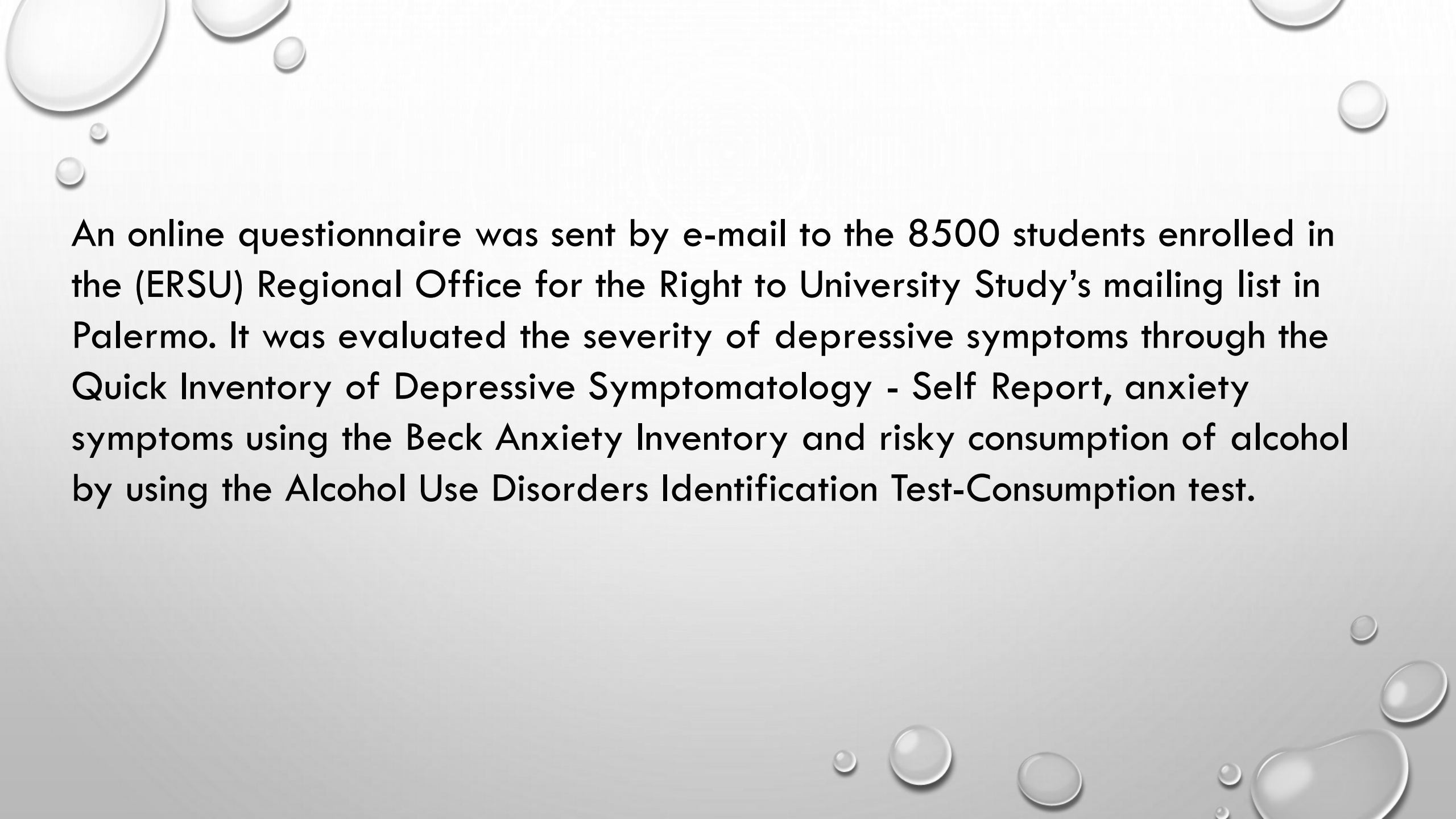
Furthermore, an analysis of the activities undertaken during the displacements shows that there are few possibilities to commit time well: except for listening to music or looking at the view, the other activities (including studying) are normally undertaken by a few commuters. In this regard, it is important to note that who travels in train or bus would generally have the opportunity to engage in the conduct of other activities in the course of travel, an opportunity that is clearly denied to those who drive own means of transport. It has indeed been shown that being committed in alternative activities, as well as having particular services on board (for example, wireless connection), affects the assessment that the person makes of the commuter status (Pàez and Whalen, 2010).

Anxiety, depression and risk consumption of alcohol in a sample of university students

Santangelo O.E., Provenzano S., Firenza A.

The university student is vulnerable to the adverse effects of many stress factors that can lead to depressive symptoms, anxiety and alcohol abuse, causing an increase in the burden of illness in young people. The aim of the study was to measure depressive symptoms, anxiety levels, and harmful alcohol consumption within the student population of the University of Palermo.

An online questionnaire was sent by e-mail to the 8500 students enrolled in the (ERSU) Regional Office for the Right to University Study's mailing list in Palermo. It was evaluated the severity of depressive symptoms through the Quick Inventory of Depressive Symptomatology - Self Report, anxiety symptoms using the Beck Anxiety Inventory and risky consumption of alcohol by using the Alcohol Use Disorders Identification Test-Consumption test.

The questionnaire answered 1102 individuals, 756 females (68.60%), with an average age of 22 years (± 3.28). 13.52% of the sample have a risky consumption of alcohol. 22.14% showed moderate depressive symptoms and 12.16% had serious or very serious symptoms. Respectively, 19.69% and 7.53% have moderate and high levels of anxiety. As for depressive symptoms and anxiety, the female gender is assigned to more relevant reference categories than males.

Depressive and anxiety symptoms in a community sample of young adults and correlation with help-seeking behavior

M. Armando, C. Dario, V. Righetti, R. Saba, G. Cavaggioni, C. Lia, P. Fiori Nastro

To evaluate: (i) self-perceived stress, depressive and anxiety symptoms in a community sample of young adults; (ii) which elements have most impact on the development of mental disease; (iii) if high levels of mental disease are related to help-seeking behavior.

The study was carried out on a sample of 1660 university students. The evaluation of the perceived stress was conducted using the Stress-Related Vulnerability Scale (SVS), the evaluation of depressive and anxiety symptoms with Beck Depression Inventory–II (BDI-II) and Beck Anxiety Inventory (BAI).

Female sex, non-resident status and a conflictual family climate were found to be more related with more severe anxious and depressive symptoms. Moreover, the latter ones were found to be strongly related with help-seeking behavior. In this university sample, mental disease associated with distress show a significant percentage. Higher level of anxiety and depressive symptoms are more related to perceived need for help and help-seeking behavior.
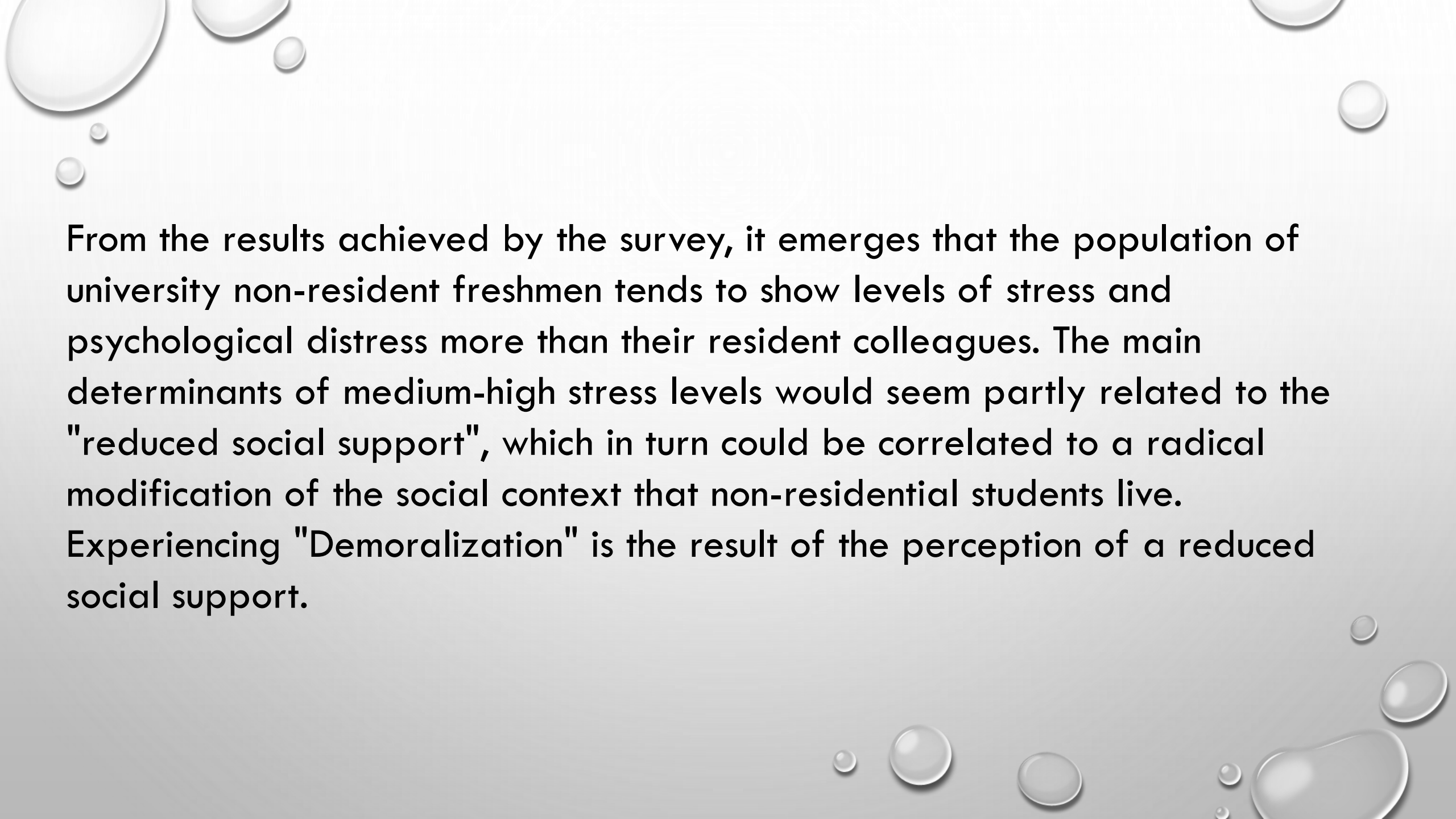
Mental uneasiness, perceived stress and help-seeking in a non-resident university student sample

M. Armando et al.
Epidemiologia e Psichiatria Sociale, 18, 2, 2009

Sample: 1067, University of Rome.

From the results achieved by the survey, it emerges that the population of university non-resident freshmen tends to show levels of stress and psychological distress more than their resident colleagues. The main determinants of medium-high stress levels would seem partly related to the "reduced social support", which in turn could be correlated to a radical modification of the social context that non-residential students live. Experiencing "Demoralization" is the result of the perception of a reduced social support.

The phenomenon of the "**unexpressed need**" is a problem from the possible heavy consequences and dimensions, since in the total sample of the students, one in four (24.4%) declares not to having turned to a psychologist/psychiatrist, despite having them felt the need. The fact that the main causes alleged by students refer to the problem of "Cost" of any therapeutic intervention leads to think that the existing public facilities, which should solve the problem, need to be strengthened. In support of what has been hypothesized, a percentage higher than 72% of the sample claimed that they would find it useful a service of psychological / psychiatric support exclusively dedicated to the "young" population group, possibly within the universities.

Anxiety Test: Experimental study on Heart Rate Variability during testing exam in university students

Francesco Peluso Cassese,
Formazione e Insegnamento, 1, 2015

Defined as a separate construct of anxiety, text anxiety occurs when individuals find themselves in evaluative situations, such as in the formal testing environments found in education (Tobias, 1979; Hill e Wigfield, 1984). Debilitating anxiety can disrupt mental processes, especially when the evaluative task is demanding, as is the case in formal academic assessment (Wachelka & Katz, 1999).

However, it is generally accepted that a small degree of anxiety can act as a motivator, to minimize the otherwise adverse effects of anxiety. Manifestations of anxiety can be physiological, cognitive or a combination of both (Hembree, 1988). The anxiety that the students perceive were investigated quantitatively and qualitatively (Bonaccio, Charlie, 2008; 2010).

Self-confidence have a strong relationship with examination anxiety. Other factors which have been investigated and had a significant positive correlation with students' examination anxiety consisted of the number of the students in a class, the reactions of school staffs, teachers and parents toward students' drop down (Moosavi et al., 2008).
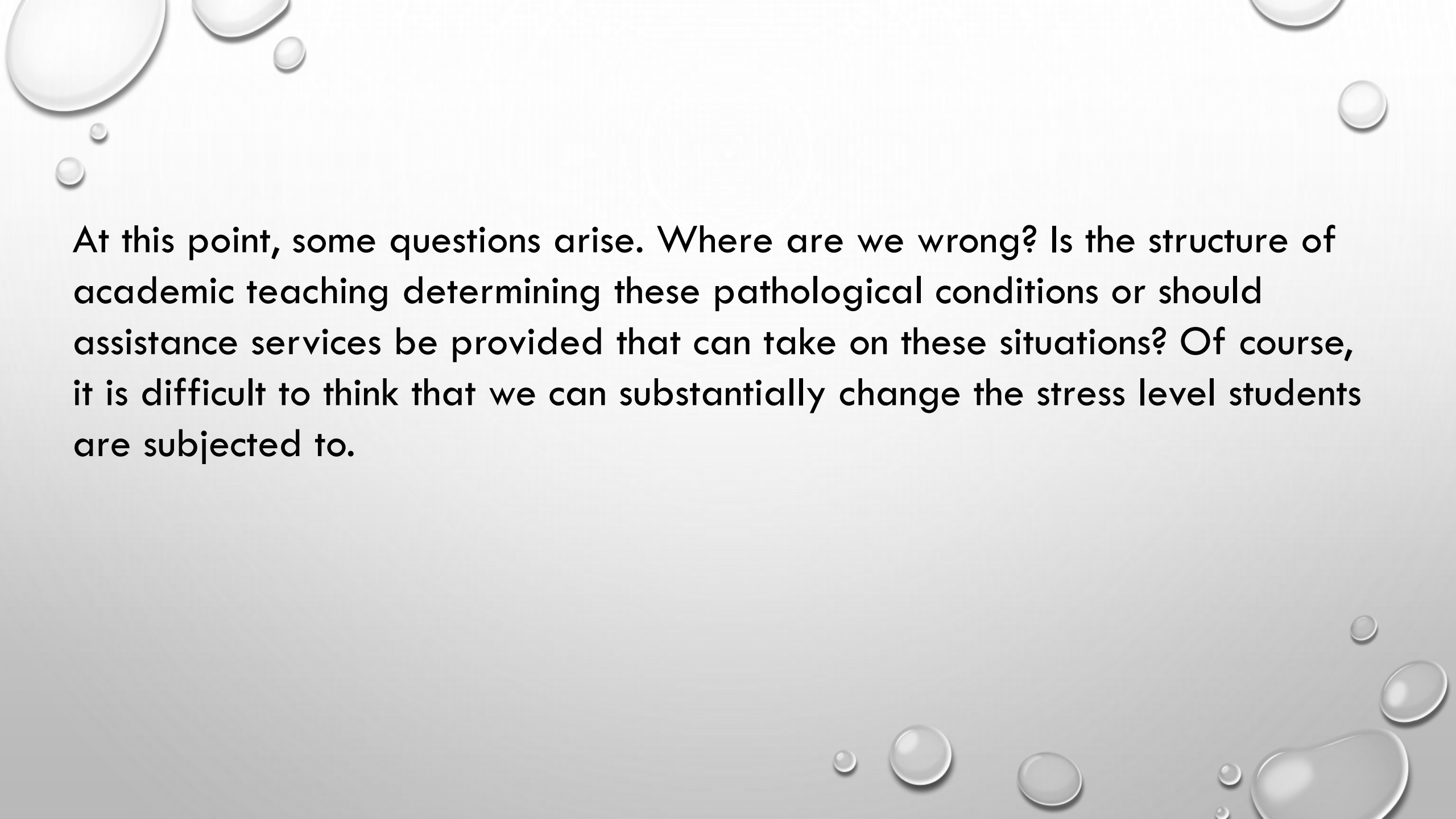
Anxiety disorders are the most prevalent psychiatric disorders (Kessler RC. et al. 2007), and one of the most costly (Kessler RC 2002). Anxiety disorders also increase risk of cardiovascular disease (CVD) (Härter et al., 2003; Vogelzangs et al., 2010) and mortality (Roest et. al., 2010; Janszky et. al., 2010; Shibeshi et al., 2007) due to a decrease of the natural Heart Rate Variability over time, commonly measured by electrocardiogram (ECG) (Dekker et al., 2000; Thayer et al., 2000; 2010).

The examination anxiety is due to an insecurity inherent to one's own abilities and it has destructive consequences on concentration and quality of learning (Pekrun R. 2004) Through this experimental research, it was highlighted that all the students underwent HRV detection have a higher level of anxiety within 20 to 30 minutes before the exam, and then decrease after answering the first question asked during the exam.

Conclusion

Stress can also lead to very serious consequences. It seems that at least one student in fifty try to attempt suicide at the University. Who tries, in most cases, is a person whose individual suffering, caused by the academic environment, has added to a background characterized by family problems, interpersonal insensitivity, anger and, in some cases, difficulties related to sexual identity.

Giada De Filippo, the 26-year-old girl who killed herself by throwing off the roof of the University of Naples, could not bear the weight of the staging she had prepared. To the family, friends and boyfriend, she announced that yesterday would be the day of his graduation. In Natural Sciences. But Giada had not done all the exams. And she was not on the list of students who had to discuss the thesis. Yet she had put on an elegant dress and was ready. Almost as if she were thinking of finding a trick to overcome that moment of embarrassment. She wanted to do it to make his parents, his boyfriend and friends happy. But there was no happy ending. Only a tragedy. Her boyfriend, who had bought her a bunch of flowers, had called her to ask where to go. In which room to go together with family members. At that point Giada could not resist. He asked where she was. She kept thanking him and asking if he saw her. And while the parents, her brother and her cousins were coming to the faculty, Giada went up to the roof and decided to put an end to her life.
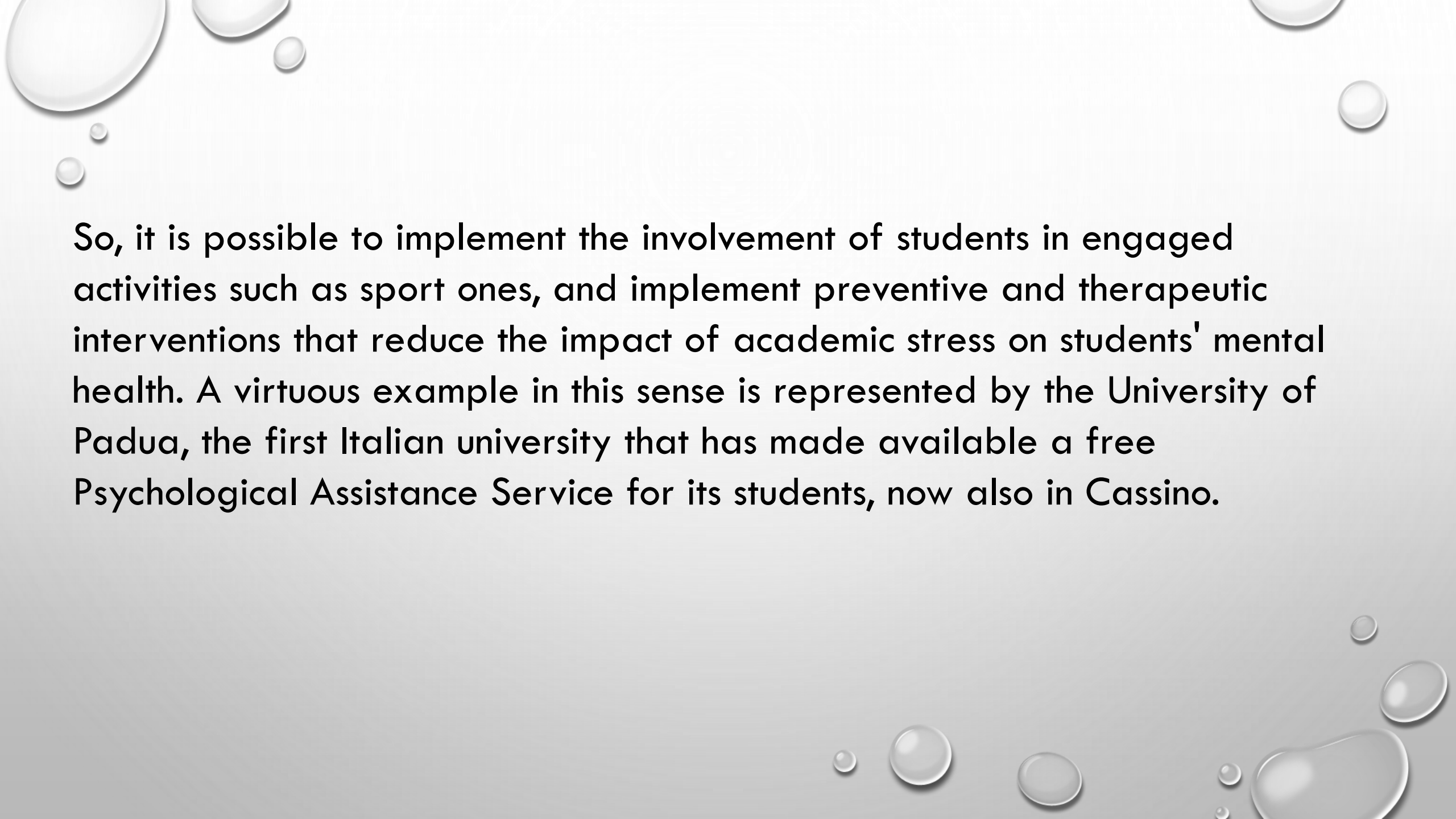
At this point, some questions arise. Where are we wrong? Is the structure of academic teaching determining these pathological conditions or should assistance services be provided that can take on these situations? Of course, it is difficult to think that we can substantially change the stress level students are subjected to.

A stressor agent relevant to our context (see Holmes and Rahe 1967) is the one related to the **change**, which produces Krisis, in the etymological sense of "rupture, choice": change requires adaptation, and therefore the ability to cope with new and often unexpected situations.

A support to overcome stressful situations can manifest itself in four forms:

1. emotional support, in the sense of attention and empathy;

2. instrumental support, concrete, made of direct responses to contingent needs;

3. informative support, or institutional communications that facilitate life in the institution;

4. appraisal, ie an evaluation and self-assessment, consisting in a negotiation between environmental pressures and individual possibilities (in Zani, Cicognani 2000: 122).

So, it is possible to implement the involvement of students in engaged activities such as sport ones, and implement preventive and therapeutic interventions that reduce the impact of academic stress on students' mental health. A virtuous example in this sense is represented by the University of Padua, the first Italian university that has made available a free Psychological Assistance Service for its students, now also in Cassino.

References:

Bacchi, S. & Licinio, J. (20016). Resilience and Psychological Distress in Psychology and Medical Students. *Academic Psychiatry*, 41(2), pp. 185-188.

Brunner E. and Marmot M. (1999). *Social organization, stress and health in Social determinant of health*. Oxford: Oxford University Press.

Cavallo, P., Carpinelli, L., Savarese, G.(2016). Perceived stress and bruxism in university students. *BMC Research Notes*, 9(1), pp. 1-6.

Denovan, A., Macaskill, A. (2017). Stress and Subjective Well-Being Among First Year UK Undergraduate Students. Journal of Happiness Studies, 18(2), pp. 505-525

Juliana Inhauser Riceti Acioli Barboza and Ruth Beresin, *"Burnout syndrome in nursing undergraduate students"*, Study carried out at feculdade de enfermagem do Hospital Israelita Albert Einstein (HIAE), Sào Paulo, Brazil, 2007

Mullen J., Kelloway E.K., Teed M. (2011). Inconsistent style of leadership as a predictor of safety behavior. *Work & Stress*, 25, 41-54.

Pàez, A., & Whalen, K. (2010). Enjoyment of commute: A comparison of different transportation modes. *Transportation Research Part A, 44*, 537-549.

Pearlin L. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, 30.

Pekrun, R. (2004). Test Anxiety and Academic Achievement. *International Enciclopedia of*

Selye H. (1956). *The stress of life*. New York: McGraw-Hill.

the Social & Behavioral Sciences 15610-15614.

 Wilmar B. Schaufeli, Isabel M. Martinez, Alexandra Marques Pinto, Marisa Salanova and Arnold B. Bakker, *"Burnout and engagement in university students. A cross-national study"*, Journal of cross-cultural Psychology, 2002.

Ryan R. M. and Deci E.L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.

Reis H.T. et al. (2000). Daily well-being: the role of autonomy, competence and relatedness. *Personality and Social Psychology Bulletin*, 26: 419-435.

Argyle M. (1987). *The Psychology of Happiness*. London: Methuen.

Brunstein J.C. (1993). Personal goals and subjective well-being: a longitudinal study. *Journal of Personality and Social Psychology, 65*: 1061-70.

Holmes T. and Rahe R. (1967). The social readjustment rating scale. *Journal of Psichosomatic Research,* 11, 213-218.

Zani B., Cicognani E. (2000). *Psicologia della salute*. Bologna: Il Mulino.

Thank you ☺