

## THERAPEUTICAL INTERVENTIONS IN UNIVERSITY STUDENTS STRESS REDUCTION: AN INTEGRATIVE REVIEW

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### ABSTRACT

**Aim:** Identify, in available Scientific papers, the therapeutical interventions that contribute to decreasing stress in University students.

**Method:** Integrative review of published articles in Portuguese, English and Spanish in the following databases: Lilacs, Medline/Pubmed, Cuiden, Scopus, Cinahl, PSYarticles, BDNF and SciELO. The articles were submitted to analysis of methodological strictness and of evidence levels.

**Results:** In the articles, complementary therapies were presented like Art Therapy, Aroma Therapy, Mind fullness, Music Therapy and Group Therapy.

**Conclusion:** The Integrative Practices confirm that they are a new proposal of care in University Students' Stress Score Reduction.

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### INTRODUCTION

Industrialization has brought a notorious technological progress and, thus, a lot of benefits and comfort for people's daily routine. However, this fast progress has also brought mental and physical exhaustion. This modern illness process, linked to people's occupations, was named stress (Banke, 2015). Betty Neuman, Nursing theorist, in her theory about systems, highlights the relationship between the human being and the environment as a process to notice stress. Each person's perception field is in a certain balance which, when in contact with intrapersonal, interpersonal and extrapersonal stressing factors, produce stimuli that may be defined as tension, leading the person to mental and physical exhaustion. (Vasconcelos, 2003). Researches show that students are also exposed to stressing factors during their study years, which harm their well-being, health and quality of life and, when there is no adaptation to the stressing factor, it becomes a threat when it comes to mental health, leading the student to

burnout syndrome (when they can not overcome the stressing factors) (Silva, *et al.*, 2016; Fogaça, *et al.*, 2012). Studies show that due to unavailability of free time, students perform complementary activities at meal time, at night, on holidays and weekends, besides having to satisfy a high production demand (Benavente *et al.*, 2014; Bublitz *et al.*, 2012). Facing this situation and considering that stress has been present among University students more and more, and facing their high emotional exhaustion, we see that there is a need to understand the practices of intervention that have been developed and performed to help control or decrease stress in University students. Thus, the aim was to identify in Scientific literature the therapeutical interventions that have been tested and that have contributed to decreasing stress in University students (Guido *et al.*, 2012; Almeida *et al.*, 2016).

### MATERIALS AND METHODS

Integrative review has the aim to summarize the results from primary researches about a pre-selected subject, in a systematic and organized way, to contribute to the knowledge of a specific subject (Souza *et al.*, 2010).

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Table 1. Description of articles about the interventions used in stress reduction in University students. Recife, 2018

BASE/AUTHOR/COUNTRY	OBJECTIVE	MÉTHOD/ EVIDENCE LEVEL	INTERVENTION	RESULTS
Zeyne APS,Edson AS,Ana MPC LILACS/ Brazil	Analyse a Nursing students Therapeutical Group for a short time.	Study of participant observational, qualitative approach type /IV	Therapeutical Group	Results showed that the use of therapies in groups may be used as a supportive and adaptability fator in their transition from theoretical learning to practice
FarfanoMV, Ramirez MG,Guzman RC LILACS/ Mexico	Evaluate the impact of graphical activities and expressive writing as a stress control way in odontology students.	Experimental study, Randomized Clinical trial/II	Arttherapy	The intervention proposed for the six subjects (groups), showed there was reduction of stress and of negative thoughts.
Lyral CS,Nakai LS, Marques AP LILACS/ Brazil	Evaluate the efficacy of aromatherapy in decreasing levels of stress and anxiety among students in the Health field	Experimental study, Randomized Clinical trial/II	Aromatherapy	With aromatherapy treatment, the 36 students had their stress scores statistically compared before and after treatment, with a significance level of 5% (p<0,05). The intervention group has shown a significant reduction of stress level, 24% less than the control group, after seven sessions, twice a week.
Vibe M,Solhaug I,Tyssen R,Friborg O, Rosenvinge JH, Tore S, Bjørndal A Medline/ Norwegen	Evaluate the effect of a Program of stress reduction based on complete mental attention for students of Medicine and Psychology	Experimental study, Randomized Clinical Trial /II	Mindfulness	The study was done with 288 students, who had a moderate effect on mental anxiety (Hedges'g 0.65, IC= .41, .88) that were found in the intervention group compared to control group.
Warnecke E; Quinn S; Ogden K;T owle N; Mark R N CINAHL/ Australia	Evaluate the effect of a Full Attention Practice in Medicine students	Experimental Study, Randomized Clinical Trial /II	Mindfulness	The intervention involved listening to a CD with attention guided practices with 30 minutes duration, for eight weeks. After statistical analysis, the results have shown that there was significant reduction in stress score
Wild K, Scholz M, Ropohl A, Bra "uer L, Paulsen F, Pascal H SCOPUS/ Germany/Swiss	Evaluate the efficacy of a elective course to learn relaxation techniques for Medicine students.	Experimental Study, Randomized Clinical Trial / II	Mindfulness	Students have shown a significant decrease in cognitive burnout stress and emotional stress, when compared to control group. Besides, they have shown reduction of anxiety and of medium depression after eight weeks of classes.
Räsänen P, Lappalainen, P Muotka J, Tolvanen, A Lappalainen R SCOPUS/ Finland	Evaluate the effect of an on-line relaxation intervention in order to improve the University students wellness	Experimental Study, Randomized Clinical Trial /II	Mindfulness	The intervention group, who used the therapy on -line, has significantly reduced the stress levels (40%) after 12 months when compared to the control group.
Barry BBEt. Al SCOPUS/EUA	Evaluate if muusic therapy influences for reduction of stress levels in Nursing students	Experimental Study, Randomized Clinical Trial /II	Musicttherapy	Controlled intervention for students at the first year (Juniors) has shown statistically significant improvements for several parameters related to <i>burnout</i> and mood.

## RESULTS

For the research, Cooper proposed steps were followed: Formulation of the research question; Data collection; Data evaluation; Analysis and interpretation of collected data and presentation of the final work. (Cooper, 1982). For the collection, research was done in publications listed in the following data basis: *LILACS*, *MEDLINE/Pubmed*, *CUIDEN*, *SCOPUS*, *CINAHL*, *PSYarit cles*, *BDEF and (SciELO)*. Three *Meical Subject Headings* (MESH) descriptors were used: "Burnout, Professional", "students" and "Evaluation of Result of Therapeutical interventions". After all the search steps, 8 primary articles were selected for the sample of the revision.

The studies brought non conventional therapies and interventions as results, being integrative practices the most predominant, such as Art therapy, Aromatherapy, Therapeutical group and *Mindfulness*. Description of articles found, including data base, authors, methodology and evidence level are shown in Table 1.

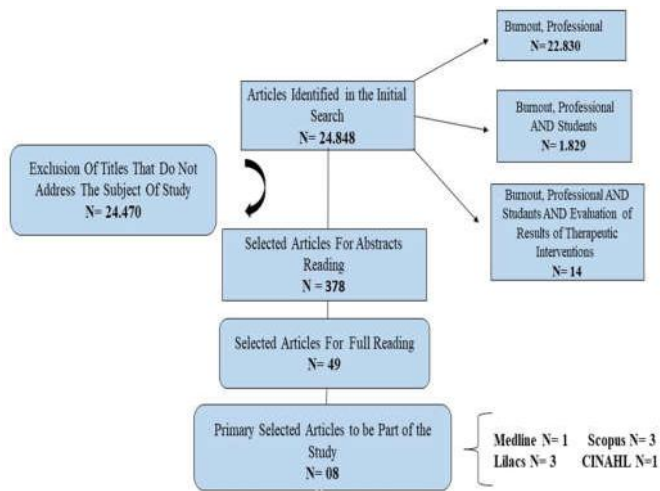


Figure 1. Flowchart of data collection. Recife, 2018

## DISCUSSION

Complementary integrative practices or non conventional practices (PICS) help and serve as tools for the viability of therapeutical room in the Educational Process at a University, being able to bring emotional balance for the completeness of the individual, respecting him as part of the system (environment) and understanding his specific nature and perspective (Morais *et al.*, 2010). Stress in the core of the university life becomes a predictive fator for lower academic performance, also affecting the relationships and creating an unfavorable environment in the teaching-learning process, harming the professional education.

At that, therapeutical interventions may be an alternative for reduction of mental and physical exhaustion and also for promoting psychological health of the university students. (Morais *et al.*, 2010). Integrative practices are tools for care in promoting total health, based on traditional medicines from all over the world besides techniques and philosophies of life created to provide wellness and human health, the name integrative and complementary practices in Health (PICS) is the Brazilian denomination for what is called in other countries, traditional medicines (Telesi, 2016). World Health Organization (WHO) has encouraged Aintegrative and complementary practices in Health worldwide, in 2014, it published the document “*WHO, tradicional Medicine Estrategy 2014-2023*” where it says that PICS have gained a lot in its use and also in researches all over the world, besides being cost-effective. People believe that looking for such practices has increased due to the increase in chronicle diseases, dissatisfaction with existente services and for the increase of the health services cost. (Lima, 2014)

## Conclusion

The use of meditation (mindfulness), therapeutical groups, aroma therapy and music therapy have become interventionist technologies formed by the integrative practices and are reinforced as a new proposal of care in reduction of scores of stress and *burnout* in undergraduates. This is possible since they are based in the whole perspective of the human beings and, above all, his individuality, providing a focus aimed to the real needs of the students.

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