

Anxiety in Higher Education: A Brief Review

Luísa Soares*, Catarina Freitas and Mariana Castro Fernandes

Faculty of Arts and Humanities, University of Madeira, Portugal

*Corresponding author: Luísa Soares, Faculty of Arts and Humanities, University of Madeira, Portugal Catarina Freitas

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ABSTRACT

Anxiety markedly affects students in higher education. In addition to the difficulties underlying this developmental stage of emerging adulthood, these young people still have to deal with their concerns and demands regarding the level of education, the new relationships they will form and, often, the distance they live from their families. Throughout this paper we seek to present a review of group intervention based on Cognitive Behavioral Therapy for anxiety problems among higher education students.

Keywords: Anxiety; Emerging Adulthood; Higher Education

Introduction

The aim of this paper is to present the main consequences of anxiety in higher education, based on the last 20 years and with individuals from 18 to 22 years old. Anxiety is an habitual state that comes from a reaction to something particular, as an alarm system. Thus, the intensity of anxiety is distinguished through normal and pathological states of anxiety (Almeida, et al. [1,2]). It is characterized by an unpleasant emotional reaction caused by an external stimulus that is perceived by the individual as a threat that produces behavioral and physiological changes (Almeida [1]). Anxiety can be characterized by two types: state anxiety and trait anxiety. The former refers to a transient circumstance that can be characterized by apprehension, tension, and increased nervous system activities, depending on the subject's perception of the situation that triggered it. The second, is related to each individual's personality and their different reactions to situations perceived as threatening. In this way, individuals who have a high anxiety trait tend to consider a greater number of situations as dangerous and, consequently, present an amplification of state anxiety (Chaves, et al. [3,4]). The period of

beginning at university is a time of transition that can be anxiety-producing. The individual characteristics of each student and the way they perceive the events they experience can influence the context of anxiety, making it a threat to their health and, consequently, also affecting their professional training (Chaves, et al. [3,5]). Therefore, in addition to dealing with the typical changes of their developmental stage, such as the construction of their identity, students also face the impositions of academic and social life (Almeida, et al. [1,6]).

Methodology

Regarding the methodology of the present work, the literature search started using the databases "Google Scholar", "B-on", "RECAAP" and "SciELO" with the keywords "psychological intervention", "anxiety", "higher education" and "TCC". The search was carried out with the aid of the Boolean operators "AND" and "OR", and with truncators "*" and "". All articles used correspond to a period of 20 years, i.e., from 2002 to 2022. The rejection criteria of articles were based on the exclusion of documents that predated 2002, and those that did not reflect content pertinent to the theme, in their abstract, for the preparation of this work, resulting in a total of 19 documents (see Table 1).

Table 1: Summary table of the research methodology.

Author and year of publication	Keywords	Database	Search date
Almeida [1]	"Anxiety"; "Risk factors";	Google Scholar	27/09/2022
	"Students"; "Higher education"		
Barbosa, et al.[27]	"Anxiety"; "University students",	Google Scholar	21/09/2022
	"Students"		
Borba, et al. [19]	"Anxiety"; "Higher education";	Google Scholar	19/09/2022
	"Students"		
Cassepp [43]	"Anxiety"; "Academic environment";	Scielo	19/09/2022
Silva [43]	"Students"		
Chaves, et al. [3]	"Anxiety", "Spirituality",	Google Scholar	21/09/2022
	"University"		
Costa, et al. [13]	"Anxiety"; "Students";	Google Scholar	19/09/2022
	"University"		
Direção-Geral da Saúde, 2020		https://www.dgs.pt/p rogramas-de-saude-	
	"Health program"	prioritarios.aspx	19/09/2022
Galvão, et al. [46]	"Mental health"; "University";	Google Scholar	2/10/2022
	"Anxiety"		
Koiana [7]	"Anxiety"; "Higher education"	RECAAP	24/09/2022
Lantyer, et al. [10]	"Cognitive behavioral therapy"; "Anxiety";	Google Scholar	29/09/2022
	"Psychological intervention";		
	"University students"		

Linhares & Meneses [47]	"Psychological intervention"; "Cognitive behavioral therapy"; "Anxiety";	Google Scholar	2/10/2022
	"University students"		
Lúcio, et al. [48]	"Anxiety"; "University students"	Google Scholar	27/09/2022
Marçal [49]	"Anxiety", "University students",	Google Scholar	19/09/2022
	"Stress"		
Miura & Wichoski, [50]	"Anxiety", "Pandemic", "Covid-19", "University students"	Google Scholar	23/09/2022
Monsell, et al. [35]	"Climate change", "ecosystem", "anxiety", "Mental health"	Google Scholar	25/09/2022
Papalia & Feldman, [17]	"Papalia", "Human development"	Google Scholar	2/10/2022
Silva, et al. [39]	"Anxiety", "University students", "Risk factors",	Google Scholar	19/09/2022
	"Psychological intervention"		
Silva [22]	"Anxiety", "Pandemic",	Google Scholar	23/09/2022
	"University students"		
Silva, et al. [21]	"Anxiety"; "University";	B-on	25/09/2022
	"University students"		
Rocha [16]	"Anxiety"; "University students"	RECAAP	22/09/2022

Theoretical Framework

Pathologic anxiety manifests itself in different ways and can be classified into different categories. Generalized anxiety is associated with excessive and uncontrollable worry related to daily life activities, such as work or academic life. Symptoms such as fatigue, sleep-related problems, feeling tense, and difficulty concentrating are greatly experienced by this population that leads to difficulty in making these activities feasible (Koiana [7]; National Institute of Mental Health, 2018; American Psychiatric Association, 2017; Craske, et al. [8]). It is essential to realize that anxiety has a bidirectional action between

emotions and cognition and it can result in a blocker of intellectual skills (Almeida, et al. [1,9]). In this sense, it is considered crucial for self-preservation, although when it becomes too excessive or prolonged, it ends up preventing the student from adapting and facing the feared situation (Almeida [1]; Claudino & Cordeiro, 2006). Several studies refer that university students and, particularly, students in health areas, have high levels of stress and anxiety (Lantyer, et al. [10-15]). The symptomatology associated with stress and anxiety is exposed as a significant obstacle to the proper functioning of the individual, both physically and psychologically and, therefore, when it comes to individuals whose profession revolves around the provision of health care to others, the risks are no longer reduced to the individual and appear as a potential risk to health service users (Lantyer [10]). In addition to this, there is little literature on the prevalence of anxious conditions in the student population. According to Rocha [16], this blind spot hinders preventive action or effective intervention, makes it impossible to discover continuity between secondary education, higher education, and entry into the labor market, and increases the risk of future professionals developing more severe clinical pictures due to the lack of prior intervention in a critical period of their lives.

The Developmental Cycle in Early Adulthood

Physical growth continues during this phase of young adults' lives. Health can be influenced by both genetics and environment, but it is the behavioral factors such as eating properly, getting enough sleep and exercise that play a central role in the health and well-being of these individuals. These environmental factors can also have negative influences such as epigenetic changes in the expression of certain genes, resulting in long-term consequences in the lives of young people (Papalia, et al. [17,18]). Another potentiating factor for negative consequences is the transformative phase of adolescence. In this period, the social group has a high importance in the habits and behaviors of these young people, and neuropsychological functions, such as

- (a) Planning,
- (b) Organization,
- (c) Decision making,
- (d) Problem solving, and
- (e) Behavioral adjustment, which are not yet fully developed (Borba, et al. [19,20]).

The connection between health and behavior elucidates the interrelationships between the physical, cognitive, and emotional aspects of development. People's prior knowledge about health affects their behavior and subsequently their feelings. Yet, understanding good and bad health habits is not enough. Personality, unfavorable social environment, and dysregulation of emotions are factors that can contribute to unhealthy behaviors (Papalia [17]). The college student is still developing, and may be more vulnerable to mental

disorders. They are faced with numerous academic situations that can generate stress and anxiety, including the taking of lectures, exams and oral presentations (Almeida [1]). Young adults are the most active population in society, it is the period of human development where greater interaction with the environment occurs. It is when the self is in full formation and very recently it was possible to observe and demonstrate how essential it is to recognize the emotional impacts that epidemics can cause in the population, such as the pandemic COVID-19 that opened doors to the need for change and adaptation to a new social, behavioral, and affective reality (Silva [21]).

Prevalence

Studies indicate that female students have a higher prevalence of anxious symptoms compared to male students (Demenech, et al. [7,22-24]). College students in health care fields, have the highest levels of anxiety, when compared to other educational fields. Factors such as

- (a) The experience of clinical practice,
- (b) Dealing with human beings,
- (c) Contact with psychological suffering,
- (d) Observation of professors in practices,
- (e) Fear of making mistakes, and
- (f) Feelings of inadequacy, are some examples triggers of anxiety in this population (Costa, et al. [25,26]).

Most students have moderate to higher levels of trait and state anxiety, which are significantly associated with the presence of physical discomfort and the need to undergo medication treatment for anxiety (Chaves [3]).

Risk and Protection Factors

Within the risk factors, it is possible to highlight psychoactive substances, which have been reported as resources used by college students, thus increasing their vulnerability for the development of mental disorders (Barbosa [27]). These risk behaviors occur not only with college students but also with high school students, who upon transitioning into their first year of higher education are more likely to increase their alcohol and psychoactive substance use (Almeida [1,28]). In part, this may be due to their leaving home and, consequently, the withdrawal of family and social support, causing some negative feelings and anxiety, as well as affecting their cognitive and emotional level (Almeida, et al. [1,29]). This family distance is seen as a risk factor, because despite promoting some freedom for the young person by becoming a displaced student, it also entails greater responsibilities and economic expenses that, depending on the family financial situation, may lead to the search for a job that will have to be merged with their studies (Koiama, et al. [7,30]). Protective factors, on the other hand, are spirituality, social skills, and green and blue spaces. In a study conducted on higher education, some

students reported that their depression and anxiety scores were reduced due to their strong connection with spirituality (Chaves, et al. [3,31]). Thus, spirituality can be considered a resource to deal with anxiety, to promote health and emotional balance in higher education students (Chaves [3]). With regard to practicing social skills, through communication and social interaction, they might enable the creation of friendship bonds, a better coexistence in their daily lives, both with their peers and with their teachers (Borba, et al. [19,32]). These social skills in communication often involve

- (a) Starting conversations;
- (b) Giving feedback;
- (c) Working in groups, or even,
- (d) Public speaking (Borba [19]).

On the other hand, it means

- (a) Being assertive;
- (b) Having the ability to speak;
- (c) Being understood and, consequently,
- (d) Understanding what others say (Borba & Lopes, 2019).

Still within social skills, in the professional and educational context, it is observed through

- (a) The attitudes,
- (b) Skills that lead to a good school and professional performance, and
- (c) Their behaviors, which in the university context should be developed and trained (Borba, et al. [19,33,34]).

Finally, the access to green and blue spaces, may have positive consequences towards improving and promoting mental health across a diverse set of mental conditions and physical disorders (Monsell, et al. [35,36]). Therapy projects related to horticulture in green spaces, green walking, or blue space-focused activities have benefits for individuals, and with individuals with mental health issues the access to these types of activities, should be even more pertinent (Monsell, et al. [35,37,38]).

Group Psychological Intervention

Several studies have indicated the effectiveness that psychological intervention have in alleviating suffering and promoting quality of life. One of the possible ways is group intervention (GI). In addition to being very effective, GI is a low-cost intervention, which also allows for the development of skills that otherwise would not be possible to develop (Ordem dos Psicólogos Portugueses, 2011, cited in Chaves [3], Yalom & Leszcz, 2006, cited in Chaves [3]). Group sessions allow the optimization of resources and the attendance of most participants. The university population, manifests multiple challenges for psychologists, especially in GI, in terms of ensuring their adherence and retention, with all their individual demands (Silva [39]). For (Johnson, et al. [39,40]), this model of intervention

is favorable for adapting to the particular characteristics and needs of students, who perform many tasks in the university context. This type of intervention is effective, especially with students who come from dysfunctional families and may have maladaptive patterns that lead to isolation, anxiety, and depression (Silva [39]). The importance of prevention and intervention plans for this issue is highlighted, since anxiety goes "hand in hand" with depression, somatization and other disorders. In most cases, it is a risk factor for more serious problems such as suicide (Silva [39]). Moreover, interventions based on cognitive and behavioral approaches allow for the observation and analysis of the results obtained, as well as the readjustment of strategies and the consistent pursuit of the therapeutic goals set (Silva [39]) and are therefore highly recommended.

The use of drugs by young college students have been increasing. The most prescribed medical drug is benzodiazepines. For example, the use of anxiolytics, which despite the extensive knowledge that many students have about the side effects and possible dependence on this drug, many of them resort to anxiolytics to better control their anxiety (Costa et al., 2017; Marchi [26]). In the opposite direction, it is worth highlighting the search for non-drug treatments, such as cognitive-behavioral therapies, this being the most common and most effective with people with anxiogenic symptomatology (Chaves [3]).

Conclusion

According to Santos [41], academic life, especially in health courses, is stressful due to the demands made throughout training, including the underlying activities and assessments. They increase psychological pressure, tension, mental fatigue, and future expectations. Upon entering college, university students are subjected to long study hours and present difficulties in personal time management (Costa et al., 2017; Santos [41]). Therefore, one may speak of academic burnout, particularly in this post-pandemic era, also characterized by exhaustion and a sense of ineffectiveness. According to the present review, great difficulties occur in emotional regulation which also affects the psychological well-being and performance of students, and may lead to the abandonment of their studies (Silva [39]). It should also be noted that the characterization of psychosocial and mental health aspects and the use of psychoactive substances in a vulnerable population of college students may be a research problem that deserves further study [42-52], as well as the construction and validation of mental health prevention programs among college students.

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Luísa Soares. Biomed J Sci & Tech Res



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