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ORIGINAL PAPER

¹Psychiatric Department, "Sotiria" Athens General Hospital for Chest Diseases, Athens, Greece

²Department of

Larissa, Greece ⁴European School

Luxembourg II,

Luxembourg

Greece

Nursing, University of Peloponnese, Sparta,

³General Department,

University of Thessaly,

Corresponding author:

Evangelos C. Fradelos.

Evdoxou 12. Athens Greece. PC 11743, E-mail:

evagelosfradelos@

hotmail.com. ORCID iD: http//www.orcid.org/

0000-0003-0244-9760.

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Factors Associated with Psychological Distress in University Students and the Relation to Emotional Intelligent and Spirituality: a Cross-sectional Study

Evangelos C. Fradelos^{1,2}, Eirini Kapsiocha³, Foteini Tzavella², Sofia Kastanidou⁴, Konstantinos Tsaras³, Dimitrios Papagiannis³, Ioanna V. Papathanasiou³

ABSTRACT

Introduction: Psychological health is the expression of harmonic expression of human's personality and is often disrupted by multiple factors. Especially during academic years, human has to confront various stressful situations that endanger his Psychological health. Enhanced levels of Emotional Intelligence and Spirituality may act protectively enhancing his ability to manipulate his emotions and his existential anxieties. Aim: The present study aims to assess psychological distress in university students and test if emotional intelligence and spirituality are related. Methods: A cross-sectional study design was employed. The sample comprised 206 students attending in different Departments of the University of Thessaly. Results: From the total of 206 students the majority were women (n=157, 76,2%) while 23,8% were men. Regarding the mean of age of the participants was found to be 30.1 ±7.15 with a minimum 18 and maximum at 44 years. Factors such as gender, living arrangement and financial frustration can affect psychological distress. The results indicated, a positive link was found among Emotional Intelligence and various factors of Spirituality and Psychological health. Conclusions: The contribution of Emotional Intelligence and Spirituality is crucial to the acquisition of well-being, happiness and meaning in life.

Keywords: Emotional Intelligence, Spirituality, Psychological health, University students, Emotions of university students.

1. INTRODUCTION

Student life is characterized as the intermediate stage from adolescence to adulthood. Students, while still possessing many of the adolescence features, are experiencing a process of moving away from the family environment. They usually live alone, away from the family home and begin to bond with their peers who often come from other places. They, therefore, are leaving behind a safe and controlled environment of the family and their surroundings and come into contact with different habits and perceptions (1). Compared to their peers who do not study at a higher education level, Students seem to be detached from the real responsibilities of life as they are absorbed in exclusively intellectual activities. At the same time, the individual is cut off from the past and adopts a new lifestyle that differs in many respects from the previous (2).

During their studies, some individuals can experience mental difficulties that are related to their inability to leave their family in combination with the feeling of loneliness and difficulties to create relationships in a new environment. The ability of the individual to live alone reflects his or her emotional maturity and is the foundation for achieving autonomy (3). Finally, a significant risk to students' mental health is the intense feeling of insecurity regarding their financial and occupational rehabilitation. The high levels of unemployment, the financial crisis, the lack of recognition in some cases of

qualification lead to discouragement and the creation of intense feelings of anxiety, insecurity and even mental disorders manifested by symptoms such as insomnia, shortness of breath,-eating disorders and difficulties in concentration and organization (2, 4). Then students often develop dysfunctional ways of managing these problems, so their self-image is affected, and they are experiencing feelings such as depression and anxiety. The existence of some mental disorder in the student has a more significant impact than on other groups in the general population as it affects his health, interpersonal relationships and academic performance (5). Inappropriate diagnosis and treatment of these problems lead to chronicity and relapses, increasing the risk of discontinuation of studies and manifestation of future occupational distress syndrome (6).

Self-management is a crucial factor in students' Emotional Intelligence. Through the right choices and the proper organization of time in terms of their academic responsibilities, Students gain the ability to manage themselves and their strengths while preparing for their future and career path (7). At the same time, feedback provides the results of the effort, the actions are judged, and their behavior is re-defined (8). While studying in higher education is a kind of additional development of one's Emotional Intelligence as the acknowledgement of failures, and the understanding of the reasons for success lead to the gradual increase of one's emotional functions (9). Academic status encourages students to develop their emotions through the acquisition of knowledge by developing their self-concept. Particularly students who are socially active inside and outside the educational establishment create new balance sheets and become more supportive of themselves (10).

Emotional intelligent (EQ), characterizes one's ability to perceive one's own emotions and those of others and to manipulate this information to guide one's behavior and thinking (11). It is a separate category of mental abilities that enable the individual to recognize and express their feelings, to understand their origin and consequences, and to regulate their expression towards themselves and other people (12). It deals in practice with the ability to process information derived from emotions and to exploit it to engage the individual (13). EQ can be associated with various outcomes in ones' personal and professional life. It facilitates better judgment in decision making and effective crisis management. Also, it is increasing self-esteem and satisfaction by achieving the goals set (14). Individuals who can understand their emotions can accurately identify their reactions and adapt more quickly to the conditions presented each time (11). There is a relation between mental health and Emotional Intelligence as stress, and the resulting demands are more effectively dealt with without disturbing the psychology of individuals (15). At the same time, emotionally intelligent individuals can express feelings of empathy, and the self-esteem that characterizes them is an incentive that motivates both themselves and those around them to cope with stressful situations (16). People with low levels of Emotional Intelligence exhibit strong feelings of insecurity and consequently, fear and frustration that hinder the success of both themselves and those around them (17).

Spirituality is considered to be a distinct dimension of individuals with specific characteristics, and it is associated with positive personality parameters (18). Foresight and conscientiousness are dominant factors related to Spirituality, and a lesser degree, are extroversion and receptivity to new experiences. Consciousness mainly indicates that individuals who approach life with discipline and organization embody the concept of Spirituality (19). When faced with a painful situation, a person often faces this challenge by seeking meaning in one's existence. Having an end goal concerning the disease can mitigate its physical effects and cultivate the belief that some benefit will come from this experience (20). Spirituality provides the emotional balance needed by reducing the fear of death and providing peace of mind. It gives meaning to one's life and eliminates hopelessness by improving the quality of one's life (21, 22). Regarding mental health, Spirituality is negatively associated with the manifestation of mental disorders. Specifically, in depressive disorders, Spirituality acts as an inhibitor of depression, which is thought to be since depression is associated with the loss of meaning in life and hope (23). Spirituality contributes to the development of a person through meaning and purpose in his life and by supplying them with a set of values that guide his course (24). Spirituality is associated with life satisfaction, and its role is reinforced mainly in the case of individuals who have lost meaning in life because of some exogenous negative factor (25, 26).

2. AIM

This study aims to assess psychological distress in university students and to highlight its' related factors and to examine the possible relationship between psychological distress, emotional intelligent and spirituality.

3. METHODS

The present study was contacted in facilities of university Thessaly in Larisa. Participants were students who were conducting their academic studies in Departments of the University of Thessaly. The sample of the research was randomly selected in order to include people of different age, gender and social status and thus to ensure the diversity of participants. Student participation was voluntary and included 206 people who agreed to participate out of the 262 initially contacted (56 people refused to participate). Inclusion criteria in the study were their attendance at a Department of Studies at the University of Thessaly and a good knowledge of the Greek language in order to be able to answer the questions asked and the absence of diagnosed mental illness. In order this study to be complied with ethical standards was conducted according to the ethical guidelines of the Declaration of Helsinki. It was firstly approved by the Ethics Committee of the Thessaly University. In addition, a written consent of the Students to participate in the process was obtained and they were each given an increasing serial number to ensure their anonymity.

Data collection

Data were collected by a specially designed four part questionnaire. A sheet containing sociodemographic and academic information. In the second part for the assessment of psychological distress Hospital Anxiety and Depression Scale (HADS), was used. This scale was developed by Zigmond and Snaith in 1983 (27). It is a handy and reliable tool for identifying anxiety and depression. HADS has been used in the general population, in general hospital patients, in cancer care units, and even in patients with acquired immune deficiency syndrome and in the student population (28). The scale comprises a total of fourteen questions out of which seven concern the development of anxiety disorder and the remaining seven concern depression (29).

Variable

The third part consisted of the Greek version of Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF). It is a 30 item questionnaire with a 7 point Likert scale respond. This scale assesses four dimensions of EQ, namely: Well-being, Self-control, Emotionality and Sociability (30).

Finally, the fourth part, which used to assesses students' spirituality was the Greek version Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale-12 non-illness, FACIT-Sp-12. This scale assesses three domains of spirituality peace, meaning and faith and it provides a score for the total spirituality of the respondent (31, 32). This scale evaluates a last seven days periods through twelve items given a 5 Likert scale responds. Higher scores in the total scale and in the three domains are indicating higher spirituality.

Statistical analysis

Statistical analysis was performed with SPSS Version 23.0 statistic software package, using both descriptive and inferential statistics. In particular, the descriptive analysis included the frequency distribution for the qualitative variables (absolute and relative frequencies) as well measures of dispersion and position for quantitative variables (mean, standard deviation, median, maximum and minimum values). Inferential statistics such as Pearson correlation coefficient (r) and Binary Logistic Regression. For statistical analysis, a significant level of p < 0.05 was set.

4. RESULTS

Descriptive statistics

Regarding sociodemographic characteristics of the sample (Table 1), from the total of 206 students the majority were women (n=157, 76,2%) while 23,8% were men. Regarding the mean of age

of the participants was found to be 30.1 ± 7.15 with a minimum 18 and maximum at 44 years. Most of the participants were living in the city (n=144, 70,0%) and most of them were originated from the boarder area of Larisa(n=137). The largest percentage of students is Greek (n = 169, 82.1%) while a small percentage comes from other countries (n = 37, 17.9%). It was also observed that 47.6% (n = 98) had some kind of interpersonal relationship, either in the form

		()	
Gender	Women Men	157 49	76,2% 23,8%
Age mean±SD			30.11±7.15
Area of Residence	Rural Semi-urban Urban	22 40 144	10,6% 19,4% 70,0%
Area of origin	Larisa Other than Larisa	137 69	66,5% 33,5%
Nationality	Greek Other	169 37	82,1% 17,9%
Interpersonal Relationship	Other Yes No	40 98 68	19,4% 47,6% 33,0%
Living Arrangement	Alone Parents Other	98 43 65	47,5% 20,8% 31,7%
Work During Studies	No Yes Other	125 73 10	59.8% 35,4% 4,8%
Internet and Social Media Use	Daily more than 5 hours Daily 2-5 hours Daily less than 2 hours Rare	122 69 12 3	59,2% 33,4% 5,8% 1,6%
Fathers' educa- tional Status	Elementary School Highschool University Degree	22 77 107	10,8% 37,6% 51,6%
Mothers' educa- tional status	Elementary School Highschool University Degree	31 79 96	15,1% 38,3% 46,6%
Fathers' work status	Full time Part time Unemployed	125 59 22	60,6% 28,6% 10,8%
Mothers' work status	Full time Part time Unemployed	65 102 39	31,5% 49,4% 19,1%
Family annual income	< 10.000 euro 10.000 to 25.000 euro > 25.000 euro	54 104 48	26,2% 50,4% 23,4%
Failed courses	0 to 2 3 to 6 7+	40 108 58	19,4% 52,4% 28,2%
Smoking	Yes No	129 77	62,6% 37,4%
Alcohol use	Yes No	145 61	70,3% 29,7%
Physical Activities / workout	Daily 2 to 5 times per week Less than 2 times per week Never	19 65 87 35	9,2% 31,5% 42,2% 17,1%
Economic frustra- tion	Yes No	154 52	74,8% 25,2%

Frequency

(n)

Percentage (%)

Table 1. Sample characteristics

of marriage or engagement or simply by cohabitation or relationship, 33% (n = 68) had no interpersonal relationship during research, while a percentage (n = 40, 19.4%) did not specify their personal status. Only 98 (47.5%) are students, 43 (20.8%) with parents and 65 (31.7%) with either a roommate or a partner. 59.8% (n = 125) of the students do not work during their studies, 35.4% are engaged in some kind of occupational activity while a small number (4.8%, n = 10) avoided answering the question. Regarding the use of Internet and Social Media 122 (59.2%) Students stated that they use daily for more than 5 hours, 69 (33.4%) Students use them for 2 to 5 hours daily and 12 (5.8%) Students use less than 2 hours daily. A small percentage of students (n = 3, 1.6%) reported that they rarely use the Internet.

Factors associated with psychological distress in university students

Binary regression analysis was performed to explore the relationship between psychological distress and students characteristics. According to the results that are presented in Table 2 we conclude the following. Anxiety symptoms were negatively correlated with students' cohabitation and interpersonal status (p = 0.019 and p = 0.001, respectively). Students' place of origin was also negatively correlated (p = .000). On the contrary, students' permanent residence and annual family income were significantly positively correlated (p=0.021 and p=0.003, respectively). Student work and financial stress are burdensome for students and are significantly associated with anxiety (p = 0.005 and p = 0.025 respectively).

Binary Logistic Regression for	Anxiety		Depression	
Variable	B (S.E.)	Sig.	B (S.E.)	Sig.
Nationality	-0.078 (0.173)	0.654	0.708 (0.426)	0.097
Gender	-0.011 (0.413)	0.979	1.733 (0.605)	0.004
Area Of Residence	0.061 (0.027)	0.021	0.613 (0.519)	0.038
Area of origin	-1.831 (0.406)	0.000	0.551 (0.291)	0.058
Living arrangement	-1.475 (0.628)	0.019	- 1.422 (0.445)	0.001
Interpersonal Relationship	-1.110 (0.340)	0.001	-1.831 (0.406)	0.000
Internet use	0.394 (0.457)	0.388	2.572 (0.861)	0.003
Fathers' educational Status	-0.337 (0.295)	0.253	0.422 (0.376)	0.261
Mothers' educational status	0.163 (0.372)	0.662	0.018 (0.483)	0.971
Fathers' work status	0.535 (0.425)	0.208	-1.583 (0.416)	0.000
Mothers' work status	0.394 (0.457)	0.388	-1.831 (0.406)	0.000
Annual Family income	2.572 (0.861)	0.003	-1.583 (0.416)	0.000
Smoking	-0.216 (0.285)	0.448	0.394 (0.457)	0.388
Alcohol use	0.708 (0.426)	0.097	1.490 (0.632)	0.018
Physical Activities	0.422 (0.376)	0.261	-1.238 (0.484)	0.011
Work during Studies	1.757 (0.628)	0.005	1.110 (0.340)	0.001
Failed Courses	1.341 (0.465)	0.004	1.238 (0.473)	0.009
Economic frustration	1.465 (0.654)	0.025	1.422 (0.445)	0.001
Constant	1.213 (0.775)	0.118	-27.015 (9.561)	0.005
				-

Table 2. Binary Logistic Regression for Anxiety and Depression

	Emotional Intelligence				Spirituality				
HADS	Wellbeing	Self control	Emotionality	Sociality	Total Emotional Intelligence	Meaning	Peace	Faith	Total Spirituality
Anxiety	-0.17	-0.46**	-0.12	-0.08	-0.31**	-0.29*	0.64**	-0.18	-0.31**
Depression	-0.28*	-0.30*	-0.222	-0.18	-0.37**	-0.37**	-0.34**	-0.29*	-0.46**

Table 3. Correlation between Depression, Anxiety and Emotional intelligence and spirituality. Pearson's correlation coefficient (r) *p<0.05, **p<0.01

Due courses significantly influenced the expression of stressful emotions (p = 0.004). Ethnicity, gender, use of the Internet, educational attainment and working status of the student's parents, smoking, alcohol use, and exercise did not affect anxiety. Depression was significantly associated with gender (p = .004) but also with students' permanent residence and origin (p = 0.038 and p = 0.058, respectively). Internet use was also positively associated with depression and alcohol use (p = 0.003 and p = 0.018), respectively). Student work and the financial burden on students have a positive effect on depression (p = 0.001and p =0.001, respectively). Finally, the courses due were also significantly correlated (p = 0.009). Coexistence and interpersonal relationships are negatively associated with depression (p = 0.001 and p = 0.000, respectively) as the quality of personal relationships functions as protective against depressive symptoms. Equally protective is the exercise that is negatively associated with depression (p =0.011). The financial status of the student's family is also significantly correlated which includes father's, mother's working status and annual family income (p = 0.000, p = 0.000 and p = 0.000 respectively). On the contrary, the nationality, the educational level of the student's parents are not related to the manifestation of depressive symptoms.

The association between Depression, Anxiety and Emotional intelligence and spirituality

Table 3 presents the results for the relationship between Depression and Anxiety with emotional intelligence and spirituality. The investigation of the relationship between HADS scale with TEI and FASITsp 12 showed negative correlations between the anxiety, depression, and total scales and most of dimensions of students' emotional intelligence and spirituality.

5. DISCUSSION

The present study aimed to investigate the factors that influence students' psychological distress and the possible relationship between psychological distress, emotional intelligence and spirituality of students of the University of Thessaly.

Students' Mental Health can be disturbed due to feelings of anxiety and depression. Satisfactory interpersonal relationships and strong family bonds can be protecting factors to the manifestation of both anxiety and depression in Student life. On the contrary, financial pressures and educational obligations have a significant impact on the expression of anxiety and depressive feelings among students. Similar studies that examined levels of anxiety and depression in different social groups also supported the protective role of the surroundings and the aggravating role of multiple obligations in the manifestation of these mental disorders (33-35).

According to our results students are reporting low levels of psychological distress. Emotional Intelligence levels may explain the fact that the majority of Students are reporting low levels of psychological distress. The influence of Emotional Intelligence on Student Mental Health indicates the need to cultivate to a satisfactory level. During a student's life, a person is confronted with several stressful factors that can affect his Mental Health. Achieving satisfactory levels of Emotional Intelligence will enable the individual to cope with difficulties and maintain a satisfactory level of quality of life. In the present study, indicators of negative direction were identified between the factors of Emotional Intelligence and the expression of negative emotions such as anxiety and depression. Previous research also supports the importance of Emotional Intelligence in Mental Health and its inhibitory role in the development of negative emotions (6, 10, 36). Emotional Intelligence is an important part of a person's being with a strong influence on their daily lives. It determines the degree to which a person can adapt to his or her environment, understand the feelings of others and perceive events from their point of view. By developing his Emotional Intelligence he is able to control his emotions and personal perceptions and work with those around him to achieve a goal. People with Emotional Intelligence are distinguished by their ability to inspire and motivate others while being characterized by strong self-confidence and self-esteem. They are optimistic and communicative people with ease in managing disputes and problems (30).

Spirituality is also an important factor in life, and people have spiritual needs regardless of whether religious or not. Meeting spiritual needs gives meaning and meaning to life and at the same time determines the existence of a purpose. Spirituality greatly influences quality of life and health, especially Mental Health (37). According to previous studies, spirituality contributes to coping with difficult situations in a person's life as well as his mental stability (18). Spirituality enhances the levels of peace, optimism, and eases the stress that students often experience during their studies. The present study identified a negative relation between anxiety and student spirituality. Similar negative relation were also observed between depression and the presence of meaning, peace, and faith of the students. Increased levels of Spirituality tend to evoke positive emotions and suspend the expression of anxiety and depression. Coping with existential stress and stress arising from the demands of daily living through Spirituality relieves feelings of hopelessness and empowers the individual as related research suggests (22, 38, 39).

In many of the Departments of the University of Thessaly include courses that focus on human spirituality and communication, whereby a percentage of students cultivate their Emotional Intelligence through their studies. According to a number of studies (9, 13, 40) the politically correct handling of diversity, which includes respect for and acceptance of people regardless their racial, social, educational or cultural differences, is a crucial feature of Emotional Intelligence and is reinforced through these courses.

In this study, limitations should be noted. First of all, the cross-sectional study design does not allow us to have a clear picture of the course of mental health, spirituality and emotional intelligence through time. One more limitation is the sample size that can be considered as moderate, mostly because some students refused to participate while others provided incomplete data. On the strengths of the study must be to consider the fact that the sampling method used in the present study is considered methodical, but the fact that it was carried out at the University of Thessaly, which is considered by the most populous academic centers, increases the degree of representativeness in the students population.

6. CONCLUSIONS

In the context of student life characterized by anxiety, crisis of interpersonal relationships, uncertainty and the attempt to redefine the 'self', maintaining emotional and mental health is a key concern. The contribution of Emotional Intelligence and Spirituality is crucial to the acquisition of well-being, happiness and meaning in life. As a result, Emotional Intelligence the level of Mental Health and the overall quality of life of students. It is crucial to promote cultivation with significant benefits in the course of their lives and the community as a whole.

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