الاحتراق النفسي لدي أعضاء هيأة التدريس بكلية التربية البدنية وعلوم الرياضة جامعة طرابلس-ليبي

المقدمة:

الاحتراق النفسي هو متلازمة ذات ثلاثة أبعاد ؛ الإجهاد الانفعالي وتبلد المشاعر ونقص الانجاز الشخصي مما يؤدي الي ضعف الإنتاجية في العمل. لا توجد معلومات عن حجم هذه المشكلة في الأوساط الأكاديمية في ليبيا كما لم تحدد العوامل المرتبطة بها في أوساط الأكاديميين الليبيين.

أهداف البحث: معرفة مدي انتشار متلازمة الاحتراق النفسي بين أعضاء هيأة التدريس وتقييم مدى ارتباطها ببعض العوامل السوشيو الديموغرافية والصحية.

طريقة البحث: مائة وثمانية من أعضاء هيئة التدريس العاملين بكلية التربية البدنية وعلوم الرياضة بجامعة طرابلس استجابوا للاستبيان الذي يحتوي على أسئلة تتعلق ببعض العوامل الشخصية والمهنية والصحية وكذلك مقياس ماسلاش الذي استخدم لقياس الاحتراق النفسي.

النتيجة:سبعة وثلاثون في المائة من الأطباء الذين استجابوا للاستبيان كان لديهم احتراق نفسي . وواحد من كل اثنين يعاني علي الأقل من احدي أبعاد الاحتراق النفسي. الدراسة بينت وجود علاقة بين الاحتراق النفسي وكلا من أمراض القلب وأمراض الجهاز الهضمي والاضطرابات العضلية العظمية .

الاستنتاج: الاحتراق النفسي منتشر بين أعضاء هيأة التدريس بالكلية وله علاقة مع بعض الاعتلالات الصحية. هذه الدراسة فتحت الأبواب لمزيد من الأبحاث المتعلقة بهذه الظاهرة بغية تتبع التغيرات في مستوياتها وكذلك استكشاف المزيد من عوامل الخطر المرتبطة بها.

الكلمات المفتاحية : الاحتراق النفسي، الأستاذ الجامعي، مقياس ماسلاش.

Burnout among academic staff members at Faculty of Physical Education and Sport Sciences (FPESS) – University of Tripoli–Libya

FarajM.Elmezughi,[1]M.B.,B.Ch.,Ph.D,Ahmed Abdallah Hamil[2]

[1]Associate Professorin Anatomy,Department of Rehabilitation and Physiotherapy,Faculty of Physical Education and Sport Sciences, University of Tripoli, Libya

Electronic address:f.elmezughi@uot.edu.ly

Tel.: +218913700216

[2] Lecturer in Rehabilitation,Departmentof Rehabilitation andPhysiotherapy, Faculty of Physical Education and Sport Sciences, University of Tripoli, Libya

Abstract

Objective: The aim of this study was to determine the prevalence of burnout among faculty staff members at faculty of physical education and sport silences9 FPESS) University of Tripoli and evaluate its association with some social demographic factors and physical health disorders.

Background: Burnout is a syndrome with three dimensions; emotional exhaustion depersonalization and reduced personal accomplishment that lead to negative impact on university professors, students and educational system as a whole. No information exists about its prevalence or its risk factors among Libyan academics.

Methods: One hundred and eight academic staff members working at FPESS responded to an anonymous, cross–sectional survey. Burnout were measured using validated Maslach Burnout Inventory–Educators Survey (MBI–ES).

Results: 37%(95% CI:26%-45%) of responders screened positive for burnout, 33%(95% CI:24%-43%) had high emotional exhaustion and 19%(95% CI:12%-29%) had high depersonalization.
Significant association was observed between burnout syndrome and cardiovascular diseases(OR=9.07, P=.002),digestive diseases(OR=14.9,P=.000)and musculoskeletal disorders(OR=3.5,P=.007)..

Conclusion: Burnout is prevalent among academicians at FPESS and it is linked to physical well being problems.This study sheds light over burnout as a mental health issue and paves the way for further pertinent researches to identify more risk factors, and follow up changes in its prevalence.

Key words: Burnout, Academic staff, Libya, MBI.

1.Introduction

According to the World Health Organization (WHO) burnout has been described in the last revision of the international classification of diseases under code QD85,as an occupational syndrome, results from not prevented or badly managed chronic stress in workplaces and its three components have been determined which are; feeling of emotional exhaustion related to one`s job, felling of negativism towards one`s care recipients and loss of achievement in one`s profession(World Health Organization, 2022). Burnout is prevalent among professions which are characterized by intensive and frequent interpersonal contact, among which is the academic career where faculty members are prone to a wide variety of stressors in the academic environment(Maslach&Jackson,1981).

Beside their basic role in teaching and supervising students in undergraduate and postgraduate studies, academicians have to conduct and publish researches in recognized peer viewed journals, superintend doctoral and master`s theses and graduation projects, invigilate at examinations, keep abreast of the latest knowledge, skills and new technology in their field of specialty ,and engage in administrative responsibilities(Shams& El-Masry, 2013; Amer et al., 2022).

They have to achieve all fore-mentioned tasks usually with a deficient material resources and inadequate motivations and remunerations.

Previous studies shown that, burnout in general population and other burnout associated professions has been linked to a range of negative consequences include; physical and mental health disorders, chronic fatigability, impaired memory, disturbed sleep, impaired relationships at workplace, alcohol addiction ,drug abuse, low productivity, absenteeism early retirement, job discontent and job change(Amer et al, 2022; Honkonen et al, 2006;Peterson et al, 2008;Embriaco et al, 2007;Mikalauskas et al, 2018).As compelling evidences still gathering from academia in neighboring countries and indicate that academics are suffering from high levels of burnout (Tamtam et al, 2011;Chalghaf, Azaiez&Elarbi, 2014).

It is essential to scrutinize burnout among Libyan academics in the context of other Arab spring countries which have known for long period of instability and unbalanced weak state institutions including higher educational ones.Therefore,the objectives of this study were to explore the burnout level among academics of faculty of physical education and sport sciences- University of Tripoli (FPESS- UOT),and to identify the

burnout dimension that might associate more with different physical disorders.

2. Material and Methods

2.1 Participants

This cross sectional study was conducted over a period of three months from May to August 2024. All staff members with different academic statuses in different departments at the FPESS –UOT, Libya were eligible for participation in this study. All teaching assistants, lecturer assistants with less than one-year duration of work and those who returned questionnaires with missing data were excluded from the current study. From the sampling frame of one hundred and fifty teaching staff members, one hundred and eight participants formed our convenient sample and received questionnaires manually.

2.2 Instrument

The respondentswere asked to complete a set of two questionnaires. The first one collected data on social demographic and health related characteristics which included; age, gender, marital status, years of experience, academic rank and physical health disorders. The second section of questionnaire contained the Maslach Burnout Inventory-Educators Survey (MBI-ES).

MBI is the most commonly used psychometric instrument for measuring burnout since 1980.The 22 items of the MBI-ES is divided into 3 factors (sub scales) to assess each domain of burnout: emotional exhaustion (EE., fillings of emotional over extension by one's work, nine items), depersonalization (DP., negative and cynical attitudes to words the students, five items), and lack of personal accomplishment (PA., loss of

competence and achievements in one's work, eight items).The participant is asked to answer each item on a Likert scale from zero (never) to six daily (Akter, Zaman & Islam, 2022). The normative scores of each MBI-ES subscales are shown in table 1.The MBI was translated from English to Arabic according to the international test commission guidelines for translating and adapting tests(International Test Commission, 2017).The authors compared the adopted translated version with previous Arabic versions and ensured that it reflects the meaning of items in English (Benzeroual & Nesraoui, 2017; Hamed, 2017).

The diagnostic approach which considers burnout as having a high scores in either EE or DP subscale· was used in this study(Shanafelt et al, 2002;Dyrbye et al, 2008).

Table1. MBI-ES subscales: normative scores.

Burnout subscale	**Burnout subscale level**		
	High	Moderate	**Low**
Emotional exhaustion	**≥ 27**	17-26	**0-16**
Depersonalization	**≥**13	7-12	**0-6**
Personal accomplishment	**0-31**	32-38	**≥ 39**

2.1 Statistical analysis

Statistical package of social sciences(SPSS) statistics version 26.0 was used to analyze the collected data. The descriptive analysis included calculations of means, standard deviation and frequencies (absolute

numbers and percentages)to characterize responding academics and to describe burnout levels among the academicians. Inferential analysis was conducted to estimate association between burnout and burnout components with different physical disorders by using odds ratios (OR) or Chi-square test (X^2).A p value <0.05 was set as a significant level.

3.Results

3.1 Internal consistency of the MBI

Cronbach`s alpha (α) coefficient values for the MBI subscales were:0.87,0.66 and 0,89 for EE,DP and PA respectively as presented in table 2.

Table2. MBI-ES subscales: internal consitency

MBI-ES subscale	α
Emotional Exhaustion (EE)	0.87
Depersonalization (DP)	0.66
Personal Accomplishment (PA)	0.89

α is **Cronbach's alpha** coefficient

3.2Social demographic and health peculiarities of study sample

Of the sample members,83% were males, 93% were married, 72% were 46 years old or elder. The mean age (± SD) of respondents was 50.8(±9) .Almost two thirds of the respondents were assistant professors, associate professors and full professors. Most of participants(82%) had an experience years of 11 or more. Less than one-fifth of teaching staff

members who took part in this study exhibit symptoms related to the musculoskeletal system.Table3 summarizes the sociolect-demographic and health profile of responders.

3.3 Prevalence of burnout and burnout subscales

Specifically, a high degree of burnout is represented by high score in emotional exhaustion or personal displacement. Based on this criteria 37% (95% CI:26%-45%)of academic staff members who were surveyed in this study were identified as suffering from a high degree of burnout.75% of them were male,65% were 46 years old or elder,90% were married, 75% had a an academic rank of an assistant professor or higher, and 80%had an experience of at least 11 years. A high level in at least one of the three MBI dimensions detected in 50% (95% CI:40%-60%) of study subjects. Table 4 exhibits prevalence of burnout subscales among teaching staff members.

3.4 Association of burnout and burnout subscales with social demographic and health variables

To assess such relationship we used bi-variate analysis which revealed that there was no significant association between burnout and any of the social demographic variables. Nevertheless, burnout was significantly associated with cardiovascular diseases(OR=9.1, P=.00),digestive diseases(OR=14.9,P=.00)and musculoskeletal disorders(OR=3.5,P=.01).Emotional exhaustion more significantly associated with the different health problem than do depersonalization .Table 5 reveals associations between burnout components and heath variables.

Table 3. Social demographic and health related characteristics of participants (N= 108)

Table 3 continued

Variable	N	%
Gender		
Male	90	**83**
Female	18	**17**
Age group (years)		
≤35	6	**6**
36–45	24	**22**
≥ 46	78	**72**
Marital status		
Single	8	**7**
Married	100	**93**
Academic degree		
Assistant lecturer	14	**13**
Lecturer	24	**22**
Assistant professor	12	**11**
Associate professor	28	**26**
Full professor	30	**28**
Working years		
≤5	8	**7**
6–10	12	**11**
≥ 11	88	**82**
Sleep disturbance		
Yes	16	**15**
No	92	**85**
Cardiovascular disease		
Yes	10	**9**

No	98	**91**
Digestive disease		
Yes	22	**20**
No	86	**80**
Musculoskeletal disease		
Yes	24	**22**
No	84	**78**

Table 4. Prevalence of burnout dimensions among faculty members

Burnout subscale	**Burnout subscale level**		
	High	Moderate	**Low**
Emotional exhaustion	**33%**	28%	**38%**
Depersonalization	19%	20%	**61%**
Personal accomplishment	28%	19%	**54%**

Table 5. Association between burnout subscales and health conditions

Burnout subscale	Health variable					
	MSD		DD		**CVD**	
	X^2	P value	X^2	P value	**X^2**	**P value**
Emotional exhaustion	14	.00	41	.00	**22**	**.00**
Depersonalization	0.95	0.62	39	.00	**8**	**02**
Personal accomplishment	8	.02	13	.00	**2.7**	**.26**

4.Discussion

The values of Cronbach's alpha of the three MBI subscales are within the acceptable ranges that recommended by many methodologists (Ursachi, Horodnic & Zait, 2015).This indicates that our Arabic MBI-ES version has an acceptable level of an internal consistency reliability as a measure for burnout among Libyan teaching staff members.

It is noteworthy that DP has the lowest Cronbach`s alpha than either EE or PA.This fact could be explained by the potential presence of insufficient effort responding (Hong, Steedl& Cheng,2020).

The current study has revealed that 37% of academic staff members at FPESS are in a situation of suffering from burnout, a result which is similar to the global prevalence of burnout found in a recent systemic review

based on a pool study of 2841university professors (Fernandez Suarez, 2021).

33% (95% CI:24% – 43%) of respondents scored high in the dimension of EE and 19% (95% CI:12% – 29%) in the dimension of DP. These finding are coherent with that found by a study conducted in Egypt by Amer et al.(2022).

Over all, the inconsistency in percentages across published researches may reflect the varying of university environments, populations of samples used and criteria adopted to define burnout.

The results of this study indicated that there was no association between the social demographic variables and burnout. The importance of social context in which the burnout develops may partially explain this negative associations as burnout is primarily linked to work–situated factors rather than individual factors (Maslach, 2003;Bianchi, Manzano–García&Rolland, 2021).Although academic burnout is associated strongly with digestive, cardiovascular and musculoskeletal diseases,

Burnout dimensions are variably related to those physical health problems. This variability in relation between burnout dimensions and different diseases warrant further investigations.

Up to date, there is plausible evidence in the literature points out to the association between professional burnout and Increased systemic inflammation, inflammation mediated factors, cardiovascular risk factors, and cardiovascular diseases(Adebayo *et al,* 2023). In addition, Alighier et al in their recent work observed significant relationship between burnout syndrome and musculoskeletal complaints(Alghadier et al, 2024).Furthermore, significant association was observed between burnout and gastrointestinal symptoms and diseases (Cholongitas &Pipili,

2010;Alzahrani et al, 2023).This research has a number of limitations.First,the response rate has not been calculated since the total number of questionnaires which were distributed is unknown. According to information from teaching staff affairs office in the faculty there are 150 teaching staff members based on this, the estimated and used sample size was more than adequate. Second, with the cross sectional design of a current study we could not be certain about the causative relation between burnout and physical health disorders; which is the cause and which is the outcome.

Third, data may be contaminated by careless responding so that the quality of data cannot be ensured.

5.Conclusion

In conclusion,the prevalence of burnout syndrome among academic staff members at FPESS was similar to that estimated internationally.this situation requires great concern to change it.significant association has been detected between burnout syndrome and most of its dimensions with physical well-being related problems.Therefore implantation of psycho-social intervention programs are necessary to promote the mental health of university professors.finally, further researches are desirable and should focus on young faculty staff members.

Conflict of interest statement

The author and co-author have no competing interest concerning this work.

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