



EFFECTIVENESS OF MUSCLE RELAXATION PROGRAM IN REDUCING THE OCCUPATIONAL - PSYCHOLOGICAL BURNOUT OF LEARNING DISABILITIES EXPATRIATE TEACHERS WHO SUFFER IRRITABLE BOWEL DISORDER IN KUWAIT

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ABSTRACT: *This study aims to investigate the effectiveness of a proposed muscle relaxation program in reducing the occupational - psychological burnout of learning disabilities expatriate teachers who suffer from irritable bowel disorder in Kuwait. Sample of the study comprise 110 teachers (62 male & 48 female) were selected from capital governorates, Hawalli and Mubarak Al Kabeer governorate. Tools of the study were Maslach scale, 1981 for occupational - psychological burnout, which consisted of 22 paragraphs that were answered through frequency and intensity, additionally, the researcher have been prepared a questionnaire to measure the extent of Irritable Bowel Disorder in the sample. Results of the study indicated that the existence of indicators of the existence of occupational (job) psychological burnout disorder on the high level according to the three dimensions: emotional stress, numbness of feelings, lack of sense of accomplishment, and the suffering of both sexes teachers of occupational (job) psychological burnout at the three dimensions: emotional stress, emotional blunting, and shortage of accomplishment sense and its almost equal, and that the increase in the level of occupational (job) psychological burnout accompanied by an irritable bowel disorder in expatriate teachers in Kuwait. The study also found that the application of muscle relaxation program led to a sense of expatriate teachers to improve the irritable bowel disorder, it also reduced the effect of level of occupational - psychological burnout in emotional stress, and emotional blunting dimensions in infection of irritable bowel disorder. finally, the application of muscle relaxation program did not reduce the effect shortage of accomplishment sense in infection of irritable bowel disorder.*

KEYWORDS: Muscle Relaxation, Occupational - Psychological Burnout, Irritable Bowel Disorder.

INTRODUCTION

Education occupation is an occupation of a human nature, its unfree from obstacles and stress that prevent the teacher from performing his required role, which makes a teacher feel unable to perform his work at expected level (Alzuoidi 2007), where suffering stress and exhaustion (combustion) and feeling unable to do his turn inside school (Qaryuti 7002, Hadidi and Khatib 7002).

Stresses leave effects in teacher occupation, level of performance, and aspects of his personality, also effects in his Physical, mental, and emotional aspects, as well as negatively affects in psychological and social adjustment of individual and his occupation and family



relations, there are many physiological, psychological, and social effects of occupational stresses on teachers (Zouidi, 2007),

Zouidi (2007) posit that the teaching occupation for special needs is one of the most occupations replete in occupational stresses, where each student considers to be a special case which is requires prepare educational and separately plans and selection a suitable teaching methods, also these students needs training and helping, the weak in mental capacities and achievement leads a teachers to feel stresses, at the same time they are un-homogenous category, there are no one method can use to teach all of these students, the effective teaching which can help the special needs students in achievements according their ability must consider some factors that related to school and class (Alrousan etal, 2004: 198 – 199).

One of results of exposure to stress known as psychological burnout (Commission ,2001) according to bendar (2011) the psychological burnout has a negative effect on teacher performance and his health, such as high blood pressure, stomach-aches, headaches, neuropathies, ulcers, heart disease and functional and neurotic colon disorder (Shehada 2015, Shehada 2004, al-'Utaibi, 2004, Jamal 2002).

The most prominent of these disorders is (irritable bowel syndrome - IBS) Which is one of the most intestinal disorders next to dyspepsia disorder. It is a disorder in the intestinal function, characterized by abdominal pain, nausea, headache, diarrhea, constipation and bowel movements and has no organic cause (Kellow& Phillips 1987).

Problems of the Study

The teacher's workload has recently increased, after prominent emergence interest in special needs peoples, where the official authorities have started to direct different sectors of society towards better care for special needs people, There has been an attitudes towards establishment many of specialized centres in care and training of special needs people, also rehabilitation of specialized technical staff to provide a best services in society, Perhaps the working with special needs people comes at the top of hierarchy of occupations that can create frustration feelings among workers, these occupation need a special requirements to deal with different category of abnormal individuals, where each individual is considered to be as special case requiring special type of service, training, teaching and helping, as well as the weakness in disabilities individuals capacity and diversity of their problems and its unity sometimes drive the workers to feel frustrated, weak sense of achievement, which is leads to psychological and occupational stresses.

One of these health problems caused by stress is the psychosomatic disorders, abudelmotaleb (2013) find out that the expatriate teachers suffering psychological burnout and psychosomatic disorders because of occupational and economical stresses, and irritable bowel disorder Where the health reports in Kuwait indicates that it is widespread. According to Lehrer (1997) It is necessary to provide appropriate treatment for people suffering a psychosomatic disorder because it's dangerous to mental and physical health of individual, which has proven to be more effective than multiple medical interventions and advise them to learn muscle or respiratory relaxation as a psychotherapy. Hence, this study comes to proposed psychotherapy based on muscular relaxation among special needs teachers which are suffering from psychological burnout and irritable bowel disorder in Kuwait.



Objectives of the study

1. To measure the level of occupational - psychosocial burnout among learning disabilities expatriate teachers in Kuwait.
2. To examine the relationship between the occupational - psychosocial burnout and irritable bowel disorder.
3. To know the effects of the muscle relaxation in reduce of occupational psychosocial burnout and irritable bowel disorder.

Questions of the study

1. What is the level of psychosocial burnout among learning disabilities expatriate teachers in Kuwait?
2. Is there a statistically significant relationship between occupational burnout and Irritable bowel disorder?
3. Does the muscle relaxation program reduce the effect of occupational burnout level in infection of irritable bowel disorder?
4. Are there any statistically significant differences in level of occupational burnout among gender of learning disabilities teachers in control and experimental group in favour of muscle relaxation program?

Hypothesis of the study

1. There would be significant influence of occupational burnout amongst learning disabilities expatriate teachers in Kuwait.
2. There is a significant relationship between occupational burnout and irritable bowel disorder among learning disabilities expatriate teachers in Kuwait.
3. muscle relaxation program would be significant effective to reduce the effects of occupational burnout level in infection of irritable bowel disorder
4. There would be significant effect of gender in level of occupational burnout among learning disabilities teachers in control and experimental group on the base of muscle relaxation program.

Importance of the Study

Importance of this study comes from fewness of Arab studies that investigated the relationship between psychological burnout and irritable bowel disorder, as well as fewness the experimental studies that targeted psychotherapy for this sample. This study also contributes to provision of research and studies in occupational psychological burnout, which directs the attention of school administrators to give attention to teachers and considering their circumstances during work and give attention to teacher.

The Study Concepts

Muscle relaxation programme: the exercises derived from behavioural theory includes intensity of muscles groups and relax it to realize the individual recognizes the difference between the state of intensity and relaxation (Al- Khatib, 2003:315).



Procedural Definition: physiological process that the person controls the physical contractions in a specific disciplined mechanism, which aims to reduce undesirable tensions and relax the self and body.

Psychological burnout: bendar defines it in learning disabilities areas general feeling about dissatisfaction in teaching process, which is lead to a poor teaching in classroom.

Procedural Definition: The score on Lama Slash scale for psychological burnout.

Irritable bowel disorder: disorder in colon function due to increased intestinal sensitivity of irritable bowel disorder patients, and the responsible of this high sensitivity is a clitoral nerve which leading to symptoms in digestive system such as distension, Dyspepsia, disabilities in excretion, although these symptoms are not dangers and do not lead to serious diseases in future, but it is very disturbing to the patient.

Procedural Definition: having some of symptoms according to person's acknowledgement.

THEORETICAL FRAMEWORK AND LITERATURES REVIEW

Psychological burnout is one of most serious problems affecting professionals, especially in human relations and services area. These challenges and variables have turned a change in this phenomenon, making the competent institutions try to find ways to cope these stresses and psychological exhaustion.

Matteson & Ivancevich, 1978 posit that the psychological burnout phenomenon does not happen suddenly, but includes three phases: phase of introspection, here the level of work satisfaction is high, phase of confusion where the level of work satisfaction begins to progressively decline, and the efficiency decreases, then reaches to of separation phase and begins to psychological retreat, illness in physical and psychological health, and high level of psychological stress, finally, the critical phase here the symptoms increase and become danger, also the individual reaches to explosion stage and the individual begins to think about leaving the work or committing suicide (Zahrani, 2008 and Zidane, 1998).

Shimes' (Cherniss, 1988, 37) in list of symptoms that may affect a psychologically burnout teacher such as weak in desire to go work, exhaustion most of day, avoid friends' conversation, persistent absenteeism, negative in dealing, and blame and doubt others (Abu al – Diyar, 2006). Joseph Blas presented a social-psychological model for psychological burnout of teacher called theory of psychological burnout, which emphasizes in importance of variables of work performance and courses of interaction of teacher and student, this theory has derived its framework from theory of teacher performance motivation. Therefore, the psychological burnout may indicate a gradual erosion of technical, psychological, and social skills where psychological burnout is the end of real depletion of professional skills and poor of ability to perform effectively (Zahrani, 2008).

In 1956, Hans Selye introduced his theory in stressess and rephrased it in 1976 where called General Adaptation. Selye mentions that the repeated exposure to psychological burnout has a negative effect on an individual's life; where psychological burnout imposes on individual physiological, social, or psychological requirements, or maybe come together, although the response to those stresses may seem successful, but the individual's accumulation of energy to



cope this psychological burnout may appear in form of psychological and physiological symptoms. he described these symptoms based on three phases of response to that psychological burnout (Zahrani, 2008 and Zidane, 1998:14).

It is the alarm phase that shows physiological change in body, and then resistance phase where the individual begins at this phase to development of qualitative resistance to burnout factors leading emergence of some psychosomatic disorders, after that the individual reaches to exhaustion phase, which happen if coping continues between body and stimulant for a long time (Zidane, 1998).

The recommended technique for the teacher to coping the psychological problems can be divided into (Nyal 1999): Pre-service strategies including realism at work, Reduce stress strategies such as muscle relaxation. and strategies during work, including friends support and program designed to reduce the psychological burnout and control stress.

Irritable bowel disorder is one of the most common physical diseases affecting the digestive system, which is affected by stress. It has a global prevalence of 11% and it's one of the most exposed organs of body and a reflection of stress, according to some studies 77% of people in the world suffers irritable bowel syndrome, and other studies in 1980s, presented 10 - 17% of Americans people, and 13.6% of British adults suffer irritable bowel syndrome (Blanchard, 2001). The most common mental ailment people with irritable bowel syndrome have is generalized anxiety disorder, Blanchard says more than 60% of Irritable bowel disorder patients with a psychiatric illness have that type of anxiety. Another 20% have depression, and the rest have other disorders. Regardless of whether they have irritable bowel syndrome, people with anxiety tend to worry greatly about issues such as health, money, or careers. Other symptoms include upset stomach, trembling, muscle aches, insomnia, dizziness, and irritability.

There's evidence that keeping stress under control can help the individuals prevent or erase Irritable bowel symptoms. The individual could learn about Muscle relaxation techniques such as deep breathing or visualization, where the individual imagines a peaceful scene or can zap tension by simply doing something enjoyment (Preiss et al., 2011).

Muscle relaxation program refers to many techniques designed to teach someone to be able to relax voluntarily. Programs most often include training in special breathing and progressive muscle relaxation exercises designed to reduce physical and mental tension (Lichtenstein 2010). Massage, watching relaxing videos or listening to special music for relaxation do not constitute relaxation therapy, although they are sometimes included as part of a relaxation therapy program. Muscle tension is usually associated with stress and anxiety, which are strongly associated with depression. Becoming aware of the link between depressive thoughts and mental and muscle tension may help (Soble 2000).

There have been many randomized controlled trials on the effect of relaxation therapy for people with depression. In general, it works better than no treatment but not as well as psychological treatments such as Cognitive Behavioral therapy. The longer-term effects of relaxation therapy are uncertain. Muscle relaxation therapy is not for everyone (Huang, 2001). Some people who are very depressed or anxious or who have other types of mental health problems find that relaxation doesn't help. It might even make them feel worse. Please check



with your doctor before trying relaxation therapy (Al-maleh, 2007), (Al-Hajjar, 1990), (Shimon, 1995) and (Ali, 2013).

Literatures Review

Many of experimental studies have been conducted and aimed to reduce high blood pressure by using muscle relaxation, which has proven effective in reduce of blood pressure symptoms, such as study of (Al-Habies, 2003), (Chesney ,1999), (Amigo, 1997) and study of (Cooper, 1997). On other hand, some studies have been conducted to examine the occupational-psychological burnout among special needs teachers, such as study of al- kharabsheh and Arabyate, 2005, Attiyah and Essawi, 2004, Sari. 2004, and al-batainah and al-Jawarneh, 2004, the results of these study indicated that there are significant effects of occupational-psychological burnout among special needs teachers.

Alqaryouti, 2008 posit that the level of occupational- psychological burnout becomes high bu increasing the scientific qualifications, while abed almitaleb, 2013 says that there is a positive relation between the occupational burnout and work alienation. Moreover al-zahrani find out that the occupational burnout is in positive associated with personal attributes. Finally, Alzuodi, 2007 and Alkhateeb 2006, indicated that the occupational burnout in negative relation with monthly income, experience years and specialization of teacher. Related to occupational burnout treatments, Zidane, 1998 have been used the ration emotion therapy model, while Abu-Aldair, 2006 have been used the cognitive behavioral therapy. Whereas, other studies have been used a muscle relation exercise to reduce level of stress such as baker, 1995 and Dahadha, 1995 and the results of the study presented a statistically significant effect.

Lizhang& Kunyao, 2014, Van, Palsson, & Whitehead, 2013, Chang et.al, 2014, and Amarin, 2014 in theirs studies find out that there is a correlation between stress, anxiety, and Irritable bowel disorder, additionally to high level of depression some disorders in attention, focusing, memories, and thinking processes.

Method of the Study

Populations and Sample of the Study

Population of the study compromise the expatriate teachers of learning disabilities in Kuwait, capital governorates, Hawalli, and Mubarak Al-kaber governorate, and the sample included 110 teachers (62 male and 48 female).

Tools of the Study

First, The Maslach teacher burnout inventory M B I, have been used to measures the occupational psychological burnout among learning disabilities teachers which is translated to Arabic language by the researcher, this scale consisting 22 items, and the responder requested to answering twice to each item, the first answer indicates to felling repetition, while the second answer indicates to intensity of feeling, the total score can be describe in below table 1 (Maslash & Jackson 1981):

**Table 1**

Domain	High	Medium	Low
Emotional stress	27 and more	17 - 26	16 and less
Emotional blunting	13 and more	12 - 7	6 and less
Shortage of accomplishment Sense	31 and less	32 - 38	39 and more

The reliability of the tools has been investigated by Alpha Cronbach test, and the correlation coefficient was (emotional stress = 0.73, emotional blunting = 0.80, and the shortage of accomplishments sense domain = 0.70), the total score of scale was 0.77.

Second, Muscle relaxation program: Muscle relaxation program which is founded by Jamal Al-khatib, 1987 have been applied twice on 18 males and 12 females for one month with interval of one-month, total time taken by exercise 12 minutes, after that the researcher sharing link recoding in Facebook daily to make it easy Appling in home, work, WhatsApp, twitter, and other social work media.

RESULTS AND DISCUSSIONS OF THE STUDY

First question: what is the level of psychosocial burnout among special education expatriate teachers in Kuwait?

To answer this question means, standard deviations, and the level have been calculated, and table 2 indicates the results.

Table 2: The General Level of Occupational Burnout.

Domain	Means	Standard Deviations	Level
Emotional stress	27.58	7.49	High
Emotional blunting	13.58	4.24	High
Shortage of accomplishment Sense	29.05	6.01	High

Table 2 shows that the level of occupational burnout for domains and total scale are high, hence the results indicates that there is an occupational burnout disorder among learning disabilities expatriate teachers in Kuwait. The findings of this study agree with previous study it is consistent with study of Abed Al- Mutaleb (2013), Al-Zafari (2010), Al-Zafari and Al-Qariuti (2010), Alzuoidi (2007), Abu-Aldair (2006) and study of Kharabsha and Arabiyat (2005) which are presented that there are high level of occupational burnout among expatriate teachers in Kuwait. This may be due to size of frustrations, the threat of dismissal and the lack of peace of promotion for them, as well as the new economic policies that have reduced their salaries.

Question two: Is there a statistically significant relationship between occupational burnout and Irritable bowel disorder?

Spearman's correlation coefficient have been calculated between dimensions of occupational burnout and Irritable bowel disorder in table 3:

**Table 3**

Dimensions of Occupational Burnout	Irritable Bowel Disorder	
	Correlation Coefficient	Sig
Emotional stress	0.275	0.004*
Emotional blunting	0.327	0.000*
Shortage of accomplishment Sense	0.250	0.008*

Significant at ($\alpha \leq 0.05$)

Table 3 presents that there are positive significant relationship between dimensions of occupational burnout and Irritable bowel disorder among learning disabilities expatriate teachers in Kuwait., this means that the increasing in level of occupational burnout is accompanied with irritable bowel disorder. This result is consistent with study of Abu-Aldair (2006), Al- Zahrani (2008) and study of Ramadan (2011).

Third question: Does the muscle relaxation program reduce the effect of occupational burnout level in infection of irritable bowel syndrome?

Table 4: Hierarchical Regression Analysis

Dependent variable	independent variables	Pre- test			Post – test		
		B	t value	t Sig	B	t value	t Sig
irritable bowel syndrome	Emotional stress	0.018	2.373	0.021	0.007	0.958	0.342
	muscle relaxation program				-0.690	-6.433	0.000
	R ²		0.088			0.472	
	ΔR^2		0.088			0.384	
	ΔF		5.631			41.384	
	Sig ΔF		0.021			0.000	
	Emotional blunting	0.034	2.539	0.014	0.011	0.884	0.380
	muscle relaxation program				-0.688	-6.381	0.000
	R ²		0.100			0.471	
	ΔR^2		0.100			0.371	
	ΔF		6.447			39.913	
	Sig ΔF		0.014			0.000	
	Shortage of accomplishment Sense	0.013	1.184	0.241	0.008	0.954	0.344
	muscle relaxation program				-0.625	-6.955	0.000

Significant at ($\alpha \leq 0.05$)



Table 4 manifests the Hierarchical regression analysis in two models, results of per- test presented that there are significant differences for all dimensions in Irritable bowel disorder where the emotional stress describes 8.8%, also the emotional blunting has described 10.0% and the shortage of accomplishment Sense dimension describe 2.4% of regression analysis in Irritable bowel disorder. While the results of post-test " after entering the muscle relaxation program for regression analysis " presents increase the value of emotional stress factor $R^2 = 38.4\%$, also in emotional blunting $R^2 = 37.1\%$ and the shortage of accomplishment Sense dimension $R^2 = 44.8\%$. these percentages are statistically significant, the researcher find out that there is adaption in results of Irritable bowel disorder and occupational burnout results.

Question number four: are there any statistically significant differences in level of occupational burnout among gender of learning disabilities teachers in control and experimental group in favor of muscle relaxation program?

Table 5: Results of t-test for Experimental Group.

Dimensions	Type	Number	Mean	Standard Deviations	Differences Between Means	t	sig
Emotional stress	Pre	30	35.40	5.07	8.50	5.016	0.011*
	Post	30	26.90	7.77			
Emotional blunting	Pre	30	14.779	3.49	4.97	5.252	0.00*
	Post	30	9.80	3.83			
Shortage of accomplishment Sense	Pre	30	27.23	5.61	-1.04	0.699	0.488
	Post	30	28.27	5.84			

Significant at ($\alpha \leq 0.05$)

Results in above table 5 indicated that there are statistically significant in level of occupational burnout among the experimental group before and after muscle relaxation program in emotional stress and emotional blunting. Whereas, there is no statistically significant in shortage of accomplishment sense dimension. The researcher posites that the coping of occupational burnout requires a real practice for long time to achieve the effects of muscle relaxation program, where the emotional stress and emotional blunting its internal feeling which can affected by thinking process of individuals.

Table 6: Results of t- test for Control Group.

Dimension	Type	Number	Mean	Standard Deviations	Differences Between Means	T	sig
Emotional stress	Pre	30	33.23	6.81	1.67	0.947	0.348
	Post	30	31.57	6.83			
Emotional blunting	Pre	30	14.17	4.79	0.97	4,230	0.807
	Post	30	13.20	4.79			
Shortage of accomplishment Sense	Pre	30	27.10	5.65	-0.87	-	0.565
	Post	30	27.97	5.95			

Significant at ($\alpha \leq 0.05$)



Table 6 indicates that there are no statistically significant differences in level of occupational burn out among control group, because the group did not expose to treatment by muscle relaxation program.

REFERENCES

- Abdulmutallab, A (2013) psychological burnout and its relation to work alienation and body disorders among sample of expatriate teachers in Kuwait, *Social sciences Journal, Kuwait university* 41(3) 11 – 50.
- Abu Al-Diyar, M (2006) *The Effectiveness of a Selective Mentoring Program in Reducing Psychological exhaustion among Special Needs*", unpublished PhD thesis, Tanta University.
- AL- Khatib, J (2003) *Behavioural Modification: A Guide for Social, Psychological, and Social Workers*, Jenin House for Studies and Distribution, Amman, Jordan.
- AL- Khatib, J (2004) *Teaching of special needs students in regular school*. Amman. Dar Wael.
- Alan R. Shoho ,& David S.Katims .(2003) : " A comparison of burnout among general and special education teaches ", *Stress and Coping in Education* ,1(6) :44-65.
- Al-habeis, f (2003) *The effect of muscular relaxation in reducing high blood pressure among Jordanians at Hospital of University of Jordan*. Unpublished Master Thesis, University of Jordan.
- Al-Hadidi, Mona-Al-Khatib, J (2005). *Strategies for teaching of special needs students*. Amman. Dar Al Fikr.
- Al-Zafari, S and Al-Qariouti, I (2010) *Psychological burnout among teachers of learning disabilities students in Oman*. *The Jordanian Journal of Educational Sciences*. 6(3) 147 – 162.
- Amigo, I. Gonzalez, A. Herrera,J . (1997)" Strees" ,*Medicine* 13: 59-65.
- Andresen, V.; Keller, J.; Pehl, C.; Schemann, M.; -Preiss, J. & Layer, P. (2011): *Irritable bowelsyndrome – the main recommendations*. *DeutschesArzteblatt International*, 108 (44), 751-771.
- Baitina, O and Hassanna, M, Bellah (2004) *Levels of psychological burnout among teachers of special education in Irbid and its relationship with some variables*, "Journal of Eitihad.
- Bakr, S (1996) *The Effect of Muscle Relaxation as a Method to Control of Psychological Stress on self-esteem*", Unpublished Master Thesis, Graduate faculty, University of Jordan
- Binder, William (2011) *Learning disabilities: characteristics, identification, and teaching strategies*. translated by: abdulrahman sulaiman, al-tohamy, mahmoud tantawi, book world library - cairo.
- Blanchard,E.B .(2001) : *Irritable bowel syndrome . Psychological assessment and treatment*. Washington DC, American Psychologist Association.
- Chang, M.; Shapiro, D.; Joshi, A.; Shahabi, L.; Tan, S.;Smith, S. & Naliboff, B. (2014): *Stress reactivity intraditional Chinese medicine-based subgroups of patients with irritable bowel syndrome*. *JournalAltern Complement Medicine* 20 (4), 276-2 83.
- Cherniss, Cary. (1988) *Observed supervisory behavior and teacher burnout in special education* , Council for Exceptional Children , *Exceptional- Children* , 54(5) : 449-454.



- Chesney, M, A. Black,G,w.Swan,G,E& Ward,M,M (1999) : Relaxation training for essential hypertension at the work site" , Psychosomatic Medicine , 36 : 737-743.
- Commission on Excellence in special Education (2001) Revitalizing special education for children and their families. www.ed.gov/inits/commissionsboards/whspesialeducation.
- Cooper,M.J. (1997) : " The effect of relaxation therapy on mild hypertension and and renergetic activity – A controlled trial" , Psychosomatic Medicine, 59: 101-120.
- Dahadha, B (1995) The impact of training on problem solving and muscle relaxation in control of Psychological stress. "Unpublished MA thesis, Yarmouk University, Irbid, Jordan.
- Eileen, M (2005) What to eat if you have a irritable bowel syndrome. Cairo, Egypt: Dar Al Farouk Publishing and Distribution.
- Fukudo, S. (2013): Stress and visceral pain: focusing on irritable bowel syndrome, Pain, Supply, (154),63-70, Doi: 10. 1016/Journal Pain.
- Fukudo, S. (2013): Stress and visceral pain: focusing on irritable bowel syndrome, Pain, Supply, (154),63-70, Doi: 10. 1016/Journal Pain.
- Hajjar, M .H (1990) The art of therapy in cognitive behavioural. Dar Al-Eilm,
- Huang, I.K (2001) Psychosomatic Medicine and Stress Reduction . {on line} yanxingong, bc.ca.
- Jamal, M (2002):" Type "A" Behavior and Job Burnout: Across Cultural study". Arab Journal of Administrative science. 9(3) :441- 456.
- Kellow, J.E & Philips, S.F (1987): " Altered small bowel motility in irritable bowel syndrome is correlated with symptoms ". Gastroenterology, 92, 1885-1893.
- Kharabsheh, O. Arabiyat, A (2005) Psychological burnout among workers with Learning Disabilities, "Umm Al Qura University Journal for Educational, Social and Psychological Sciences .708-892: 7(82).
- Lackner, J.; Gudleski, G.; Dimuro, J.; Keefer, L. &Benson, H (2001). Body –mind pioneer, Psychology Today, 34,56.
- Lehrer, P. (1997): "Psycho physiological hypotheses regarding multiple chemical sensitivity syndromes", Environmental Health Perspectives Supplements, 10 (5), 479-483.
- Lichtenstein, G. (2010): Small and Large Intestine. University of Pennsylvania, Pennsylvania.
- Liu, L.; Xiao, Q.; Lizhang, Y. & Kunyao, Sh. (2014): A cross-sectional study of irritable bowel syndrome in nurses in China: Prevalence and associated psychological and life style factors. Journal Zhejiang University Science, 15(6), 590-597.
- Majali, S (2003) Neuropsychological characteristics of patients with irritable bowel syndrome. Journal of Educational and Psychological Sciences, University of Bahrain. 4 (4) 44 – 104.
- Maslash, c; Jackson S E (1981) The Measurement of Experienced Burnot. Journal of Occuational Behavior, 2(2), 99-113.
- Matteson, M.T& Ivancevich,J.H. (1987) : Controlling works , San fracisco , jossy bass.
- Miller AR, North CS, Clouse RE, Wetzel RD, Spitznagel EL, Alpers DH. (2001): " The association of irritable bowel syndrome and somatization disorder", Ann Clin Psychiatry. Mar;13(1):25-30
- Ramadan, R (2011) occupational burnout and its Relation to Professional Satisfaction among primary School Teachers ", Educational Magazine Kuwait University, 722 – 829 (8).
- Rousan, F, Al- Khatib, J, Natour, M (2004) Learning disabilities, first edition
- Samadoni, S (1995) psychological burnout, Journal of Contemporary Education, April 1 – 19.



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- Sari, H. (2004):" An analysis of burnout and job satisfaction among Turkish special school head teachers and the factor effecting their burnout and job satisfaction", *Educational Studies*, 30 (3): 291- 306.
- Sartawi, Z (1997), "Psychological burnout and its sources among Special Education Teachers", *Journal of the Faculty of Education, Ain Shams University*, Volume 21 (92) 1 – 57.
- Shimon, M (1995) *Mental Training - Relaxing the Way to the Championship*. "Arab Federation of Sports Medicine, *Journal of Sports Medicine Sciences*, Bahrain, (2) 19.
- Soble, R. (2000): *The wisdom of the gut*. *US. News &World Report*, 128 (13), 50-65. The Arab Open University.
- Van, M.; Palsson, O. & Whitehead, W. (2013). Which psychological factors exacerbate irritable bowel syndrome? Development of a comprehensive model. *Journal Psychosomatic Research* 74 (6) 486-492.
- Zahrani, Nawal. (2008). *Psychological burnout and its relation to personal attributes among female workers with Special Needs*, "Unpublished Master Thesis, University of Umm Al-Qura University, Makkah, Saudi Arabia.
- Zaidan, I, MM (1998): *The Effectiveness of Directed and Non-Directed Psychological Counselling on the Reduction of psychological burnout among Sample of Female Teachers*", Unpublished PhD Thesis, Institute of Educational Studies and Research, Cairo University.
- Zuodi, H (2007): "Sources of Stress and Psychological burnout among Special Education Teachers in Karak and its Relation to Some Variables", *Journal of Mu'tah University*, (2) 789-829.