Middle-East Journal of Scientific Research 12 (3): 340-346, 2012
ISSN 1990-9233

DOI: 10.5829/idosi.mejsr.2012.12.3.64183

# Mental Health Status and Demographic Factors Associated with it in Teachers

*Safoora Davari and Msoud Bagheri*

Department of Psychology University of Kerman,
Faculty of Shahid Bahonar, University of Kerman, Iran

**Abstract:** The aim of present study was to investigate mental health status and associated demographic factors among teachers of Rodan's town, Iran. This analytical-descriptive study was carried on teachers living in Rodan's town, Iran in 2010-2011 school years. 274 teachers (150 Male and 124 Female) among three grades were chosen with cluster sampling stratified random, completed demographic questionnaire and general health questionaire-28 (GHQ- 28). Data analysis was done by mean, percent, frequency, One-sample t test, independent t test, one – way analysis variance, Leven test and tuky test in SPSS. The result of data analysis by descriptive statistics showed that relatively large number of teachers had mild mental health problems but data analysis by inferential statistics did not show mental health problems in teachers. Variables such as, sexuality, age, place of life and perceived socioeconomic class also had an impact on the variables studied. Although the teachers did not show problems of mental health at all a relatively large number of them had the problems of mental health which need special attention.

**Key words:** Mental Health · Demographic Factors · Teachers

## INTRODUCTION

Mental health is one aspect of the overall concept of health which is so broadly used but a comprehensive and complete definition has not been provided for it that is agreed by the majority of researchers and scholars [1].

However, despite various definitions, today researchers consider the interaction between psychological, biological and social variables in examining mental health [2].

Thus, given that mental health contains all biological, psychological and social aspects of a person, investigating the condition, identifying related factors and promoting it are the most important objectives of a society and in this regard mental health of teachers is much more important than other classes in the community [3] because future human investments of the community (today's children and adolescents) are at the hands and as a result their lack of mental health (behavioral problems, stressful factors) can be effective in creating psychological disorders and behavioral problems of students as well [4]. Moreover, psychological health of teachers makes their healthy thought and interaction with the environment well possible and increases their social compatibility [5]; and as a result causes better relationship between teachers and students and through this can be linked to mental health of students, too.

It is worth mentioning that teachers play a significant role in providing mental health services (identifying problems of mental health, evaluating mental health interventions, preparing the foundation of interventions and referring students to counseling centers) [6-8]. In this respect, expectation of the community is so high that it is suggested that the required skills and abilities for getting involved in mental health problems of students be taught to them well in teaching training centers [9].

Therefore, increasing cognition and awareness of teachers about their mental health and factor affecting it can also empower teachers more in performing this responsibility.

However, despite the significant importance of teachers' mental health (regarding the relationship it has with students' mental health) [3], in many internal and external studies, the prevalence rate of lack of mental health in teachers' community has been reported even more than general population of countries. For example, a

**Corresponding Author:** Safoora Davari, Department of Psychology University of Kerman,
Faculty of Shahid Bahonar, University of Kerman, Iran.

study in Australia has reported the prevalence rate of acute psychological disorders in teachers of this country 17 percent, i.e. about twice more than the 9 percent prevalence rate of general population of this country; on another one in Brazil has reported it to be 41.5 percent [4]. Studies in China have also reported the health condition of teachers to be lower than general population of the country and their working pressure to be even more than doctors [10]. Similarly in Iran, the study by Bakhtiar pour [11] has reported the prevalence rate of psychological disorders among teachers of Isfahan province 26.5 percent, which is more than the 19.92 percent overall psychological disorder in urban community of Isfahan.

Furthermore, the study of occupational burnout of teachers that is associated with their lower psychological health [12] represented some degrees of occupational burnout in the majority of elementary teachers of Kerman province [13]; and similarly the majority of teachers of Kashan city have been reported to have mild occupational burnout, 28.1 percent moderate occupational burnout and 15.4 percent severe occupational burnout [14]. In fact, teaching has always been raised as a job with high risk of occupational and mental burnout [15].

Many studies have examined the relationship between various factors and mental health of teachers that different and sometime contradictory results have been reported. For example, the study by Yang *et al.* [10] in China demonstrated that age and sexuality are associated with life quality of teachers and life quality is also correlated with their mental health. So that female and older teachers had lower mental health [10]. Higher rate of psychological symptoms in female teachers has been confirmed by the study of Shakiba *et al.* [16].

Many studies demonstrated that demographic factors such as sexuality, age, family position and teaching level are associated with mental health of teachers [3, 11, 15] Bakhtiar Pour's [11] also found higher prevalence rate of these disorders in married teachers.The study by Arasteh [4] also confirmed the relationship between sexuality and mental health, but reported more prevalence rate of psychological disorders in male teachers than female teachers; such that depression prevalence was significantly higher in male teachers than female teachers.

However, contrary to the mentioned studies, the study by Nourian Najaf Abadi and Jahangir [17] didn't find a significant relationship between sexuality, marital status and service location of teachers; and only demonstrated that there is a significant relationship between social trust and mental health of teachers. Similar results (lack of relationship between mental health and demographic variables: age, sexuality, occupational status, education field) were reported by Sadghi *et al.* [18] in their study on employees of an educational and clinical center. Besides what mentioned above, other studies indicated significant relationship between factors such as job satisfaction [19], coping skills [20], work-family conflict [21] and mental health of teachers.

Results of such studies increase the importance of conducting studies related to the effect of various factors on mental health of teachers; because by knowing and controlling these factors some measures can be performed for solving teachers' problems and promoting their mental health, such as holding school preparation courses that increase perception of expertise, job control and behavior management with students in teachers and has a significant effect on controlling teachers' mental pressures [22].

Hence, according to what has been mentioned, this study aimed to examine teachers' mental health condition of Roodan towan, Iran and demographic factors associated with it.

## MATERIALS AND METHODS

This descriptive-analytic study was performed as cross-sectional on formal or on-contract teachers of Roodan town, Iran in school year 2010-2011. The statistical sample was considered 290 persons according to the table of Kuji Marji and counting sample loss, who were selected by stratified cluster sampling (strata based on sexuality and teaching level of teachers). After putting aside discredited and incomplete questionnaires, eventually data of 274 persons were analyzed as the statistical sample of the study. The research instruments were:

**A:** Demographic characteristics questionnaire that contained information in relation to sexuality, age, level of education, teaching level, marital status, the perceived socioeconomic class and life location of teachers.

**B:** Mental health questionnaire (GHQ-28) that has indicated the most credibility and sensitivity among its various versions and is suitable for all individuals in society. This questionnaire consisted of the four subscales of physical symptoms, anxiety and insomnia, social dysfunction and depression and evaluated questions about the individual's mental condition in the last month. It should be mentioned that the lower the score of the individual in this test and its subscales,

the better mental health she/he had [23], therefore, this issue should be considered in results interpretation and correlations.

In Iran, many studies have used this questionnaire for assessing mental health and suitable Chronbach's alpha coefficients have been reported for the overall mental health and its subscales [23]. In the present study, 0.89, 0.75, 0.79, 0.75 and 0.80 Chronbach's alpha coefficients were obtained for the overall mental health, physical symptoms, anxiety and insomnia, social dysfunction (function disorder) and depression respectively. In this study similar to that of Arasteh [4] the cut-off score of 23 was considered for the overall mental health and 14 for each component of mental health which means that those who obtained 23 and higher in the overall mental health or 14 and higher in each of components had mental health problem.

## RESULTS

This demographic features of the participated teachers in the study indicated that form the total number of 274 studied teachers, 150 were males (54.7%) and 124 were females (45.3%), 222 lived in the city (81%) and 52 in the village (19%), 231 were married (84.3%), 38 single (13.9%), 1 divorced (0.4%) and 4 widowed (1.5%), 14 had diploma (5.1%), 119 associate of arts diploma (43.4%), 137 undergraduate (50%), 3 postgraduate (1.1%) and 1 seminary (0.4%) education degree. Also 70 males and 55 females taught in elementary level (45.6%), 48 males and 38 females in guidance school level (31.4%), 33 males and 30 females in high school level (23%).

Descriptive statistics of the study variables also indicated that 200 of teachers (73%) had no or the lowest, 63 (23%) mild, 9 (3.3%) moderate and 2 (0.7%) severe physical symptoms. It can be said that 74 of teachers (27%) have had mild, moderate and severe physical symptoms.

Also 190 of teachers (69.3%) have had no or the lowest, 71 (25.9%) mild, 9 (3.3%) moderate and 4 (1.5%) severe anxiety and insomnia. Thus, it can be said that 84 (30.7%) of teachers have had mild, moderate and severe anxiety and insomnia.

Moreover, 169 of teachers (61.7%) have had no or the lowest, 100 (36.5%) mild, 3 (1.1%) moderate and 2 (0.7%) severe social dysfunction. Thus, it can be said that 105 (38.3%) of teachers have had mild, moderate and severe social dysfunction.

Also, 259 of teachers (94.5%) have had no or the lowest, 11 (4%) mild, 3 (1.1%) moderate and 1 (0.4%) severe depression. Thus, it can be said that only 15 (5.5%) have had mild, moderate and severe depression.

Regarding the overall mental health, 220 of teachers (80.3%) have had no or the lowest, 46 (16.8%) mild, 7 (2.6%) moderate and 1 (0.4%) severe mental health problem. Thus, it can be said that 54 (19.7%) of teachers have had mild, moderate and severe mental health problem. In the following, in order to more accurately examine the rate of mental health and its components in teachers (cut-off 23 for the overall mental health and cut-off 14 for components of teachers' mental health), a one-sample t-test was performed. In this test (according to Table 1) the significance level was obtained less than 0.01. Thus, it can be concluded that teachers enjoyed the overall mental health; and physical symptoms, anxiety and insomnia, social dysfunction and depression were not significant in them.

In the following, means of the study variables were examined using appropriate tests according to the demographic variables such as: sexuality, age, life location, marital status, education degree, teaching level and the perceived social class.

To examine the effect of sexuality on the study variables, Levine test was performed first using independent t-test that in this case the null hypothesis of the test was accepted for all variables at $\alpha$=0.01, therefore, with 99%confident, equality of variances was accepted based on sexuality.

Then, a dependent t-test was performed that according to Table 2, it can be concluded that with 99% confident, physical symptoms and anxiety and insomnia of female teachers were higher; and their mental health was lower than male teachers.

Examining the effect of age on the study variable (according to Table 3) also demonstrated that with 99% confident, teachers' age only affected their physical symptoms rate; did not affect their anxiety and insomnia, social dysfunction, depression and mental health rate. After performing Tukey post hoc test it was found that by increasing teachers' age, their physical symptoms rate has been higher.

To examine the effect of life location on the study variables, at first Levine test was performed that similar to sexuality, the null hypothesis of Levine test was accepted for all variables at $\alpha$=0.01. Therefore, with 99% confident, the hypothesis of equality of variances was accepted for all variables based on life location.

Table 1: One-sample t-test, examining the rate of mental health and its components in teachers

| Variable | Mean | t | df | P-value.1-tailed |
|---|---|---|---|---|
| Physical symptoms | 7-May | -5.333333333 | 273 | 0/000 |
| Anxiety and insomnia | 1-May | -2.529411765 | 273 | 0/000 |
| Social dysfunction | May-42 | -2.833333333 | 273 | 0/000 |
| Depression | Jan-78 | -2.961538462 | 273 | 0/000 |
| Mental health | 17/28 | -0.208333333 | 273 | 0/000 |

Table 2: Dependent t-test for comparing the study variables between male and female teachers

| Variable | Sex | Mean | SD | t | df | P-value.1-tailed |
|---|---|---|---|---|---|---|
| Physical symptoms | Male | 4-Apr | 7-Feb | -4/5** | 272 | 0/000 |
| | Female | 9-May | 1-Mar | | | |
| Anxiety and insomnia | Male | 5-Apr | 4-Mar | -2/7** | 272 | 0/003 |
| | Female | 6-May | 5-Mar | | | |
| Social dysfunction | Male | 4-May | 3 | 0 | 272 | 0/405 |
| | Female | 5-May | 5-Feb | | | |
| Depression | Male | 6-Jan | 5-Feb | -0.25 | 272 | 0/088 |
| | Female | 2-Feb | 7-Feb | | | |
| Mental health | Male | 15/8 | 4-Sep | -2/9** | 272 | 0/001 |
| | Female | 19/04 | 3-Aug | | | |

Table 3: One-way variance analysis, comparing means of mental health and its components based on teachers' age

| | Age | | | | |
|---|---|---|---|---|---|
| Variable | Less than 30 years | Between 30 to 40 years | More than 40 years | F | P-value |
| Physical symptoms | May-96 | 1-May | Mar-93 | Jun-55 | 0/002 |
| Anxiety and insomnia | Apr-72 | 24-May | Apr-50 | 8-Jan | 0/342 |
| Social dysfunction | 21-May | May-42 | May-41 | 0/15 | 0/860 |
| Depression | Jan-39 | Jan-90 | Jan-87 | 0/97 | 0/381 |
| Mental health | 17/28 | 17/57 | 15/72 | 0/74 | 0/479 |

Table 4: Dependent t-test for comparing the study variables based on teachers' life location

| Variable | Life location | Mean | SD | t | df | P-value.1-tailed |
|---|---|---|---|---|---|---|
| Physical symptoms | City | 2-May | 1-Mar | 1/66* | 272 | 0/049 |
| | Village | 4-Apr | 6-Feb | | | |
| Anxiety and insomnia | City | 3-May | 5-Mar | 2/6** | 272 | 0/004 |
| | Village | 9-Mar | 1-Mar | | | |
| Social dysfunction | City | 4-May | 8-Feb | 0/22 | 272 | 0/412 |
| | Village | 3-May | 7-Feb | | | |
| Depression | City | 9-Jan | 8-Feb | 9-Jan | 272 | 0/137 |
| | Village | 4-Jan | 9-Jan | | | |
| Mental health | City | 17/8 | 3-Sep | 1/94* | 272 | 0/026 |
| | Village | 15/1 | 6-Jul | | | |

Table 5:One-way variance analysis, comparison of the means of the study variables based on socioeconomic class

| | Socioeconomic class | | | | | | |
|---|---|---|---|---|---|---|---|
| Variable Mean | low | Medium to low | Medium | Medium to high | High | F | P-value |
| Physical symptoms | 5-Jun | 7-Apr | 1-May | 1-May | 4-May | 0/4 | 0/832 |
| Anxiety and insomnia | 5-Aug | 3-May | 9-Apr | 7-Apr | 5 | 2-Jan | 0/326 |
| Social dysfunction | 8 | 4-Jun | 4-May | 6-Apr | 1-Jun | 2/6* | 0/035 |
| Depression | 5-Jun | 8-Jan | 7-Jan | 6-Jan | 2 | 3/5** | 0/009 |
| Mental health | 29/5 | 18/2 | 17/1 | 15/9 | 18/6 | 2-Feb | 0/071 |

In this regard, dependent t-test (according to Table 4) indicated that with 99% confident, teachers whose life location was city had more anxiety and insomnia; and with 95% confident more physical symptoms; and also with 95% confident lower mental health than teachers who lived in village.

To examine the effect of the perceived social class on the study variables, a one-way variance analysis was used. This test (according to Table 5) indicated that social class of teachers affected their depression with 99% confident and their social dysfunction with 95% confident. After performing Tukey post hoc test, it was revealed that social dysfunction and depression were higher in teachers of low social class than teachers of other social classes.

Analyses didn't show any significant effect about comparison of variables regarding marital status, education degree and teaching level of teachers.

## DISCUSSION

Examining descriptive statistics of the study variables demonstrated that 27% of teachers have had physical symptoms, 30.7% anxiety and insomnia, 38.3% social dysfunction, 5.5% depression and 19.7% mental health problem at least mildly. This result is consistent with those studies that have reported mental health problems in teachers [4,11,16,18,24,25].

However, the considerable result is that given the cut-off of mental health and its components, teachers of this city generally did not show mental health problems (Table 1), i.e. the majority of them had a suitable mental health and this finding is somehow similar to that of Shakiba *et al.* [16] (in which teachers had a normal MMPI clinical profile), but contradicts with most of studies performed in the communication of teachers [3, 4, 10, 11] that of course it might be due to type of collected data or even overemphasis of previous studies on descriptive statistics and not using inferential statistics.

In explaining the result of lack of mental health problem in teachers of this city, it can be said that given performing behavioral and religious selections for being accepted in teaching occupation, only those have been accepted that had high religiosity and more positive personality traits (since the city is small it causes that people know each other well and people having personality problems or being non-religious or with low mental health were rejected in the majority of cases in teaching occupation selection); and in fact their mental health (probably due to high religiosity and positive personality traits) has been high before becoming a teacher. The relationship between religiosity and personality dimensions (in interacting with each other or alone) and mental health has been confirmed in many studies [26-30].

In the following, examining the effect of sexuality variable on mental health revealed that female teachers have lower mental health; and more physical symptoms and anxiety and insomnia than male teachers. Lower mental health and more prevalence of psychological disorders among female teachers or generally among females have been reported by the majority of studies performed in this field [3,4,10,11, 16-18].

In explaining this result, it can be said that females due to having various roles (more responsibility in taking care of children, taking care of parents, house works, acting as a counselor for students, etc.) feel more mental and physical pressure on one hand and on the other hand due to lower social interactions (due to not having sufficient time and the society expectation), they do less pleasant work for themselves; that this issue may be associated with their lower mental health. On the other side, women usually have more family-work conflict than men that this can also be associated with their lower mental health, according to the study by Binti Panatik *et al*. [21].

The next result of the study about age also indicated that age only affects physical symptoms of teachers (the older, the more physical symptoms) and does not affect other components of mental health. Although some studies have reported the relationship between age and teachers' mental health [10, 15], more studies have indicated lack of any relationship between age and mental health especially in Iran country [3, 4, 11, 17].

In explaining this result, it can be said that by getting older, physical problems increase due to getting older and occupational burnout (due to more work experience) and through this, age may affect physical symptoms.

The other result of this study reported lower anxiety and insomnia and physical symptoms in rural teachers; and their higher overall mental health than urban teachers.

In explaining this result, it can be said that perhaps this difference was related to lifestyle difference of urban and rural teachers. Rural residents in this city are usually more disciplined in their sleeping and waking up time; and on the other hand, the majority of rural teachers engage in agricultural activities professionally or even for amusement that this can cause entertainment, nimbleness and even mental relief besides financial benefits. On the other side, rural teachers have far less urban life problems

(air pollution, noise pollution, high costs of life, decrease in friendly relations and social support, etc.) and as a result decrease in these problems can be associated with their mental health growth.

Another result was related to high rate of depression and social dysfunction of low social class. This wasn't unpredictable given the problems they have (poverty, lack of effective supportive sources, low family position, lack of entertainment facilities, several problems in their close members of the family, etc.). It seems that this perception of the social class can reduce sense of control and preciousness of the individual, so that the person's ability of decision making is reduced and thus, his depression and social functioning disorder are increased.

It should be mentioned that inferential statistics of the present study haven't reported mental health problems of teachers in this city, but given the descriptive statistics of this study, it seemed that almost many teachers of this city had mild mental health problems and a few had moderate or even severe mental health problems, that according to the sensitivity of teaching occupation, officials should consider this point and attempt more in promoting their mental health and reducing their mental health problems. On the other hand, given the higher mental health problems in female teachers than male teachers, it is suggested that supportive plans be designed and implemented for promoting their mental health and efficient counseling programs specifically for this class.

## REFERENCES


1. Nejat, H., 1999. Concept of mental health in the Schools of psychology. The Quarterly Journal of Fundamentals of Mental Health, 3: 160-166.
2. Rezai, F., 2011. Kaplan and Sadok's psychiatry behavioral sciences, 10th ed. Eds.H. Kaplan and V.A. Sadok.Theran Arjmand Press, 1: 9-30. Make References like this Style.
3. Byani, A.A., A.M. Kvchky and G.M. Kvchky, 2007. mental health status teachers in Golestan province using psychological syndrome Check list (SCL.90.R)Sciences. Journal of Gorgan University of Medical Sciences, 2: 39-44.
4. Arasth, M., 2008. Mental Health status and related factors among high school teachers in the cities Sanandaj and Bejar. Scientific Journal of Kurdistan University of Medical Sciences, 4: 53-62.
5. Rezapour, Y., 2011. Predicting job satisfaction of teachers based on religious beliefs and psychological health. Journal of Modern Psychological Research, 23: 67-79.
6. Kaveh, M.H., D. Shojaizade, D. Shamohammadi, H. Eftekhar Ardabili, A. Rahimi and J. Bolhari, 2002. Organizing mental Health Services in School: Assessing Teachers' Roles. Journal of School Health Research in Statute, 4: 1-14.
7. Franklin,C.G.S., J.S. Kim, T.N. Ryan, M.S. Kelly and K.L. Motgomery, 2012. Teacher involvement in school mental health interventions; A systematic review. Children and Youth Services Review, 34: 973-982.
8. Brown, J.D., L.S. Wissow, A. Gadomski, C. Zachary, E. Bartlett and I. Horn, 2006. Parent and Teacher mental Health Ratings of Children using primary-care services: Inter rater Agreement and Implications for mental Health screening. Ambulatory Pediatrics, 6: 347-351.
9. Rothi, D.M., G. Leaveg and R. Best, 2008. On the Front-Line : teachers as active observers of Pupils' mental Health. Teaching and Teacher Education, 24: 1217-1230.
10. Yang, X., C. Ge, B. Hu, T. Chi and L. Wang, 2009. Relationship between quality of life and occupational Stress among teachers. Public Health, 123: 750-755.
11. Bakthyarpour, P., 2003. mental health status of teachers in Isfahan province. Knowledge and Research in Psychology, 16: 79-98.
12. Mohammadi, S., 2006. Burnout and psychological Health in High school Teachers. Journal of Iranian Psychologists, 9: 15-23.
13. Ghadimi Moghadam, M.M. and M.A. Hoseini Tabatabaei, 2006. Prevalence of Burnout syndrome and Its Relationship with Gender,Education Level,Job Classification, and Geographical Location among Teachers and Employees of the Education organization. psychological Research, 1(2): 56-73.
14. Saberi, H.R., A. Moravvej and J. Nash, 2011. Factors associated with burnout of teachers, Schools in Kashan in 2008. Southern medical Journal, 1: 41-50.
15. Kovess-masfetg, V., C. Rios-seidel and C. Sevilla-Dedieu, 2007. teachers' mental health and teaching levels. Teaching and Teacher Education, 13: 1177-1192.

16. Shkiba, M., N.M. Bakhshani, M.R. Saravani and H. Hossein Poor, 2012. Comparative study of Mental Health of High school Teachers and counselors.Journal of Reserch in medical sciences zahedan, 1: 18-22.
17. Nourian najafabadi, M. and N. Jahangir, 2012. The relationship between social trust and mental health (case study: teachers city Tiran and karvan. social Sciences, 2: 34-59.
18. Sadghi, A., B. Rahmani, M.R. Kiaee, M. Ahmadpoor, R. Mohammadi and S.H. Nabavi, 2011. Mental health status of employees of Qazvin Shaid Rajaee hospital. Journal of North Khorasan University of Medal Sciences, 4: 34-37.
19. Kahh, D. and T. Hyvdy, 2012. Jop Satisfaction and Mental health. Journal Paysh, 3: 377-383.
20. Amyni khvyy, N., M. Shykhyany and Z. Fakori, 2011. the relationship between coping skills and mental health among female students, teachers. Journal of Women and Society, 2: 103-127.
21. Binti Panatik, S.A., S.K. Zainal Badri, A. Rajab, H. Abdul Rahman and I. Madshah, 2011. The Impact of work family conflict on psychological well –Being among school teachers in malaysia. procedia–social and Behavioral Sciences, 29: 1500-1507.
22. Zhai, F., C.C. Raver and C. Li-Grining, 2011. Classroom-based interventions and teachers, perceived job stressors and confidence ; Evidence from a randomized trial in Head Start setting.Early childhood Researterly, 26: 442-452.
23. Fathi Ashtiyani, A., 2009. psychological tests: personality and Mental Health. Theran Be'sat Press, pp: 310-313.
24. Noorbala, A.A., S.A. Bagheri Yazdi, M. Asadi Lari and M.R. Vaez Mahdavi, 2011. Mental Health status of Individuals fifteen Years and order in Tehran-Iran (2009) Iranian. Journal of psychiatry and clinical psychiatry and Clinical Psychology, 4: 479-483.
25. Hossaeni, S.H., A. Sadeghi, R. Najafzade, J. Rezazade, S.H. Nabari, M. Ranaee and H. Almasi, 2011. Mental health in North khorasan university students,of medical sciences and Its related factors in 2010. Journal of North Khorasan University of Medal Sciences, 3: 23-28.
26. Locknhoff, C.E., *et al*, 2009. Five-factor model personality traits, spirituality / Religiousness. and mental health among people living with HIV. Journal of Personality, 5: 1411-1436.
27. Unterrainer, H.F., K.H. Ladenhauf, M.L. Moazedi, S.J. Liebmann and A. Fink, 2010. Dimensions of religious/ spiritual well- being and their relation to personality and psychologyical well- Being. personality and individual Differences, 49: 192-197.
28. Maltaby, J. and L. Day, 2004. Should never the twain meet? Integrating models of religious personality and religious mental health, personality and individual Differences, 36: 1275-1290.
29. Steffen, P.R. and K.S. Masters, 2005. Does compassion mediat the intrinsic religion–health relationship ? Annals of Behavioral Medicine, 3: 217-224.
30. Zuraida, N.Z. and H.S. Ahmad, 2007. Religiosity and suicide ideation in Clinically depressed patients, Malayasian Journal of psychiatry,1:12-15.