

THE COMPARISON OF BURNOUT, PSYCHOLOGICAL WELL-BEING AND META-COGNITIVE BELIEFS IN TEACHERS OF NORMAL AND EXCEPTIONAL SCHOOLS

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Abstract

Aim: The purpose of this study is to compare comparing burnout, psychological well-being and cognitive beliefs in normal schools and teachers are exceptional.

Materials and Methods: The research methodology selected causal-comparative design. The population consisted of all teachers (Ordinary and special schools) are in Rasht. The sample consisted of 100 participants (50 teachers and 50 teachers from special schools, normal schools) were randomly selected. Questionnaire for collecting data from burnout, psychological well-being scale riffs and meta-cognition questionnaire was used. This study analyzed data from a multivariate (MANOVA) was used.

Results: The result of the analysis showed that burnout among teachers of exceptional schools, there are significant differences in psychological well-being and cognitive beliefs ($P < 0.01$). Teachers of special schools, depersonalization, and lower psychological well-being are more impaired cognitive beliefs.

Conclusion: It is recommended that officers and staff training to prevent burnout among primary teachers of normal and exceptional conditions to provide positive Meta cognitive beliefs and psychological well-being will improve.

Key Words: Burnout, Psychological Well-Being, Meta-Cognitive Beliefs, Normal Teacher, Exceptional Teacher, Ordinary and Special Schools.

1. Introduction

Today the problem of burnout is one of the most common difficulties in workplace. Unfortunately, this is very worrisome in business world and in modern life. Learning environments including schools as a complicated social system have many elements. Each of these elements has interaction with other elements and with its environment, (Azizi Moghaddam, 2007). Teachers are including the human elements that have a special place in educational settings. They have the most important role among present people at school. On the other hand, by increasing responsibilities and become more complex learning environments in schools, the teachers are expected to operate on a much broader level than before. This increasing expectation along with other personal and family problems put them under constant pressure (Hevi & Miskel, translated by Seyed Abbas Zadeh, 2003). Obviously, if the pressure is too much, the teachers' primary energy can be reduced due to constant stresses and it can cause their burnout, while their health and welfare endangered, translated by Alvani & Memarzade, 2003). These groups of teachers who have job burnout are

showing negative attitudes towards their professional growth (Beycioglu, 2010). It seems that this issue is fairly more complex and severe about exceptional teachers who deal with special students. Various studies also suggest that the prevalence of mental disorders in teachers with high working pressure is 1.5 times the other teachers (Purto & et al, 2006).

On the other hand, most experts pointed that burnout is resulted from job stress. They believe that when a person is placed in conditions and circumstances which is under pressure and makes him feel uncomfortable he has been experienced burnout (Sarmadi & et al, 2009). Freudenberger (1975) knows fatigue as a state of exhaustion or failure which is in the result of some kind of sacrifice in life. Maslach & Jackson (1989) are defined burnout as a syndrome of emotional exhaustion, depersonalization and personal accomplishment (quoted by Schaufeli & Leiter, 2001).

Hydenber's research findings (2004) have shown that burnout rate of teaching staff is higher than world standard in all aspects.

Sarmadi & et al (2009) in a research, "mental health and burnout in teaching job" concluded that 31.2%, 20.4%, and 48.4% of teachers in moderate and high level suffer from failure, depersonalization and emotional exhaustion respectively. The prevalence of occupational stress in large-scale and impact of stress on psychosomatic diseases such as high blood pressure and digestive problems caused that the study of burnout is increasingly expanded. So that the World Health Organization (WHO) (1987) stated 90% of employees are not satisfied with their job. They believe that their job is not in their life goals direction. Also, 75% of people are seeking psychological helps due to lack of job satisfaction (Russel, Altmaier & Vanvelzen 1987, quoted by Mohammadi, 2006).

Review of existing research literature shows that job burnout is related to different factors, including psychological well-being and meta-cognitive beliefs. For example, today there is agreement on this point that positive health is not only a thing beyond the absence of disease (Ryff, 1989), but it also encompasses the feelings of happiness and well-being (Lareson, 1991).

In this respect, Ryff & Keyes (1995) have presented positive mental health or psychological well-being model. It comprised of 6 components of self-acceptance, autonomy, positive relationship with others, purposeful in life, dominate environment, personal growth. This new model is widely investigated by researchers like Clark & et al (2001), Dierendonk (2005), Cheng & Chan (2005), Lindfors, Berntsson & Lundberg (2006) and others in the world (quoted by Bayani & et al, 2007).

Study of Whithed and Ryba (1995) in the area of teachers' views about occupational mental stress, their understanding in relation to coping strategies and using these cognitive strategies has shown that teachers are under a lot of stress. But mental pressure related to personal life is very low among them compared to their work stress.

In these studies it was also shown that a small number of teachers use meta-cognitive strategies to deal with stresses. As a result, we can say that the applying meta-cognitive strategies will reduce the amount of work-related stress. Accordingly, meta-cognition is formed by individual's understanding and beliefs about himself, meta-cognitive experiences and strategies (Wells, 2009). Although it includes both cognitive processes and cognitive experiences or adjustment (Flavell, 1987) the meta-cognitive knowledge refers to acquisition of it about cognitive processes and the ways of using cognitive control processes (Westwood, 1993; quoted by Livingston 1997). In recent years, meta-cognitive beliefs are also studied as the basis of many psychological disorders (Wells, Matthews, 1994). In this course, to evaluate the psychometry of cognitive beliefs and thoughts, meta-cognitive questionnaire is designed in five dimensions of positive beliefs about worry, negative beliefs about worry, low cognitive confidence, negative beliefs about thoughts and cognitive awareness. Each of these factors has a significant relationship with the level of emotional vulnerability. They are conceptually related to structures such as consciousness and cognitive failures; they are emphasized on real dimensions and actual characteristics. In sum, based on the literature concluded that meta-cognition is considered as a general factor in vulnerability to mental disorders. Despite numerous studies on the role of cognition in psychiatric disorders, there is little

research which has focused on relationship between health components and meta-cognition in normal individuals (Ashori & et al, 2009).

Ashori & et al, (2009) showed that there was a significant correlation between individuals' scores in scales of meta-cognitive beliefs and public health.

Despite the research already done in the field of burnout, a few researches are conducted on comparing and the amount of burnout, psychological well-being and meta-cognitive beliefs among teachers of ordinary and exceptional schools. Hence, present study attempted to answer this essential question: Is there a difference between burnout, psychological well-being and meta-cognitive beliefs of teachers in ordinary and exceptional schools?

According to the study purpose and research background, the following hypotheses were tested.

Main hypothesis: there are differences between burnout, psychological well-being and cognitive beliefs of teachers in ordinary and exceptional schools.

First sub-hypothesis: the rate of burnout varies in teachers of ordinary and exceptional schools.

Second sub-hypothesis: level of psychological well-being is different among teachers of normal and exceptional schools.

Third sub-hypothesis: level of meta-cognitive beliefs is different in teachers of normal and exceptional schools.

2. Methods

This study is of causal-comparative design which has been performed as sectional. Statistical population consisted of all primary school teachers in ordinary and special schools of regions 1 and 2 of school year 2012-2013 in Rasht. Among them 100 people (50 female teachers of special schools and 50 female teachers of ordinary schools) were selected as the sample size based on cluster random method and Morgan & Krejcie table (1990). Tools used in this study included the Maslach Burnout Inventory (MBI), scale psychological well-being Ryff (SPWB), short form of meta-cognition questionnaire (MCQ-30).

1- Maslach Burnout Inventory (MBI): this questionnaire is comprised of 22 articles and 3 subscales (affective or emotional exhaustion, depersonalization and personal accomplishment). Among these articles, 9, 5 and 8 items are related to estimate of emotional exhaustion, depersonalization and personal accomplishment, respectively. In terms of specific traits that each person has experienced feelings and behaviors related to burnout, different grades will be given to them from 0-6. Then, these scores are summed up and the score of a particular person is determined. If the person in terms of emotional exhaustion get the score of 27 or higher, or a score of 13 or higher in depersonalization and he received the score of 31 or less in personal accomplishment, it means that he has burnout (Momeni & et al, 2008).

Maslach and Jackson (1981) were calculated internal validity of this test by using Cronbach's alpha for each of the subscales. They achieved the following results: emotional exhaustion with internal consistency ($\alpha = 0.90$), depersonalization with internal consistency ($\alpha = 0.79$), and individual failure with internal consistency ($\alpha = 0.71$). They obtained some information about construct validity of researchers' burnout questionnaire at five studies and for eight years. This shows that it is possible to use measures of burnout, emotional exhaustion, depersonalization and personal failure in factor analysis and correlation. The validity of this scale is investigated by Nilian (1992) for the first time.

2- Scale Psychological Well-being Ryff (SPWB): it is 54 words version of psychological well-being questionnaire Ryff (1989), which is designed for adults. It contains 6 basic components of psychological well-being model (autonomy, positive relationship with others, purposeful in life, dominates environment, personal growth and self-acceptance). The subjects have to specify in a 6-

degree Likert spectrum (1 = strongly disagree to 6 = strongly agree) that to what extent agree or disagree with each statement. This scale was used by Niknam for the first time in Iran (Yahya Zade 2005, quoted by Mikaeili Monie, 2008).

Cronbach's alpha obtained in the study of the Ryff (1989) is reported for self-acceptance (0.93), positive relationships with others (0.91), autonomy (0.086), dominate environment (0.90) and personal development (0.86). Also, correlations between subscales were reported from 0.32 to 0.76. By this, the highest correlation was obtained between self-acceptance and environmental dominance (0.76) and the lowest correlation was achieved between positive relations with others and autonomy (0.32) (Bayani & Kochaki, 2008).

Ryff (1989) examined the evidence of test validity by calculating the correlation coefficients of psychological well-being scale scores by tests scores which measure psychological positive performance (convergent validity) and psychological negative functions (divergent or discriminated validity). He also in his review showed that six factors of this questionnaire are independent from each other. However, they are interrelated ($P < 0.001$) and the correlation ranges from 0.32 to 0.67. Further, construct measures a unit as psychological well-being.

3- Meta-cognition Short Form Questionnaire (MCQ-30): Short form of meta-cognition questionnaire Katrait, Hatton and Wells (2004) was a self-report scale of meta-cognitions. It contains 30 questions and 5 subscales (positive beliefs about worry, negative beliefs about dangerous and non-controllable thoughts, lack of cognitive confidence, beliefs regarding the need to control thoughts, cognitive self-consciousness). It is graded as multiple-choice with Likert scale ranged from disagree (= 1) to strongly agree (= 4). Cronbach's alpha coefficient of this questionnaire and its components reported 0.93 and 0.72. Also, to retest after a month the reliability coefficient is obtained 0.73. The correlation coefficient of this questionnaire was meaningful with anxiety- state Spelberg ($r = 0.53$), State Worry Questionnaire Penn ($r = 0.54$) and obsessive compulsive feeling questionnaire Badu ($r = 0.49$) in $P < 0.01$.

3. Research Findings

A) Descriptive findings: include statistical indicators, mean and standard deviation that are presented in table (1).

Table (1) Descriptive Indexes of study variables

variable	component	Teachers of ordinary schools		Teachers of exceptional schools	
		mean	Standard deviation	mean	Standard deviation
Burnout	emotional exhaustion	24.18	4.923	29.46	5.636
	depersonalization	5.18	1.913	5.62	2.230
	personal accomplishment	33.42	4.887	29.34	4.350
psychological well-being	autonomy	36.00	6.809	34.28	6.260
	environmental dominance	34.04	7.616	27.84	6.855
	personal development	33.14	6.710	26.28	6.024
	positive relationships with others	37.60	6.279	30.50	5.846
	purposeful in life	33.42	6.590	26.16	5.571
	self-acceptance	30.22	5.772	25.02	4.419
Meta-cognitive	Positive belief	14.10	2.880	11.86	2.408

beliefs	negative belief	10.26	2.018	11.90	2.426
	Lack of confidence	13.00	2.347	12.74	2.239
	Self-consciousness	13.56	2.589	13.74	2.248
	thoughts control belief	16.22	3.364	13.78	2.179

Descriptive results of above table shows the difference of mean and standard deviation of scores related to components of burnout, psychological well-being and cognitive beliefs of female teachers in primary ordinary and special schools.

B) Findings of the research hypothesis: This section contains assumptions with obtained results which are presented below.

To examine the hypotheses the univariate and multivariate variance analysis test (MANOVA) was used.

Main hypothesis: there are differences between burnout, psychological well-being and cognitive beliefs of teachers in ordinary and special schools.

First sub-hypothesis: the rate of burnout varies in teachers of ordinary and exceptional schools.

Table (2) Results of multivariate variance analysis for burnout variable

effect	value	F	df hypothesis	df error	Significance (sig)	Effect Size (eta)
group Wilks Lambda	0.649	14.084	3	96	0.000	0.306

According to data of above table, the ratio of F is significant about burnout combination variable (Sig < 0.01, $F_{(3, 96)} = 14.084$). The effect size equals to 0.306 ($\text{Partial}\eta^2 = 0.306$). Therefore, with regard to rejection of assumption H_0 and with 99% confidence, can be expressed that above hypothesis that "level of burnout in teachers of ordinary and special schools has a significant difference" is confirmed.

Table (3) Results of univariate variance analysis for components of burnout variable

Change source	Dependent variable	SS	df	MS	F	sig
group	emotional exhaustion	696.960	1	696.960	24.893	0.000
	depersonalization	4.840	1	4.840	1.121	0.292
	personal accomplishment	416.160	1	416.160	19.445	0.000

In terms of above table, the ratio of calculated F is significant in components of emotional exhaustion and personal accomplishment at alpha level of 0.05 (Sig < 0.05). However, this difference was not significant in depersonalization component (Sig > 0.05).

Second sub-hypothesis: level of psychological well-being is different among teachers of normal and exceptional schools.

Table (4) Results of multivariate variance analysis for psychological well-being

effect	value	F	df hypothesis	df error	Significance (sig)	Effect Size (eta)
group Wilks Lambda	0.462	18.021	6	93	0.000	0.538

According to above table, the ratio of observed F is significant in the case of mix variable of psychological well-being ($\text{Sig} < 0.01$, $F_{(6, 93)} = 18.021$). The effect size is 0.538 ($\text{Partial}\eta^2 = 0.538$). Thus, with regard to rejection of assumption H_0 and with 99% confidence, can be stated that above hypothesis that "level of psychological well-being in teachers of ordinary and special schools has a significant difference" is confirmed.

Table (5) Results of univariate variance analysis for components of psychological well-being

Change source	Dependent variable	SS	df	MS	F	sig
group	autonomy	73.96	1	73.96	1.729	0.192
	environmental dominance	961	1	961	18.306	0.000
	personal development	1176.49	1	1176.49	28.939	0.000
	positive relationships with others	1260.25	1	1260.25	34.245	0.000
	purposeful in life	1317.69	1	1317.69	35.390	0.000
	self-acceptance	676	1	676	25.583	0.000

In terms of above table, the ratio of calculated F except autonomy, in other components of psychological well-being is significant at alpha level of 0.01 ($\text{Sig} < 0.05$).

Third sub-hypothesis: level of meta-cognitive beliefs is different in teachers of normal and exceptional schools.

Table (6) Results of multivariate variance analysis for Meta-cognitive beliefs

effect		value	F	df hypothesis	df error	Significance (sig)	Effect Size (eta)
group	Wilks Lambda	0.684	8.701	5	94	0.000	0.993

According to the above table, the results of multivariate test Wilks Lambda is significant about combination variable of meta-cognitive beliefs at alpha level of 0.01 ($\text{Sig} < 0.01$, $F_{(5, 94)} = 8.701$). Effect size equals to 0.993 ($993/0 \text{ Partial}\eta^2 = 0.993$). This means that there are significant differences between two groups of ordinary and exceptional teachers in terms of components of meta-cognition beliefs. Thus, with regard to the rejection of assumption H_0 and research hypothesis confirmation, with 99% confidence it can be stated that the above assumption is correct.

Table(7) Results of univariate variance analysis for components of Meta-cognitive beliefs

Change source	Dependent variable	SS	df	MS	F	sig
group	Positive belief	125.44	1	125.44	17.803	0.192
	negative belief	67.24	1	67.24	13.5	0.000
	Lack of confidence	1.69	1	1.69	0.321	0.572
	Self-consciousness	0.81	1	0.81	0.138	0.711
	thoughts control belief	148.84	1	148.84	148.53	0.000

Given the ratio of F, and to determine which of meta-cognition components is different between two groups, univariate variance analysis was used. According to above table, calculated F ratio between teachers of ordinary and exceptional schools was statistically significant in components of positive, negative beliefs and thought control at alpha level of 0.05 ($\text{Sig} < 0.05$). However, it was not significant in lack of confidence and self-awareness components ($\text{Sig} > 0.05$). Therefore, the

above hypothesis is confirmed, in general. It can be expressed that generally there are significant differences between teachers of special and normal schools in terms of meta-cognition beliefs.

4. Discussion and Conclusion

Based on the results, first hypothesis that "burnout is different among teachers in ordinary and special schools" was approved ($P < 0.01$). Corresponding to this finding, teachers in special primary schools received higher scores on burnout than teachers of ordinary schools. This result to some extent is consistent with the research findings of Sarmadi & et al (2009), Koshaki & et al (2009), Kordi (2009), Mohajer (2003), Ghobari Banab & et al (2005), and Khodabakhsh & Mansouri (2010). Moreover, this hypothesis finding is in perfect harmony with studies of T. Pas & et al (2012), Ozer and Beycioglu (2010) and Lareson (2005). However, present study findings do not match the research results of Khosravi (2012) and Roosh (2010). To explain the first research results it can be suggested that phenomenon burnout in the first place should be seen as a multidimensional phenomenon instead of a single index (Kalimo & et al, 2001; translated by Baraheni, 2005). Second, employment issues, lack of effective control in workplace, isolation, dissatisfaction from received salaries, job congestion and pressure, role ambiguity, lack of management support, limited access to supportive sources, behavioral patterns of exceptional students are the most important predictors of exceptional teachers' burnout (Friedman, 1995). The present finding also showed its consistency with some researches like Khodabakhsh & Mansouri (2010) and T. Pas, Bradshaw & Hersfeldt. Thus, burnout among teachers of special schools is significantly more than regular teachers. A review of the literature related to conditions in which exceptional children's teachers are working, confirms this, too. It indicates that circumstances of special students are in such a way that each of them needs an individual training program. It should be noted that planning these programs are based on other written activities such as: preparing and completing sent worksheets from related centers and administrations, notes of all meetings and sessions, recording the evaluation report of students, referral request, medical assistance, and professional, parent phone calls, registration and profile of academic progress monthly, periodic and yearly, notes for parents, reports of social skills, adaptation and communication of any student, behavioral and disciplinary reports, and completing transfer forms for some students to groups, basic or other institutions. It seems that the pressures resulting from these conditions were effective on significant difference in rate of burnout in teachers of normal and special schools.

Furthermore, based on the results of statistical analysis the second hypothesis of this study that "level of psychological well-being differs in teachers of normal and exceptional schools" was confirmed. It was founded that special schools' teachers are with lower psychological well-being than ordinary teachers. This result corresponds to the study findings of Sarmadi & et al (2009), Bayani & et al (2007), Gholami & Mansouri Far (2009), Kiani & et al (2007). It also is consistent with the research findings of Gudmundsdottir & et al (2012), Burns and Machin (2010), Mitchem & Downing (2005), Baroon Byrne (2004). It can be said in explanation of this assumption that exceptional children's teachers teach children who have low ability, therefore this profession requires a lot of work with these children. While working with exceptional children is itself very difficult. This is particularly due to this that teaching retarded, blind, deaf, inconsistent and hard hyperactive children is usually not possible without repetition and great effort. It is evident that much effort makes the situation intolerable. While the teacher is trying to dominate the situation, she has no choice but get help the rewards and punishments. Ultimately, because she cannot succeed, this disability feeling leads to anxiety. In this case, she probably considered children as the main obstacle to her progress, so she begins to aggression, failing to work and her responsibility. This can raise concerns about the education of exceptional children. Consistent with findings of this study, research of Bayani & et al (2007) as determining mental health status of teachers of ordinary and special schools revealed that teachers in ordinary schools have higher mental health and psychological well-being. Gudmundsdottir & et al (2012) demonstrated in several studies that

teachers in special schools have lower psychosocial well-being and life satisfaction than teachers in ordinary schools. Burns and Machin (2010) in a research concluded that psychological well-being of teachers in special schools is significantly smaller than teachers in ordinary schools. It seems that one of the reasons for low level of psychological well-being refers to this that students of special schools are with behavioral problems and more learning difficulties (Mitchem & Downing, 2005). Meanwhile, hard work and low material and spiritual incentives are influential compared to normal school teachers and other professionals (Baroon, Byrne, 2004).

Based on findings, the third hypothesis that "the level of meta-cognition beliefs is different in teachers from ordinary and special schools" was approved. It revealed that meta-cognitive beliefs ordinary schools' teachers are higher than teachers of special schools ($p < 0.01$). This finding to some extent is consistent with the research findings of Ashori & et al (2009), Gold (2013), Koenen (2012), Kleitman & Gibson (2011), Sica & et al (2007) Davies & Valentier (2000). In explaining the finding of this assumption can be said that teachers of exceptional children lose main positive beliefs about their abilities due to great effort for teaching and low efficiency of students. Thus, the negative beliefs are strengthened such as usefulness of teaching these students. This problem causes that teachers of special schools have negative meta-cognitive beliefs about themselves and children. Moreover, weak feedbacks of children on training and education leads to these teachers are less likely to see their successes feedbacks. Hence, some of them have somewhat less cognitive confidence. Although based on the findings of this study, cognitive confidence is something that in ordinary teachers should also be considered. Furthermore, present study revealed that teachers of exceptional students lose partly control over their thoughts due to job pressure. Consistent with this finding, Ashori & et al (2009) compared the cognitive beliefs and public health in teachers of ordinary and special schools. They found that meta-cognitive beliefs, which are important factors in mental health and help to improve mental health of people, are disturbed in teachers of special schools. In this regard, the findings of Kleitman and Gibson (2011) indicated that teachers in special schools are with low self-efficacy and high disturbed meta-cognitive beliefs than ordinary teachers. In general, the results of this study showed that there was a significant difference among female teachers of ordinary and special elementary schools in terms of burnout, psychological well-being and meta-cognitive beliefs ($P < 0.01$). Also, teachers of special schools had more burnout, lower psychological well-being, and more disrupted meta-cognitive beliefs. Among the limitations of this research are using a mere questionnaire and lack of samples of male teachers. To increase the validity and more generalization of findings, it is recommended that in future research the present design to be implemented among male teachers of special and ordinary schools and with more sample size. Further, it is suggested to those who are in charge of teaching and training institutes that to prevent burnout among teachers provide conditions to increase their positive psychological well-being and meta-cognitive beliefs.

References

- Alavi, Hamid, Zomorodi, Hava and Shafi Abadi, Abdolah. (2009). Investigate the relationship between quality of work life (QWL) and burnout in Mashhad school administrators. M.A Thesis in Educational Management, Allameh Tabatabai University.
- Ashori A, Vakili Y, Ben Saeid, S, Noei, Z. (2009). Meta-cognition beliefs and public health of students. Scientific Journal of Mental Health. 11th Year, No. 1, pp. 15-20.
- Azizi Moghaddam, A. (2009). Examine the relationship between organizational health of schools and teachers' burnout. Two Research Journals of Scholar behavior. Shahed University. 16th year. No. 36.
- Bayani, A. Goudarzi, H., Mohamadkochaki, A. (2007). Investigate the relationship between psychological well-being and general health of students. Knowledge and research in psychology, No. 35 & 36, pp. 153-164, Spring & Summer 2008.

- Farahmand, Fatemeh. (2008). Stress and burnout in teachers. Second edition. Tehran: Hava Publications.
- Ghobari Banab, Bagher, Nabavi, M, Shirkol, Mandana. (2005). Factors affecting burnout among teachers of blind, deaf and normal students in secondary schools in Tehran. Journal of Psychology and Educational Sciences. Thirty-fifth year. No. 2. Pp. 109-135.
- Hevi & Miskel (1991). Educational Management (theory, research and practice). Translated by Mir Mohammad Sayed Abbas Zadeh (2003). Urmieh University, Urmieh, pp. 448-452.
- Hosseini, Seyed Abolghasem (1984). Principles of Mental Health. The first volume. Ferdowsi University Press.
- Jafar Pour, Hassan (1997). the relationship between hardiness and burnout in teachers of ordinary and special schools. M.A Thesis, Tehran University, Tehran.
- Khakbazan, Zahra (2006). The relationship between source of control and burnout among teachers in elementary public schools of Neyshaboor city. M.A thesis. Allameh Tabatabai University.
- Khani Pour, H., Sohrabi, F., Tabatabai, S. (2011). Comparing meta-cognitive beliefs and thought control strategies in students with normal levels and pathologies of concern. counseling and clinical psychology researches, first year. No. 1.
- Khodabakhsh, M. Mansouri, P. (2010). Investigate the role of adaptive and non-adaptive dimensions of humor and psychological well-being in burnout. Mashhad, scientific-research Journal of Nursing Faculty. 10th year. Number 3. Pp. 31-20.
- Khosravi, Mohammad Ali (2012). Examine the relationship between career growth, job satisfaction, and burnout in teachers of ordinary and special primary schools in East Counties of Golestan province. M.A thesis. Educational Sciences. Ferdowsi University of Mashhad.
- Kordi, Ehteram (2009). Identification and comparison of primary and secondary school teachers' burnout in Damghan city. M.A thesis. University of Psychology and Educational Sciences. Shahid Beheshti University.
- Koshaki Shirin; Sepah Mansour, Mozghan; Nooshad, Mehr Noosh. (2006). Relationship between self-esteem and burnout in teachers of professional skills in special and ordinary secondary schools. M.A Thesis in Educational Psychology. Islamic Azad University. Central Branch of Tehran.
- MohammadAmini, Zahra. (2007). Investigate the relationship of meta-cognitive beliefs with mental health and academic achievement of boy students. Journal of Educational Innovations, sixth year. No. 19. March 2007.
- Mohammadi, Shahnaz (2006). Teachers' burnout and psychological health. Journal of Iranian Psychologists, Third Year, No. 9.
- Moqimian, Hassan, Ahmadi, Karim and Jahangiri, Ahmad. (2004). "The relationship between hardiness and burnout among ordinary and special schools" M.A Thesis, Tehran University.
- Nooshad, Mehr Noosh, Koshaki Shirin; Sepah Mansour, Mozghan (2005). Relationship between self-esteem and burnout in teachers of professional skills in special and ordinary secondary schools. M.A Thesis in Educational Psychology. Islamic Azad University. Central Branch of Tehran.
- Prochaska, J; Norokras, J. (2000). Theories of psychotherapy, translated by Seyed Mohammadi (2004). Tehran, Roshd publication. pp. 55-62 and 78-83.
- Saif, Ali Akbar (2007). Modern educational psychology. Tehran: Doran Publication.

- Sarmadi Ansar, H. Asgari, A, Ghanbari, S. (2009). Burnout and Mental Health, the major components associated with the teaching profession. Journal of Human Sciences, tenth year. No. 26.
- Shamlou, Saeid. (2003). Mental health. Tehran: Roshd Publications.
- Wells, Adrian (2001). Meta-cognitive using in explanation and treatment of emotional disorders. Translated by Rauf. Ahoo Ghalandari (2004). Tehran: Kankash Publication Institute.