

ORIGINAL ARTICLE
ΕΡΕΥΝΗΤΙΚΗ ΕΡΓΑΣΙΑ

Relationships between psychological well-being, happiness and perceived occupational stress among primary school teachers

OBJECTIVE To examine relationships between psychological well-being, happiness and perceived occupational stress among primary school teachers in Iran. **METHOD** This cross-sectional study was carried out from September 23, 2014 to May 22, 2015 in Bandar Abbas, Iran. The sample size was 330, calculated according to the Morgan table. Three questionnaires were used for data gathering, specifically scales of perceived occupational stress and psychological well-being, and the Oxford Happiness Scale. **RESULTS** The mean age of the participating teachers was 32.58 ± 7.48 years. Significant negative correlation was demonstrated of occupational stress with life satisfaction ($p < 0.01$, $r = -0.81$), spirituality ($p < 0.01$, $r = -0.64$), joy and optimism ($p < 0.01$, $r = -0.52$), individual development ($p < 0.01$, $r = -0.48$), positive relationships with others ($p < 0.01$, $r = -0.74$), and autonomy ($p < 0.01$, $r = -0.4$), as well as with overall psychological well-being ($p < 0.01$, $r = -0.8$). In addition, significant positive correlation was demonstrated between subjective well-being and happiness ($p < 0.01$). **CONCLUSIONS** Occupational stress in teaching may lead to poor psychological well-being and reduced happiness in primary school teachers.

Schools play a central role in the process of shaping childhood and framing futures. Teachers are surely the most important members of schools for achieving these aims. In the context of teaching, studies have shown significant association between the mental health status of teachers and the academic performance of schoolchildren.¹ For example, the teacher's happiness and psychological well-being are predictive of the schoolchildren's happiness and well-being, which are, in turn, two main predictors of pupils' academic achievement. The teacher's positivity and expression of positive emotions may affect school performance.^{2,3}

Teaching is a profession associated with high stress, and teaching responsibilities include balancing the demands of the pupils and concerns about their behavior, and speedy decision-making is often required.⁴ Teachers are put under additional pressure by scientific research work, performance appraisal, expectations of promotion and fear of redundancy. In this regard, studies from the

United Kingdom (UK) and the United States of America (USA) have reported that about half of teachers leave the profession within 5 years.⁵ They also documented illness in most of those who train and qualify as teachers, with an average of approximately 5 days' absence per year. High levels of stress and heavy workload were the explanations given by half of the teachers who were leaving.⁶

Perceived occupational stress is reported to have a negative impact on mental health, as measured by insomnia, depression, psychological well-being, anxiety, happiness, etc.⁷ Teacher psychological well-being is conceptualized as a positive psychological state, due to harmony between the expectations of the school and specific environmental factors on the one hand and personal demands on the other.⁸ Psychological well-being is described as being composed of five dimensions: Desire for involvement at work, thriving at work, interpersonal fit at work, perceived recognition at work, and a feelings of competency.⁹ The level of happiness

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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2017, 34(4):504–510

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Συσχετίσεις μεταξύ ψυχολογικής ευεξίας, προσωπικής ευτυχίας και αντίληψης του εργασιακού άγχους σε δασκάλους πρωτοβάθμιας εκπαίδευσης

Περίληψη στο τέλος του άρθρου

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of the teacher is an indicator of perceived stress, but also of workplace success, because it is predictive of the happiness of the pupils and their school performance. The well-being and happiness of teachers thus plays an essential role in their pupils' satisfaction and achievement.¹⁰

Although numerous studies have investigated the prevalence of and demographic risk factors for occupational stress, few have examined the psychological dimensions. The inclusion of multiple measures of psychological status provides the means of understanding the ways in which the mental health of teachers is influenced.¹¹ This study makes an additional contribution by exploring the association between perceived occupational stress and two main determinants of mental status, psychological well-being and happiness. In recent years, researchers in many countries have evaluated the occupational stress of teachers, but there are few reports on this topic in Iran.¹² Therefore, the present study was conducted with the objective of determining relationships between psychological well-being, happiness and perceived occupational stress among primary school teachers in Iran.

MATERIAL AND METHOD

Design and sample

A cross-sectional survey was performed from September 23, 2014 to May 22, 2015 in the city of Bandar Abbas, the capital of Hormozgan province in the south of Iran. According to Bandar Abbas statistical information, the total number of full-time primary school teachers was 2,000. A sample size of 330 was decided, according to the Morgan table, and the participants were selected from different areas of the city using simple random sampling. All the participating teachers provided written informed consent before enrolment and all responses were kept confidential. Self-administered questionnaires were distributed to the participating teachers and their responses were anonymous. A total of 330 completed questionnaires were obtained (effective response rate: 100%).

Measurements

Three questionnaires were used for data gathering. The first was designed for measuring perceived occupational stress, while the second and third consisted of psychological well-being and happiness scales, respectively.

The scale of perceived occupational stress

The scale of perceived occupational stress was developed to measure participants' experience of occupational stress.¹⁰ The original version has 25 items and responses are scored on a four

point Likert-type scale, ranging from 0=not at all to 3=very much. The scale has test-retest reliability over a short retest interval (several days) of 0.91 and a Cronbach α coefficient of 0.75. It had already been translated and validated in Iran by another study.

The scale of psychological well-being

The scales of psychological well-being is an 84-item self-report questionnaire¹² which includes six domains that measure autonomy (10 items), environmental mastery (19 items), personal growth (8 items), positive relations with others (8 items), purpose in life (13 items) and self-acceptance (19 items). Of these items, 37 were scored negatively, but later reversed in final scoring procedures. The responses were recorded using a 6-point Likert scale ranging from 1=strongly disagree to 6=strongly agree. Higher scores reflect greater experience of psychological well-being and positive affect. This scale has been translated and validated in Persian, with Cronbach's α coefficients of 0.77, 0.78, 0.77, 0.70, 0.71, and 0.78 for the environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance, and autonomy subscales, respectively and 0.82 for the entire questionnaire.

The Oxford Happiness Scale

This questionnaire was developed¹⁹ to assess subjective happiness from a global perspective using a four-point Likert scale ranging from 0=strongly disagree to 3=strongly agree. This scale consists of 29 items and higher scores indicate higher levels of happiness (the range of possible scores is 0–87). The Oxford Happiness Scale has high internal consistency ($\alpha=0.9$) and good test-retest reliability ($r=0.78$ after 7 weeks). The test-retest reliability, internal consistency and validity of the Farsi version of the Oxford Happiness Scale were confirmed by a sample of Iranian university students.

Statistical analyses

Data handling and analyses were conducted using the Statistical Package for Social Sciences (SPSS) software, version 16.0 (SPSS Inc, Chicago). The data are reported as means, standard deviation (SD) and percentages for demographic variables. Pearson correlation, multivariate regression coefficient, and simple linear regression techniques were used for statistical analysis of the data.

RESULTS

Demographic characteristics

The mean age of the 330 teachers who participated in the study was 32.58 ± 7.48 years (33.19 ± 7.25 years in males and 31.92 ± 7.7 years in females). There was no significant difference between males and females in age. In terms of educational level, 77 (23.2%) of the respondents were associate degree graduates, 199 (60.3%) were Bachelor degree graduates, and 54 (13%) were Masters' degree

holders or higher. As shown in table 1, the mean scores on the questionnaires were 27.87 ± 8.64 for perceived occupational stress, 145.26 ± 37.05 for psychological well-being and 47.06 ± 13.51 for the Oxford Happiness Scale. In addition, the Cronbach's α coefficient of the three questionnaires was assessed in the present survey, showing high internal consistency (tab. 1).

Homogeneity of regression slopes and normality of data distribution

The Kolmogorov-Smirnov (KS) and F tests were used to examine the normality of data distribution and homogeneity, respectively, of the regression slopes, permitting the use of parametric and regression analyses (tab. 2).

The first hypothesis: Subjective well-being has a role in predicting perceived occupational stress in primary school teachers in Bandar Abbas

To answer this hypothesis, the Pearson correlation and multivariate regression coefficient were applied, the results of which are shown in tables 3 and 4. The variance inflation factor (VIF) was used to identify the linearity of the variables, and the results show that the presumptions of the regression analysis were met.

In addition, the Durbin-Watson test gave a score between 1.5 and 2.5, thus meeting the presumption of independence of errors.

As table 3 shows, a significant negative correlation was found between occupational stress and each of the six domains life satisfaction ($p < 0.01$, $r = -0.81$), spirituality ($p < 0.01$, $r = -0.64$), joy and optimism ($p < 0.01$, $r = -0.52$), individual development ($p < 0.01$, $r = -0.48$), positive relationships with others ($p < 0.01$, $r = -0.74$) and autonomy ($p < 0.01$, $r = -0.4$), and overall psychological well-being ($p < 0.01$, $r = -0.8$).

The results in table 4 also show that 70% of the variance of occupational stress is explained by subjective well-being ($p < 0.01$, $\beta = -1.04$). The results in table 4 also show that all aspects of psychological well-being predict job stress of teachers. Thus, the hypothesis that "subjective well-being has a role in predicting perceived stress in primary school teachers in Bandar Abbas" is confirmed, with a negative relationship.

Second hypothesis: Happiness has a role in predicting perceived occupational stress in primary school teachers in Bandar Abbas

To answer this hypothesis, univariate regression was used, the results of which are shown in table 5. VIF was used

Table 1. The mean scores of teachers on the three study questionnaires (n=330).

Questionnaire	Mean	Standard deviation	Minimum	Maximum	Cronbach's α coefficient
The Scale of Perceived Occupational Stress	27.87	8.64	61	12	0.75
The Scale of Psychological Well-being	145.26	37.05	252	92	0.88
The Oxford Happiness Scale	47.06	13.51	78	7	0.81

Table 2. Normality and homogeneity of variables and regression slope of the questionnaire responses.

Questionnaire	K-S	Probability	F	Significance level
The Scale of Perceived Occupational Stress	1.03	0.239	2.73	0.06
The Scale of Psychological Well-being	1.125	0.159	0.74	0.306
The Oxford Happiness Scale	0.993	0.311	0.02	0.98

Table 3. Matrix of correlations between occupational stress and psychological well-being of primary school teachers (n=330).

Variables	Life satisfaction		Spirituality		Optimism		Individual development		Positive relationships with others		Autonomy		Overall well-being	
	P	R	P	R	P	R	P	R	P	R	P	R	P	R
Job stress	<0.01**	-0.81	<0.01**	-0.64	<0.01**	-0.52	<0.01**	-0.48	<0.01**	-0.74	<0.01**	-0.40	<0.01**	-0.80

** p value <0.01

Table 4. Multivariate regression analysis to predict occupational stress based on psychological well-being in primary school teachers (n=330).

Variables of psychological well-being	Occupational stress						
	B	Standard error	β	T	Significance	Durbin- Watson	VIF
Constant value	-26.92	4.63		-5.805	0.001**	1.74	1
Life satisfaction	-0.711	0.231	-0.193	-2.317	0.001**		
Spirituality	-0.912	0.256	-0.274	-3.565	0.001**		
Optimism	-0.974	0.212	-0.241	-4.582	0.001**		
Individual development	-1.107	0.246	-0.225	-4.504	0.014**		
Positive relationships with others	-0.615	0.280	-0.052	-1.767	0.001**		
Autonomy	-0.662	0.229	-0.125	-2.887	0.001**		
Overall well-being	-1.04	0.116	-1.04	-9.007	0.001**		

VIF: Variance inflation factor

Table 5. Univariate regression analysis to predict job stress based on happiness in primary school teachers (n=330).

Variables	Occupational stress							
	Regression coefficient	Total share	Net share	Converted F	β	T	Durbin- Watson	VIF
Happiness	0.491	0.241	0.239	102.33	-0.491	-10.11**	1.65	1.15

VIF: Variance inflation factor

to identify the linearity of the variables and the Durbin-Watson test was used to determine the independence of errors. The score in the Durbin-Watson test was between 1.5 and 2.5 and thus the presumption of independence of errors is met.

According to the results presented in table 5, it can be seen that 24% of the variance of occupational stress is explained by happiness ($p < 0.01$, $\beta = -0.491$). Thus the hypothesis that "happiness has a role in predicting perceived job stress in primary school teachers in Bandar Abbas" is confirmed, with a negative relationship.

The third hypothesis: There is a significant relationship between subjective well-being and happiness in primary school teachers in Bandar Abbas

Pearson correlation coefficient was used to answer this hypothesis. A significant positive correlation was dem-

Table 6. Matrix of correlations between happiness and subjective well-being in primary school teachers (n=330).

Variables	Psychological well-being	
Happiness	P	R
	0.001*	0.241

* p value < 0.01

onstrated between subjective well-being and happiness ($p < 0.01$). Thus, the hypothesis that "there is a significant relationship between subjective well-being and happiness in primary school teachers in Bandar Abbas" is confirmed.

DISCUSSION

It was shown in this study that 70% of occupational stress variance is explained by the domains of subjective well-being, in the negative direction. This is consistent with the results of a recent study that also reported a relationship between job stress and mental well-being.^{13,14} These results are also in line with the findings of a study which measured job stress and job satisfaction and reported that job stress has a negative relationship with job satisfaction.¹⁵ The findings suggest that having good mental health is one of the inhibiting factors for the negative effects of occupational stress. Conversely, research has shown that job stress has a negative impact on mental health and on the quality of the work done.¹⁶

Results of a study published in 2014 also show that job stress is influenced by the psychological well-being of people.¹⁷ As a theoretical explanation of the research findings, it should be noted that subjective well-being, as studied, has six components that include self-acceptance,

positive relationships with others, autonomy, dominating habitat, having a purpose in life, and personal growth.¹⁸

As seen in table 5, 24% of the occupational stress variance is explained by happiness, in a negative relationship. This finding is concordant with the results of two studies conducted in 2009 and 2010.^{19,20} People who are happy feel more secure, more easily make decisions, have a spirit of partnership, and are satisfied with those with whom they live. Therefore, one of the factors affecting job stress, and that can reduce it, is the happiness of the individual and its related variables.²¹ As a theoretical explanation for this finding, it can be said that happy people are those ones who agree with this statement, "When I assume a new responsibility, I predict that I will be successful". Happy people predict future events positively, and compared with pessimist people they are more expectant of success, happiness, and health.²² When happy people face difficult situations they use coping strategies and search for social support, and they emphasize the positive aspects of negative events, while unhappy people use denial mechanisms and by focusing on their own stress and negative feelings isolate themselves from their goals.²³ In explaining the research hypothesis, it should be noted that happy people have a sense of self-control. People who have a sense of empowerment tend to perform better in life, especially in their jobs, compared with people who feel useless.²⁴

A significant positive correlation was demonstrated in this study between subjective well-being and happiness. This finding is in line with the results of several other studies.^{25,26}

Psychological well-being has been shown to depend on positive affect to a large extent, but at the same time it is characterized by the relative absence of negative emotions. In other words, what should be done to achieve well-being is to emphasize the positives and put the negatives aside.^{27,28} In another explanation of this finding, it can be said that one factor which directly affects psychological

well-being is happiness. Happiness refers to the judgment of the person of the degree of happiness or quality of life, in other words, happiness means how much an individual enjoys his(her) life.²⁹

Some researchers believe that being positive is connected with the trait of extraversion, and being negative is correlated with personality neuroticism, which is another of the factors affecting happiness.³⁰ Being positive includes the sub-factors of joviality (such as beaming, being happy and alive), self-assurance (such as being reliable, strong and physically active) and alertness (e.g., being alert, focused and determined).³¹

Additional documentation has developed the theories of extending and developing positive emotions to explain how positive emotional experiences not only indicate personal health but also promote psychological well-being and personal evolution.³² Many negative emotions such as anxiety and anger limit momentary thinking-action, by which people become aware to protect themselves in a special way.³³ In contrast, positive emotions extend the reserves of momentary thinking-action of the person.³⁴ This expansion of the reserves of momentary thinking-action provides opportunities to build sustainable personal resources, which in turn provide the groundwork for growth and increased psychological well-being of the individual. Happiness enables the person act socially, intellectually, or in an artistic way, and can therefore strengthen social support networks by wise behavior, and through creativity produce art and science or creative problem-solving in daily life.³⁵

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ΠΕΡΙΛΗΨΗ

Συσχετίσεις μεταξύ ψυχολογικής ευεξίας, προσωπικής ευτυχίας και αντίληψης του εργασιακού άγχους σε δασκάλους πρωτοβάθμιας εκπαίδευσης

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ΣΚΟΠΟΣ Μελέτη πιθανών συσχετίσεων ανάμεσα στην ψυχολογική ευεξία, στην προσωπική ευτυχία και στην αντίληψη του εργασιακού άγχους μεταξύ δασκάλων πρωτοβάθμιας εκπαίδευσης στο Ιράν. **ΥΛΙΚΟ-ΜΕΘΟΔΟΣ** Η παρούσα

μελέτη διεξήχθη από τις 23 Σεπτεμβρίου 2014 έως τις 22 Μαΐου 2015 στην πόλη Bandar Abbas του Ιράν. Στη μελέτη αυτή, σύμφωνα με τον πίνακα Morgan, εντάχθηκαν 330 δάσκαλοι. Τρία ερωτηματολόγια χρησιμοποιήθηκαν για τη συλλογή δεδομένων, περιλαμβανομένων της κλίμακας αντίληψης του εργασιακού άγχους (Perceived Occupational Stress Scale), της κλίμακας ψυχολογικής ευεξίας (Psychological Well-Being Scale) και του ερωτηματολογίου ευτυχίας της Οξφόρδης (Oxford Happiness Scale). **ΑΠΟΤΕΛΕΣΜΑΤΑ** Η μέση ηλικία των δασκάλων ήταν $32,58 \pm 7,48$ έτη. Αναδείχθηκε μια σημαντική αρνητική συσχέτιση ανάμεσα στο εργασιακό stress και την ευχαρίστηση της ζωής ($p < 0,01$ και $r = -0,81$), την πνευματικότητα ($p < 0,01$ και $r = -0,64$), τη χαρά και την αισιοδοξία ($p < 0,01$ και $r = -0,52$), την προσωπική εξέλιξη ($p < 0,01$ και $r = -0,48$), τις καλές διαπροσωπικές σχέσεις ($p < 0,01$ και $r = -0,74$), την ατομική ανεξαρτησία ($p < 0,01$ και $r = -0,4$) και τη συνολική ψυχολογική ευεξία ($p < 0,01$ και $r = -0,8$). Επί πλέον, διαπιστώθηκε η ύπαρξη σημαντικής θετικής συσχέτισης μεταξύ της υποκειμενικής προσωπικής ευημερίας και της ατομικής ευτυχίας ($p < 0,01$). **ΣΥΜΠΕΡΑΣΜΑΤΑ** Το εργασιακό άγχος της διδασκαλίας μπορεί να οδηγήσει σε πτωχή ψυχολογική ευεξία και προσωπική ευτυχία στους δασκάλους πρωτοβάθμιας εκπαίδευσης.

Λέξεις ευρητηρίου: Αντίληψη εργασιακού άγχους, Δάσκαλοι, Ευτυχία, Ψυχολογική ευεξία

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