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**PREDICTION OF PHYSICAL AND MENTAL HEALTH BASED ON DECISION  
MAKING AND PROBLEM SOLVING SKILLS, COPING STRATEGIES AND  
MARITAL ADJUSTMENT**

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**ABSTRACT**

Undoubtedly health is the most important aspects of human life issues and various factors in person and family can have a key role in this issue. Hence the purpose of the present research is decision making and problem solving skills, coping strategies and marital adjustment. Research method is descriptive and from correlation type. The statistical population was include all married teachers of elementary schools in Karaj city in the academic year 2014-2015 that by using random cluster sampling 358 person were selected based on Morgan table. To collect information was used from Dyadic Adjustment Scale of Spanier (DAS, 1976) Samani questionnaire family process (2005) and Samani questionnaire family content (2008). The data analyzed through Pearson correlation and stepwise regression. Pearson correlation results showed that there is a significant relationship between research variables and stepwise regression results showed that decision making and problem solving skills, coping strategies and marital adjustment explain together 29/1 of variance physical and mental health. Decision making and problem solving skills, coping strategies and marital adjustment can be predict the physical and mental health and with increasing of this associated

factors with person and family can see increasing and improve physical and mental health in family members.

**Keywords: Physical And Mental Health, Decision Making And Problem Solving Skills, Coping Strategies, Marital Adjustment**

## INTRODUCTION

Sometimes humans forget that well-being is a precious gem and its maintaining is responsibility for them (Rafiee, 2012). Undoubtedly, health is one of the most important aspects of humans' life issues (Vadadhir, Sadati & Ahmadi, 2009). About the concept of well-being, the most accepted definition is from WHO (World Health Organization): "a state of complete physical, mental and social health and not merely the absence of disease or infirmity". Also mental well-being is described by WHO as: "... a state of health in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (Vadadhir, Sadati & Ahmadi, 2009). The researchers believe that health and disease are as a process that factors of cultural, social and psychological impress on its formation. Problems of physical and mental problems have reciprocal effects on each other, and in fact psychological problems can cause physical disease and vice versa (Bazaziyan & Besharat, 2010). In dimension marriage and family, physical

and mental health is considered one of the factors that influence satisfaction that have reciprocal impact on each other. Researches have shown that the mutual relationship is between physical and mental health with marital quality and marital satisfaction (Kouhi, Etemadi & Fatehi Zadeh, 2015).

From the factors that affect the physical and mental health is a problem-solving and decision-making skills. Problem solving consists of a complex set of subcategories of cognition, behavioral and attitude. Mayer (1983) has defined decision-making problem-solving as a multi-step process that one must understand the relationship between past experience and current issues and with regard to it adopt appropriate solution. He has defined three features for problem solving: problem solving is a cognitive process but is inferred from behavior. The result of process of problem solving is a presenting solutions and problem solving involves decision making and manipulation or act base on previous knowledge (Shokohi Yekta, 2008). Researches have shown that increasing problem-solving and decision-making skills decreased marital or family problems

(ShokohiYekta, 2008; Ghalili, Ahmadi&FatehiZadeh, 2007). Other studies have shown that the significant relationship between decision-making and problem-solving skills with physical and mental health (Rasulzadeh Tabatabai, Ajeie&Fathi Ashtiani, 2004; Mohammadi, 2005).

Other influence factors on physical and psychological health is coping strategies. According to Lazarus and Folkman, coping strategies is a set of cognitive and behavioral efforts that applies in order to translate, interpretation and modify a stressful situation and lead to reduction of its suffering and are effective in overcoming life's challenges (Dafei, 1997). Generally, in dealing with stressful situations the people used two types of coping: effective coping and ineffective coping. What is introduced as effective coping strategies the same procedures coping with problems that by individuals are designed and runs consciously that its result is successful problem solving or resolving of crisis. Ineffective coping are efforts that although they are used to cope with difficult situations but typically leads to worsening of the situation, hence ineffective coping cannot be interpreted as skills (Reeve, 2014). In research focused on the couples coping strategies, have confirmed its effectiveness in improving the quality of couples life (Ozoni Davaji, Dadkhah,

Khodabakhshi & Dowlatshahi, 2011). Researchers have shown that education of coping strategy can promote physical and mental health and is effective in reducing behavioral and social problems (ErfaniKhaneghah, 2002; Ramesht& Farshad, 2005). Other researches have shown that teaching coping strategies reduce pain, pain-related behaviors and psychological problems of patients with pain (Keefe & et al, 1996).

Marriages and families in addition to providing satisfy needs emotional, psychological, sexual, etc., can be grown healthy generations. Obviously, a maladjusted relationship will lead to a standstill health and development member (Taherirad, 2009). What in family and unity of husband and wife has important role is adjustment couple together (Moein, Ghiasi&Masmuei, 2010). Marital adjustment concept was presented by Spanier and Cole, which can be considered as a permanent process (Spanier & Cole, 1976). Lewis and Spanire defined this process as events, circumstances and interactions that couple's life moves forward in during adjustment. Hence marriage of high quality has relationship with good adjustment, suitable relationship, high levels of their happiness, unity and a high level of satisfaction of relationships (Latifses&Estroff, 2005). Marital

adjustment is externalizing husband and wife together at any point of time (Hosseini Nasab, Badri&Ghaemian, 2009). Adjustment Couples are wife and husbands that have great agreement with each other and accomplish good management on time and their own financial issues (Greef&Bruyne, 2000). Marital relationship is one of the most stable interpersonal relationships and its impact on individuals is more than any other relationship. Researches show that positive marital quality and their relations affect health directly and indirectly (Ashmore, Emery, Hauck & Macintyre, 2005). Other researches show that the marital adjustment has a significant relationship with physical and mental health in couples and children (Darvizeh&Kahaki, 2009; Bahrame Ehsan &Aslami, 2009).

According to the importance of health in individual and family life and also sublime role of the divine blessing in society that its existence leads to the development of society and it is reduce led to the slow progress and imposed costs on society and government, also unmatched role the family has in physical and mental health of its members and the other hand existence high physical and mental health in teachers that will lead to nurtures discerning and educated students, hence the purpose of the present research is prediction of physical

and mental health based on decision making and problem solving skills, coping strategies and marital adjustment in teachers.

## MATERIALS AND METHODS

Research method is descriptive and from correlation type. The statistical population was include all married teachers of elementary schools in Karaj city (Iran) at the academic years 2014-2015 that by using random cluster sampling, among the 4 areas of education, from the 4 area 358 people were selected based on Morgan table. The data analyzed through Pearson correlation and stepwise regression. To collect information was used from Dyadic Adjustment Scale of Spanier (DAS, 1976), Samani questionnaire family process (2005) and Samani questionnaire family content (2009).

Dyadic Adjustment Scale: This scale is used to measure marital adjustment. This scale with 32 items by Spanire in 1976 was developed to assess the marital adjustment. This scale measures the four dimensions satisfaction, solidarity, agreement and expression of love among husband and wife. This scale has substantial internal consistency with Cronbach's alpha 0/96. In IRAN, MollahZadeh reported Test-retest reliability of this scale with 0/86 and 0/89 with Cronbach's alpha and reported 0/90 amount of concurrent validity with Dyadic

Adjustment Scale Locke – Wallace (MollahZadeh, 2001).

Samani questionnaire family process: in order to measure decision making and problem solving skills and coping strategies were used from this questionnaire that by Samani (Samani, 2007) constructed based on a theoretical model of the family process and have 43 items with five-degree (5 = completely agree to completely disagree = 1)which measures five scope (Samani, 2008). In order to determine the reliability of the scale, Samani used Cronbach alpha's calculation method. The alpha coefficient for the decision making and problem solving and coping strategies reported respectively with 0/86 and 0/88 (Samani, 2008). The validity of this scale by Samani wereevaluated in the two studies by using factor analysis that results of these two studies indicate that this scale has psychometric adequate (Samani &Sadeghzadeh, 2010).

Samani questionnaire family content: in order to measure physical and mental healthwas used from this scale. That by Samani (2008) constructed based on a theoretical model of the family process and have 38 items with five-degree (5 = completely agree to completely disagree = 1)which measures seven scope (Samani,

2008). The alpha coefficient for the physical and mental health reported with 0/79. The validity of this scale were evaluated by using factor analysis that results of these two studies indicate that this scale has psychometric adequate (Samani, 2008; Samani &Sadegh Zadeh, 2010). Also Jafri (2010) reported Cronbach's alpha for the scale factors from 0/65 to 0/86.

**RESULTS**

The sample consisted of 230 women and 128 menand a total were 358 people that they have formed most of the sample in terms ofbachelor's degree (%53/4), period marriage from 13 to 18 years (%27/7) and having two children (%46/4). Parameters of descriptive variables and correlation analysis and regression are as follows:

The **Table 1, 2** show the results matrix of Pearson correlations between research variables that based on the relationship between physical and mental health with decision making and problem solving skills, coping strategies and marital adjustmentisrespectively 0/485, 0/469 and 0/428 that all these relationships are significant (P<0/01).

In order to investigation amount was used predictions stepwise multiple regression, which results are in the **Table 3** below.

**Table 1: Descriptive indicators research variables**

Variables	Mean	Standard deviation
physical and mental health	19/38	4/39

decision making and problem solving skills	38/01	7/03
coping strategies	47/24	8/35
marital adjustment	129/03	20/70

Table 2: Matrix of correlations between research variables

Variables	1	2	3	4
physical and mental health	1			
decision making and problem solving skills	0/485	1		
coping strategies	0/469	0/633	1	
marital adjustment	0/428	0/579	0/606	1

P < 0/01

Table 3: summarizes the results of the regression equation

Variables entered	Multiple correlation (R)	Coefficient of determination (R <sup>2</sup> )	Coefficient of determination modified	F	.Sig
problem solving skills	0/485	0/235	0/233	102/36	0/001
problem solving skills and coping strategies	0/528	0/279	0/275	20/27	0/001
problem solving skills, coping strategies and marital adjustment	0/539	0/291	0/285	5/50	0/020

According to **Table 3** the first stage decision making and problem solving component inserted into equation and the correlation with criterion variable (physical and mental health) is 0/485 that explained %23.5 from the variation of physical and psychological health. In the second stage component of coping strategies entered into the equation and the multiple correlation coefficient increased to 0/528. These two factors together explained % 27.9 from the variance of physical and mental health. In third stage component of marital adjustment inserted into equation and multiple correlation coefficient increase to 0/539 and these three components together explained % 29.1 from the variance of physical and mental health.

F statistic and its significance in the above table responds to this question that whether

the amount variance of explained by the prediction variables is significant or not that according to its value is significant for the first stage (F = 102/36) in P<0/001. Therefore decision making and problem solving skills can predict physical and mental health. In the second stage and third F-value is significant according to the level of significance and hence variables of decision making and problem solving skills, coping strategies and marital adjustment can predict physical and mental health.

**DISCUSSION**

The purpose of the present research was prediction of physical and mental health based on decision making and problem solving skills, coping strategies and marital adjustment in teachers. The data analyzed through Pearson correlation and stepwise regression. Pearson correlation results

showed that there is a significant relationship between physical and mental health decision making and problem solving skills, coping strategies and marital adjustment and stepwise regression results showed that decision making and problem solving skills, coping strategies and marital g skills decreased marital or family problems (ShokohiYekta, 2008; Ghalili, Ahmadi & Fatehi Zadeh, 2007). Other studies have shown that the significant relationship between decision-making and problem-solving skills with physical and mental health (Rasulzadeh Tabatabai, Ajeie & Fathi Ashtiani, 2004; Mohammadi, 2005). Factors and conditions that clearly explain this finding have roots in the theories and findings that the one hand, consider the physical and mental health as a product of problem-based thinking, and the other hand, consider significant the effect of therapeutic interventions based problem solving as an appropriate method to repair and enhance functioning of mental, social and occupational (Mohammadi, 2005). In fact, individuals confronted at their life with a variety of challenging situations that become ill and suffering from physical and emotional distress. When, they found a good way to solve the problem by using decision-making and problem-solving skills and it can run they prevent from the creation of such physical and mental problems.

adjustment can predict the physical and mental health.

In relationship between decision-making and problem-solving with physical and mental health, researches have shown that increasing problem-solving and decision-making

In relationship between physical and mental health and coping strategies, researchers have shown that education of coping strategies can promote physical and mental health and is effective in reducing behavioral and social problems (ErfaniKhaneghah, 2002; Ramesht & Farshad, 2005). Other research has shown that teaching coping strategies reduce pain, pain-related behaviors and psychological problems of patients with pain (Keefe & et al, 1996). People who have low health and suffering from mental disorders such as anxiety and depression, people are who have not familiar enough with these disorders and do not know coping strategies with it. However, when they use the coping strategies such as problem solving, expressing emotions, setting goals, decision making and planning, identification and registration of negative thoughts and its replacing with positive thoughts, mental relaxation, positive image, support systems and different methods, typically they learn some ways to coping with the challenges of

lifethat makes them less exposed physical and mental disorders and problems.

About relationship between physical and mental health with marital adjustment, researches have shown that the mutual relationship is between physical and mental health with marital quality and marital satisfaction (Kouhi, Etemadi & fatehi Zadeh, 2015) and another research showed that positive marital quality and their relations affect health directly and indirectly (Ashmore, Emery, Hauck & Macintyre, 2005). Other researches show that the marital adjustment has a significant relationship with physical and mental health in couples and children (Darvizeh&Kahaki, 2009). There is conflict in marriage between husband and wife, which confounds couples of mental relaxation. However, when the adjustment between the husband and wife is high, this means that they can coping with these conflicts and in front problems are flexible and, avoidance from conflicts will lead to greater physical and mental health in couples.

According to these research findings we can conclude that decision making and problem solving skills, coping strategies and marital adjustment can predict physical and mental health and to increase this components and stability other factors can partly be prevented from creating physical and mental distress and improve physical and mental

health in people. Therefore, according to our research results recommend to physicians, psychologists, counselors and other experts at family welfare with aware from impact of these variables on the physical and mental health of individuals and families when working with individuals and families, teach the influence of these factors and enhance these factors in individuals and families.

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