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The Role of Early Maladaptive Schemas and Emotional Knowledge in Predicting Employees' Illness Anxiety

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ABSTRACT

The present study was conducted to investigate the role of early maladaptive schemas and emotional knowledge in predicting employees' anxiety. The current research is of a descriptive-correlation type. The statistical population included all employees of companies (Aida Nar, Arshida, Sobh Farda and Avijeh) in Tehran from October to January 2021. Using available sampling method, 135 people were selected. The respondents filled in Young & Brown, 1994 (1994) schema questionnaire, Grant et al.'s (2002) emotional awareness, and Ahadi and Pasha's hypochondriasis questionnaire (2001), and finally, regression analysis was used to analyze the data. The obtained findings showed that initial maladaptive schemas and emotional knowledge can predict employees' illness anxiety ($p<0.05$). Accordingly, disconnection area ($\beta = -0.37$), disrupted constraint area ($\beta = -0.24$), autonomy area (0.10), Emotional self-awareness ($\beta = 0.05$), other areas of orientation ($\beta = 0.04$) and area of autonomy ($\beta = 0.10$) had the highest coefficient of influence in predicting illness anxiety, respectively. According to the results of this research, early maladaptive schemas and emotional knowledge can predict illness anxiety; hence, counselors and psychologists should prioritize early maladaptive schemas and emotional knowledge in the study of anxiety.

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Problem statement

Currently, most of the leading companies in the world pay more attention to improving the mental health of employees at work than before. Today, due to the spread of the coronavirus and the changes in the economic situation, many companies are trying to keep their employees away from stress through proper planning. Therefore, it is very important for managers to maintain the mental health of employees. Over the past years, the world has changed so much that managers are likely to face depressed, anxious, less energetic, and psychologically damaged employees. Factors such as parenting responsibilities, family, economic conditions, etc. can affect the intensity of stress and anxiety of employees (Gugała et al, 2019). It is natural for a person to be sensitive to his physical health and eliminate the smallest problem as soon as it occurs. Sometimes a person's sensitivity to his physical health condition is much more acute than expected and manifests itself in the form of a serious and important problem. In illness anxiety, the patient does not complain of specific physical symptoms and the main problem is the worry of contracting a disease (Sadock et al., 2015). The prevalence of illness anxiety disorder in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders is reported to be about 2-7% (Barsky et al., 2004). Its highest prevalence is reported in people aged 20-30 (Talaei & Bourdbar, 2009). Age, sex, marital status and educational qualification have been suggested as possible causes of this disorder (Scot et al., 2006). The risk factors for illness anxiety disorder include: occurrence of stressful factors, history of abuse in childhood, history of certain diseases in the family, personality characteristics, such as the tendency to be sick and excessive use of the Internet and searching for symptoms and health-related issues (Sadock et al., 2015).

   One of the influential factors in illness anxiety is the schema; the schema is one of the fundamental concepts of contemporary psychotherapies and has a long history in psychology (Van Vreeswijk, Broersen, & Nadort, 2015). By presenting his model in 1993, Young emphasized the concept of early maladaptive schemas as a key structure in the emergence of psychological trauma, and after that psychology experienced the use of schema as a core concept of personality (Young & Gluhoski, 1996), psychopathology (McGinn & Young, 1996) and psychotherapy (Farrell, Shaw, & Webber, 2009). Zhang and Hoe stated that primary schemas are beliefs that individuals have about themselves, others, and the environment, and typically result from a person's unmet childhood needs, emotional ones in particular (Farrell, Fretwell, & Reiss, 2012). In fact, early maladaptive schemas are stable and fixed throughout life and form the basis of a person's cognitive constructions; early maladaptive schemas are the deepest level of cognition and are stable and long-term principles that arise in early life, continue in adulthood, and are defined by a lot of inefficiency. These schemas are considered a template for processing subsequent experiences (Young, 1999). Inconsistent schemas are harmful cognitive and emotional patterns in a person that are formed in the early development and evolution of the mind and are repeated throughout life. Early maladaptive schemas arise when emotional and emotional needs of childhood are not satisfied. Basic needs, such as secure attachment to others, autonomy, freedom in expressing needs, healthy emotions, excitement and the realistic limitations of these schemas usually operate beyond awareness at the deepest level of cognition and make a person psychologically vulnerable to the development of distress such as depression, addiction, anxiety, dysfunctional relationships and psychosomatic disorders (Young, 1999). Based on five unsatisfied emotional needs, Young divides the primary maladaptive schema into five areas: disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness, over-vigilance, and inhibition (Siahmoshtei, Delavar, & Borjali, 2021). According to Young, they provoke negative thoughts and acute psychological distress, and are the core of personality disorders and many other disorders (Delattre et al., 2004). In their research titled "The relationship between schemas and hypochondriasis among married women in Tehran", Orei and Neshatdost showed that the first factor of illness anxiety disorder, which is physical complaints, has a significant relationship with schemas

in the field of disconnection and rejection, impaired autonomy, and over-vigilance and inhibition. The factor of fear and worry has a meaningful and direct relationship with the schemas of the areas related to disconnection and rejection, impaired autonomy and performance and over-vigilance (Orei & Neshatdost, 2015). The results of Ghasemi and Elahi's research (2019) showed that the significant role of the schemas of the areas of impaired autonomy and performance and impaired limits was defined by illness anxiety; the same was true about the role of the schemas of vulnerability to loss and illness, and entitlement/magnanimity, but there was no significant difference between these two.

Another influential factor in illness anxiety is emotional knowledge. Emotional knowledge is teaching the nature of emotion to people. Emotional knowledge is viewed as an essential complementary factor to cognitive development because both are considered to be the main and important causes of personality development (Rafaeli, Bernstein, & Young, 2010). Despite helping people to discover the area of feelings and emotions, emotional knowledge has specific goals: identifying emotional states, learning cognition, learning emotions, regulating and processing emotional levels, preventing addiction and other risky behaviors, increasing psychological toughness, and having a positive attitude and prevention from interpersonal conflict. Emotional knowledge refers to a person's ability to read emotional states and recognize emotional signs. It is one of the important factors in determining a person's position in life, and it directly affects the variables related to the person, including emotion regulation and social competence, and leads to the timely processing of information that is emotional and using it is necessary in guiding cognitive activities such as problem-solving and focusing on necessary behaviors. Emotion interpretation and regulation is essential for adaptive social behaviors (Lopez, Salovey, Cotes, Beers, & Petty, 2005). In a research, Mohebbi and Zarei (2019) concluded that positive strategies of cognitive regulation of emotion had an inverse and significant relationship with anxiety and negative strategies of cognitive regulation of emotion had a direct and meaningful relationship with it. The results of Mardani and Mehrabi's research (2016) showed that anxiety had a negative and inverse relationship with most adaptive strategies of cognitive emotion regulation, but it had a positive and direct relationship with acceptance. Among other maladaptive strategies of cognitive emotion regulation, a direct and significant relationship was observed with the anxiety of the sample group. Also, there was a negative and inverse relationship between anxiety and all the components of marital satisfaction. Studies have shown that the perception and management of emotions and emotional self-awareness, in general, play an important role in reducing anxiety and hypochondriasis. Awareness of specific emotions in oneself and others is necessary to adapt to the surrounding environment and people suffering from illness anxiety disorder have less understanding of their emotional nature (Farhoumandi, Zarean, Nasiri, & Jega, 2022). The research results of Kamranvar Jahromi et al. (2020) showed that there is a significant direct correlation between maladaptive strategies of cognitive regulation of emotion and anxiety of Corona disease (P<0.01) and a significant inverse correlation between anxiety of Corona disease and adaptive strategies of cognitive regulation of emotion (P <0.01) as well as perceived social support (P<0.05). The research of Salari et al. (2019) showed that there is a significant inverse correlation between the adaptive emotional regulation strategy and distress tolerance with Corona anxiety, and there is a negative and inverse correlation between the non-adaptive emotional regulation strategy and Corona anxiety. In addition, women showed higher levels of over-vigilance and other-directedness schemas and other associated anxiety symptoms compared to men. The results of Ran et al. (2020) showed that during the Corona outbreak, the prevalence of depression (47.1%), anxiety (31.9%), and physical symptoms (45.9%) was high. According to the research results of Reiser et al. (2019), there is no statistically significant relationship between health anxiety and emotion regulation, but there is a significant relationship between anxiety sensitivity and depression and emotion regulation. Research shows that there is a significant relationship between the early maladaptive schemas and emotional knowledge, but the extent of illness anxiety prediction by these variables among employees has not

been studied yet, however, the necessary information about illness anxiety among service providers, especially employees, has been sufficiently studied. Hence, considering the importance of illness anxiety, especially its incidence in certain professions such as employees, and the high impact of this issue on the process of service they provide as well as the lack of research on this important issue in Iran, this research aims to determine the level of illness anxiety of employees and its relationship with early maladaptive schemas and emotional knowledge. In other words, this research seeks to find the role of early maladaptive schemas and emotional knowledge in illness anxiety.

Methodology
The research method in this study is descriptive correlational of regression analysis type, in which early maladaptive schemas and emotional knowledge are the predictor variables and illness anxiety is the criterion variable. The statistical population includes all the employees in the companies of Aidanar, Arshida Sobh-e-Farda and Avijeh in Tehran, Iran who were working between October and December 2021. Availability sampling is used as a sampling method. According to the type of study and the number of predictor variables in the regression analysis, and based on the recommendation of Tapachink and Fidell (2007), the sample size should be at least 10 times more than the number of predictor variables; therefore, 100 employees (30 to 45 years old) from Aidanar, Arshida, Sobh-e-Farda and Avijeh companies who were present at the time were selected by availability sampling method, but taking into account the drop in the sample and removing the invalid answers, 140 questionnaires were provided to the participants. Finally, 135 people were included in the analysis as a statistical sample.

Tools
Young Schema Questionnaire-short form (YSQ-S2): The Young Schema Questionnaire-short form is a self-report instrument for measuring schemas. Based on the description of each sentence, the person evaluates himself on a six-point Likert scale. The items of the questionnaire are categorized by schemas. This questionnaire has both a short form and a long form. Its long form has 205 questions and measures 18 early maladaptive schemas. The long form is used for clinical work because it asks more questions for each schema and thus provides more detailed information. The short form of Young's schema questionnaire has 75 questions and consists of five questions that had the most analytical load in the long form. The short form is used in research because it takes less time to complete. In the short form, the two-letter code that comes after 5 sentences indicates which schema these questions are related to. The first comprehensive research on the psychometric properties of the Young Schema Questionnaire was conducted by Schmidt, Joiners, Young, and Telch (1995) and Cronbach's alpha coefficient in the non-clinical community, has been obtained between 0.58 and 0.82 for the subscales of this questionnaire. Moreover, these researchers showed that the Young schema questionnaire has a significant relationship with the scales of psychological distress and personality disorders and therefore has acceptable validity (Schmidt et al., 1995).

The standardization of this questionnaire in Iran was done by Ahi (2007) on 387 students of Tehran universities, (of which 252 were female and 135 male students), using multi-stage random methods from Allameh Tabatabaei, Shahid Beheshti, Tarbiat-e-Modarres and Aloum Tahqiqat Universities. Using Cronbach's alpha the internal consistency of this questionnaire was obtained 0.97 in female and 0.98 in male students. Therefore, the following were obtained as the reliability of schemas: emotional deprivation 0.87, abandonment 0.78, mistrust - misbehavior 0.83, alienation - social isolation 0.87, defect - shame, failure 0.90, dependence - incompetence 0.86, vulnerability 0.90, insufficient self-control 0.79, obedience 0.83, sacrifice 0.82, emotional inhibition 0.86, extreme fault-finding 0.72 and self-control - insufficient self-discipline 0.87.

Emotional Knowledge Questionnaire: Grant et al.'s (2002) standard emotional self-awareness questionnaire, which has 33 questions developed by Grant, Franklin, and Langford in 2002, assesses people's emotional self-awareness with a five-point Likert scale from never to very much. In this questionnaire, the components include recognition with 6 questions (4,18,20,21,22,24) identification with 5 questions (1,3,8,17,29) transformation or communication with 7 questions (6,12,13,15,27,30,3) environmentalism with 10 questions (5,7,10,11,14,16,19,28,32,33) and problem-solving or decision-making with 5 questions (2,8,23,25,26); the scores between 33 and 44 indicate the low level of emotional self-awareness, while the ones between 44 and 88 indicate its average level, and the scores above 88 indicate its high level among the subjects. The reliability coefficient is 0.79. In the study of Mohnna and Taalepasand, the validity of the questionnaire was confirmed by experts. The reliability of the questionnaire was obtained 0.79 by Cronbach's alpha.

Ahvaz hypochondriasis questionnaire: This questionnaire was developed and validated to measure hypochondria disorder in Ahvaz, Iran by Ahadi and Pasha in 2002. The questionnaire has 45 questions and its purpose is to evaluate the hypochondria disorder among people with different histories (physical complaints, and mental preoccupations, fear and worry). The components of the questionnaire have two dimensions, which are questions related to physical complaints and mental preoccupations (1 to 35) and fear and worry (36 to 45) in which the scoring is yes (number 2) and no (number 1). Validity and reliability in the research of Ahadi and Pasha (2002) were extracted through factor analysis of the two factors of the questionnaire, and the validity of the questionnaire was also confirmed. Furthermore, the reliability of the questionnaire was calculated using the test-retest method, and the correlation coefficient between the two times of this test was 0.67, which indicates the desirable reliability of this tool. Concurrent validation and differential validity were used to validate this questionnaire. The reliability coefficient after 3 weeks was 0.78, the correlation coefficient after 6 weeks was 0.67, and the correlation coefficient of the test with the hypochondria subscale was 0.48, which indicates high and acceptable reliability and validity to check and diagnose the level of hypochondriasis.

Procedure

After coordinating with the relevant officials and the subjects, the primary maladaptive schema questionnaires, the emotional self-awareness questionnaire, and the hypochondria questionnaire were provided to the participants; in order to comply with the ethical principles and attract the cooperation of the participants some information was provided to the participants who were assured that the information would be confidential. After the agreement with the participants and the completion of the researcher's consent form, due to the Covid-19 Pandemic the questionnaires were prepared electronically (Google Form) and sent to WhatsApp groups of the companies, and the participants who were willing to answer, complete the said questionnaire with full satisfaction.

Ethical considerations

1- The participation of the subjects was not forced and all the respondents answered the questionnaires out of their desire.
2- The confidentiality of the information was observed and the respondents answered the questionnaire without including their first and last names.

Findings

In this research, 9.6 percent of the subjects (13 people) were 29 to 32 years old, 35.6 percent (48 people) were 33 to 35 years old, 37.0 percent (50 people) were 36 to 38 years old and 17.8 percent (24 people) were 39 to 40 years old. Moreover, according to the table, the average age of all participants was 35.33 years. Among the 135 people in the statistical sample of the research, 34 people (25.2%)

were from Sobh-e-Farda Company, 41 people (30.4%) from Aidanar Company, 27 people (20.0%) from Arshida Company and 33 people (24.4%) were from Avijeh Company; 31.9% of the subjects had a diploma degree, 40.7% had a bachelor's degree, 18.5% had a master's degree, and 8.9% had a doctorate degree or equivalent degrees in medicine; 48.1% of the participants were single, 39.3% were married, 8.1% were divorced, and 4.4% had other cases.

Table 1.
Mean (M) and standard deviation (SD) of research variables

Variables	Mean	SD	Max	Min	Skewness	Kurtosis
Illness anxiety	54.71	7.20	80	45	0.89	0.41
Emotional self-awareness	80.72	15.89	132	33	-0.37	1.49
Disconnection area	22.11	5.52	123	25	-0.90	0.03
Disrupted constraint area	98.60	19.49	60	10	-1.66	0.37
Other-directedness area	38.35	9.95	60	10	-0.37	-0.05
Autonomy area	40.42	9.57	6	10	-0.76	0.67
Vigilance area	36.77	10.07	60	14	-0.12	-0.30

As shown in Table 1, the average score of illness anxiety is equal to 54.71 and its standard deviation is equal to 7.20. The minimum and maximum scores of this variable are calculated as 45 and 80, respectively. The mean score of emotional self-awareness is equal to 80.72 and its standard deviation is equal to 15.89. The minimum and maximum scores of this variable are calculated as 33 and 132, respectively. The mean scores of the initial inconsistent schemas of the disconnection area are equal to 22.11 and its standard deviation is 5.52. The minimum and maximum scores of this variable are calculated as 40 and 150, respectively. The mean value of the impaired limit area is 98.608 and the standard deviation is 19.49. The minimum and maximum scores are calculated as 20 and 120 respectively. The mean value of the other-directedness area is 38.55 and the standard deviation is 9.95. The minimum and maximum scores are calculated as 10 and 60, respectively. The mean value of the autonomy area was 40.42 and the standard deviation was 9.57. The minimum and maximum scores were calculated as 10 and 60, respectively. The mean value of the over-vigilance area was 36.77 and the standard deviation was 10.07. The minimum and maximum scores were calculated 14 and 60, respectively. As can be seen from the above table, the coefficients of skewness and elongation of all the variables studied in the research are in the safe and acceptable range (+2 and -2), which indicates that the deviation from the normal distribution is not observed among the data; therefore, it is inferred that the data distribution of these variables is normal; hence, Pearson's correlation test was used.

Hypothesis 1: There is a relationship between early maladaptive schemas and emotional knowledge with employees' illness anxiety.

Table 2 shows the correlation of the variables. The results of correlation analysis of illness anxiety with early maladaptive schemas and emotional self-awareness of the subjects show that all the areas of early maladaptive schemas i.e., the first one, disconnection area (R=-0.548), the second one, impaired limits (R=-0.496) the third one, other-directedness (R=-0.299) and the fourth one, autonomy (R=-0.334) as well as the fifth area, over-vigilance (R=-0.408) have an inverse and significant relationship with illness anxiety at the level of 0.001. Moreover, the first area of early maladaptive schemas, i.e. disconnection (R=0.381), the second area of impaired limits (R=0.444), the third area of other-directedness (R=0.286), the fourth area of autonomy (R=0.203), and the fifth area of over-vigilance (R=0.362), has a direct and significant relationship with emotional self-awareness at the level of 0.001.

Table 2.

The results of correlation analysis of illness anxiety with early maladaptive schemas and emotional self-awareness of subjects

	1	2	3	4	5	6
1- 1st area	--					
2- 2nd area	0.75**	--				
3- 3rd area	0.51**	0.47**	--			
4- 4th area	0.60**	0.63**	0.38**	--		
5- 5th area	0.60**	0.52**	0.58**	0.55**	--	
6- Emotional self-awareness	0.38**	0.44**	0.28**	0.20**	0.36**	---
7- hyperchonderiasis	-0.54**	-0.49**	-0.29**	-0.33**	-0.40**	-0.20**

Hypothesis 2- Early maladaptive schemas and emotional knowledge can predict employees' illness anxiety.

Table 3.

Variance analysis of prediction model for employee illness anxiety based on early maladaptive schemas and emotional knowledge

Model		sum of squares	d.f	mean square	F	R	R^2
Early maladaptive schemas and emotional knowledge	regression	2292.135	6	382.022	10.494	0.574	0.330
	Remainder	4659.599	128	36.403			
	Total	6951.733	134				

Table 3 shows the validation parameters of the model for predicting employee illness anxiety based on early maladaptive schemas and emotional knowledge. According to the obtained parameter value (p=0.00), the presented model is of high importance and is able to predict employees' illness anxiety at a confidence level of 95%. The values of prediction coefficients for predicting employees' illness anxiety based on early maladaptive schemas and emotional knowledge are presented separately in Table 4.

Table 4.

Results of simultaneous regression analysis of illness anxiety with early maladaptive schemas (disconnection, impaired limits, other-directedness, autonomy, and over-vigilance) and emotional knowledge

Predictor variable	B	SE	B	T	P	tolerance	VIF
Emotional self-awareness	0.026	0.038	0.058	0.694	0.001	0.751	1.331
Disconnection area	-0.120	0.039	-0.376	-3.081	0.000	0.352	2.842
Disrupted constraint area	-0.089	0.046	-0.240	-1.930	0.0170	0.339	2.952
other-directedness	0.029	0.067	0.040	0.438	0.056	0.614	1.630
autonomy area	-0.790	0.077	0.105	1.021	0.000	0.500	2.000
vigilance area	-0.113	0.075	-0.157	-1.498	0.000	0.474	2.109

a: Dependent variable (criterion): illness anxiety

In Table 4, the results of simultaneous regression analysis of illness anxiety with emotional self-awareness and early maladaptive schemas (disconnection, impaired limits, other-directedness, autonomy, and over-vigilance) are presented. As can be seen, the areas of disconnection (β=-0.37),

impaired limits (β=-0.24), autonomy (β=0.10), emotional self-awareness (β=0.05), other-directedness (β = 0.04) and autonomy (β = 0.10) respectively had the highest coefficient of influence in predicting illness anxiety. Furthermore, the tolerance index of the predictor variables is more than 0.1 and the assumption of non-colinearity of the variables has been met.

Discussion and conclusion

The results show that there is a significant relationship between early maladaptive schemas and emotional knowledge with employee illness anxiety; hence, the research hypothesis of a significant relationship between early maladaptive schemas and emotional knowledge with employee illness anxiety is accepted. The results of the correlation analysis of illness anxiety with early maladaptive schemas and emotional self-awareness of the subjects show that the areas of early maladaptive schemas, i.e. the first area of disconnection (R=-0.548), and the second area of impaired limits (R=-0.496) and the third area of other-directedness (R=-0.299), and the fourth area of autonomy (R=-0.334) as well as the fifth area of over-vigilance (R=-0.408), have an inverse and significant relationship with illness anxiety at the level of 0.001. Moreover, the first area of disconnection (R=0.381), and the second area of impaired limits (R=0.444), and the third area of other-directedness (R=0.286) as well as the fourth area of autonomy (R=0.203) and the fifth area of over-vigilance (R=0.362), have a direct and significant relationship with emotional self-awareness at the level of 0.001. The results of the current research are in line with the results of TalehBektash et al. (2012), and Cámara and Calvete (2012).

The structure of maladaptive schemas is self-defeating patterns that are formed from the beginning of development and are repeated throughout life (Delattre et al., 2004). These schemas operate at the deepest levels of cognition, beyond awareness, and make a person vulnerable to problems such as anxiety, depression, ineffective communication, addiction, and psychosomatic disorders (Young & De Abreu, 2010). Early maladaptive schemas are gradual and unconsciously maintained within the individual and used to process subsequent experiences, thereby extending throughout the individual's life and determining behaviors, thoughts, feelings, and relationships with others (Young & De Abreu, 2010; Fergus & Valentiner, 2010). Schemas cause biases in interpretation, distorted attitudes, incorrect assumptions, unrealistic perspectives of events (Young & De Abreu, 2010). The results of various studies have shown that there is a significant relationship between the schemas of obedience, insufficient self-control, and failure/shame with anxiety symptoms, and also the presence of anxiety, especially in childhood, causes the formation of early maladaptive schemas (Lumley & Harkness, 2007; Young & De Abreu, 2010). Moreover, occupational anxiety, especially in employee-related occupations, due to the related stress, causes people to somehow suffer from various diseases such as asthma, cardiac problems, etc. (Gxoyiya, 2007).

On the other hand, people who have high emotional skills and knowledge arrange their lifestyle in such a way that it has less negative consequences for them (Kazemi et al., 2020). They are also skilled at building and maintaining high quality relationships. On the contrary, people who have low emotional knowledge will have weaker adaptation in facing life stress, and as a result, they will suffer more despair and depression and other negative consequences such as anxiety (Kazemi et al., 2020). In fact, the use of negative emotion regulation strategies, such as not having sufficient or weak emotional knowledge in the context of anxiety and illness, may cause consequences such as worsening symptoms and reducing the ability to cope with anxiety by reducing positive emotions and even increasing negative emotions (Labus et al., 2013). Furthermore, the use of negative strategies is related to the lack of proper management of emotions in dealing with daily life events, and causes symptoms or internal disorders (such as anxiety and depression). Therefore, it can be expected that by increasing emotional knowledge and reducing negative strategies, the level of employee illness anxiety will decrease. Moreover, there is a significant relationship between anxiety and depression

with the components of self-blame, blaming others, mental rumination, catastrophizing, positive acceptance; in the sense that the use of these low-emotion knowledge strategies increases these psychological symptoms (Zare & Selgi, 2012). Aldao and Nolen-Hoeksma (2010), argue that lower emotional intelligence is highly correlated with pathology. This is due to the fact that their adaptability is more dependent on the context. For example, re-evaluation can be adaptive only when the situation can be reconstructed in real conditions (Zare & Selgi, 2012). It is the emotional knowledge that in order to reduce emotional pressures, in potential situations provokes emotion, which leads to the reduction of expressive behaviors and negative experience (Szczygie et al., 2012).

Early maladaptive schemas and emotional knowledge can predict employees' illness anxiety.
 The results show that early maladaptive schemas and emotional knowledge can predict employees' illness anxiety, and the research hypothesis that early maladaptive schemas and emotional knowledge can predict employee illness anxiety is accepted. These five areas of early maladaptive schemas and emotional knowledge concurrently can predict 33 percent of illness anxiety, and variables in the areas of disconnection (β=-0.37), impaired limits (β=-0.24), autonomy (β=0.10), emotional self-awareness (β=0.05), other-directedness (β=0.04) and autonomy (β=0.10) respectively had the highest influence of coefficient in predicting illness anxiety. It explains the changes in the participants' illness anxiety, and the results of the present study are consistent with the results of Masoudi et al.'s research (2016); Ghasemi and Elahi (2019); and Hosseini et al. (2021). According to the aforementioned studies, there is a significant relationship between the field of impaired autonomy- performance and impaired limits, with the symptoms of psychopathology; it is the case in families that are fully occupied or more importantly in families that reduce the self-confidence of their children due to excessive care. The low self-confidence that exists in these people greatly reduces their ability to cope with the disease and they perceive themselves as a weak person who is not able to do physical effort or exercise. These factors create anxiety when one faced with ambiguous and threatening stimuli, in which worry and fear about the disease and its symptoms lead to physiological symptoms of anxiety and strengthen their belief about being sick (Barazandeh et al., 2016).

The early maladaptive schemas of the area of impaired limits lead to problems in determining factors such as internal boundaries, responsible performance or coherent activity to achieve long-term goals as well as weakness and disability. People with these schemas have problems in interpersonal communication and respecting others' rights, cooperating with others, setting goals and achieving realistic goals. These people usually do whatever they want whenever they want without considering the reality and possible harm to others, and in order to gain power or control, they exaggerate their superiority and make great efforts to overcome others. They strongly avoid discomfort and do not tolerate pain and suffering, avoid responsibility and want to avoid conflict at all costs. As a result, in order to escape solving the problems and responsibilities of life, they show symptoms of illness anxiety to accept the role of a patient. Playing this role as a patient is considered a way to escape realty of life (Sigre-Lerios et al., 2015).

Early maladaptive schemas have a negative effect on people's self-confidence, and this low self-confidence makes them underestimate their ability to cope with the disease, and based on their attitude, they are not strong enough to make efforts for their work and overcome anxiety and life problems. Confronting with ambiguous and threatening stimuli, these factors start the cycle of anxiety in which worrying about the disease and the symptoms that may be caused by this disease leads to physiological symptoms of anxiety and strengthens their belief about being sick. On the other hand, early maladaptive schemas of the limits are not strong enough in determining internal boundaries, responsible performance or coherent activity to achieve long-term goals (Young & De Abreu, 2010). Therefore, people with these schemas have problems in respecting others' rights, cooperation, goal setting and realistic goals (Sigre-Lerios et al., 2015). Usually, these people do whatever they want at

any time without considering the existing realities and possible losses for others, and in order to gain power through controlling, they put exaggerated emphasis on themselves and try to overcome others (Sigre-Lerios et al., 2015). They avoid discomfort and do not have the ability to bear the pain, so they avoid taking responsibility for their own work and others, and they want to evade responsibilities and unsolvable and insurmountable problems at any cost; hence, they show symptoms of illness anxiety to accept the role of a patient. This means that the patient's role is actually considered an escape route because a person can avoid disturbing obligations and postpone undesirable challenges and be exempted from his desired duties (Sigre-Lerios et al., 2015).

Those who suffer from the early maladaptive schema of vulnerability to harm and disease, always experience anxiety due to excessive and extreme fear of unpleasant events. One of the aspects that the fear and concern of these people focuses on is the fear of medical events and diseases (Boudoukha et al., 2016). People with an early maladaptive schema of vulnerability to harm and disease through fear of accidents and diseases observe symptoms that confirm their fear and worry, and as soon as they encounter ambiguous or uncomfortable situations and symptoms, they immediately confirm their expectations, which increase the intensity and persistence of their anxiety. And finally, it leads to a disruption in their performance. People with an early maladaptive schema of entitlement/grandiosity consider themselves more important and higher than others, and they consider special rights and privileges for themselves. Those with this schema do not feel responsible for the mutual respect that is the foundation of healthy social interaction, often insisting that they can do whatever they want regardless of its cost and damage to others. They tend to gain power so that they can show off their superiority to others (such as becoming successful, famous, and rich). These people are often overly demanding and domineering and do not empathize with others in social relationships. It seems that the anxiety of disease among these people is considered a form of defense against excessive self-attention. In fact, this behavioral pattern makes a person more susceptible to illness anxiety (González-Jiménez & del Mar Hernández-Romera, 2014). Also, studies have shown that people who have weaknesses in social problem solving cause many problems such as anxiety, aggression, and depression (Hassani & Tahar, 2019). Having less emotional knowledge makes people experience more psychological pressure. This in turn causes illness anxiety and even leads to physical illnesses such as cardiovascular disease (Emanuel et al., 2010). Emotional knowledge helps us understand that negative emotions may occur, but they are not a constant and permanent part of our personality, and it also helps a person not to respond the events and incidents that occur in life for him involuntarily and without reflection, but with thought and reflection (Emanuel et al., 2010). As a result, it can be concluded that in emotional knowledge, control and management of emotions are considered, and a person should have emotional knowledge and full presence of mind regarding thoughts and feelings (Nikandish et al., 2017). For this reason, emotional knowledge helps a person, in addition to being fully aware of feelings and emotions and accepting them without bias, to be in a state of calmness and concentration, and to gain the ability to control and manage his thoughts, anxiety, and emotions; developing this ability makes it possible for a person to feel that he has more control over his life in all matters, so instead of giving automatic negative responses, he responds with more control, calmness and awareness in anxiety-provoking situations and copes with the problems better (Nikandish et al., 2017). The limitations of the research included availability sampling, the research sample being limited to the city of Tehran, the lack of control over disturbing variables (education, spirituality). Therefore, caution should be taken in generalizing the results. Since the type of research is based on correlational assumptions, causal relationships have not been studied; therefore, caution should be taken in generalizing the results. Owing to the fact that the research is of correlation type and it is not possible to examine the causal relationships of the variables in this type of research, it is suggested to use causal models in future research. It is suggested to carry out qualitative research in order to specify more precisely the dimensions of the phenomenon of illness anxiety and emotional

knowledge. Also, these researches should be carried out in other geographical areas, on other populations and other groups, so that the data can be generalized with more confidence. It is suggested that the workers and managers in all departments cooperate with other relevant agencies to identify employees with early maladaptive schemas and weak emotional knowledge and provide them with services to reduce the anxiety of the disease. It also seems that specialized training (such as emotion regulation skills and mindfulness) is more necessary for employees.

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