Original Article

The Moderating Role of Lifestyle on Maladaptive Schemas and Responsibility among Iranian Male Teachers

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Abstract

Introduction: Responsibility can be affected by personality and life conditions. The present study was conducted to investigate the moderating role of lifestyle on maladaptive schemas and responsibility among Iranian male teachers.

Method: The study population consisted of all male teachers at primary schools in the city of Manneh, North Khorasan, Iran (n=250), 250 teachers who were selected using the census sampling method were participated in this study. The data collection tools comprised responsibility, early maladaptive schemas, and lifestyle questionnaires. For data analysis, Pearson correlation coefficient and hierarchical regression were employed.

Results: The results showed a significant correlation between responsibility and early maladaptive schemas (r=-0.38, p<0.001) and lifestyle (r=0.42, p<0.001). Also, the results of moderation regression reflected that lifestyle modifies the relationship between early maladaptive schemas and responsibility.

Conclusion: Results indicated that high scores in maladaptive schemas were associated with low responsibility scores in case of an unhealthy lifestyle, whereas high maladaptive schemas scores were associated with high responsibility scores in cases with a healthy

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Introduction

Responsibility is one of the most important concepts in the field of educational psychology, which has attracted extensive attention in recent years (1). Employees with organizational commitment consider the public interest, perform their duties, and attend to the effects of their actions on the public by ethical thinking. Therefore, responsible employees with the observance of citizenship rights and proper fulfillment of their roles seed trust in the society and give validation to their organizations (2). Therefore, responsibility is a phenomenon that connects people to the organization and society (3).

In current industrial societies, considering the growing importance of responsibility in problem-solving, organizations require responsible personnel (4). Responsibility is a relatively stable personal characteristic associated with conscientiousness, trustworthiness, acting upon rules and regulation, and the belief that logic and wisdom must dominate life. A person with high sense of responsibility prioritizes needs of the community. Such people accept the consequences of their behaviors and are dependable (5).

It is assumed that behavioral and emotional commitment to carry out occupational responsibilities can be influenced by emotional and cognitive patterns of maladaptive schemas.

The majority of schemas are formed in the early years of life based on certain events occurring during childhood; these schemas continue to exist in the next stages of life and entirely affect future life experiences (6). Primary maladaptive schemas (EMS) are the beliefs people have about themselves, others, and the environment, which usually originate from the lack of satisfaction of early needs, especially emotional needs, during childhood (7). EMS leads to negative life experiences such as a feeling of excessive psychological stress and dissatisfaction with life (8). Schemas that constitute individuals' thinking about their needs, beliefs, assumptions about people, events, and environments can affect their tendency to order, progression, insistence, trustworthiness, and adherence to laws and ethics (9).

Several studies have examined the relationship between EMS and responsibility. For example, Thimm (10) ascribed that responsibility is significantly correlated with schema defectiveness/shame. Unal (11) showed a negative correlation between conscientiousness and the disconnection /rejection domain of EMS. Also, Muris (12) proposed that conscientiousness is correlated with the unrelenting standards/hypocriticalness schema, which is associated with depression, anxiety, and eating disorders in non-clinical adolescents. Bahramizadeh and Bahrami (13) in a study of students showed that the mistrust/abuse scheme had the greatest association with student responsibility.

It seems that the relationship between EMS and responsibility can be moderated through lifestyle. As Terracciano and McCrae (9) conducted a cross-cultural study and referred to psychiatrists and noted that responsibility is a personality trait that is usually shaped as an attitude in the psychological and behavioral structure of the individual, and in general, as a lifestyle. They pointed out that responsibility leads to a desire for order, progressivity, insistence, trustworthiness, and adherence to rules and ethics.

Lifestyle is a set of beliefs, habitual patterns of behavior, hobbies, and methods of explaining social or personal conditions that determine individuals' specific types of responses (14). A healthy lifestyle is an effort to obtain full physical, mental, and social well-being. Healthy lifestyles include behaviors that guarantee physical and mental health. In other words, a healthy lifestyle involves physical and mental dimensions (15). The physical dimension includes nutrition, exercise, and sleep, and the psychological dimension comprises social communication, coping with stress, learning methods, and spirituality (15). A healthy lifestyle reduces the risk of severe diseases or premature death and enhances an individual's adaptation to the environment (15).

In another study, it was indicated that healthy lifestyle is positively related to psychological well-being (16). Based on previous studies, social and individual responsibilities at school have a significant relationship with lifestyle dimensions (17-18). Fakhraei and Narimanzadeh (19) indicated that teachers who had a modern lifestyle were more responsible than others. Halvorsen, et al. (20) found that schemas of mistrust/abuse, defectiveness/ shame, and failure could significantly predict responsibility among depressed patients.

According to a review of the literature, individuals' beliefs about themselves, others, and the environment are rooted in the lack of satisfaction of basic needs, especially emotional needs, in childhood. It can be assumed that EMS are negatively correlated with responsibility. In addition, as lifestyle is influenced by the culture and training provided in the context of family and educational systems, it can be assumed that it partially moderates the effects of EMS on responsibility. In other words, it seems that a healthy lifestyle can reduce the negative effects of EMS on responsibility, while an unhealthy lifestyle can exacerbate the negative effects of EMS on responsibility. Therefore, since previous studies have examined only the simple correlation between variables of EMS, responsibility and lifestyle, the present study tries to seek moderating effects of lifestyle on relationship between responsibility and EMS.

Methods

The study population included all male teachers at primary schools in the city of Manneh, North Khorasan Province, Iran (n=250). When the volume of the statistical community is low, the members of the community are available and the selection of all members of the community does not impose a high cost on study, census sampling method is used. Therefore, due to the limited size of the community, all the teachers were selected through the census sampling method. Teachers who were willing to cooperate completed the responsibility, early maladaptive schemas, and lifestyle questionnaires. In total, the number of questionnaires returned was 200. The mean age of the participants was 36.1±7.52 years old (age range: 25 to 54 years), and their mean years of service was 11.86±6.76 years (range: 2 to 29 years).

It was used correlation coefficient and regression analysis to analysis data. For the examination of the moderating role of lifestyle in the relationships between EMS and responsibility, it was entered the diversion score of the EMS separately as the first predictor variable in the regression analysis. In the second step, the deviation score of the lifestyle variable (moderator variable) was entered in the regression analysis as the second predictor variable. Finally, in the third step, the interaction of the deviant scores of the EMS and lifestyle variables as the third predictor variable was entered in the analysis.

For gauging the moderator effects of EMS and lifestyle, the participants were divided into two groups of high and low based on a standard deviation of higher and lower than the mean; then, the average of the formed groups in the responsibility variable was calculated

Responsibility Questionnaire: It was used the responsibility subscale of California Psychological Inventory for the measurement of responsibility. This subscale contains 42 items assessing features such as conscientiousness, commitment, hard work, seriousness, trustworthiness, behavior-based discipline, logic, and sense of responsibility. The items are responded to base on agree-disagree format (5). In Iran, Cronbach's alpha

and retest reliability of the responsibility subscale were reported 0.57 and 0.73, respectively (21).

Early Maladaptive Schema Questionnaire (YSQ): This self-report questionnaire was developed by Young, et al. (8) to measure EMS. Its short form contains 75 items evaluating schemas of abandonment/instability, mistrust/abuse, emotional deprivation, defectiveness/shame, social isolation/alienation, dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, failure, entitlement/grandiosity, insufficient self-control/self-discipline, subjugation, self-sacrifice, emotional inhibition, and unrelenting standard/hypocriticalness. Each item is rated based on a 5-point Likert scale ranging from "not at all true" to "describes me exactly". In Iran, the Cronbach's alpha for the whole scale was calculated at 0.80 and for the sub-scales it ranged from 0.60 to 0.87 (22). Shahamat (23) showed that this questionnaire has good convergent validity with psychological distress, sense of value, cognitive vulnerability to depression, and personality disorders.

Life Style Questionnaire (LSQ): Lali, Abedi, and Kajbaf (24) designed this questionnaire to evaluate lifestyle. LSQ consists of 70 items and is scored based on a 4-point Likert scale (never=0, sometimes=1, usually =3 and always=4). The questionnaire taps into 10 factors, including physical health, physical exercise, weight and nutrition control, disease prevention, psychological health, spiritual health, social health, avoidance of drugs, prevention of events, and environmental health. In this questionnaire, higher scores indicate healthier lifestyle. In a study by Lali et al. (24), the lifestyle questionnaire was approved as a multidimensional tool by using factor analysis. Cronbach's alpha for LSQ subscales were within the range of 0.76 to 0.89, and the Cronbach's alpha of 0.87 was obtained for the whole questionnaire.

Results

The mean and standard deviations of the studied variables and the correlations between them are presented in Table 1. The results

demonstrated a significant correlation between responsibility, lifestyle, and EMS.

Table 1: Correlations among the variables

variables		Mean	Std. Deviation	responsibility	Lifestyle	Maladaptive schemas
	responsibility	21.38	5.19	-	0.42**	-0.383**
Lifestyle	Environment health	13.88	3.93	0.279**	0.549**	-0.338**
	Prevention of events	16.52	4.15	0.279**	0.639**	-0.376**
	Avoidance of drugs	12.22	3.45	0.227**	0.500**	-0.349**
	Social health	14.25	3.76	0.249**	0.554**	-0.297**
	Spiritual health	12.36	3.45	0.217**	0.572**	-0.309**
	Mental health	14.03	3.88	0.230**	0.582**	-0.355**
	Prevention of diseases	14.02	3.97	0.261**	0.655**	-0.381**
	weight	14.24	3.98	0.222**	0.515**	-0.266**
	Body exercises	14.07	3.57	0.175*	0.507**	-0.217**
	Physical health	15.90	3.99	0.237**	0.575**	-0.267**
	total	141.52	21.61	0.42**	-	-0.559**
Maladaptive schemas	Over vigilance/inhibition	31.71	8.70	-0.250**	-0.497**	0.781**
	Other directedness	34.31	8.68	-0.324**	-0.490**	0.832**
	Impaired limits	32.62	8.14	-0.266**	-0.404**	0.821**
	Impaired autonomy / performance	67.10	17.00	-0.361**	-0.481**	0.921**
	Disconnection/rejection	84.26	20.30	-0.393**	-0.538**	0.941**
	total	250.01	55.45	-0.383**	-0.556**	-

Note: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

The amount and level of significance of the predictor variables in steps 1 to 3 are shown in Table 2. In order to study the moderating role of lifestyle in the relationship between EMS and responsibility, hierarchical regression analysis was carried out (Table 2).

Table 2: Moderator regression analysis for examining the moderating role of lifestyle in the relationship between early maladaptive schemas and responsibility

model	*Predictors variables*	*Step1 β*	*Step2β*	*Step3β*	R^2	R^2 change
1	Over vigilance/inhibition	-0.25**			0.06	0.06**
	life style	-0.05	0.39**		0.18	0.12**
	Over vigilance/inhibition * life style	-0.05	0.40**	-0.02	0.18	0.0
2	Other-directedness	-0.32**			0.32	0.10**
	life style	-0.15*	0.35**		0.44	0.09**
	Other directedness*life style	-0.14	0.35**	-0.06	0.45	0.004
3	Impaired limits	-0.26**			0.26	0.07**
	Life style	-0.11	0.37**		0.43	0.11**
	Impaired limits*life style	-0.10	0.40**	-0.07	0.44	0.005
4	Impaired autonomy / performance	-0.36**			0.36	0.13**
	Life style	-0.21**	0.32**		0.46	0.08**
	Impaired autonomy / performance*life style	-0.17*	0.34**	-0.15**	0.48	0.02**
5	Disconnection/rejection	-0.39**			0.39	-0.15**
	Life style	-0.23**	0.27**		0.46	0.06**
	Disconnection/rejection*life style	-0.20**	0.31**	-0.11	0.48	0.01

As can be deduced from Table 2, among the five regression analyses performed, in one regression, lifestyle significantly moderated the relationship between impaired autonomy/performance schema and responsibility. In this regression, the maximum variance of criterion variables is explained by the pattern in step 3 (R^2=0.48). Regarding the moderating effect of lifestyle, it can be observed that the interaction of the impaired autonomy/performance schema and lifestyle has increased the variance of the criterion variable beyond the effect of both of them from 0.46 to 0.48. The regression coefficient related to this variable (β=-0.15, p<0.001) indicates that this increase is statistically significant.

Figure 1 clarifies how the variables of EMS and lifestyle interact in the prediction of responsibility. In fact, Figure 1 shows that with an unhealthy lifestyle, high scores in EMS are associated with low responsibility scores, whereas with a healthy lifestyle, high EMS scores are associated with high scores in responsibility. Also, Figure 1 depicts that low scores in EMS are associated with low responsibility scores in unhealthy lifestyles, but in case of a healthy lifestyle, low EMS scores are associated with high responsibility scores.
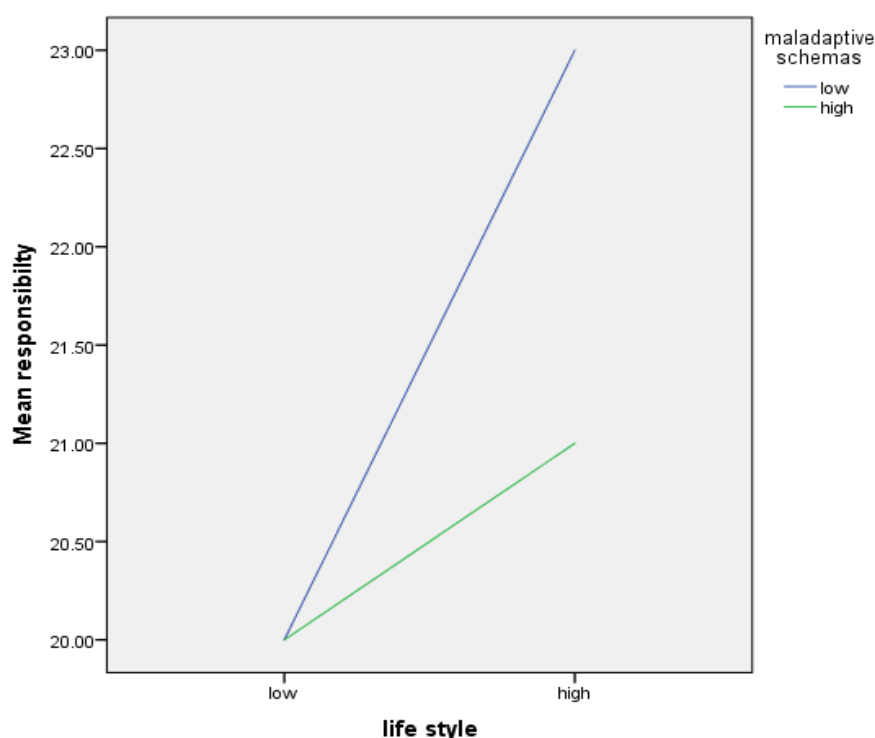

Figure 1. The interaction of maladaptive schemas and lifestyle in the prediction of responsibility

Discussion

This study was performed to investigate the moderating role of lifestyle in the relationship between EMS and responsibility among Iranian male teachers. While previous studies have examined only simple correlation between EMS, responsibility and lifestyle, this study indicated how the variables of EMS and lifestyle interact in the prediction of responsibility. The results of this study showed that EMS had a significant negative correlation with responsibility. These findings are in line with the results of some previous studies (10-13). Considering that EMS are self-damaging emotional and cognitive patterns that affect the way one thinks, feels, and behaves in different aspects of life (8), schemas can negatively influence behavioral and emotional

commitment of individuals to carry out their occupational and social responsibilities.

In detail, in the disconnection/rejection schema, individuals mostly engage in satisfying their own emotional needs and do not respect their commitment to others and their responsibilities. In the impaired autonomy/performance schema, the individual's expectations of themselves and the environment interfere with their perceived ability to survive and act independently or successfully carry out tasks (8). Therefore, it prevents the proper fulfillment of individual and social responsibilities.

The schema domain of impaired limits impedes respecting the rights of others, collaborating with others, and targeting or committing to realistic objectives. Thus, it reduces the sense of responsibility in individuals. The schema domain of other-directedness is extremely focused on the tendencies, emotions, and responses of others such that the individual's own needs are ignored (8). It seems that individuals with these schemas ignore their own personal and social responsibilities as it is important for them to receive love and acceptance, continue their relationship with others, and avoid retaliation, Also, the overvigilance/inhibition schema domain emphasizes extremely on the suppression of emotions and spontaneous choices of the individual and the satisfaction of intangible and internal rules and expectations of ethical performance and behavior. These often lead to lack of happiness, expression of opinions, relaxation, close relationships, and well-being (8). It seems that the inflexibility and extreme emphasis on a set of strict laws and criteria disrupt individual and social responsibilities. Also, individuals with these schemas always feel and think that they fail at doing things; consequently, they take less individual and social responsibility.

The present study showed that lifestyle components were positively related to responsibility. It seems that people with a healthy lifestyle primarily feel responsible for their physical and psychological well-being and act properly in the field of health care. A person who has a high self-esteem usually opts for less risky behaviors and unhealthy lifestyles, and this feeling of self-worth leads to reflection of positive feelings, thoughts, and attitudes toward others and the environment. Therefore, people with a healthy lifestyle feel responsible towards others and their assigned duties.

The present study showed that lifestyle was negatively correlated with EMS. These results are consistent with the findings of similar studies that have examined the relationships of maladaptive schemas with coping strategies (11, 25). Also, considering that we found an association between healthy lifestyle and positive variables such as psychological and physical well-being and life satisfaction, the present study was in line with studies that showed that maladaptive schemas influenced the individual's vulnerability and disconnection/rejection associated with high levels of psychological symptoms and low levels of life satisfaction (11, 26, 27).

Also, the present study showed that lifestyle moderated the relationship between the impaired autonomy/performance schema domain and responsibility, such that an unhealthy lifestyle tends to exacerbate the effect of the schemas of impaired autonomy/performance on responsibility, while a healthy lifestyle reduces the negative impact of the impaired autonomy schemas on responsibility. This result is similar to the findings of Unal (11), which showed that low scores in the impaired autonomy/performance schema domain were related to the problem-oriented style, which is correlated with less psychological problems, while EMS was related to high psychological stress. On the other hand, Unal (11) demonstrated that conscientious people use a problem-oriented style, which leads to higher life satisfaction. It seems that if people with high impaired autonomy/performance scores have an unhealthy lifestyle, they are more likely to fail in performing their duties and responsibilities, while if they adopt a healthy lifestyle, their psychological and physical well-being will be improved because a healthy lifestyle increases self-confidence and self-esteem. Also, these individuals are more likely to succeed in their personal and social life.

The present study showed that lifestyle did not significantly modify the relationships between responsibility and disconnection/rejection, other-directedness, overvigilance/ inhibition, and impaired limits schema domains. In other words, having a healthy or unhealthy lifestyle did not reduce the negative effects these EMS on responsibility. It seems that people with high scores in the disconnection/rejection schema domain have low feelings of security, stability, affection, empathy, acceptance, and respect, such that lifestyle modifications do not help to increase their sense of responsibility.

Also, people with high scores in the impaired limits schema domain have serious problems with respecting the rights of others, working with others, and targeting or committing to realistic goals, which may impede them from having a healthy lifestyle or a sense of individual and social responsibility. People with high scores in the other-directedness schema domain prioritize the needs of others, which may act as a barrier to having a healthy lifestyle and taking responsibility for themselves. Also, people with high scores in the overvigilance/inhibition schema domain, because of suppression of their emotions or meeting rigid rules and expectations, likely have less physical and psychological well-being; therefore, they also adopt an unhealthy lifestyle and face difficulties in fulfilling their responsibilities.

Generally, the results showed that high scores in EMS were associated with low responsibility scores in case of an unhealthy lifestyle, whereas high EMS scores were associated with high responsibility scores in cases with a healthy lifestyle.

This study had some limitations that should be mentioned here. First, the self-report nature of our data may have led to bias in data collection. Second, the study population was limited to elementary school teachers from a small town in Iran and our findings should be extrapolated to other contexts with caution. Third, this study was a correlational study and we could not find the causal relationships between the variables. Therefore, we recommend conducting further studies among other occupations and among women with a survey of demographic characteristics.

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