



(Original article)

## Predicting Moral Behavior Based on Psychological Health, Lifestyle and Prosocial Behaviors

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### Abstract

**Background:** Due to the prevalence of immoral behaviors, it is necessary to study ethical behaviors and identify its predictors with the aim of promoting ethical behaviors. Therefore, the aim of this study was to predict moral behavior based on psychological health, lifestyle and prosocial behaviors.

**Method:** This was a descriptive-analytical correlational study. The study population of principals and deputies of the second year of high school in Tehran in the academic year 2009-2010 was 2973 people. The sample size based on Cochran's formula was estimated to be 340 people who were selected by multi-stage cluster sampling method. The research instruments were the Ethical Behavior Inventory, the Psychological Health Scale, the Health Promoting Lifestyle Profile, and the Prosocial Behavior Questionnaire. Data were analyzed by Pearson correlation coefficient and multiple regression tests simultaneously in SPSS software version 25.

**Results:** The results showed a significant relationship between psychological health ( $r = -0.35$ ), lifestyle ( $r = 0.27$ ) and societal behaviors ( $r = 0.41$ ) with moral behavior ( $P < 0.01$ ). Other results showed the effective role of mental health, lifestyle and prosocial behaviors in predicting moral behavior ( $R^2 = 0.39$ ,  $P < 0.001$ ).

**Conclusion:** According to the results of this study, planning to improve moral behavior based on psychological health, lifestyle and prosocial behaviors is essential.

**Keywords:** Moral behavior, Psychological health, Lifestyle, Prosocial behaviors

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Received: 04 May 2021

Accepted: 15 Jun 2021

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## Introduction

Ethics has an effective role in improving the performance, efficiency and effectiveness of the organization and in today's organizations, the prevalence of immoral behaviors has increased significantly compared to the past (1). Ethics and moral behaviors are learned as a result of the do's and don'ts of a group, organization, or community (2). Ethical behaviors include a set of community-approved practices and behaviors that reflect the values of the individual, the organization, and society (3). Unethical behavior in organizations reduces trust and communication within the organization and increases absenteeism, underemployment and wasting resources and energy (4). Existence of ethical behaviors in organizations causes the members of that organization to be more loyal to organizational values and to use their maximum effort to achieve the goals of the organization (5). Psychological factors predicting moral behaviors that were less studied include psychological health, lifestyle and pro-social behaviors.

Psychological health as one of the important dimensions of general health includes mental comfort, feeling of self-sufficiency, empowerment, autonomy and self-fulfillment (6). Public health has physical, mental, social and spiritual dimensions and means complete well-being and comfort of these dimensions and dynamic interaction between them (7). Psychological health is the ability to communicate harmoniously with others, change and modify the individual and social environment and solve challenges in a logical, structured and purposeful way (8). People with high mental health, unlike people with low mental health, are more hopeful and happier in life, use appropriate coping strategies to deal with stressful events, and have fewer emotional, social, and psychological problems (9). The results showed that there is a relationship between mental health and moral behavior (10-13). For example, research results showed that spiritual health had a positive and significant relationship with moral behaviors (10). In another study, it was found that there was a positive and significant relationship between organizational health and ethical behavior (11). The results of another study showed

the relationship between mental health and moral development (12). In another study, the results showed that health and moral behavior had a positive and significant relationship (13).

Lifestyle is a concept that has received much research in recent decades due to its role and importance in health (14). Lifestyle is a normal way of life and a unique pattern of characteristics, behaviors and habits that each person shows in his life and has accepted it (15). Health-centered lifestyle has six dimensions including stress management, health responsibility, social relationships, spiritual growth, nutrition, and physical activity (16). People with healthy lifestyles are healthier, feel less helpless, less irritable, have less aggressive and impulsive behaviors, and use effective and positive coping techniques (17). The results showed that there is a relationship between lifestyle and moral behavior (18-20). For example, research results showed that lifestyle had a positive and significant relationship with moral intelligence (18). In another study, it was found that there was a significant positive relationship between Islamic lifestyle and moral identity and self-control (19). Other research results showed the relationship between lifestyle and social responsibility with moral behavior (20).

Prosocial behaviors refer to positive social and voluntary behaviors that aim to help or support others (21). In other words, prosocial behaviors refer to behaviors that are intended to help others and are not directly beneficial to the individual and may even pose risks to the individual with such behaviors (22). In general, there are four types of prosocial behaviors, including altruistic, obedient, emotional, and collective prosocial behaviors that require empathy and effort to increase the well-being of others (23). The results of research showed the relationship between societal behaviors and moral behavior (24-26). For example, research results showed that societal behaviors had a positive and significant relationship with moral identity (24). In another study, it was found that there was a significant positive relationship between prosocial behavior and religious attitudes, empathy and altruism (25). Another study showed that community-

friendly behaviors had a positive and significant relationship with ethics and moral leadership and the ethics of colleagues (26).

Today, immoral behaviors have increased compared to the past, and to reduce such behaviors, one must first identify the factors associated with them, such as psychological health, lifestyle and prosocial behaviors. Another important point is that many studies have been conducted with the aim of predicting moral behavior and identified the role and role of each of them, but these studies paid less attention to the role of psychological health, lifestyle and prosocial behaviors in predicting it. One of the organizations in which it is necessary to study ethical behaviors is the organization of education, especially schools. Because schools have an effective role in educating current and future students, and if the next generation is a morally oriented generation, we can see a decrease in immoral behaviors that seem to be among the pillars of the school of predicting ethical behavior in principals and deputies due to interpersonal relationships. With students, teachers and parents is more important than other pillars. Therefore, the aim of this study was to predict moral behavior based on psychological health, lifestyle and prosocial behaviors.

## Material & Methods

This descriptive-analytical study was a correlational study. The study population of principals and deputies of the second year of high school in Tehran in the academic year 2009-2010 was 2973 people. The sample size based on Cochran's formula was estimated to be 340 people who were selected by multi-stage cluster sampling method. In this sampling method, first the city of Tehran is divided into five parts north, south, east, west and central and three parts are selected randomly and then from each part two regions and from each region 20 schools are randomly selected and all principals and deputies. Selected schools were selected as the sample.

The mean and standard deviation of the age of managers and deputies was  $42.38 \pm 5.61$  years. In terms of gender, 178 were women (52.35%) and 162 were men (47.65%), 297 were married

(87.35%), 35 were single (10.30%) and 8 were divorced or in terms of education, 34 were associate (10%), 235 were bachelor (69.12 %), 52 were master (15.29%) and 19 were doctoral (5.59%).

In addition to the researcher-made form of demographic information, four tools were used to collect data. The first tool, called the Ethical Behavior Inventory, was used to measure moral behavior. This tool has 15 items that are rated based on a range of five Likert options from strongly disagree (score 1) to strongly agree (score 5). The score of the moral behavior list is calculated by adding the score of the items and the minimum score in it is 15 and the maximum score in it is 75, and a higher score indicates more appropriate moral behavior. The content validity of the instrument was confirmed by experts and its reliability was reported to be 0.96 by Cronbach's alpha method (27). In a study conducted in Iran, its reliability was reported to be 0.91 by Cronbach's alpha method (28). In this study, reliability was obtained by Cronbach's alpha method by calculating the correlation coefficient between items 0.88.

The second instrument, called the Mental Health Scale, was used to measure mental health. This tool has 25 items that are graded based on a range of five Likert options from zero (score 0) to severe (score 4). The score of the Mental Health Scale is calculated by adding the score of the items and the minimum score is 0 and the maximum score is 100, and a higher score indicates lower mental health. Convergent validity of this scale was reported to be 0.95 with its revised 90-item form and its reliability was reported to be 0.97 by Cronbach's alpha method (29). In this study, reliability was obtained by Cronbach's alpha method by calculating the correlation coefficient between items of 0.93.

The third tool, called the health-promoting lifestyle profile, was used to measure lifestyle. The tool has 48 items that are rated based on a range of four Likert options from never (score 1) to forever (score 4). The lifestyle profile score is calculated by summing the score of the items and the minimum score is 48 and the maximum score is 192, and a higher score indicates a more appropriate lifestyle. The validity of the instrument structure was confirmed by

exploratory factor analysis and its reliability was reported by Cronbach's alpha method of 0.94 (30). In a study conducted in Iran, its reliability was reported to be 0.92 by Cronbach's alpha method (31). In this study, reliability was obtained by Cronbach's alpha method by calculating the correlation coefficient between items 0.88.

The fourth tool, called the Behavioral Questionnaire, was used to measure community-friendly behaviors. This tool has 23 items that are rated based on a range of five Likert options ranging from not describing me at all (score 1) to fully describing me (score 5). The score of the community-friendly behaviors questionnaire is calculated by summing the scores of the items and the minimum score is 23 and the maximum score is 115, and the higher score indicates more community-friendly behaviors. Convergent validity of the instrument with the scales of global social behavior and social desirability and its construct validity were confirmed by exploratory factor analysis and its reliability was reported by Cronbach's alpha method of 0.85 (32). In a study conducted in Iran, its reliability was reported to be 0.76 by Cronbach's alpha method (33). In this study, reliability was obtained by Cronbach's alpha method by calculating the correlation coefficient between items 0.81.

To conduct this research, we first coordinated with the officials of Tehran Education and Training Organization and reviewed the statistics of secondary school principals and deputies, and then by multi-stage cluster sampling method, first six districts and 20 schools from each district were randomly selected and all principals and deputies as Samples were selected. For example, the importance of research and ethical considerations such as confidentiality, confidentiality of private information, etc. were stated and they were asked to respond to research tools. The average time it took each person to complete the tools was about 30 to 35 minutes. The tools were reviewed for completeness by the managers and deputies after completion and were thanked and appreciated. Finally, the data were entered into SPSS software version 25 and analyzed at the significance level of 0.05 by Pearson correlation coefficient and multiple regression tests simultaneously.

## Results

Table 1 reports the results of descriptive information on mean, standard deviation, distortion and strain of mental health, lifestyle, prosocial behaviors and moral behavior.

**Table 1: Results of descriptive information on mental health, lifestyle, prosocial behaviors and moral behavior**

Variables	Mean	SD	Kurtosis	Skewness
Psychological health	34.28	4.23	0.27	0.68
Lifestyle	121.55	13.41	0.46	0.89
Prosocial behaviors	72.36	8.87	0.22	0.73
Moral behaviors	47.91	6.84	0.15	0.46

The hypothesis that the variables of mental health, lifestyle, prosocial behaviors and moral behavior were normal were not rejected due to the values of skewness and kurtosis in the range of +1 to -1 (table 1). Other assumptions of the analysis method were that the multiple linearity assumption of the predictor variables was rejected due to the fact that the variance inflation values were smaller than 10 and the residual correlation was

rejected due to the camera-Watson value being in the range of 1.5 to 2.5. According to these results, the use of Pearson correlation analysis and multiple regression is allowed.

Table 2 shows the results of the correlation coefficients of mental health, lifestyle, societal behaviors and moral behavior.

**Table 2: Results of the correlation coefficients of mental health, lifestyle, prosocial behaviors and moral behavior**

Variables	Psychological health	Life style	Prosocial behaviors	Moral behaviors
Psychological health	1			
Lifestyle	-0.32	1		
Prosocial behaviors	-0.18	0.24	1	
Moral behaviors	-0.35	0.27	0.41	1

There was a significant relationship between psychological health ( $r = -0.35$ ), lifestyle ( $r = 0.27$ ) and societal behaviors ( $r = 0.41$ ) with moral behavior at a level less than 0.01 (Table 2). Regarding the negative relationship between mental health and moral behavior, we can refer to the method of scoring the Mental Health Scale (higher score indicates lower mental health). Therefore, with the improvement of mental health (decrease in its score), the rate of moral behavior increases.

Table 3 reports the results of multiple regression simultaneously to predict moral behavior based on psychological health, lifestyle and prosocial behaviors.

Together, the variables of psychological health, lifestyle and prosocial behaviors were able to predict 39% of the changes in moral behavior, which was significant at a level less than 0.001 (table 3).

**Table 3: Simultaneous multiple regression results for predicting ethical behavior based on psychological health, lifestyle, and prosocial behaviors**

Variables	R	R <sup>2</sup>	df	F value	Sig.	$\beta$	T value	Sig.
Psychological health			3			-0.22	-3.15	<0.001
Lifestyle	0.63	0.39	336	17.25	<0.001	0.19	2.95	<0.002
Prosocial behaviors						0.27	3.64	<0.001

## Discussion

The results of the present study showed that psychological health had a negative and significant relationship with moral behavior. Regarding the negative relationship between mental health and moral behavior, we can refer to the method of scoring the Mental Health Scale (higher score indicates lower mental health). Therefore, with the improvement of mental health (decrease in its score), the rate of moral behavior increases. This result was consistent with the results of previous studies (10-13). In interpreting these results, based on the researches of (6), it can be said that on the one hand, if there is mental health, it is possible to express healthy thoughts and interact with the social environment and society, one's hope to improve one's life and others increases, prevents stress and burnout in personal and professional

life and provides the basis for healthy and constructive social adaptation and interaction. On the other hand, health means a dynamic and interrelationship between the various physical, mental, social and spiritual dimensions of human beings, and in order to be at a high level, it is necessary that all dimensions work in harmony with each other and in an integrated manner. In such a situation, psychological health is interpreted as a state of psychological maturity that can play an effective role in other human behaviors (such as moral behaviors). As a result, moral behavior increases as mental health improves.

In addition, the results of the present study showed that lifestyle had a positive and significant relationship with moral behavior. This result was consistent with the results of previous studies (18-20). In interpreting these results based on research (20), it can be said that a person's lifestyle is closely related to health and adaptive behaviors and ap-



appropriate lifestyle provides the basis for more control over health and its improvement so that people enjoy their lives more and show appropriate behaviors. Another important point based on research (18) is that lifestyle and living conditions and the environment in which a person is and the social relationships that a person establishes with others have a significant impact on a person's personality and behaviors. Lifestyle is an intertwined set of individual and social behavioral patterns derived from a distinct semantic system that creates a culture in human society, and since none of human societies can be considered free of culture and moral system, lifestyle can play an effective role in promote ethical behavior.

Also, the results of the present study showed that prosocial behaviors had a positive and significant relationship with moral behavior. This result was consistent with the results of previous studies (24-24). In interpreting these results based on research (26), it can be said that prosocial behaviors refer to any action or activity that a person does to reduce the need or increase welfare, comfort and other comfort. These behaviors show what motivates people, when, how much, and how they help or support others. Prosocial behaviors reflect the desirable nature of human beings and play an effective role in improving the social conditions of individuals, and since these behaviors are approved by society, so they can be called moral. As a result, one can expect moral behavior to increase as societal behaviors increase.

Other results of the present study showed that psychological health, lifestyle and prosocial behaviors were able to predict moral behavior. In interpreting these results, it can be said that people with good mental health, lifestyle and socially desirable behaviors have a high quality of life and because of having many friends, they seek help when challenges and stressful situations occur. Such people usually show adaptive behaviors in life and tend to help others and take steps towards the health and well-being of society (themselves and others). These behaviors, since they are considered moral and social, therefore psychological health variables, Lifestyle and socially friendly behaviors can play an effective role in predicting moral behavior.

## Conclusion

The results showed a significant relationship between psychological health, lifestyle and prosocial behaviors with moral behavior and their significant role in predicting moral behavior. Therefore, it is necessary to design programs to improve moral behavior through psychological health, lifestyle and prosocial behaviors. As a result, professionals and planners can design programs to improve ethical behavior and implement them through workshops.

## Ethical Consideration

In this study, the tools were anonymous and the consent form for participating in the research was signed by all samples. They were also reminded of the importance and necessity of researching and analyzing the data in general, and were assured of ethical considerations such as confidentiality, confidentiality of private information, and so on.

## Conflict of Interest

The authors declare that there is no conflict of interests.

## Acknowledgement

The authors would like to thank the officials of the Education Organization and the regional administrations of Tehran for their cooperation and the managers and deputies for participating in the research.

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