

# The relationship between social health and self-efficacy mediated by personality characteristics of graduate students

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**ABSTRACT:** The students' health is a critical issue that caused enormous challenges nowadays (Kadison & Digeronimo 2004; Snyder 2004). The importance of the issue is particularly when the problems of this group are increasing. For example, the results of a 13-year study show that nowadays the students go to college counseling centers more than ever before. In addition their problems are more complicated (Benton et al., 2003). Basically, any attention to this group, especially their social health, will have a significant impact on the future of the country. High social health shows that the individual is responsible and purposeful, which indicates high self-efficacy (Roughanchi, 2005). This study examined the relationship between social health and self-efficacy mediated by personality characteristics of graduate students. A sample group of 250 graduate students studying at Marvdasht Islamic Azad University in the 2011-12 academic years were randomly chosen. Social health, self-efficacy and personality characteristics were measured by Keyes social health questionnaire, (1998), Sherer self-efficacy questionnaire, (1982) and personality questionnaire (NEO-FFI), respectively. Lisrel and SPSS-18 statistical software were used for the analysis of the observed data. The obtained results showed that self-efficacy is impressive and also effective on social health. Furthermore, self-efficacy and social health are highly correlated. Finally, personality characteristics have a relationship with social health and play an important role in the emergence of sense of self-efficacy. In general, personality characteristics can have a mediating role in the present model.

**Keywords:** Self-efficacy, Social health, Personality characteristics, Neuroticism, Extroversion, Openness, Agreeableness, Conscientiousness.

## INTRODUCTION

Going to university is considered as an important shift in life because the individual encounters different challenges such as, creating new social relationships and facing academic expectations. The personality dimensions are also important in this regard. Academic period is stressful due to the presence of numerous factors. What makes the student's life stressful and distinguishes it from normal aspects of life is the existence of certain expectations regarding social and academic performance. The students' parents, families and the university administrators expect the students to complete the academic period with perfect efficiency. Reinforcing mentally and physically, strengthening the personal and inner essences and also enhancing the quality of social relationships by deepening the relationships and mitigating the contradictions are basic strategies that largely guarantees human health (Cohen, 1985).

Nowadays, social health, as one of the aspects of being healthy, has a great role and importance along with physical, mental and spiritual health. So, being healthy is not only the absence of physical and mental diseases, but also how an individual manages social interactions and how his/her thoughts are about the society are considered as the individual health standards in a macro level of the society.

In our country, despite the existing shortcomings particularly in the deprived areas, appropriate steps have been taken for the individuals' physical health. But what its absence is tangible in all country arenas is due to having no adequate attention to the individuals' dimensions (psychological, behavioral and social). This negligence in the age of communication and globalization causes individuals to be vulnerable in psychological aspects such as committing suicide, smoking, running away from home, having educational failure, and other social pathologies that should be paid to with particular attention (Torkamani, 2001).

The fact of social transformations indicates that the form of diseases and disorders is changing and epidemiological phenomenon is taking place. This phenomenon is quickly advancing and causes the diseases and disorders. As the result, by 2020, the disruptive sources of health around the world will be psychological, behavioral and social diseases and disorders (Marandi, 2006).

Therefore, changes related to developments, adaptation to the new methods of study, life style, separation from familiar and supportive environments, group behavior and its resulting pressures, the various events of the country and the existing culture in the universities, altogether put the students under severe physical, psychological and social exhaustion and endanger all dimensions of life, including health (Monk and Mahmood, 1999). Several definitions have been provided for health, but the most common one is the World Health Organization (WHO)'s definition, which is as follows: "Complete state of physical, mental, and social well- being and not merely the absence of infirmity." (Babapour Kheyroddin et al., 2003).

One of the variables that affect the individual's health condition is self-efficacy. According to Bandura (1997), self-efficacy is the most fundamental and essential mechanism for humans to manage and control events that affect their lives (Zimmerman and Kitsantas, 2005). While high self-efficacy is associated with better health (Dennis, 2003), low self-efficacy is associated with anxiety, depression and high psychosomatic symptoms (Benight and Bandura, 2004).

According to Bandura, (1997) self-efficacy is a person's ability to cope with a particular situation. In other words, self-efficacy is defined as people's judgments about their capabilities to produce designated levels of performance (Pajares, 1997).

In academic environments, self-efficacy refers to the students' believes in being able to do the specified learning tasks. The students, who believe that they can be successful in their studies, have more desire, effort and perseverance in doing the learning tasks and also trust their abilities more (Bandura, 1997).

Nowadays, many researchers believe that the five-factor model can increase our knowledge about personality and health. Each of the five main factors, neuroticism (N), extroversion (E), openness (O), agreeableness (A) and conscientiousness (C) are a set of compromised attributes that can help both the individual and the group to achieve their basic needs (Bass, 1996 as quoted by Korortkov and Hannah, 2004). Considering the important role of social health and self-efficacy in the people's lives and the problems regarding personality characteristics which can affect these two variables, pointing the variables studied in this research can help increasing the sense of the students' self-efficacy and social health.

High social health shows the individual's satisfaction of various aspects of his/her life. Being satisfied with life, trying for prosperity and success and coping with problems show the individual's high self-efficacy. Also, a conscientious person is regular and responsible for conducting his/her life's affairs and has pre-determined goals and desires. Consequently, we can say that a conscientious person has high social health and high self- efficacy. On the contrary, low social health brings low satisfaction of life which shows low self-efficacy. Considering that shyness is a social phenomenon, a shy person is not able to express his/her demands, lacks confidence and unable to make decisions and talk with people. Also, a neurotic person is nervous and incompatible and prone to depression. So the four upper cases overlap with each other. The main issue followed in the present study is the relationship between social health and self-efficacy mediated by personality characteristics of graduate students at Marvdasht Islamic Azad University that is displayed in the following hypothetical model (Figure 1).

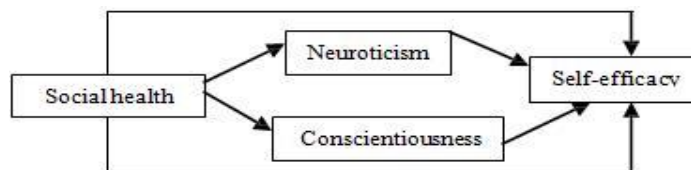


Figure 1. Hypothetical model of the relationship between social health and self-efficacy mediated by personality characteristics

## MATERIALS AND METHODS

### Method

The current research study is descriptive with correlation method and the type of structural modeling equations. In this method, the relationship between the variables is analyzed based on the objective of the study.

**Participants**

The population of the study was all the graduate students studying at Marvdasht Islamic Azad University in 90-91 academic years that include 1283 cases. The statistical sample size, using the Morgan and Krjisy table (1970), was randomly determined 250 participants.

**Data Collection Procedures**

After selecting the sample, the questionnaires were distributed among the participants, provided with the required descriptions about the mentioned questionnaires, and they were asked to fill them according to the instructions.

**Research instruments**

The research instruments used in this study are: Social health questionnaire (Keyes, 1998), Self-efficacy questionnaire (Sherer et al., 1982) and personality questionnaire (NEO-FFI)

**Social Health Scale:**

Keyes, (1998) had provided this scale based on his social health theoretical model which contains 33 items. 7, 7, 6, 7 and 6 items are about social acceptance, social integration factor, social participation, prosperity factor and social adaptation factor, respectively. This questionnaire is based on a Likert scale. Grading ranges from strongly disagree to strongly agree based on 0-1-2-3. 17 items should be inversely graded (3-2-1-0).

**Self-efficacy Scale**

Sherer et al, (1982) developed the General Self-efficacy Scale to measure self-efficacy, which is a 17-item self-expressing scale and uses a 5-point Likert scale ranges from strongly disagree to strongly agree (Kim and Omize, 2005). Sum of item scores ranges from 17 to 85 (Hyan, Chung & Lee, 2005). The scores of items number 3-8-9-13-15 increases from right to left, and the rest from left to right. This scale does not discriminate certain conditions and does not restrict different ages to apply (Mirzaei Kandari, 2007).

**Personality Questionnaire**

In this study, NEO-FFI test which has 60 items was used to measure five factors: neuroticism (N), extroversion (E), openness (O), agreeableness (A) and conscientiousness (C). Each of these factors includes 12 items. The participants selected the answers in a 5-point Likert scale (strongly disagree, disagree, undecided, agree and strongly agree). This questionnaire’s grading was based on 0-1-2-3-4. It should be noted that the two factors, neuroticism and conscientiousness used in this study were totally 24 items.

**Data Analysis**

- Lisrel and SPSS-18 statistical software were used to investigate the mediation of personality factors.
- Descriptive statistics (mean and Standard deviation) and the correlation coefficient were evaluated.
- Inferential statistics (regression) was also applied.

**RESULTS**

Table 1. Mean, Standard deviation, Minimum and Maximum of the participants' scores within the research variables

Variable	Mean	SD	Min	Max	N
Social Health	59.38	10.48	27	84	33
Neuroticism	36.08	6.83	16	55	12
Conscientiousness	45.46	7.16	12	60	12
Self-efficacy	58.76	8.51	33	77	17

Table 2. The correlation coefficients between the variables

Variable	1	2	3	4	5
1 Social Health	1*				
2 Neuroticism	-.1*	.33*	1*		
3 conscientiousness	.23*	-	-	1*	
4 Self-efficacy	.36*	-	.19*	-.40*	1*
		.34*	.42*		

All the correlation coefficients between the variables in p=.001 are significant.

Table 3. Suitability of the suggested model with data based on the indicators of propriety

Model	$\chi^2$	Df	$X^2/df$	NN FI	G FI	R FI	C FI	NRMS FI EA
Suggested Model	6277.38	37	1.67	.81	.91	.67	.81	.60528

Table 4. Structural model: direct directions and standardized coefficients in the suggested model

Direction	$\beta$
Social Health → Neuroticism	.18
Social Health → Conscientiousness	.30
Neuroticism → Self-efficacy	-.37
Conscientiousness → Self-efficacy	.39
Social Health → Self-efficacy	.47

Table 5. Structural model: indirect directions and standardized coefficients in the final model

Direction	$\beta$
Social Health → Neuroticism → Self-efficacy	.06
Social Health → Conscientiousness → Self-efficacy	.11

Table 6. Social Health and Self-efficacy regression coefficient. Self-efficacy (dependant variable)

Model 1	NSC B	SC SE	T B	Sig.	R
(Invariable)	34.788	3.982	8.73	.0001	
Social Health	.361	.059	.36	6.06	.001 .36

Nonstandardized coefficients: NSC Standardized coefficients: SC Standard error: SE

Table 7. Social Health, Neuroticism and Self-efficacy regression coefficient. Self-efficacy (dependant variable)

Model 2	NSC B	SC SE	T B	Sig.	R
(Invariable)	56.55	4.95	11.40	.001	
Social Health	.28	.05	.28	5	.001
Neuroticism	-.45	.07	-.36	-6.55	.001 .50

Nonstandardized coefficients: NSC Standardized coefficients: SC Standard error: SE

Table 8. Social Health, Conscientiousness and Self-efficacy regression coefficient. Self-efficacy (dependant variable)

Model 2	NSC B	SC SE	T B	Sig.
(Invariable)	17.93	4.09	4.33	.001
Social Health	.28	.05	.25	4.68
Conscientiousness	.53	.06	.44	8.25

### DISCUSSION AND CONCLUSION

Since self-efficacy as an intrinsic feature can either affect or influence on the individuals' social health, and as the researches show the relationship between these two variables, it seems clarifying mediated factors such as personality characteristics that are associated with social health can play an important role in the emergence of the individuals' sense of self-efficacy. In the present model, the effect of social health mediated by personality characteristics (conscientiousness and neuroticism) on self-efficacy was evaluated. Abdollah Tabar et al, (2008)

and Refahi and Fekri, (2011) found that the M.A students' social-health scores are higher than those of graduate students. Also, the obtained results of Larson, (1996) and Refahi and Fekri, (2011) were similar, stating that there is a negative significant relationship between social health and public health. Mirzaei and Hatami, (2010) and Hayes and Joseph (2003) indicated that among the five investigated personality factors, extroversion and agreeableness have a positive relationship with happiness while neuroticism have a negative relationship with it; And also among the personality characteristics, extroversion and conscientiousness are the strongest predictor factors of happiness, life satisfaction and mental welfare. Referring to the above entries, the results of this study revealed that people who have high self-efficacy will choose the best solution in facing with difficult tasks. They are purposeful and also consider the best techniques in achieving their goals with the required efforts and perseverance. They believe that they can make their own destiny and can control over their own lives.

Hayes and Joseph, (2003) indicated that neuroticism factor has a negative relationship with happiness and life satisfaction. High social health shows the individual's satisfaction and full compatibility with various aspects of his/her life. But a neurotic person has flightiness and depression and cannot apply effective strategies in various situations. Therefore, the more socially healthy a person is, the less neurotic he/she is. Agha-mohammadi et al, (2011) found that teaching self-efficacy will increase positive social interactions in runaway girls; high social health shows the quality of the individual's relationships with others, and his/her full satisfaction with life. Being satisfied with life, trying for prosperity and coping with problems show the individual's high self-efficacy. When social health and neuroticism were simultaneously as self-efficacy predictor variables in regression equation, the regression coefficient of the social health was reduced. However, it is still significant and confirms the mediation of neuroticism in the relationship. A person with a neurotic trend is sad, flighty and prone to depression (Howard & Howard, 1998). Graduate students are expected to be purposeful and hard-working and also have a good social health. This means to be satisfied and fully compatible with various aspects of their lives, and to have effective interactions in their social relationships.

A neurotic person is certainly not satisfied and fully compatible with various aspects of his/her life. Generally, a neurotic person has low social health and as a consequence, his/her self-efficacy will be low, because self-efficacy and social health are directly related to each other.

Furthermore, Hayes and Joseph, (2003) illustrated that among personality characteristics, extroversion and conscientiousness are the strongest predictors of happiness and life satisfaction. People with high social health are fully satisfied with their lives, purposeful and responsible. As a result, people with high social health are highly conscientious and also dutiful.

Conscientious people are regular and responsible for conducting their lives' affairs and have pre-determined goals and desires. People with high social health are also fully satisfied with all aspects of their lives. They are purposeful, means they know which behaviors are required to achieve their goals and also believe that they can make their own destiny and can control over their own lives. They have a complete and comprehensive viewpoint of the world and high acceptability, so that they believe in people with all their positive and negative attributes and accept them in their social relations. Consequently, when a person has a high social health, he/she is very conscientious and also has a high self-efficacy. Personality characteristics also influence self-efficacy. The results revealed that the ratio of the direction of conscientiousness on self-efficacy is direct and positive. Wahtera, (1991), in a longitudinal study, showed a positive relationship between self-efficacy and nursing performance process (including the patient, planning, implementation and evaluation of health care programs), that are in accordance with the individual's conscientiousness. The more conscientious a person is, the more responsible, organized and scheduled he/she is in conducting his/her affairs. Also, a self-efficacious person is very disciplined and careful in conducting his/her affairs and knows the appropriate behaviors to achieve his/her goals. Therefore, the more conscientious an individual is, the more self- efficacious he/she is. On the contrary, neurotic people are distressed and depressed and do not have certain goals in their lives, but self-efficacious people are purposeful, know how to deal with their life situations and make their own destiny. Graduate students must be purposeful and make their own destiny and consider the best choice to achieve their goals. When self-efficacious people select a goal in their lives, they try to choose the best way to achieve their desires. Instead, neurotic people not only cannot be purposeful in their lives, but also they cannot choose the best way to achieve their goals, even if they have any goal, because they are flighty and depressed and incapable of decision making and cooperation. The lack of these two elements prevents people from achieving their goals. In addition, it suggests that people cannot have control over their own lives and destiny. As a result, the more neurotic a person is, the less self-efficacious he/she is.

In this study, Sherer's self-efficacy scale (1982) was used and self-efficacy was not evaluated in social and academic situations. The sample population in this study was restricted to the graduate student from one university. Hence, to strengthen findings of this study, more researches should be done.

It's necessary to note that economic and social statuses may influence on all the research variables, but were not controlled in the present study and might have influenced the research results.

### **Suggestions**

Considering that the present study indicated the personality characteristics as the effective factor on self efficacy, human personality and its growth is influenced by the genetics and the environment, but the impact of the environmental factors on the formation of personality is dominant; since the effective environmental factors on personality begin from families, thus parenting styles, family environment and the dominant behavior of the family members should be greatly paid attention to. Also, given that both high social health and conscientiousness cause high self efficacy and are highly correlated with each other, thus, more attention should be paid to these two factors through conducting training workshops. At the end of the university, a student can include the required workshops in his/her programs in order to increase self- efficacy, to reinforce social behaviors and group activities and also to deal with shyness.

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