

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/286888342>

Students' views about health concept by drawing and writing technique

Article · January 2013

CITATIONS
14

READS
138

4 authors, including:



Gülcan Cetin
Balıkesir University

29 PUBLICATIONS 145 CITATIONS

[SEE PROFILE](#)



Murat Özarlan
MEB

25 PUBLICATIONS 33 CITATIONS

[SEE PROFILE](#)

Students' views about health concept by drawing and writing technique

Gulcan Cetin^{1,*}, Murat Ozarslan², Ebru Isik², Handan Eser²

¹Balikesir University, Faculty of Necatibey Education, Balikesir, Turkey

²Balikesir University, Institute of Science, Balikesir, Turkey

Received: 25 November 2011; accepted: 23 January 2012

Abstract

The aim of the study was to determine the views of ninth grade students about health concept by drawing and writing technique. Study group consisted of 156 ninth grade students in two schools (Technical and Industrial Vocational Schools for Girls and Technical and Industrial Vocational Schools) in Kocaeli, Turkey in the 2010-2011 academic years. The study based on qualitative approach was conducted by means of the drawing and writing technique after 'the Health Concept Unit' had been thought in the 9th grade Hygiene Course. Data were analyzed according to the content analysis method. Explanations of students about health concept were compatible with the findings obtained from their drawings in the study. According to the results of the study, it was seen that students usually described health as a physical and psychological well-being; however, they did not stress health in terms of social well-being adequately. While the importance of nutrition and exercise were mentioned at the protection of health in general, unbalanced diet, microbes and harmful habits were considered as factors negatively affecting health.

Keywords: Health; Drawing and writing technique; Secondary school
©Sila Science. All rights reserved.

1. Introduction

Human being continues investigations in order to make healthy and long life possible. One of the investigations focuses on 'What is health?' Definitions of the concept of health have been made so far but there is not agreement on certain definition because the concept of health is composed by individuals according to their own life, culture, conscious and thoughts [1, 2].

The definition of health that World Health Organization [3] made up in 1948 and is still valid: 'Health is not only a case without a disease or not being unhealthy but also it is a complete situation of bodily, psyche and social well-being.' It is not adequate that individuals are not ill only bodily and psychologically, but also it is required that they are well-being in terms of their social dimension. Therefore the fact that individuals are a sense of well socially is related to social life and the society they closely live in.

Natapoff [1] defined health as being able to fulfill desired works and exercise; strong body; a beauty skin; pink cheeks; bright eyes, well-being, not being ill; being able to eat regularly; gladness; feeling well; cleanliness, health control. In the one of the studies conducted with a group of children between 5 and 6 years old [4] the concept of health was associated with being able to go out, eat, and get along with their friends. In the other study [5], the concept of health was determined as feeling well in terms of psyche and body. It was mentioned as being able to body work regularly, not being ill; living in a good, quality, fun and happily, and being fitness. Some other expressions that were related to definition of the concept of health were: Health was eating and drinking whatever you wanted, living in the society properly and being well determined by doctor. Paying attention to nutrition; exercising; living regularly and the necessity of paying attention to avoid harmful habits were emphasized as factors required for protection of the health.

Wang [6] who conducted with different age groups of Chinese students determined that the students defined the concept of health at the extent of physical, psychological and social in the study. When the students were describing health, initially they focused on health's dimension of the physical, and then they used health's dimension of the psychological and social aspect respectively. Students illustrated that health in the form of well-being in that body and psychological, not being ill, being strong of body, right thoughts, being happy, adjusting to situation, and being energetically. General conditions to protect health were listed as doing sport, regular nutrition (eating fruit and vegetable), good-humored or being mild-mannered, more physical working, using his/her mind more, doing good things and caring for body health. Similarly, a study carried out on adult women [7], health was explained by focusing individual's physical and psychological dimensions and instead of social dimension. Participants expressed health which is happiness, peace, feeling well, behaviors of healthy life, being fitness, fulfillment functions of organs, providing their own needs, not being pain, ache, and weakness. Alternatives techniques, such as poll, interview, concept map, and fortunate line, are used in order to determine students' opinion, explanation and approach [8, 9]. Besides, one of the techniques, which are used for health education search, is writing and drawing technique [10].

Technique of drawing and writing is useful for being come out of earnings of students deeply; furthermore it is quite beneficial in terms of acquiring natural, highly qualities and unexpected data about hidden thought, understanding and attitudes of learners [8, 11]. In the literature, there are many studies about drawing and writing techniques. Some of them concentrate on health, health education, harmful habits towards health, illness and environment [10, 12-14].

It is seen that health is mostly associated with those notions in studies related to opinions of individuals towards health concept whom explanation or/and drawing technique have been applied on: feeling well, fulfillment of desired things, to carrying out daily activities, exercising, playing game itself or together with other friends, applications promoting health, strong body [10, 13, 15].

Those figures have been found at the drawing of students about health concept in many instances. A house having kitchen; fresh meal; clean plates; clean water; clean water closet; a safe home; trees; corn plants; someone playing ball; hospital; short fingernails; people washing their hands after using the water closet or getting up [16-18].

However, in the literature positive correlation has been found between meanings, thoughts that individuals give their attitudes towards health and health traits of individuals [5]. Attitude that is inclination to reacting an object, situation, an event or a notion positively or negatively has got dimensions of cognitive, affective and behavior; moreover, any change which may occur at the one of these dimensions can attract other dimensions [19, 20].

Although there are many studies about technique of drawing and writing as stated above, any study concentrating on describing of drawing and writing technique has not been founded in our country. Therefore this study has been conducted to determine thoughts of 9th grade students towards health concept by means of drawing and writing technique.

2. Method

2.1. Problem

What were the views of ninth grade students about health concept by drawing and writing technique?

2.2. Study Group

The study has been carried out in Kocaeli which is one of the biggest cities of Turkey and it is found in the west part of Turkey. The study group consisted of 156 ninth grade students (male 81; female 75) in two schools (Technical and Industrial Vocational Schools for Girls and Technical and Industrial Vocational Schools) in Kocaeli in the 2010-2011 academic years.

*Corresponding author: Tel.: +90-266-241-2762; fax: +90-266-249-5005.
E-mail address: gulcan_cetin@hotmail.com (G. Cetin).

2.3. Data collection and data analysis

Drawing and writing technique has been applied in order to reveal thoughts of students about health concept in this study. The technique is one of the significant techniques preferred in the reflection of thoughts of individuals [21].

Initially drawing and writing technique has been explained and then A4 papers have been handed out during data collection. It has been asked for 'What is health? Explain and draw' in 5 minutes afterwards. It has been expressed that this is not examination, and it has also been applied for purpose of a research. It has been emphasized to students that doing it without looking each other is important and time has been shorten for completion of drawing-writing activity in order to prevent looking each other. What is more, it has been expressed to students to imply their opinions freely and not to restrict them on this topic.

Views of students about health concept collected with technique of drawing writing technique have been analyzed with content analysis." The main purpose is to reach concepts and correlations to explain data in the content analysis. Thus similar data is combined within framework of theme and specific concepts and these are commented by organizing format readers can understand". Initially answer sheets of students have been numbered from 1 to 156 so as to start data analysis. Example of three answer sheets of students has been presented in the Figs. 1-3. Drawing and explanation every one of the answer sheets has been analyzed into two separate sections. Hence explanations about health concept definition of each student have been gathered into specific themes and sub-themes for explanation part. Drawings of students related to health concept have been probed similarly. Findings about these have been given in the Table 1. Furthermore, interesting student's explanations about health have been given by signifying his or her school number and making same quote into "...". Examples have been presented to drawings of students related to health by indicating student number in the text like (S3).

Internal consistency of sub-themes and themes created about student's both explanations and drawings have been provided by article writers in this study made about health.

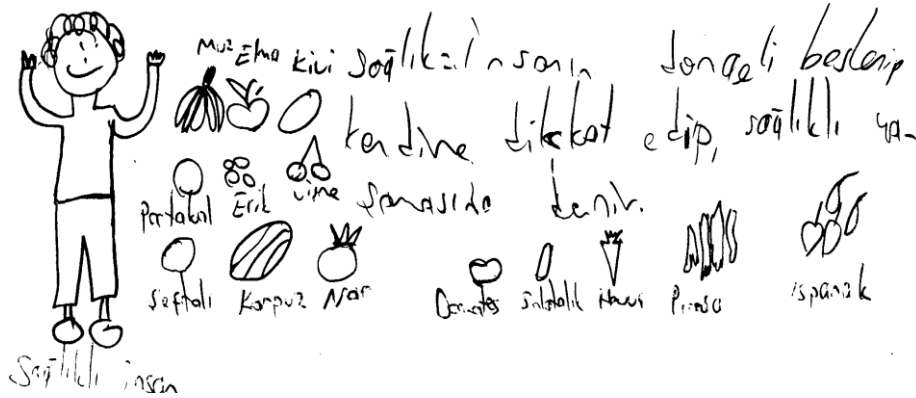


Fig. 1. A sample answer sheet of S21 (Health is defined as a person has balanced diet, take care of himself/herself and live healthy).

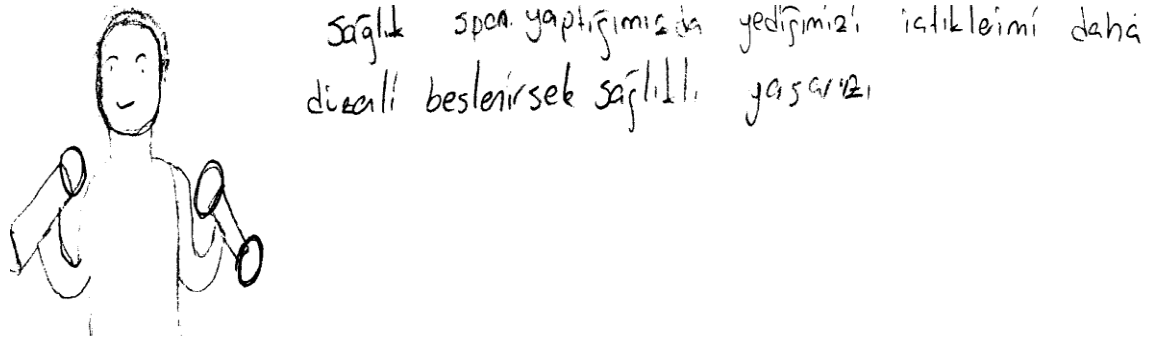


Fig. 2. A sample answer sheet of S97 (When we exercise and have more balanced diet, we live more healthy).

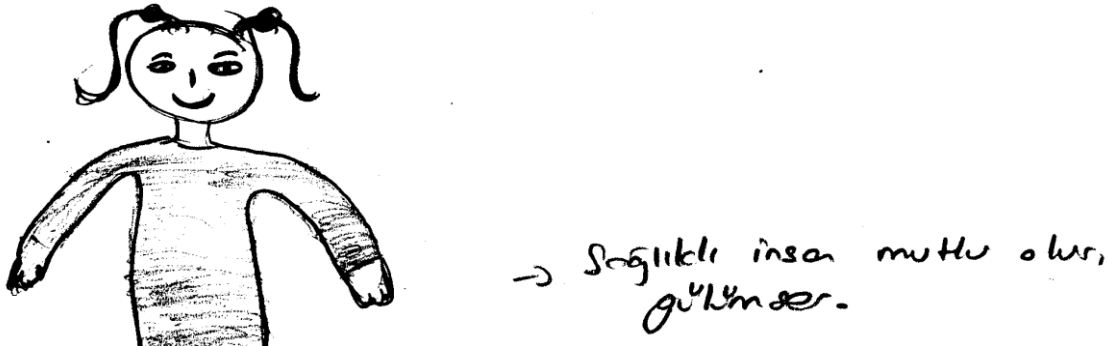


Fig. 3. A sample answer sheet of S51 (Healthy person is happy and smiles).

3. Results

Thoughts of 9th grade students towards health concept have been looked over under the name of the explanations and drawings into two separate sections and frequency and distribution of themes and subthemes of explanations and drawings in the Table 1. As seen in the Table 1, explanations students made while defining health concept were being gathered under the 6 themes and 26 subthemes, drawings also they made while defining health concept were collected under the 4 themes and 16 sub-themes.

Table 1. Distributions of explanations and drawings about health concept to themes and sub-themes

Theme	Sub-theme	Explanation (f)	Drawing (f)
1. Definition of Health Concept	Being healthy psychological	61	-
	Being healthy physically	43	-
	Being healthy socially	2	-
	Smiling face	-	85
	Physical force	-	48
	Human	-	47
	Total	106	180
2. Factors Protecting Health	Exercising	31	11
	Balanced diet	17	48
	Cleanliness	11	5
	Regular life	-	6
	Water	2	6
	Medicine and medical materials	-	3
	Wearing	-	2
	Total	61	81
3. Factors Affecting Health Negatively	Unbalanced diet	31	-
	Microbe/Bacteria	20	6
	Harmful habits (Alcohol and cigarette)	5	7
	Environment	5	-
	Total	61	13
4. Human and Human Body	Human	59	-
	Body	29	-
	Life	27	-
	Heart	8	9
	Organ	7	-
	Physical force	4	-
	Lung	-	3
	Liver	-	2
	Kidney	-	1
	Total	134	15
5. Medicine	Healthy	58	-
	Disease	19	-
	Immunity	14	-
	Unhealthy	8	-
	Vaccine	1	-
	Total	100	0
6. Nutrition and Nourishments	Fruits	9	-
	Vegetables	6	-
	Breakfast (Honey, milk, egg and etc.)	5	-
	Vitamin	2	-
	Total	22	0

3. 1. Explanations of definition of health concept

Explanations of students have been collected under the 6 themes in the Table 1. Definition of health is that factors protect health, human and human body, negative factors affecting health, medicine, nutrition and nourishments. Thoughts of some students have been submitted together with subthemes of theme.

1. Definition of health concept: Majority of students described health as state of being psychological healthy (39%) and state of being physical healthy (28%). Students express state of being psychological healthy as feeling well, being glad and peaceful, and human laughing and enjoying. Students implied state of being physical healthy in the form of carrying out desired activities, being active, exercising, strong body, body fitness, being well of body values, not lacking of or not acting up any organ, not being illness, being high immunity. Students defined being well socially those individuals can play game with their partners, get along with people, can communicate other people and have regular life. For example, "... health is state of felicity of human having good social, psychological and physical activities." (S98), "... state of feeling fitness physically." (S65), "... operating of human's organ efficiently ..." (S43), "... there not being any lack of body ..." (S92), "... it is that human is happy and gets along with other people ..." (S108), "... body has got good values ..." (S81).

2. Factors Protecting Health: It was seen that 9th students used mostly exercising (20%), to eat balanced diet (11%) and cleanness (7%) concepts. For example, "... health can be protected by eating balanced diet ..." (S15), "... we must exercise and eat balanced diet for living healthy" (S121), "... we must keep our hands clean and eat clean foods" (S83).

3. Negative Factors Affecting Health: 9th grade students mentioned rather nutrition (%20) and microbes/bacteria (%13). For example, "... someone that eats junk continually and lies down is getting unhealthy." (S125), "... microbes make body unhealthy ..." (O93).

4. Human and Human Body: While students were defining health concept, they explained by establishing relations with human and concepts related to human. For example, "... health is called life that human need ..." (S73), "... a healthy human is a person that enjoy in life and like living ..." (S143), "... health is not any lack at the body..." (S37).

5. Medicine: When explanations of 9th grade students were looked over it was seen that some students often used healthy (37%), illness (19%) and immunity (9%) and these concepts were put under the medicine theme. In relation to this matter; S31: "... healthy people are happy ..."; S37: "... health is that immunity system becomes strong ..."; S55: "... person has got any illness ..."; S93: "... a body not having any illness is healthy."

6. Nutrition and Nourishments: Explanations of 9th grade students towards health concept were looked over, nutrition and nourishments were attractive. These concepts: Fruits (%8), vegetables (4%) were classified under the nutrition and nourishments theme. Students have stated these concepts; "... fruit and vegetable affect our health positively ..." (S108), "... fruit and vegetable should be eaten for healthy life ..." (S74).

3. 2. Drawings about definition of health concept

Drawings of students about health concept were presented fewer than 4 themes at the Table 1: Figures about definition of health concept, factors protecting health, figures about human body by defining health and figures about factors affecting health negatively. Thoughts of some students were also submitted together with sub-themes of themes.

1. Drawings about Definition of Health Concept: When the drawings of students were investigated about health concept, some drawings of students were gathered under the definition of health concept like Table 1. According to this, students made drawings related to mostly 'smiling face about definition of it' (%54) (features such as happiness and peace of health are described). It was determined that students made drawings about physical force (31%) (described as force and fitness of health in terms of body) and human (30%) (health is described as being associated with human figures.) 3 students' drawings related to definition of health have been example at under S23, S64, S90, described health with smiling face at Fig. 4, drawing of child lifting weight at Fig. 5, and drawing of humans living healthy and enjoy fully in Fig. 6 respectively.

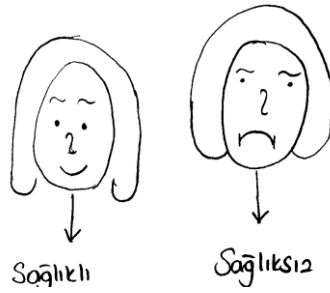


Fig. 4. Smiling face.



Fig. 5. Physical force.

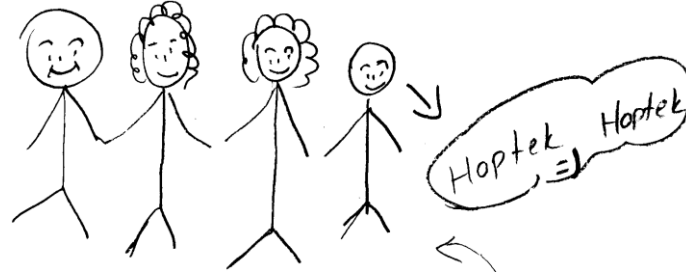


Fig. 6. Funny and pleasant people.

2. Drawings of Factors Protecting Health: Drawings related to factors protecting health has been displayed at the Table 1. It has been exhibited that students stressed nutrition (31%) (eating nutritious meal, drinking milk, consumption of mush fruit and vegetable and exercising (20%), (walking, exercising, playing game), yet they almost no emphasized regular life (4%), water (4%) and clean (3%). Drawings of 6 students have been example of factors protecting health. At Figs.7 and 8, it has been seen that fruit should be eaten for equal nutrition (S61) and milk ought to be drunk (S106). S94 expressed health would be protecting by exercising. At Figure 10, S112 drew figure of regular life drawings mentioning importance of water (S35) and cleanness (S138) has been showed.

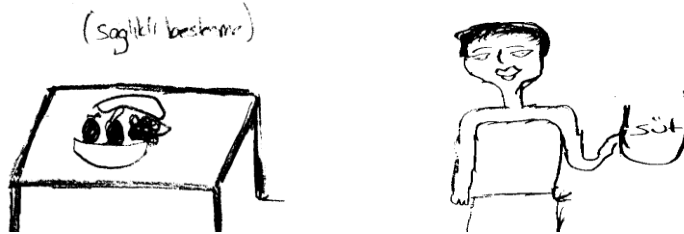


Fig. 7 and 8. Two drawings about nutrition and healthy nutrition.

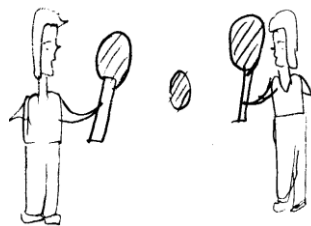


Fig. 9. People exercising.

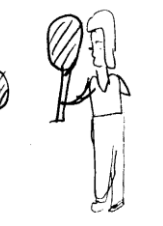


Fig. 10. Regular life.

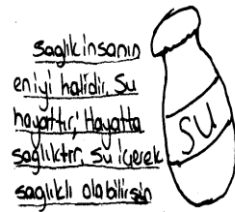
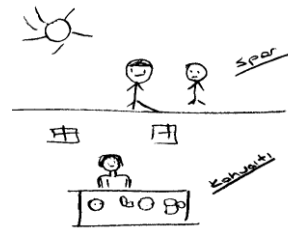


Fig. 11. Water.



Fig. 12. Cleanliness.

3. Drawings of Factors Affecting Health Negatively: When drawings of factors affecting health negatively were investigated, drawings were made by students (Table1): Cigarette, alcohol and other harmful habits (4%) and microbes (4%). Two figures were submitted as an example given below. S27, S130 expressed his/he thoughts with drawings of factors causing harmful effects and drawings of displaying negative effects of microbes to health at Fig. 13 and 14 respectively.

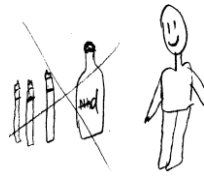


Fig. 13. Harmful habits.



Fig. 14. Negative effects of microbes.

4. Drawings about Human Body: When drawings about human body of students were looked over, it was seen that they drew those (Table1): Heart (6%), lung (2%), and liver (1%). Two figures were presented as an example given below. At the Fig. 15, S41 mentioned his/her thoughts with human body and he art and at the Fig. 16; S149 explained his/her thoughts with organs such as lung and liver at the human body.



Fig. 15. Drawing displaying human heart.



Fig. 16. Drawing showing human body.

4. Discussion and conclusions

The study has been carried out in order to determine the thoughts of 9th grade students about health concept by drawing and writing technique. Explanations and drawings of students about health concept have been gathered into 6 themes. Although four themes out of them have shared same properties of explanation and drawings (definition of health concept; factors protecting health, factors affecting health negatively; human and human body), two themes only have been made up for explanation (medicine; nutrition and nourishments). Results given below have been obtained:

1. Definition of Health Concept: According to explanations of students about health concept, it was observed that students described health by taking into consideration dimensions of physical, psychological and social. There are resemblances amid findings of health concept's definition in the literature. For instance health has been defined as feeling well, being glad, being peace, not being any disease and pain, being able to fulfill desired activity, being active, accomplishing daily activities, playing game by himself/herself or his/her own friends, strong body [1, 4-7, 10, 13, 15, 18]. Besides, health is explained in the form of smiling face, pink cheeks, bright eyes and strong body [1, 6]. One of the attractive subjects is that students have paid attention dimension of psychological and physical significantly rather than social dimension of health [5-7].

It can be said that there usually are similarities between explanations and drawings of health concept of students. Seeing that it was seen students gave place figures about mostly smiling face and physical force related to definition of students' health concept. If it was thought that figures of smiling face and physical force had represented state of being well psychically and physiologically, it might be told that there were similarities between expressions of students at the figures and explanations about health concept of students.

2. Factors Protecting Health: According to explanations of students about health concept it was seen students attach attention how to keep on health. According to explanations of students, it was determined that exercising, equal nutrition, cleanliness were the most important elements, balanced nutrition and exercising were the most important elements according to drawings of students. Hence it may be said majority of students have said and drawn similar things. However, when explanations and drawings of students were taken into consideration all together, it might be thought elements, such as cleanliness, regular life, have been overlooked. As a reason of it, it can be inferred that students have got sufficient knowledge and awareness about this subject, factors of equal nutrition and exercising are stressed instead of other factors by environment, culture and media. There are similarities between this study and literature findings. For example regular nutrition, fruits, vegetables exercising and cleanliness were emphasized in the literature [1, 5, 6].

3. Factors Affecting Health Negatively: Explanation and drawing of students, they stressed factors affecting health negatively into their explanation. They have written unequal nutrition and microbes are the most important factors affecting health negatively. Students consider the most factors that are cigarette, alcohol and microbe, bacteria affecting health negatively. It has been observed they have not emphasized other negative factors such as inconvenient environment condition, harmful chemical substance, psychological and social element. Because they have not got sufficient knowledge and awareness on factors affecting health negatively. Accordingly the fact that knowledge and awareness of students should be increased about factors affecting health positively or negatively will be able to provide great benefits so as to create healthy society and protection of individuals' health.

4. Human and Human Body: Just as students were writing and drawing their thoughts about health concept, they used concepts related to human and human body for explanation rather than drawing. Students mostly mentioned concepts about human, body and life. They drew organs such as lung and liver at least. According to this, while they were defining health concept, it was observed they put themselves at the centre. Students expressed thoughts about health concept by using their own experience and trial. One of the important subjects is that heart concept is common into their both explanation and drawings.

5. Medicine: As students were explaining their thoughts about health concept; it was clear they often used concepts of medicine particularly healthy, disease, and immunity.

6. Nutrition and Nourishments: While students were explaining health concept, writings of them about nutrition and nourishments particularly fruits, vegetables, nourishments eaten during breakfast were interesting at least. In the literature [4, 6, 5], health concept is associated with nourishments, fruits and vegetables.

Thoughts, which students have toward health concept, can influence attitude and behavior of them towards to health [17]. In this line, thoughts of individuals about health concept have important role for determination and development of knowledge, sense, and behavior of individual. Therefore data displaying thoughts of individual are quite eminent in terms of protection of students' health, healthy life, and creation of healthy society [5, 22].

This study in which thoughts of students about health concept have been investigated can provide us new ideas for re-designing of health education and their thought, behavior, attitude toward health. Activities of health education can be reformed by using results of this type study in order that health education to be applied will be successful. Thus determination thoughts of individual and adults toward health concept at the each grade of education and instruction and factor affecting these can increase quality and achievement of health education to be applied in the future [23-32].

References

- [1] Natapoff JN. Children's views of health: A developmental study. Am J Public Health 1978;68:995-1000.
- [2] Hatemi H. Lise Sağlık Bilgisi Kitabı. Bayrak Publications, Istanbul, p. 12, 2003.
- [3] World Health Organization. Definition of health. Available from: http://www.who.int/topics/mental_health/en/index.html. 2010.
- [4] Normandeau S, Kalnins I, Juras S, Hanigan D. A description of 5-to 12-year old children's conceptions of health within the context of their daily life. Psychol Health 1998;13:883-896.
- [5] Araz A, Harlak H, Mese G. Sağlık davranışları ve alternatif tedavi kullanımı. TSK Kor Hek Bulteni 2007;6:112-122 [in Turkish].
- [6] Wang, W. Mainland Chinese students' concept of health. Asia-Pacific J Public Health, 2004. Available from: <http://aph.sagepub.com/content/16/2/89>. 2010.

- [7] Aslan D, Boztas G, Kilic E, Ozturk I, Erkan K, Gunbey L, Balci M, Akin L. Thoughts of women who are registered in a sports center about "health/illness" concept and factors which influence their health seeking behavior. *Erciyes Univ Saglik Bil Derg* 2007;13:30-38 [in Turkish].
- [8] White R, Gunstone R. Probing understanding. The Falmer Press, [City?, Country?](#), pp. 114-150, 1998.
- [9] Bahar M, Ozel M, Prokop P, Usak, M. Science student teachers' ideas of the heart. *J Baltic Sci Educ* 2008;7:1648-3898.
- [10] Backett-Milburn K, McKie L. A critical appraisal of the draw and write technique. *Health Educ Res Theory Pract* 1999;14:387-398.
- [11] Atasoy B. Fen Ogrenimi ve Ogretim. Gunduz Education and Publishing, Ankara, pp. 246-253, 2004 [in Turkish].
- [12] Woods SE, Springett J, Porcellato L, Dugdill L. "Stop it, it's bad for you and me": Experiences of and views on passive smoking among primary-school children in Liverpool. *Health Educ Res* 2005;20:645-655.
- [13] Piko BF, Bak J. Children's perceptions of health and illness: Images and lay concepts in preadolescence. *Health Educ Res Theory Pract*. 2006;21:643-653.
- [14] Pluhar ZF, Piko BF, Kovacs S, Uzzoli A. Air pollution is bad for my health: Hungarian children's knowledge of the role of environment in health and disease. *Health Place* 2009;15:239-246.
- [15] Onyango-Ouma W, Aagaard-Hansen J, Jensen BB. Changing concepts of health and illness among children of primary school age in Western Kenya. *Health Educ Res Theory Pract* 2004;19:326-339.
- [16] Backett K, Davidson C. Rational or reasonable? Perceptions of health at different stages of life. *Health Educ J* 1992;51:55-59.
- [17] Boruchovitch E, Mednick BR. The meaning of health and illness: some considerations for health psychology. Evely Boruchovitch Birgitte R. *Psico-USF* 2002;7:175-183.
- [18] Almqvist L, Hellnas P, Stefansson M, Granlund M. "I can play!" Young children's perceptions of health. *Pediatric Rehabil* 2006;9:275-284.
- [19] Tezbasaran A. Likert tipi olcek gelistirme kılavuzu. Turk Psikologlar Dernegi Publications, Ankara, 1996 [in Turkish].
- [20] Ucal Canakay E. Muzik teorisi dersine iliskin tutum olcegi gelistirilmesi. Ulusal Muzik Egitimi Sempozyumu Bildirisi, Pamukkale Universitesi Egitim Fakultesi, Denizli, April 26-28, pp. 297-310, 2006 [in Turkish].
- [21] Rennie LJ, Jarvis T. English and Australian children's perceptions about technology. *Res Sci Technol Educ* 1995;13:37-52.
- [22] Ozarslan M, Isik E, Cetin G, Eser H. 9. Siniff Ogrencilerinin Saglik Kavramina Iliskin Goruslerinin Cizme-Yazma Teknikniginin Gore Incelenmesi. 9th Ulusal Fen Bilimleri ve Matematik Egitimi Kongresi, Izmir, 2010 (in press) [in Turkish].
- [23] Cetin M. EU education project of effects on auto mechanics in terms of health, safety and environmental sensitivity. *Ener Educ Sci Tech-B* 2012;4:87-96.
- [24] Ilhan EL. Examination on the healthy life style behaviors of the student-athletes in university teams in Turkey. *Ener Educ Sci Tech-B* 2012;4:1511-1522.
- [25] Tuncer M. Evaluation of learning environment variables in Turkey from the aspect of a learner's health and education. *Ener Educ Sci Tech-B* 2012;4:1703-1712.
- [26] Inan HZ. Teaching science process skills in kindergarten. *Ener Educ Sci Tech-B* 2011;3:47-64.
- [27] Kubiato M, Vaculová I. Project-based learning: characteristic and the experiences with application in the science subjects. *Ener Educ Sci Tech-B* 2011;3:65-74.
- [28] Aydin S, Yel M. The effect of brain based learning biology education upon the academic success and attitude. *Ener Educ Sci Tech-B* 2011;3:87-98.
- [29] Kaya Y. Effect of late coming during the lecture on the rate of learning performance. *Ener Educ Sci Tech-B* 2011;3:221-228.
- [30] Kaya Y. The effect of regulator and stiffer exercises for speaking mechanics on the stuttering education and therapy. *Ener Educ Sci Tech-B* 2011;3:253-268.
- [31] Gulay H. Relationship of different variables to depressive symptoms in early childhood: A research from the point of parental acceptance-rejection, social development, social skills and peer relationships. *Ener Educ Sci Tech-B* 2011;3:431-440.
- [32] Demirbas MF. Contemporary child education. *Ener Educ Sci Tech-B* 2012;4:1015-1020.