

THE EVALUATION OF THE BOUNDARIES OF THE ABILITY TO MANAGE BEHAVIOUR AND PERCEPTION OF THE LEGAL MEANING AND THE CONSEQUENCES OF ACT OF THE STUDENTS ACCORDING TO A SCENARIO-BASED STUDY

Tarık Uluçay,¹ Mahmut Aşirdizer,² M. Sunay Yavuz,² M. Gökhan Dizdar,³ Yıldırım Zeyfeoglu²

¹ Manisa Branch of Institute of Forensic Medicine, Manisa, Turkey

² Celal Bayar University, Medical School, Department of Forensic Medicine, Manisa, Turkey

³ Van Branch of Institute of Forensic Medicine, Van, Turkey

ABSTRACT

Objective: The aims of this study were to determine the differences among the limits of the ability to manage behaviour and perception of the legal meaning and the consequences of the act with a scenario-based study over the students ages between 10-18 in the primary and secondary schools; and to investigate its interactions with environmental factors.

Material and Method: The results of the questionnaires, which were filled out by 969 students were evaluated in this study. The descriptive characteristics of the students who attended this research were defined. For each scenario, the rates of “expected responses” were determined for each question.

Results: From 1.8% to 29.2% of the students did not have the perception of what is “true or false” or the perception of what is “crime or not crime”. From 1.9% to 66.1% of the students did not have foresight about the legal meaning and the consequences of the act. The environmental factors did not seem to affect them.

Conclusion: The ability to manage behaviour and perception of the legal meaning and the consequences of the act for attributed crimes to every under-18-year-old child should be evaluated in special units and special juvenile courts.

Key Words: Ability, perception, legal liability, age groups
Nobel Med 2013; 9(3): 125-132

SENARYOYA DAYALI BİR ÇALIŞMA İLE ÖĞRENCİLERİN DAVRANIŞLARINI YÖNLENDİRME YETENEĞİ VE EYLEMİN YASAL ANLAM VE SONUÇLARINI İDRAK ETME SINIRLARININ DEĞERLENDİRİLMESİ

ÖZET

Amaç: Bu çalışmanın amaçları, 10-18 yaşları arasındaki ilk ve orta öğretim öğrencileri üzerinde senaryoya dayalı bir çalışma ile davranışlarını yönlendirme yeteneği ve eylemin yasal anlam ve sonuçlarını idrak etme sınırları arasındaki farklılıkları tanımlamak ve onun çevresel faktörler ile etkileşimini araştırmaktır.

Materyal ve Metod: Bu çalışmada 969 öğrenci tarafından doldurulmuş anket sonuçları değerlendirilmiştir. Bu araştırmaya katılan öğrencilerin tanımlayıcı özellik-

leri tanımlanmıştır. Her bir senaryoda, her bir soru için “beklenen yanıt” oranları saptanmıştır.

Bulgular: Öğrencilerin %1,8 ile %29,2’si, “doğru ve yanlış” kavramlarının ne olduğu algısına ve “suç ve suç olmayan” kavramların ne olduğu algısına sahip değildi. Öğrencilerin %1,9 ile %66,1’i, eylemin yasal anlam ve sonuçları hakkında öngörüye sahip değildi. Çevresel faktörler onlar üzerinde etkili olarak görülmedi.

Sonuç: 18 yaş altındaki her çocuk için kendisine isnat olunan suçun yasal anlam ve sonuçlarını idrak etme ve davranışlarını yönlendirme yeteneği özel birimlerde ve özel çocuk mahkemelerinde değerlendirilmelidir.

Anahtar Kelimeler: Yetenek, idrak etme, yasal sorumluluk, yaş grupları
Nobel Med 2013; 9(3): 125-132

Table 1: Questions in the survey about each scenario				
1) According to your opinion, is the behaviour in this scenario true or false?				
a) Yes		b) No		
2) According to your opinion, did the child in this scenario commit a crime?				
a) Yes		b) No		
3) According to your opinion, how to apply a sanction for the child in this scenario?				
a) S/he should be instructed not to do it any more and must be released	b) S/he should be punished by her/his families.	c) S/he should be placed to Child Protection Agency	d) S/he should be taken to jail.	e) Other
4) According to your opinion, did the person in this scenario (if s/he was an adult) commit a crime?				
a) Yes		b) No		
5) According to your opinion, how to apply a sanction for the person (if s/he was an adult) in this scenario?				
a) S/he should be instructed to not do any more and must be released	b) S/he should be taken to jail.	c) Other		

Table 2: Key for classification to be "expected" or "unexpected" of every answer														
Questions →	1 st question		2 nd question		3 rd question					4 th question		5 th question		
Answers →	a	b	a	b	a	b	c	d	e	a	b	a	b	c
Scenario-1	E	U	E	U	E	E	E	U	*	E	U	U	E	*
Scenario-2	E	U	E	U	E	E	U	U	*	E	U	U	E	*
Scenario-3	E	U	E	U	E	E	E	U	*	E	U	U	E	*
Scenario-4	E	U	E	U	E	E	U	U	*	E	U	U	E	*
Scenario-5	E	U	E	U	E	E	U	U	*	E	U	U	E	*
Scenario-6	E	U	E	U	E	E	E	U	*	E	U	U	E	*
Scenario-7	E	U	E	U	E	E	E	U	*	E	U	U	E	*
Scenario-8	E	U	E	U	U	U	E	E	*	E	U	U	E	*
Scenario-9	E	U	E	U	U	U	U	E	*	E	U	U	E	*
Scenario-10	E	U	E	U	E	E	U	U	*	E	U	U	E	*

E: Expected; U: Unexpected * : Each response was evaluated to be "expected" or "unexpected" in the "other" section.

INTRODUCTION

In the constitutional state, the peace of the society is protected by law. Even if only one of the individuals in a society is under threat, due to the behaviour of another person, law-makers accept the presence of a crime. Accordingly, they make necessary legal regulations for the prevention of this crime and they want to apply penal sanctions, which are proposed by legislation officers in relation to this crime.^{1,2}

In many countries, the lower age limit of criminal liability is defined between the ages of 7 and 18 on the basis of "Convention on the Right of the Child" and "United Nations Standard Minimum Rules for the Administration of Juvenile Justice (The Beijing Rules)".^{3,4} It was accepted that penal sanctions does not have corrective properties for the children under the determined ages; penal sanctions which are applied to the little children are not deterrent and exemplary for other children or adults, and the children under determined ages are not dangerous for the society.^{2,3}

In Turkey; the lower age limit of criminal liability is defined as the age of eleven in the 53rd article of Turkish Penal Code numbered as 765, which was abolished in 2005.⁵ In Turkish Penal Code, which was put into effect in 2005, the lower age limit of criminal liability was raised to the age of 12 with the legal decision in the first part of the 31st article that includes "there was no criminal liability under 12 years old when it is committed an offence and an inquiry can't be pursued for the children under 12 years old, but the security precautions which are peculiar to children can be applied to these children".⁶

According to the laws which are prepared with casuistic methods, criminal liability is associated with the certain age limits.^{3,4} However, the development of a child's mental structure is affected by several factors such as gender, interaction with the social environment, educational status, genetic structure, etc.⁷⁻¹³ For each child, the ability to manage behaviour and perception of the legal meaning and the consequences of the act can develop in different ages and this age can be over or below of the legally determined age limits.

In this study, we determined the differences among the limits of the ability to manage behaviour and perception of the legal meaning and the consequences of the act with a scenario-based study over the children below the age of 10 and the adolescents below the age of 18 at the primary and secondary schools in Manisa; to investigate the interaction between "the ability to manage behaviour and perception of the legal meaning and the consequences of the act" and environmental factors.

MATERIAL and METHOD

This study was carried out after approval of Ethical Board of Medical School of Celal Bayar University (09 February 2009, No: 0040) and permissions for 1000 students of Governorate of Manisa (24 March 2009; No: B.08.4.MEM.4.45.00.07-500/6425) and Research Review Committee of Provincial Directorate of National Education (20 March 2009; B.08.4.MEM.4.45.00.07-500/6137). Prior to distributing the questionnaire, we asked for the consent from each of legal representatives of 1000 students. 969 of 1000 students were consented to include in this study. According to the aforesaid aims, the results of the questionnaires filled out by 969 students at the primary and secondary schools in Manisa were evaluated in this study. The descriptive characteristics of the children and the adolescents who attended this research were defined by taking account of the statistical methods for the selection of samples.

In this study, a questionnaire included 25 questions about students' demographic, socio-cultural and →

socio-economic features and 10 scenarios containing five questions about their perception of crime and penal sanctions, their ability to manage behaviour and perception of the legal meaning and the consequences of the act in the scenarios which were applied with face-to-face interview method.

Scenario-1: An 8-year-old child, who had to live on the streets for various reasons, was very hungry for three days. He could not stand it any longer. When he smelled the baked bread in front of a bakery, he escaped upon stealing some bread from the counter while the baker was busy.

Scenario-2: A 10-year-old child, who had never had a bike, was jealous of his friends who had bikes. He asked for his friend's bike to ride for a short period of time at the edge of the park. When his friend refused to give his bike, he took it unfairly.

Scenario-3: A 13-year-old child who did not get allowance from his family blocked the way of two children aged 7. He beat the little children and he took their allowance.

Scenario-4: A 10-year-old child was eating cherries on the cherry tree in the neighbour's garden with his fellows. In the meantime, the owner of the garden came towards them with a stick in one of his hands. His friends fled but he was caught.

Scenario-5: A 9-year-old child admired his friend's pencil. When his friend went to the lesson break, he took the pencil from the pencil box of his friend and he put it into his bag. The next class session, the bag fell to the ground from his desk, and the pencil in the bag appeared. The child was caught by his teacher.

Scenario-6: The two 11-year-old children quarrelled after they collided with each other during the break. They began to fight when they came across in the garden. One of the children took a stone from the ground, and he struck to the head of the other child. The other child was injured.

Scenario-7: A 10-year-old child was very furious, because a boy, who was 16 years old, had beaten him, and taken his ball. He went his home and took the handgun of his father. He fired the handgun towards the boy. The boy was injured.

Scenario-8: Three 14-year-old children stole shoes from the front of the doors of the apartments for 10 days. Then, they sold the shoes; they bought new clothes for themselves, and they concealed the rest of the money as their allowance. →

Table 3: Student's demographic, socio-cultural and socio-economic features

Gender	n	%	Occupational status of her/his father	n	%
Male	589	60.8	Unemployed	103	10.6
Female	380	39.2	In lower social class workers in occupations	534	55.1
			In upper social class workers in occupations	332	34.3
Age groups	n	%	Economic status	n	%
<12	241	24.9	Very poor or poor	72	7.4
12-15	357	36.8	Medium gain	792	81.7
15≤	371	38.3	Rich or very rich	56	5.8
Types of school	n	%	No answer or I don't know	49	5.1
Elementary school in urban	446	46.0	Status of spending money of students	n	%
Elementary school in slum	113	11.7	Not have spending money	135	13.9
Elementary school in rural area	35	3.6	0.25-10.00 TL spending money (weekly)	589	60.8
High school	105	10.8	10.25 TL or more spending money (weekly)	245	25.3
Industrial school	180	18.6	Experience of going to a police station	n	%
College	18	1.9	Those who went to police station with any crime	33	3.4
Anatolian high school	72	7.4	Not having ever gone to a police station	936	96.6
Types of family	n	%	Was any of the family members sent to jail?	n	%
Immediate family	843	87.0	Yes	65	6.7
Family size	120	12.4	No	853	88.0
Other	6	0.6	No answer or I don't know	51	5.3
Status of parents	n	%	Was one of your friends sent to jail?	n	%
Those whose one of parents died	31	3.2	Yes	147	15.2
Those with separated or divorced parents	27	2.8	No	602	62.1
The ones with their parents	911	94.0	No answer or I don't know	220	22.7
Types of home	n	%	Status of school success	n	%
Parents' home	642	66.2	Very successful or successful	471	48.6
Rent home or relatives home	306	31.6	Moderately successful	454	46.9
Student hostel or bed & breakfast	27	2.2	Unsuccessful or very unsuccessful	44	4.5
Educational status of her/his mother	n	%	Attendance to lessons in school	n	%
Not having received institutional training	178	18.4	Well	616	63.6
Have received primary education	639	65.9	Moderate	326	33.6
Have received high school or higher education	152	15.7	Bad	27	2.8
Educational status of her/his father	n	%	Status of school discipline	n	%
Not having received institutional training	56	5.8	Well	923	95.3
Have received primary education	621	64.1	Bad	46	4.7
Have received high school or higher education	292	30.1	Number of brothers or sisters	n	%
			Time spent out school and home	n	%
Not have brother or sister	74	7.6	No	183	18.9
Have one or two brothers or sisters	619	63.9	Between 0 and 2 hours.	608	62.7
Have three or more brothers or sisters	276	28.5	More than 2 hours.	178	18.4
Order of children in the house	n	%	Time spend watching television	n	%
The first or only child	426	44.0	No	69	7.1
The last child	231	23.8	Between 0 and 2 hours.	605	62.4
One of intermediate children	312	32.2	More than 2 hours.	295	30.5
Occupational status of her/his mother	n	%	Acclaimed characters on television	n	%
Unemployed or a housewife	800	82.6	Prone to the crime and aggression	425	43.9
In lower social class workers in occupations	97	10.0	Not prone to the crime and aggression	480	49.5
In upper social class workers in occupations	72	7.4	No answer or I don't know	64	6.6

THE EVALUATION OF THE BOUNDARIES OF THE ABILITY TO MANAGE BEHAVIOUR AND PERCEPTION OF THE LEGAL MEANING AND THE CONSEQUENCES OF ACT OF THE STUDENTS ACCORDING TO A SCENARIO-BASED STUDY

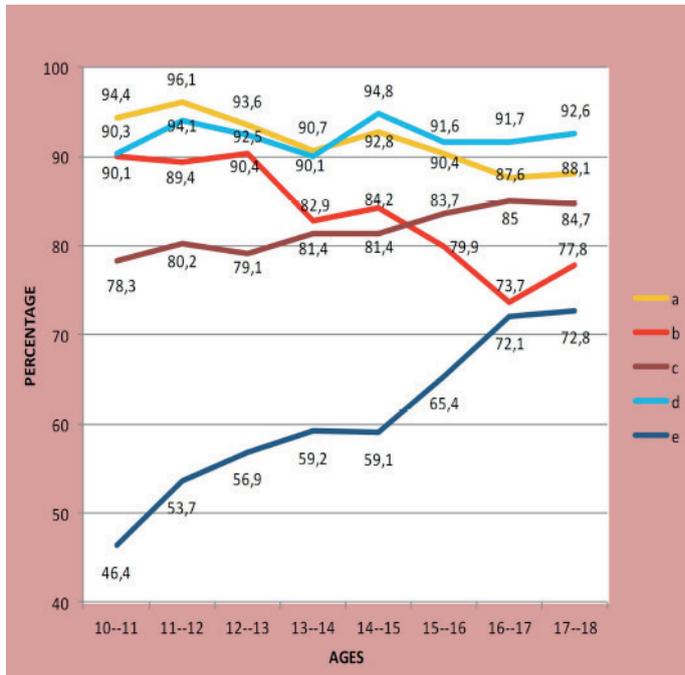


Figure 1: The relationship between the obtained averages of expected responses for each answer type and the ages of students. (a): The answer of question-1 “according to your opinion, is the behaviour in this scenario true or false?” (b): The answer of question-2 “according to your opinion, did the child in this scenario commit a crime?” (c): The answer of question-3 “according to your opinion, how to apply a sanction for the child in this scenario?” (d): The answer of question-4 “according to your opinion, did the person in this scenario (if s/he was an adult) commit a crime?” (e): The answer of question-5 “according to your opinion, how to apply a sanction for the person (if s/he was an adult) in this scenario?”

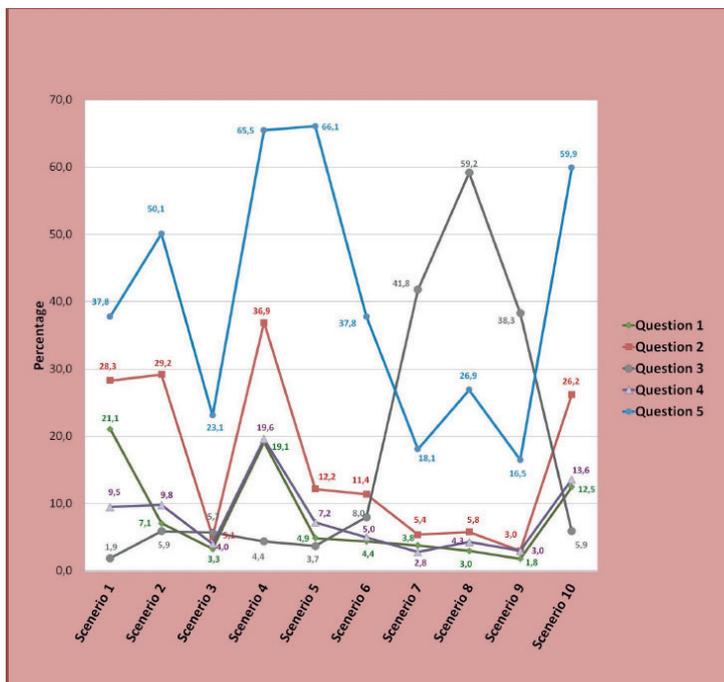


Figure 2: The average values of unexpected responses for each question according to the scenarios (a): The rates of unexpected responses for Question-1 in each scenario (b): The rates of unexpected responses for Question-2 in each scenario (c): The rates of unexpected responses for Question-3 in each scenario (d): The rates of unexpected responses for Question-4 in each scenario (e): The rates of unexpected responses for Question-5 in each scenario

Scenario-9: A 13-year-old child, who was eager to have a motorcycle, broke into a shop by breaking the

glass. He was caught while he was stealing money from the safe of the shop.

Scenario-10: A 13-year-old child was caught by the park guardian while he was writing a slogan about a football team on a wall in the park.

For each scenario, the following survey including 5 questions, which is shown in the Table 1, was applied. All of the answers for the each scenario questions were classified as “expected” or “unexpected” according to the Turkish Penal Code and applications of forensic psychiatrists and forensic scientists (Table 2).

The rates of the “expected responses” were determined for each student in each question in each scenario. Then, the averages were calculated as a percentage of each rate of the expected responses for all types of answers. The relationship between the obtained values and the ages of the students were compared with “Chi-square test.”

The average percentage of the expected answers and its standard deviations were defined according to the students’ demographic, socio-cultural and socio-economic features and ages. The difference among the means was statistically evaluated. In the comparison of the means of the two samples of independent observations, the Student’s-t test was used on condition that the groups include normally distributed population, “Mann Whitney-U test” was used on condition that the groups do not include normally distributed population. In the comparison of the means of three or more samples of independent observations, one-way ANOVA was used on condition that the groups include normally distributed population (in this situation, Bonferroni test as the method of post-hoc analysis was used for the evaluation of group averages, which are different from each other). If the groups do not include normally distributed population, Kruskal-Wallis one-way analysis of variance test was used.

RESULTS

In the first stage of this study, the knowledge of 969 students about some demographic, socio-cultural and socio-economic features was collected and shown in Table 3.

In the second stage of this study, the answers of students for each question in each scenario (see: material and methods section) were classified as “expected” or “unexpected” (Table 1). Then the average values were calculated for each age group and each scenario. The averages of the expected responses for each question →

in each scenario were calculated. These were shown in Table 4. In this study, contrary to the expectations of researchers, the averages of the expected responses of students significantly reduced by age in first answers for 1st, 2nd, 4th, 6th, 7th and 10th scenarios; second answers for 1st, 2nd, 4th, 5th, 6th and 10th scenarios; and fourth answers for 1st, 4th and 10th scenarios (Table 4). These reductions may be explained by authors with two theories: 1) emergence of the concept of “forgiveness against the relatively minor offenses” as a result of developing a sense of “conscientious responsibility” with age increase, 2) confusion of thought with age increase as a result of affections of “unpunished misconducts or crime” models against the relatively minor offenses in society.

In the second step of the second stage, the average values of the expected responses in each age were calculated in question groups for each scenario. The averages of the expected responses for the first questions, which are accepted as indicators of the perception of what was “true or false”, decreased with age ($p>0.05$) (Figure 1/a). The averages of the expected responses for the second question, which were accepted as indicators of the perception of what is “a crime or not a crime”, decreased with age ($p>0.05$) (Figure 1/b). The averages of the expected responses of the third questions, which were accepted as indicators of the foresight about the legal meaning and the consequences of the act, increased with age ($p>0.05$) (Figure 1/c). We aimed to show the changes of perceptions of the children according to the changing situations in the ages of heroes of the scenarios in the fourth and the fifth questions. The averages of the expected responses which were accepted as the indicators of the perception of what is “crime or not crime”, increased with age when the hero of the scenario was an adult ($p>0.05$) (Figure 1/d). The averages of the expected responses which were accepted as indicators of the foresight about the legal meaning and the consequences of the act, when the hero of the scenario was an adult, increased with age ($p>0.05$) (Figure 1/e). In the evaluation of the findings summarized in Figure 1, a significant difference in the data of children between the ages of 10 and 18 was not found in the criteria about “the ability to identify true and false” and “the ability to perceive the legal meaning of act” ($p>0.05$).

In the third step of the second stage, the average values of the unexpected responses for each question were calculated according to each scenario. In the answers of the first question in the scenarios, the averages for all ages of unexpected responses changed from 1.8% to 21.1% according to type of the scenario (Figure 2/a). In the answers of the second question in the scenarios, the rate of the unexpected responses changed from

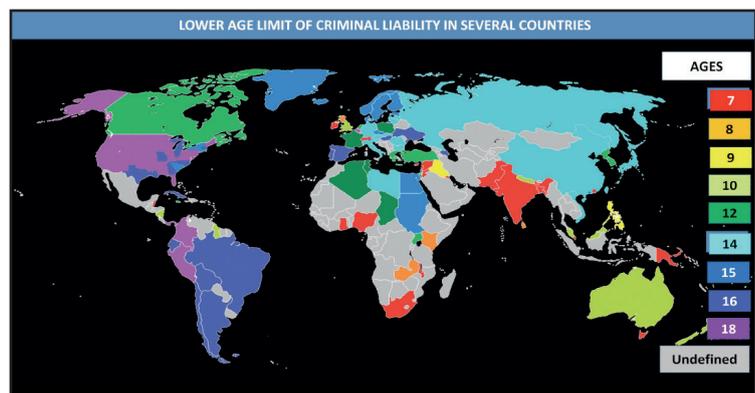


Figure 3: The lower age limit of criminal liability in several countries³⁴

3% to 36.9% according to the type of the scenario and ages (Figure 2/b). In the answers of the third question in the scenarios, the rate of the unexpected responses changed from 1.9% to 59.2% according to the type of the scenario and ages (Figure 2/c). In the answers of the fourth question in the scenarios, the rate of the unexpected responses changed from 2.8% to 19.6% according to the type of the scenario and ages (Figure 2/d). In the answers of the fifth question in the scenarios, the rate of the unexpected responses changed from 16.5% to 66.1% according to the type of the scenario and ages (Figure 2/e).

In the third stage of this study, the average of the expected responses and their standard deviations were calculated and classified in three age groups including students less than 12 years of age, students between 12 years and 15 years of age, students over than 15 years of age. The correlation between these values and aforementioned demographic, socio-cultural and socio-economic factors were investigated. It was observed that each of the socio-cultural and socio-economic factors did not affect the perception of the legal meaning and the consequences of the act ($p>0.05$ for each of the demographic, socio-cultural and socio-economic factors).

DISCUSSION

In this study, students’ perception of what was “true or false” was evaluated with responses taken for the first questions; the students’ perception of what was “a crime or not a crime” was evaluated with the responses taken for the second questions; the foresight about the legal meaning and the consequences of the act of students were evaluated with responses taken for the third questions; the students’ perception of what was “crime or not crime,” when the hero of the scenario was an adult, was evaluated with the responses taken for the fourth questions and the foresight of the students about the legal meaning and the consequences of the act, when the hero of the scenario was an adult, →

THE EVALUATION OF THE BOUNDARIES OF THE ABILITY TO MANAGE BEHAVIOUR AND PERCEPTION OF THE LEGAL MEANING AND THE CONSEQUENCES OF ACT OF THE STUDENTS ACCORDING TO A SCENARIO-BASED STUDY

Table 4: The averages of expected responses for the each questions of each scenario

Range of ages	10-11 (%)	11-12 (%)	12-13 (%)	13-14 (%)	14-15 (%)	15-16 (%)	16-17 (%)	17-18 (%)	Mean (%)	p value	
QUESTION - 1	Scenario-1	85.6	91.1	81.5	82.0	83.2	73.7	64.2	65.3	78.9	p<0.001
	Scenario-2	95.0	97.6	93.6	92.6	96.7	92.1	87.8	85.7	92.9	p<0.001
	Scenario-3	95.0	99.2	95.4	91.8	95.8	99.1	100.0	98.0	96.7	p<0.05
	Scenario-4	89.3	93.5	89.0	82.0	80.8	73.7	67.5	66.0	80.9	p<0.001
	Scenario-5	95.0	95.9	95.4	94.3	96.7	96.5	93.5	93.8	95.1	p>0.05
	Scenario-6	96.9	95.9	98.1	96.7	95.0	94.7	92.7	93.8	95.6	p<0.05
	Scenario-7	98.7	98.4	97.2	94.2	95.0	95.6	94.3	94.7	96.2	p<0.05
	Scenario-8	95.6	98.4	97.2	90.2	97.5	98.2	100.0	100.0	97.0	p<0.001
	Scenario-9	98.8	97.5	98.1	94.3	98.3	100.0	99.2	100.0	98.2	p>0.05
	Scenario-10	93.8	93.4	90.7	89.3	89.2	80.7	76.4	83.3	87.5	p<0.001
QUESTION - 2	Scenario-1	83.7	80.5	77.6	84.6	83.1	62.3	56.1	60.2	71.7	p<0.001
	Scenario-2	84.4	83.7	83.5	77.0	64.2	55.3	53.7	57.7	70.8	p<0.001
	Scenario-3	95.0	99.2	95.4	90.2	94.2	96.5	95.9	92.9	94.9	p>0.05
	Scenario-4	82.5	75.6	79.8	62.3	59.7	55.3	37.4	43.3	63.1	p<0.001
	Scenario-5	93.7	89.4	93.6	86.9	88.3	83.3	78.9	86.6	87.8	p<0.001
	Scenario-6	90.0	91.9	96.3	86.9	90.8	87.7	78.9	86.6	88.6	p<0.01
	Scenario-7	95.0	97.6	97.2	91.7	95.8	95.6	89.3	94.8	94.6	p>0.05
	Scenario-8	91.1	95.1	96.3	86.1	94.1	96.5	98.4	97.9	94.2	p<0.01
	Scenario-9	98.1	96.7	98.2	90.2	98.3	97.4	98.4	99.0	97.0	p=0.01
	Scenario-10	87.5	84.6	86.0	73.0	73.3	69.0	50.2	59.4	73.8	p<0.001
QUESTION - 3	Scenario-1	96.9	96.7	99.1	99.2	98.3	99.1	98.4	98.0	98.1	p>0.5
	Scenario-2	90.0	90.2	91.7	95.0	94.1	96.5	97.5	100.0	94.1	p<0.001
	Scenario-3	86.9	90.2	82.6	85.2	86.7	84.2	79.7	76.5	84.3	p>0.05
	Scenario-4	93.8	95.1	96.3	96.7	92.5	99.1	95.9	96.9	95.6	p>0.05
	Scenario-5	96.3	95.1	95.4	95.9	97.5	96.5	95.9	98.0	96.3	p>0.05
	Scenario-6	92.5	91.9	88.1	91.0	91.7	96.5	91.1	92.9	92.0	p>0.05
	Scenario-7	63.8	56.1	55.0	59.0	60.0	62.3	56.9	49.0	58.2	p>0.05
	Scenario-8	22.8	35.0	33.6	37.0	41.5	45.1	59.0	62.4	40.8	p<0.001
	Scenario-9	44.4	59.3	58.7	60.7	57.5	62.3	80.5	78.6	61.7	p<0.001
	Scenario-10	95.6	91.9	90.6	94.2	94.2	95.6	95.1	94.7	94.1	p>0.05
QUESTION - 4	Scenario-1	86.3	87.8	89.8	89.3	95.0	87.7	95.1	94.9	90.5	p<0.05
	Scenario-2	88.1	91.1	89.9	89.3	95.0	88.6	92.7	86.7	90.2	p>0.5
	Scenario-3	91.1	98.4	95.4	91.8	97.5	97.4	99.2	99.0	96.0	p<0.05
	Scenario-4	82.5	89.4	82.6	83.6	84.2	75.4	65.9	78.4	80.4	p<0.001
	Scenario-5	92.5	91.8	90.8	90.2	93.3	95.6	93.4	95.9	92.8	p>0.05
	Scenario-6	93.1	95.9	96.3	95.1	97.5	95.6	93.5	93.8	95.0	p>0.05
	Scenario-7	93.0	99.2	97.2	94.2	99.2	98.2	99.2	99.0	97.2	p<0.01
	Scenario-8	91.1	98.4	95.3	89.3	98.3	97.4	99.2	99.0	95.7	p<0.001
	Scenario-9	93.8	98.4	95.3	91.8	100.0	99.1	100.0	99.0	97.0	p<0.001
	Scenario-10	91.3	90.2	92.5	86.1	88.3	81.4	78.9	80.2	86.4	p<0.01
QUESTION - 5	Scenario-1	49.4	54.5	57.0	65.0	57.3	71.9	72.4	76.5	62.2	p<0.001
	Scenario-2	44.4	46.3	45.4	48.8	50.8	47.8	58.3	61.5	49.9	p<0.05
	Scenario-3	58.9	73.8	71.6	75.8	70.6	83.9	91.7	98.0	76.9	p<0.001
	Scenario-4	26.9	28.7	36.1	37.8	39.2	32.7	36.4	42.3	34.5	p<0.05
	Scenario-5	23.1	24.0	25.0	24.8	35.3	42.5	53.4	49.5	33.9	p<0.001
	Scenario-6	42.5	56.1	60.6	67.5	56.8	68.8	77.9	77.1	62.2	p<0.001
	Scenario-7	64.8	75.6	81.1	79.2	84.0	91.2	94.3	93.6	81.9	p<0.01
	Scenario-8	51.9	65.9	69.8	69.4	74.1	83.2	90.0	91.4	73.1	p<0.001
	Scenario-9	69.4	78.7	78.3	81.7	85.7	89.5	95.1	96.9	83.5	p<0.001
	Scenario-10	33.1	33.3	44.3	42.0	37.0	42.0	51.2	41.1	40.1	p<0.05

was evaluated with the responses taken for the fifth questions in the face of different behaviours which were defined in each of 10 scenarios (Table 4).

In the evaluation of answers of first questions, it was observed that more than 90% of the students accepted the behaviours in scenarios 2, 3, 5, 6, 7, 8 and 9 as false. Between 78% and 88% of them accepted the behaviours in scenarios 1, 4 and 10 as false. The “false” perceptions of the students in the face of behaviours in scenarios 1, 2, 4, 6, 7 and 10 were decreased with the increasing age of students. These results were statistically meaningful. The students’ perception of what was “true or false” in the face of behaviours in scenarios 3 and 8 were increased with the increasing age of students. These results were statistically meaningful. There was not a statistical relationship between the “false” perceptions of students in the face of behaviours in scenarios 5 and 9 and ages. Finally, it was defined that there was not the perception of what was “true or false” in 1.8%-21.1% of students (Figure 2/a) and totally, the averages of the expected responses for the first questions, which were accepted as the indicators of the perception of what is “true or false”, decreased with age (p>0.05) (Figure 1/a).

In the evaluation of answers of second questions, it was observed that more than 90% of the students accepted the behaviours in scenarios 3, 7, 8 and 9 as criminal. Between 63.1% and 88.6% of them accepted the behaviours in scenarios 1, 2, 4, 5, 6, and 10 as criminal. The criminal perceptions of the students in the face of the behaviours in scenarios 1, 2, 4, 5, 6, and 10 were decreased with the increasing age of students. These results were statistically meaningful. The criminal perceptions of students in the face of behaviours in scenarios 8 and 9 were increased with the increasing age of students. These results were statistically meaningful. There was not a statistical relationship between the criminal perceptions of students in the face of behaviours in scenarios 3 and 7 and ages. Finally, it was defined that there was not the perception of what is “a crime or not a crime” in 3%-29.2% of the students (Figure 2/b) and totally, the averages of the expected responses for the second question, which were accepted as indicators of the perception of the concept of “a crime or not a crime”, decreased with age (p>0.05) (Figure 1/b).

In the evaluation of answers of third questions, it was observed that more than 90% of the students gave the expected responses in scenarios 1, 2, 4, 5, 6 and 10. Between 58.2% and 84.3% of them gave the expected responses in scenarios 3, 7 and 9. The rate of the expected responses in scenario 8 was only 40.8%. The rates of the expected responses of the students in the face of behaviours in scenarios 2, 8 and 9 were increased →

with the increasing age of students. These results were statistically meaningful. There was not a statistical relationship between the rates of students' expected responses in the face of behaviours in other scenarios and ages. Finally, it was defined that there was no foresight about the legal meaning and the consequences of the act in 1.9%-59.2% of students (Figure 2/c) and in total, the averages of the expected responses of third questions, which are accepted as the indicators of foresight about the legal meaning and the consequences of the act, increased with age ($p>0.05$) (Figure 1/c).

In the evaluation of answers of fourth questions, it was observed that more than 90% of the students accepted the behaviours in scenarios 1, 2, 3, 5, 6, 7, 8 and 9 to be criminal. 80.4% and 86.4% of them accepted the behaviours in scenarios 4 and 10 to be criminal respectively. The criminal perceptions of the students in the face of the behaviours in scenarios 4 and 10 were decreased with the increasing age of students. These results were statistically meaningful. The criminal perceptions of the students in the face of the behaviours in scenarios 1, 3, 7, 8 and 9 were increased with the increasing age of students. These results were statistically meaningful. There were not a statistically relationship between the criminal perceptions of the students in the face of behaviours in scenarios 2, 5 and 6 and ages. Finally, it was defined that there was not the perception of what was "a crime or not a crime" in 2.8%-19.6% of students (Figure 2/d) and in total, the averages of the expected responses which were accepted as the indicators of the perception of what was "crime or not crime" increased with age, when the hero of the scenario was an adult ($p>0.05$) (Figure 1/d).

In the evaluation of answers of fifth questions, it was observed that 83.5% of the students gave the expected responses in scenario 9. The rate of the expected responses in scenario 5 was only 33.9%. Other values of the expected responses in other scenarios ranged between 34.5% and 81.9%. The rates of the expected responses of the students in the face of behaviours in all scenarios were increased with the increasing age of students. These results were statistically meaningful. Finally, it was defined that there was no foresight about the legal meaning and the consequences of the act in 16.5%-66.1% of the students (Figure 2/e) and in total, the averages of the expected responses which were accepted as the indicators of the foresight about the legal meaning and the consequences of the act increased with age, when the hero of the scenario was an adult ($p>0.05$) (Figure 1/e).

In the evaluation of the findings summarized in Figure 2/a, 2/b and 2/d, 1.8%-29.2% of the students did not have the perception of what was "true or false"

or the perception of what was "crime or not crime." In the evaluation of the findings summarized in Figure 2/c and 2/e, 1.9%-66.1% of the students did not have foresight about the legal meaning and the consequences of the act. Thus, it can be expressed that 1.8% to 66.1% of the students did not have the ability to manage behaviour and perception of the legal meaning and the consequences of the act. It was foreseen that these percentages would have increased, when the dimension of the data concerned with the ability to manage behaviour was extended.

In most of the previous studies, the rates of the children, who were not capable of discriminating, were defined between 0.2% and 9%.¹⁴⁻²⁰ These rates were reported to be 21.8% by Bilgili et al., 28% by Tunali et al., 39.3% by Tanrıöver et al. and 50% by Yagmur et al.²¹⁻²⁴

It was estimated that the differences between the rates obtained in our study and other studies and the differences among the results of the previous studies were influenced by socio-cultural and socio-economic conditions of the child, and was concerned with "perspectives, educational levels and specializations" of practitioners who examined the child, too. Also it was reported that, even the definition of a crime varied according to professions of social anthropologists, sociologists and criminalists.^{8,9}

Although, each of the socio-cultural and socio-economic factors did not seem to affect the perception of the legal meaning and the consequences of the act in this study ($p>0.05$), it was well-described in previous manuscripts that there was a correlation between various socio-cultural/socio-economic factors and the children who were pushed to a crime.⁷⁻¹³ This topic is vital for the future of societies. Moreover, this issue should be discussed in the national and international scientific area as a priority, and there should be some compromises on this topic.

In the present study, in relation to the criteria about "the ability to identify true and false" and "the ability to perceive the legal meaning of act," a significant difference in the data of the children between the ages of 10 and 18 was not found ($p>0.05$). The lower age limit of criminal liability in several countries was shown in Figure 3.

We suggest that the verdict of World Health Organization "anyone, under the age of 18, should be considered as a child" should be accepted exactly by all legislators and law practitioners. Additionally, heavy prison sentences have been applied in many countries for children under the age of 18, correctional sanctions commensurate with the crime should be prior to heavy prison sentences, "probation" and "foster →

family” status should be given more operational to these children. In Turkey, and around the world, many children have been pushed to crime as a result of adult guidance or connivance. It is foreseen that, in these type of crimes, giving a heavier punishment for the adult guidance or connivance will prevent the use of children to commit crimes.

In the present study, the data is obtained by a method which has not been done before. These results should be supported by additional studies including more subjects and more data for true solutions.

CONCLUSION

The true diagnosis of “the ability to manage behaviour and perception of the legal meaning and the

consequences of the act” of children is not a simple problem which can be left to initiative of only a single psychiatrist, forensic expert or social worker, or a single judge’s decision.

It is recommended that the ability to manage behaviour and perception of the legal meaning and the consequences of the act for attributed crimes in every child under 18 years old should be evaluated in the special units including child psychiatrist, sociologist, forensic scientist, pedagogue, psychologist and social worker, together with a judge who has the pedagogical information for the special child courts.

Acknowledgement: We thank biostatistician Prof. Dr. Gönül Dinç for the supports in the statistical evaluation.

C	CORRESPONDING AUTHOR: Mahmut Aşirdizer Celal Bayar Üniversitesi, Tıp Fakültesi, Adli Tıp AD, 45030, Manisa masirdizer@yahoo.com
✓	DELIVERING DATE: 25 / 12 / 2012 • ACCEPTED DATE: 08 / 05 / 2013

REFERENCES

- Hancı IH. A social wound which led to child delinquency. *Bul Med Chamber Izmir* 1999; 6: 24-28. Oral G. Forensic psychiatry. In: *Forensic Medicine, Volume-3* (Soysal Z, Cakalır C, eds). Istanbul: Press and Film Center of Istanbul University. 1999: 1377-1572.
- Hong Kong Law Reform Commission. Chapter 2-The minimum age of criminal responsibility in other jurisdictions. Available: <http://www.hklrii.org/hk/other/hklrc/reports/2000/05/age-Chapter-2.html> [Accessed at: March 15, 2010].
- Polat O. Child delinquency. Available: <http://www.hukukcu.org/> [Accessed at: March 15, 2010].
- Republic of Turkey, Ministry of Justice. Repealed Turkish Penal Code numbered as 765. Available: <http://www.ceza-bb.adalet.gov.tr/mevzuat/765.htm>. [Accessed at: March 12, 2010].
- The Constitution of the Republic of Turkey. Turkish Penal Code numbered as Available: <http://www.tbmm.gov.tr/kanunlar/k5237.html>. [Accessed at: March 12, 2010].
- Dizman H, Gultekin G, Canturk G. The effects of family relationships to child criminology. *Turk J Forensic Psychiatr* 2005; 2: 9-15.
- Fisek AG, Ciner CU, Akpınar T. Leading studies regarding child crimes and two Ph.D theses. *J Fac Law Ankara Univ* 2008; 57: XVII.
- Elgaz Y. Examination of the context of the United Kingdom and Turkey of criminal process in the child related crimes *J Police Era* 2009; 8: 43-47.
- Kocatas B. The relationship of lower social-economic structure child crime in Malatya. *J Sociol Research* 2007; 10: 157-186.
- Hickey EW. *Encyclopedia of Murder and Violent Crime*, 1st ed. California: SAGE Publication. 2003: 541-544.
- Yokus Sevuk H. In Terms of Principles in International Contracts, Institutional Approach in the Fight with Juvenile Delinquency. 1st ed. Istanbul: Beta Press, Publication & Distribution. 1998: 45.
- Avci M. A study on children in detention: social causes which affected on juvenile delinquency, and solutions. *J Grad School Social Sci* 2008; 11: 3.
- Karagoz YM, Atilgan M, Sargin OO, Demircin S. Socio-demographic features children who were attributed a crime in Antalya. The Book of Panels and Poster Presentations of 10th National Days of Forensic Medicine. Istanbul: The Publications of the Council of Forensic Medicine. 2003: 148-154.
- Gunaydin G, Demirci S, Dogan KH. The evaluation of 1249 cases which were sent to Konya Branch of Council of Forensic Medicine for examination of “capable of discriminating.” The Book of Panels and Poster Presentations of 10th National Days of Forensic Medicine. Istanbul: The Publications of the Council of Forensic Medicine. 2003: 263-269.
- Yavuz C, Hancı H, Cakmak A, Arisoy Y, Ege B. Juvenile Delinquency in Izmir between 1991-1993 years. The Congress Book of 1st Congress of Forensic Sciences. Adana: Cukurova University. 1994: 151-154.
- Dirol F, Canturk G, Kucuker H. The Evaluation of cases which were examined for “capable of discriminating” in Elazig Branch of Council of Forensic Medicine in the 1997-1999 years. The Book of Annual Meetings of Forensic Medicine, 2002. Antalya: The Publications of the Council of Forensic Medicine. 2002: 286-289.
- Gundogmus UN, Colak B, Boz H, Bicer U. The evaluation of juvenile criminal responsibility in Kocaeli between 1996-2001. *J Forensic Med* 2003; 17: 1-7.
- Akyuz G, Yücel Beyaztas F, Kugu N, Analan E, Dogan O. The evaluation of socio-demographic and clinical features in children and adolescents which were sent to medical examination by a claim of committing crime. *Bul Legal Med* 2000; 5: 70-75.
- Karagoz YM. Juvenile delinquency in Antalya: a survey study contains 225 cases. The Book of Poster Presentations of 8th National Days of Forensic Medicine. Antalya: The Publications of the Council of Forensic Medicine. 1995: 155-160.
- Bilgili M, Kar H, Yavuz E, Akgul E. Distinguish and discretion, theft and usurpation. *J Forensic Med* 2002; 16: 18-22.
- Tanriover Kandil S, Hocaoglu C, Bagdatli H, et al. The evaluation of medico-legal cases applied to Child Psychiatry Department of Medical Faculty of Karadeniz Technical University in the last four years. *J Clin Forensic Med* 2002; 2: 1-6.
- Tunali I, Kendi O, Bilge Y, Bendigal S, Demirel B. The evaluation of juvenile delinquency in 50 cases which were sent to Forensic Medicine Department of Ankara University for medical examination of distinguish and discretion between 1989-1993 years. The Book of Poster Presentations of 1st National Congress of Forensic Medicine. Istanbul: The Publications of the Council of Forensic Medicine 1994; 363-367.
- Yagmur F, Renklidag T, Canturk G. Evaluation of 74 cases who had been done ability of realization and distinction examination between 1992-2002 in Ankara University. *Turk J Forensic Psychiatr* 2004; 1: 15-20.

• This article was prepared from expertise thesis of the same name of Dr. Tarık Ulucay (2009) and it was presented as a poster presentation in the 22nd Congress of the International Academy of Legal Medicine, July 5-8, 2012, Istanbul (Turkey).