An Investigation of Concepts and Words Used By Turkish Children and Teenagers to Define Their Perceptions Regarding Events Involving Emotional Situations

Nilüfer Özabacı

University of Osmangazi, Faculty of Education, Department of Guidance and Counselling Psychology, Eskişehir, Turkey

A B S T R A C T

The present study aimed to determine the concepts and words children and teenagers use to define their perceptions of events that involve emotions. It attempted to identify words that children and teenagers use to express emotions and the differences between children and teenagers in this regard. The study focused on 214 children and adolescents, including 124 students from four primary schools in Eskisehir, Turkey (59 girls and 65 boys) and 90 students from one secondary school and two high schools (39 girls and 51 boys). The students were given a questionnaire that asked 10 questions focusing on three emotional categories (happiness, sadness and fear), two types of self-descriptive adjectives (positive and negative) and two neutral categories (semantically related and semantically unrelated). The questionnaire was developed from a form used by Doost et al. (1999). We concluded that the positive and negative expressions used by both children and teenagers were examined regardless of frequency of use, and the constituents, which were basically detected, were gathered under definite titles.

Key words: emotion, emotional words, emotional expressions

Introduction

Emotions have psychological causes. They are created by cognitive evaluations, e.g. the perception of a predator makes one fearful; its disappearance reduces this fear. They have consequences that include ritualised, or symbolic, behaviours that no longer serve any function other than the communication of the emotion, e.g., anxiety, cry, or laugh. These behaviours communicate an emotional state to other members of the species and sometimes to members of other species.

Basic emotions often have bodily sensations that accompany them. Successful emotional processing is likely to involve a range of cognitive, behavioural, physiological and emotional processes such as exposure and habituation[6–12], appraisal and reappraisal[7], insight[8], restructuring of cognitive and emotion schemas[3–7], disclosure, and catharsis[2–14]. This is the theory of emotion that motivated our semantic analysis[11]. Its central assumption is that emotions serve a communicative function, both within the brain and within the social group. In both cases,

emotions are simple signals that propagate pervasively within the system. Unlike the signals of natural language, these signals do not have a propositional structure. The meaning of a propositional signal depends on combining the meanings of its parts according to its syntactic structure, whereas the meaning of a non-propositional signal is not composed of the meanings of its parts; the parts themselves have no meaning. Quatley and Laird's theory implies that any emotional term should devolve upon one of the five basic emotion modes or some subset of them, and that there will be no need to invoke any other emotional state. These predictions were borne out by the semantic analysis of 590 emotional words. Emotional theories should be advantaged among three factors: First, emotional terminology should be analysable in coherent categories. Second, all terms denoting emotions ultimately depend on just the five basic families of emotional modes, roughly speaking: happiness, sadness, anger, fear, and disgust. Third, words referring to

emotions reflect the structure of emotional experience as posited by the theory; therefore, some words may be used to refer to basic emotions, which can be experienced regardless of whether the individual experiencing them is aware of their cause or object. On the other hand, other words designate emotions that can be experienced only with a known cause or object. There should also be words that designate complex emotions that have a highly specific propositional content that cannot be divorced from their subjective experience[11].

Semanticists and clinicians have evaluated the words reflecting the emotions and examined the differences between the evaluations. By calculating the mean values of the words, which do not have any difference between the distributions, the levels of reflected emotion were obtained. The words and values found as a result of this study were divided into subcategories of positive and negative emotions. Under the positive emotion categories, there were sub-emotion groups of competency and happiness, whereas under the negative emotion categories, incompetency, unhappiness, fear, anxiety, suspect, and aggression were sub-emotion groups[1]. Another study of 942 university students for the research was titled »Investigating the University Students' Density of Emotion Assigned to the Words and Idioms Expressing Emotions in terms of Some Variables«. Twenty-two words and idioms expressing emotions were involved in the category competency, 26 words and idioms in the category happiness, 30 in the category incompetency, 53 in the category unhappiness, 11 in the category fear, 12 in the category anxiety, nine in the category suspect, and 52 in the category aggression. Thus, the list consisted of 215 words and idioms expressing emotions. Many words included in the current study were also found to be highly representative of the discrete emotional categories of happiness (e.g., cheerful, friendly), surprise (e.g., shocked, surprised), anger (e.g., rage, aggression), anxiety (e.g., nervous, uneasy) disgust (e.g., vomit, stinking), fear (e.g., horror, afraid), sadness (e.g., hopeless, gloom), and neutral (e.g., bookcase, carrot. The study considered words categorised to validly represent their designated emotions greater than 70% of the time, increasing or decreasing this cut-off would obviously cause more or fewer words to be classified as blended. The actual percentages of categorisation for each word are presented in the appendices so that researchers can select criteria that areappropriate to the specific goals of their studies[5]. However, for most studies investigating discrete emotional categories, the selection of words that are highly representative is preferred over those that are blended, and the use of such words may allow for a greater consistency of results observed across studies and study sites[13].

The present study was designed to determine the concepts and words used by children and teenagers to define their perceptions regarding events that involve emotions. In addition to identifying words used by children and teenagers to express emotions, it aimed to reveal differences between children and teenagers. Within the framework of this general goal, the following questions were addressed.

1. What are the words and concepts used by children and teenagers to define their perceptions regarding events that include emotions?
2. Are there any differences between children and teenagers in terms of use of the words expressing emotions?
3. Are there any differences in the use of words expressing emotions in terms of gender?
4. Are there any differences in the use of words expressing emotions in terms of age?

Materials and Methods

Subjects

Two hundred and fourteen children and adolescents comprising 124 students from four primary schools in Eskisehir, Turkey (59 girls and 65 boys) and 90 students from one secondary and two high schools (39 girls and 51 boys) in Eskisehir, Turkey participated in this study during the 2007–2008 spring term.

Measure

A questionnaire was used that included 10 questions focusing on three emotional categories (happiness, sadness and threatening), two types of self-descriptive adjectives (positive and negative) and two neutral categories (semantically related and semantically unrelated). The questionnaire was developed from a form that was used by Doost and others[6]. Subjects were asked to generate single words to describe a given category (e.g., »please list as many words as you can to describe happy feelings«) and to generate single words to describe things that instigate emotions (e.g., »please list as many words as you can that make children feel sad«). The questionnaire was 11 pages long. The first page contained instructions, and the remaining 10 pages contained the eliciting questions for the 10 categories. Below each question, there were spaces numbered from 1 to 20 in which subjects could write down their responses. The questionnaire alternated negative and positive questions and the last question was always positive. The subjects were asked to answer each question within five minutes and told that there were no right or wrong answers.

TABLE 1
NUMBER OF SUBJECTS

Age	Girls	Boys	Number of Students
10	11	14	25
11	13	7	20
12	10	11	21
13	25	33	58
14	14	12	26
15	10	24	34
16	15	15	30
Total	98	116	214

Procedure

Ethical permission for the study prior to collecting data by contacting and receiving approval to from the appropriate management authority the education directorship of the city involved. Participants were assured of the confidentiality of their responses and provided informed verbal consent. Assent was obtained from the students themselves. The students' parents received the informed written consent form given to the students by the researcher. The administration of the questionnaire was carried out by class teachers. Teachers read aloud the test instructions while the students were looking at the first page. Students then had the opportunity to ask questions, which were answered by the investigators. The teacher read aloud the first question and asked the subjects to write down their responses within five minutes. The other questions were administered in the same way. The test was administered in two parts with a 10-minute break between the fifth and sixth questions. Subjects were administered the questionnaire in groups.

Data analysis

The study had two different dimensions. Different analysis methods were applied, and the procedures were explained. While analysing and interpreting the words and concepts related to the situations developed by the students, the following steps were conducted:

1) Encoding data
2) Obtaining themes
3) Organising and defining data according to themes
4) Ensuring reliability and validity
5) Transferring data to the SPSS package program for quantitative data analysis

Stage 1: Encoding data

The data related to the participants' emotional states were gathered under the predetermined question lists or themes:

»If you see a child who is scared and screaming, what do you think it is that scared him?«

»Think of a sad child and write as many words expressing his emotions as you can.«

»Think of a child who feels terrible, and write as many words as you can to define these emotions.«

»Write as many words as you can to explain the emotions experienced by a scared and frightened child.«

»Please list the things that make children sorry.«

»What words do you use to explain your emotions when you feel very happy?«

»Write as many words explaining happiness as you can.«

Stage 2: Obtaining themes

At this stage, through the analysis of the words and concepts expressing emotional states and content analysis[15], emotions were defined in relation to the predetermined concepts. The words and concepts about the emotions under each concept were selected and picked up. In constructing the themes, the four dimensions of »Basic Emotions« were used, namely Joy, Anger, Fear and Grief. It was observed that some students could not produce any emotions or statements related to emotions under these themes. Thus, 25 papers that did not include any related statements or emotions regarding the themes were excluded[10].

Stage 3: Organising and defining data according to themes

The emotional statements were arranged according to themes and were relisted under these themes. This list was compiled for two purposes:

1) To use as a resource while gathering the emotions under a certain category
2) To make the data analysis procedure and interpretation of this study reliable.

Stage 4: Ensuring reliability and validity

Reliability and validity are two criteria used to determine the plausibility of a study. Therefore, »reporting the collected data in detail and explaining how the research achieves the result are involved in the important criteria of the validity in a qualitative study«.[15] For the present study, two significant procedures were applied to ensure the validity of the findings:

1) The data analysis procedure (especially the procedure of constructing the concepts and categories expressing the emotions) was explained.
2) In this study, 402 words were produced by children and 383 words were produced by teenagers, totalling 785 words. Each of them was classified under a theme and discussed in the section describing findings.

To ensure the internal consistency of the study, two strategies were followed. First, the study was carried out with the support of experts and literature, from the beginning to the end of the study. The second strategy held that experts were asked to verify whether the words given under eight emotional categories developed in the study represented these conceptual categories or not. To this end, two lists were given to four lecturers working at the same department:

1) A list containing images expressing emotions, in alphabetical order
2) A list of six categories conveying emotional states

The experts were asked their opinions about these two lists. On the basis of their feedback, the acceptability of the categories was determined.

Statistics

In the quantitative data analysis, the significance of the difference between the participating students' levels of producing words in terms of individual features were analysed via t-test and variance analysis. For the items identified as different in the variance analysis, Tukey's post hoc analysis was applied to obtain the cause of the difference. There was a significant difference interpreted if $p < 0.05$, and the data was examined by considering the mean values. The data was analysed through the SPSS package programme.

Results

Overall findings

1) 402 words were produced by children, whereas the number of words produced by teenagers was 383.

2) When the words produced by children were examined, it was generally observed that the majority of the 402 words produced by children were concrete words, abstract words and words expressing emotions. Words such as love, respect, tolerance, friendship, honesty, happiness, being loved, and rejoicing were most frequently repeated.

3) The titles of words most frequently encountered among teenagers were love and romance. There are many words that can be presented under these titles including wandering with peers, spending time with friends, flirting, falling in love, being admired, kissing, etc.

4) Another focus that was often repeated by children was school and school life. Success at school, having good marks, receiving a certificate of appreciation or achievement, being successful in placement exams, and being a student appreciated by the teachers are the words that were related to school and that were often repeated by the children in the study group.

5) The analyses regarding children's and teenagers' objective, positive, negative and question statements indicated that teenagers had more varied mean values of words at a significant level than the children.

6) Although there are concepts related to family in the words produced by teenagers as positive statements, these concepts were not as often repeated as in the children's words; they were just written as mother, father, sister/brother and family. In Table 2 and Table 3, the first 15 words produced by children and teenagers for the statements classified as positive and negative statements were listed.

As seen in Table 2 and Table 3, for the statement »If you see a child who is scared and screaming, what do you think it is that scared him?«, both children and teenagers mostly produced the word mother. Whereas children gen-

TABLE 2
THE 15 WORDS THAT WERE MOST FREQUENTLY WRITTEN BY CHILDREN AND TEENAGERS FOR NEGATIVE SITUATIONS

	»If you see a child who is scared and screaming, what possibilities that scare him will you think?«		»Think of a sad child and write as many words expressing his emotions as you can«		»Think of a child feels terrible, write as many words as you can, to define these emotions«		»Write as many words as you can, to explain the emotions experienced by a scared and frightened child«		»Please list the things that make children sorry«	
	Child	Teenage	Child	Teenage	Child	Teenage	Child	Teenage	Child	Teenage
1	mother	mother	pain	pain	pain	pain	crying	pain	parentless	hunger
2	mother's beating	father	crying	hunger	crying	crying	mother	crying	mother	family
3	father	Being stabbed	death of mother	family pressure	separation	family	father	mother	death of mother	family pressure
4	father's beating	gangs	orphan	love	trouble	mother	beating	father	Being scolded	being cheated
5	bug	being beaten	being humiliated	separation	anxiety	father	horror	pressure	father	mother
6	being beaten	night	death of father	depression	longing	fatigue	disappointment	emptiness	Death of father	friends
7	crazy	ghost	fatherless	being excluded	illness	solutionlessness	sad	lack of courage	Being shouted	separation
8	earthquake	thief	boredom	emotionlessness	acrimony	getting depressed	indecisiveness	longing	Beinghurt	father
9	mouse	nightmare	being excluded	falling down	uneasiness	distrust	fight	yearning	being beaten	failure
10	seeing a ghost	crowd	illness	excitement	sadness	disappointment	fear	uneasiness	lesson	compueterless
11	thief	blood	disappointment	sad	pessimism	fed up with life	downheartedness	being introvert	being excluded	environment
12	nightmare	darkness	fighting	pessimistic	fight	betray	unhappiness	pessimistic	anxiety	depression
13	purse snatcher	fight	having accident	darkness	anxiety	pessimism	hatred	darkness	illness	being excluded
14	incubus	being lost	grief	grief	unwellness	chaos	boredom	getting angry	disappointment	fighting
15	darkness	dog	being scared	being offended	hatred	grief	astonishment	fear	apathy	being scared

TABLE 3
THE 15 WORDS MOST FREQUENTLY WRITTEN BY CHILDREN AND TEENAGERS RELATED TO POSITIVE SITUATIONS

	»What words do you use to explain your emotions when you feel very happy?«		»Write as many words explaining happiness as you can«	
	Child (Ages between 10–12 years old)	Teenager (Ages between 13–16 years old)	Child (Ages between 10–12 years old)	Teenager (Ages between 13–16 years old)
1	unity	mother	family	family
2	problemless	Friendship	mother	mother
3	honesty	falling in love	friend	friend
4	laughing	Father	father	falling in love
5	smiling	Success	success	father
6	flying	Enthusiasm	computer	success
7	life	Dancing	wandering around	computer
8	excitement	having fun	laughing	chatting
9	tolerance	Flirting	present	birthday
10	peace	Laughing	tolerance	best friend
11	goodness	Excitement	report card	present
12	pleasure	finding a job	happiness	tolerance
13	happiness	Goodness	joy	getting good marks
14	joy	having a profession	school	having a profession
15	sharing			

erated words such as mother's beating, father, bug, being beaten, crazy, earthquake, mouse, ghost, teenagers used words such as father, gangs, being stabbed, being beaten, night, ghost, thief, nightmare, crowd and, blood. The students in the older age group used expressions related to playing with friends, and expressions about computer games became more dominant. Furthermore, programs providing instant communication were often mentioned. When the words produced by teenagers were examined, it was observed that there were not as many expressions about objects that can be purchased as there were in the children's responses.

In response to the statement, »Think of a sad child and write as many words expressing his emotions as you can«, children produced words such as pain, crying, death of mother, orphan, being humiliated, death of father, fatherless, boredom, being excluded, illness, disappointment, fighting, having accident, grief, and being scared. On the other hand, for the same statement, teenagers generated words like pain, hunger, family pressure, love, separation, depression, being excluded, emotionless, falling down, excitement, sad, pessimistic, darkness, grief, and being offended.

Regarding the statement, »What words do you use to explain your emotions when you feel very happy?« children produced words such as union, untroublesome, honesty, laughing, smiling, rejoicing over, life, excitement, tolerance, peace, goodness, pleasure, happiness, joy, and sharing. On the other hand, teenagers essentially used the words like mother, friendship, falling in love, father, success, enthusiasm, dancing, having fun, flirting, laughing, excitement, finding a job, goodness, and having a profession.

In response to the statement, »Write as many words as you can to explain the emotions experienced by a scared and frightened child«, the words crying, mother, father, beating, horror, disappointment, sad, indecisiveness, fight, fear, downheartedness, unhappiness, hatred, boredom, astonishment were used by children. Teenagers produced words such as pain, crying, mother, father, pressure, emptiness, lack of courage, longing, uneasiness, being introverted, pessimism, darkness, getting angry and fear.

The 15 words that were repeated by children for the statement, »Please list the things that make children sorry« were parentless, mother, death of mother, being scolded, father, death of father, being shouted, being hurt, being beaten, lesson, being excluded, anxiety, illness, disappointment, and apathy. On the other hand, for this statement, the teenagers produced words such as hunger, family, family pressure, being cheated, mother, friends, separation, father, failure, computerless, environment, depression, being excluded, fighting, and being scared.

The mean values and standard deviations of the words produced for the statements in terms of variables; gender and being either children or teenager were presented in Table 4. Accordingly, the mean value of the words produced by 98 female students for the statement »If you see a child who is scared and screaming, what do you think it is that scared him?« was 7.38; and the mean value of the words produced by 116 male students for this statement was 7.40. Furthermore, for the statement »Think of a sad child and write as many words expressing his emotions as you can«, the mean value of the words written by female students was 6.72; on the other hand, the mean value of the words written by the male student was found

TABLE 4
THE DISTRIBUTION OF THE MEAN AND STANDARD
DEVIATIONS OF THE WORDS PRODUCED FORTHE
STATEMENTS IN TERMS OF GENDER AND
CHILDREN/TEENAGER VARIABLES

| Items | Gender | | | |
	Child/Teenage (Ages between 10–16 years old)	N	M	S
1. »If you see a child who is scared and screaming, what do you think it is that scared him?«	Girl	98	11.14	6.55
	Boy	116	11.45	7.01
	Child	150	9.40	5.46
	Teenage	64	15.79	7.51
2. »Think of a sad child and write as many words expressing his emotions as you can«	Girl	98	7.38	6.16
	Boy	116	7.40	5.96
	Child	150	5.88	4.97
	Teenage	64	10.93	6.84
3. »What words do you use to explain your emotions when you feel very happy?«	Girl	98	6.72	4.42
	Boy	116	8.12	6.13
	Child	150	6.04	4.23
	Teenage	64	10.87	6.43
4. »Think of a child who feels terrible; write as many words as you can to define these emotions«	Girl	98	6.15	5.35
	Boy	116	8.08	5.77
	Child	150	5.33	3.86
	Teenage	64	10.01	5.96
5. »Write as many words explaining happiness as you can«	Girl	98	8.62	6.50
	Boy	116	9.94	7.57
	Child	150	7.59	5.94
	Teenage	64	13.43	7.96
6. »Write as many words as you can to explain the emotions experienced by a scared and frightened child«	Girl	98	7.31	8.83
	Boy	116	8.08	6.72
	Child	150	6.13	6.51
	Teenage	64	11.48	11.48
7. »List the things that make children sorry«	Girl	98	8.32	7.32
	Boy	116	9.09	6.24
	Child	150	7.10	5.62
	Teenage	64	12.59	7.61

p<0.05

to be 8.12. In addition, when female students produced words for the statement, »What words do you use to explain your emotions when you feel very happy?«, the mean value of the words was 5.96, whereas the mean value of the 116 male students' words was 7.37. Then, for the statement »Think of a child who feels terrible, write as many words as you can to define these emotions«, the mean value of the words produced by the female students was 6.15, whereas the mean value of male students' words was 8.08. Furthermore, the 98 female students produced words for the statement, »Write as many words explaining happiness as you can«. with a mean value of 8.62, whereas the mean value of the 116 male students' words was 9.94. For the statement, »Write as many

words as you can to explain the emotions experienced by a scared and frightened child«, the mean value of the female students' words was 7.31, but the mean value of the male students' words was 8.08. Lastly, the mean value of the female students' words for the statement, »List the things that make children sorry«, was 8.32, but for this statement, the mean value of the male students' words was 9.09.

When these statements were examined in terms of whether the participants were children or teenagers, it was found that the mean value of the 150 children's words for the statement, »If you see a child who is scared and screaming, what do you think it is that scared him?« was 5.88; on the other hand, the mean value of the teenagers' words for the same statement was 10.93. For the statement, »Think of a sad child and write as many words expressing his emotions as you can«, the mean value of the words written by 150 children was 6.04; for the same statement, the mean value of the 64 teenagers' words was 10.87. The 150 children who participated in the study produced words for the statement, »What words do you use to explain your emotions when you feel very happy?« with a mean value of 5.33; on the other hand, the mean value of the 64 teenagers' words was 10.01. The mean value of the words that 150 children produced for the statement »Write as many words explaining happiness as you can« was 7.59, but the mean value of the words that the teenagers wrote for the same statement was 13.43. Moreover, for the statement, »Write as many words as you can to explain the emotions experienced by a scared and frightened child«, the mean value of the words written by the children was 6.13; but it was 11.48 for the teenagers'. Lastly, the 150 children wrote words related to the statement, »List the things that make children sorry«, with a mean value of 7.10, whereas the mean value of the words produced by the teenagers was 12.59.

Furthermore, the produced words and concepts were also examined in terms of age variables in order to describe the perceptions related to the statements including emotional states; the mean values and differences between children and teenagers are presented in Table 5.

ANOVA of the words produced for the statements, in terms of age variables, was performed. To investigate whether the mean values of the words written for the statement »If you see a child who is scared and screaming, what do you think it is that scared him?« differed in terms of the age of the participants or not, one-way ANOVA analysis was employed. Accordingly, it was observed that there was a significant difference between age groups ($F_{(214–7)}=5.339$, p<0.05). To find out between which groups the difference occurred, the Tukey test was applied, and it was determined that the 10-year-old age group had the lowest mean value. The 14-year-old age group had a higher mean value than the 10-year-old age group but a lower value than other age groups. The mean value of the 11-year-old age group was higher than the 10- and 14-year-old age groups but lower than that of the 12-, 13-, 15-, and 16-year-old age groups. The 13-year-old

TABLE 5
THE DISTRIBUTION OF THE MEAN VALUES, STANDARD DEVIATIONS AND RESULTS OF THE ONE-WAY ANOVA ANALYSIS
ON THE WORDS PRODUCED RELATED TO THE STATEMENTS IN TERMS OF AGE

Items	Age	N	M	S	F	The Group with Difference
1. »If you see a child who is scared and screaming, what possibilities that scare him will you think?«	10 age	25	3,50	1,96		
	11 age	20	6,07	3,99		1–6
	12 age	21	8,47	4,57		1–7
	13 age	58	7,18	6,82	5,33	2–6
	14 age	26	5,60	6,67		5–6
	15 age	34	10,28	6,59		
	16 age	30	9,73	5,04		
2. »Think of a sad child and write as many words expressing his emotions as you can«	10 age	25	3,88	1,77		1–4
	11 age	20	5,14	2,86		1–6
	12 age	21	7,36	3,63		1–7
	13 age	58	8,24	5,53	6,48	2–6
	14 age	26	5,92	6,85		2–7
	15 age	34	9,95	5,98		5–6
	16 age	30	10,21	5,01		
3. »What words do you use to explain your emotions when you feel very happy?«	10 age	25	3,88	1,77		
	11 age	20	5,14	2,86		1–6
	12 age	21	7,36	3,63		1–7
	13 age	58	8,24	5,53	5,42	2–6
	14 age	26	5,92	6,85		5–6
	15 age	34	9,95	5,98		
	16 age	30	10,21	5,01		
4. »Think of a child who feels terrible, write as many words as you can, to define these emotions«	10 age	25	3,80	1,32		
	11 age	20	7,14	4,51		
	12 age	21	9,26	6,57		1–3
	13 age	58	7,22	5,94	4,12	1–6
	14 age	26	4,92	4,54		1–7
	15 age	34	8,73	5,88		
	16 age	30	9,42	7,17		
5.»Write as many words explaining happiness as you can«	10 age	25	4,92	1,97		
	11 age	20	6,85	4,78		1–4
	12 age	21	9,84	5,01		1–6
	13 age	58	10,10	7,65	6,59	1–7
	14 age	26	6,32	6,26		2–6
	15 age	34	13,13	8,58		5–6
	16 age	30	11,73	6,35		
6. »Write as many words as you can, to explain the emotions experienced by a scared and frightened child«	10 age	25	3,80	1,54		
	11 age	20	6,18	5,27		1–6
	12 age	21	8,05	5,36		1–7
	13 age	58	8,02	9,45	4,19	2–7
	14 age	26	5,14	7,84		5–7
	15 age	34	9,82	6,12		
	16 age	30	13,00	11,71		
7. »List the things that make children sorry«	10 age	25	4,65	2,01		
	11 age	20	8,48	4,71		
	12 age	21	9,68	4,59		1–6
	13 age	58	8,06	7,91	4,36	1–7
	14 age	26	6,89	8,29		5–6
	15 age	34	11,84	6,27		
	16 age	30	10,73	7,19		

$p < 0.05$

students had a higher mean value than the other groups, apart from the 12-, 15-, and 16-year-old age groups. The mean value of the 12-year-old age group was higher than that of the 15- and 16-year-old students. The 16-year-old students' mean value was higher than other groups except the 15-year-old age group. Thus, the 15-year-old age group had the highest mean value for this statement.

The results of ANOVA, which was applied to examine whether there was any significant difference related to the statement, »Think of a sad child and write as many words expressing his emotions as you can«, revealed that there was a significant difference in terms of age ($F_{(214-7)}$= 6.489, p<0.05). The results of the Tukey test showed that the lowest mean value belonged to the 10-year-old age group. However, the 11-year-old age group had a lower mean value than the other groups, with the exception of the 10-year-old age group. The 14-year-old age group students had a higher mean value than the 10- and 11--year-old students but lower than the 12-, 13-, 15-, and 16-year-old students. The 12-year-old students had a higher mean value than the 10-, 11-, and 14-year-old age groups, whereas they had lower values than the 13-, 15-, and 16-students. The mean value of the 13-year-old students was higher than other groups except the 15- and 16-year-old age groups. Lastly, the mean value of the 15-year-old age group was higher than the complete mean values of the other groups, apart from the 16-year--old age group.

The same analysis was applied for the statement, »What words do you use to explain your emotions when you feel very happy?« and it was discovered that there was a significant difference in terms of age ($F_{(214-7)}$= 5.423, p<0,05). Also, the results of the Tukey test indicated that the 10-year-old age group had the lowest mean value. The 11-year-old age group had a higher mean value than the 10-year-old age group but a lower one than the other groups in the study. The 14-year-old age group had a higher mean value than the 10- and 11--year-old age group, but it was lower than the other groups. The 12-year-old students reached a higher mean value than the 10-, 11-, and 14-year-old age groups but had a lower mean value than the 13-, 15-, and 16-year-old age groups. On the other hand, the 13-year-old age group had a higher mean value than all the other groups except the 15- and 16-year-old age groups. The 15-year-old students, who had higher values than the 16-year-old age group, had higher mean values than the other groups.

When the results of the analysis of the statement »Think of a child who feels terrible, write as many words as you can, to define these emotions«, was examined, it was seen that there was a significant difference between groups in terms of age because $F_{(214-7)}$=4.120, p<0,05. The results of the Tukey test showed that the 10-year-old age group had the lowest mean value of all the groups. The 14-year-old age group had a higher mean value than the 10-year-old age group, but it was lower than the other age groups. The mean value of the words produced by the 11-year-old age group was higher than those produced by the 10- and 14-year-old age group but lower

than for the other groups. Additionally, the mean value of the 13-year-old age group was higher than for the 10-, 11-, and 14-year-old age groups, yet lower than the 12-, 15-, and 16-year-old age groups. The 12-year-old students had a higher mean value than the other groups, apart from the 15- and 16-year-old age groups. However, the mean value of the 15-year-old age group was lower than for the 16-year-old age group, and the 16-year-old age group had the highest mean value for this statement.

The results of variance analysis on the statement, »Write as many words explaining happiness as you can«, indicated that there was a significant difference between groups in terms of age ($F_{(214-7)=}$6.595, p<0,05). According to the Tukey test, the 10-year-old age group had the lowest mean value among the age groups. The 14-year-old age group had a higher mean value than the 10-year-old age group, but the mean value was lower than other groups'. The students in the 11-year-old age group had a higher mean value than the 10- and 14-year-old age groups did; however, they had a lower value than the 12-, 13-, 15-, and 16-year-old age groups did. The mean value of the 12-year-old age group was lower than that of the 15- and 16-year-old age groups but higher than that of the 10-, 11-, 13-, and 14-year-old age groups. The 15--year-old students reached a higher mean value than other groups, except for the 16-year-old age group. The 16-year-old age group had the highest mean value of the words produced for this statement.

For the statement, »Write as many words as you can to explain the emotions experienced by a scared and frightened child«, one-way ANOVA was employed and the results pointed to the fact that there was a significant difference between the groups in terms of age of the students ($F_{(214-7)}$=4.197, p<0.05). According to the Tukey test, again, the 10-year-old age group had the lowest mean value among the groups. The 14-year-old students had a higher mean value than the 10-year-old age group but a lower value than the other groups. Additionally, the mean value of the 11-year-old age group was higher than that of the 10- and 14-year-old age group yet lower than the other groups. The 10-, 11-, and 14-year-old students' mean values were lower than the 13-year-old aged group's; however, the 13-year-old age group had a lower mean value than the 12-, 15-, and 16-year-old age groups. The mean value of the 12-year-old age group was higher than that of the 10-, 11-, 13-, and 14-year-old age groups but lower than that of the 15- and 16-year-old age groups. The 15-year-old age group had a higher mean value than the other groups, except for the 16-year-old age group. The highest mean value for this statement belonged to the students in the 16-year-old age group.

The results for the statement, »List the things that make children sorry«, indicated that again there was a significant difference between the words produced by the students in terms of age ($F_{(214-7)}$=4.364, p<0,05). The Tukey test showed that, again, the 10-year-old age group had the lowest mean value, and the 14-year-old age group had a lower mean value than the other groups, apart from the 10-year-old age group. The group contain-

ing the 13-year-old students had a higher mean value than the 10- and 14-year-old groups but a lower value than the 11-, 12-, 15- and 16-year-old age groups. Moreover, the 11-year-old students had a higher mean value than the 10-, 13-, and 15-year-old age groups did, whereas they had a lower mean value than the 12-, 15-, and 16-year-old age groups did. The 12-year-old students' mean value was higher than those of the other groups, except for the 15- and 16-year-old age groups. The 16--year-old age group had a higher mean value than the other groups, except for the 15-year-old age group. The 15-year-old age group had the highest mean value for this statement.

Discussion

When the positive and negative expressions used by both children and teenagers were examined, regardless of frequency, the constituents, which were basically detected, were gathered under definite titles. Among the children's positive expressions, family had an important place. Mother and father's showing love, being appreciated by mother and father, having a happy family life with mother and father, and brotherly love are perceived as positive things by almost all the children who participated in this study. Thus, it can be concluded that family is a significant focus in the positive emotional life of a child.

Another common focus of children in the study was seen in words related to school, including school and education life. Most of the children in the study used words related to school, including success at school, having good marks, receiving a certificate of appreciation or achievement, being successful in placement exams, and being a student appreciated by the teachers. Furthermore, going to school is seen as a source of happiness for students. Another striking point is that some students mentioned not going to school as a source of happiness. Moreover, exams was also among the most repeated words. The positive words produced by the children for the statement about the things that made them happy were games, playing football, or playing with ball. It should be pointed out that computer games is mentioned more frequently than games played with friends on street. Being with friends, having new friends, buying presents, and celebrating birthday were among the other positive expressions mentioned by children. The words love, respect, tolerance, friendship, honesty, happiness, being loved, rejoicing, were the most-repeated ones.

Moreover, expressions related to school were also encountered in this group. Being successful at school, being successful at University Entrance Exam (OSS) and High School entrance Exam (OKS), being appreciated by teachers, passing the class, being praised, going to school, playing truant, and studying the desired profession were some of the main expressions that could be presented un-

der the title of school. The words that were encountered most often were love and romance. Wandering with peers, spending time with friends, flirting, falling in love, being liked, and kissing were also some words under this title. The students in this age group also used expressions related to playing games with friends, but computer games were more dominant. In addition, the programs that provided instant communication via the Internet were also often mentioned. When the words written by teenagers were examined, it was seen that there was not many expressions related to objects that could be purchased. The number of the words produced under this title was 383. The analysis of the children and teenagers' responses to objective, positive, and negative statements indicated that the teenagers had more different mean values than the children did. The increase in language skills with age is predictable. As the child gets older, his language skills improve with the effect of the social environment and cognitive development, and his vocabulary is enriched. Thus, it can be concluded that there is a significant relationship between the participants' ages and the words they produced, and as age rises, the mean values of the words increase. For the results related to the 14-year-old age group in the study, it could be posited that these findings were related to the transition into puberty. [4] The results of this study showed that there was no significant difference in terms of gender.

Limitation and Recommendations

Several important limitations should be considered in interpreting the results of our study. One of the limitations of this study was that during the data collection process, we collected emotions of students, even though some of them could have been placed into a emotional stituations. In doing so, children and teenagers may have lost some of the insights inherent to personal ways of conceptualizing their emotions that suitable with emotional situations. Results completely depend on children/teenagers' emotional explenations.

Despite some limitations, this study has a number of strengths. First, it uses an appropriate questionnaire to provide real information about children/teenagers' emotions, which allowed for a more accurate representation of the way emotions are manifested in this population. Using this questionaire, the study has provided further insight into children/teenagers' emotions about special stituations.

The results of the present study may be used to identify groups of children/teenagers' most vulnerable and in need of assistance according to their emotions about emotional stituations, and they may provide valuable information for future emotional education planning and development, which may be directed at assisting subgroups within the student population.

REFERENCES

1. ACAR NV, 25 Years in Guidance and Counselling, (Nobel Press, Ankara, 2003). — 2. BOHART AC, Psychotherapy Theory, Research and Practice, 17 (1980) 192. — 3. BUCCÝ W, Psychoanalytic Enquiry, 12 (1997) 151. — 4. CAMRAS L, ALLÝSON K, Journal of Nonverbal Behavior, 9 (1985) 84. — 5. CEYHAN A, Investigating the University Students' Density of Emotion Assigned to the Words and Idioms Expressing Emotions in terms of Some Variables. (Anadolu University, Eski@ehir 2000). — 6. DOOST N, MORADÝ RA, TAGHAVÝ RM, YULE W, DALGLEÝSH T, Personality and Individual Differences, 27 (1999) 433. — 7. FOA EB, KOZAK MJ, Psychological Bulletin, 99 (1986) 20. — 8. HUNT MG, Behaviour Research and Therapy, 36 (1998) 361. — 9. LAZARUS RS, Stress and emotions: a new synthesis (Free Association Books, London, 1999). — 10. KUÝKEN D, CAREY R, NÝELSEN T, Imagination, Cognition and Personality, 6 (1987) 341. — 11. OATLEY K. JOHNSON-LAIRD PN, Cognition and Emotion, 1 (1987) 29. — 12. RACHMA NS, Behaviour Research and Therapy, 18 (1999) 23. — 13. STRAUSS GP, ALLEN DN, Cognition & Emotion, 22 (2007) 114. — 14. TRAUE HC, PENNEBAKER JW, Emotion, inhibition and health. In: HOGREFE and HUBER (Eds) (Seattle USA, 1993). — 15. YILDIRIM A, ÞÝMÞEK H, Qualitative Research Methods (Seçkin, Ýstanbul, 2005).

N. Özabacı

University of Osmangazi, Faculty of Education, Department of Guidance and Counselling Psychology, Meşelik Kampüsü, Eskişehir 26480, Turkey
e-mail: niluferozabaci@hotmail.com

ISTRAŽIVANJE KOCEPATA I RIJEČI KOJE KORISTE DJECA I TINEJDŽERI U TURSKOJ U EMOCIONALNIM SITUACIJAMA

SAŽETAK

Cilj studije bio je determinirati koncept i riječi koje koriste djeca i tinejdžeri kako bi definirali svoju percepciju događaja koja uključuje emocije. Pokušala se uočiti razlika između riječi korištenih od strane djece i tinejdžera. Studija uključuje 214 djece i adolescenata, uključujući 124 učenika iz 4 osnovne škole iz Eskisehira, Turska (59 djevojčica i 65 dječaka) i 90 učenika iz jedne srednje škole i dvije gimnazije (39 djevojčica i 51 dječak). Učenicima je dan upitnik s 10 pitanja fokusiranih na tri emocijalne kategorije (sreća, tuga i strah), dva samoopisna pridjeva (pozitivno i negativno) i dvije neutralne kategorije (semantički povezane i semantički nepovezane). Upitinik je prilagođen po formi koji ju koristio Doots i sur. (1999).