Students' Concepts about Their Classmates with Disabilities, In Co-Taught Classes: A Research Based On Greek Primary Schools

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Abstract

Co-teaching of students with or without disabilities in the same classroom, with the presence of two teachers (a special education teacher and a general education teacher) is being implemented at a rapid pace on Greek primary schools throughout the last decade. However, this teaching method lacks of published research studies, concerning its actual benefits in the educational process as well as in the acceptance of children with disabilities from their peers. In this paper, we explore the perceptions of 336 primary school students, half of whom attend classes with students with disabilities and the other half without them, for their concepts about their peers with disabilities. Positive attitudes toward students with disabilities from students, who are co-taught with them, provide initial information on the potentials of co-teaching to support an inclusive school environment in which all students can be equally accepted.

Keywords: Co-teaching, inclusive education, students' perceptions, students with disabilities, acceptance

Introduction

Nowadays, the education of students with disabilities has become a major issue and conflict between different social groups and organizations, while several countries around the world seek through their policies on inclusive education. The inclusion of students with disabilities is based on opinions, considering that disability is the result of interaction of individual differences and social and economic structures, which lead to the exclusion of students with disabilities from social life (Anastasiou and Kaufman, 2011, 2012, 2013). The most recent proposal for inclusive education in Greece is co-teaching (Act 2008). Regarding co-teaching, research in Greece has been mainly focused on the views of teachers about its application. However, these studies do not include the students' perspective. The perception of students without disabilities about co-teaching is essential for the successful implementation of inclusive education.

Greek legislation (Act 2008) allowed students with disabilities to attend general education classes with the implementation of co-teaching settings. In particular, students with disabilities can attend classes in general education schools, supported by special education teachers, depending on the type and severity of their diagnosis. One of the objectives of the Act is to improve and exploit the capabilities and skills of students with disabilities. Students with disabilities should attend co-teaching class, when it is considered that this is the best educational framework, based on the decision of the corresponding state vector. Co-teaching may be defined as the partnering of a general education teacher and a special education teacher or another specialist for the purpose of jointly delivering instruction to a diverse group of students, including those with disabilities or other special needs, in a general education setting and in a way that flexibly and deliberately meets their learning needs (Friend, 2008). In most models, co-teaching students with and without disabilities are taught by two teachers who share the planning and classroom management. They are teaching using a variety of collaborative strategies and guidance settings and then evaluate students' performance.

(Turnbull et al., 2004; Friend and Bursuck, 2009; Friend and Cook, 2012). During co-teaching, all students are improving their academic skills and social behavior (Friend and Cook, 2007; Hang and Rabren 2009). Students with disabilities increase their academic performance. (Hang and Rabren 2009). After co-teaching, the assessment of the needs of students from both teachers, can produce alternative teaching suggestions and help to improve conditions for future co-teaching (Conderman 2011; Murawski and Lochner 2011). While many studies have shown that co-teaching can positively influence academic and social development of all students (Murawski and Swanson, 2001; Sapon-Shevin, 2003), some researchers have expressed concern about its effectiveness. (Klingner et al., 1998; Zigmond and Magiera, 2001). Opponents believe that in order to meet students with disabilities, co-teaching "decays" the content of the course, which pushes high performance students without disabilities at a disadvantage (Sapon-Shevin, 2003; Tomlinson et al., 1997). They also raise concerns about the evaluation unbiasedness (Salend and Duhaney, 2002), the effectiveness of teaching methods, the use of teaching aids and layout of classrooms associated with co-teaching (Mastropieri and Scruggs, 2004).

Additionally, according to Zigmond and Magiera (2001) research based on co-teaching, is characterized as "inadequate". Students' perceptions about their learning environment should be considered together when studying the viability of co-teaching programs (Austin, 2001). The importance of understanding the perceptions of students with and without disabilities about co-teaching and their impact on the academic and social development becomes more evident as the students' opinions about their classroom environment can shape and influence the learning outcomes. Kortering and Braziel (1999) found that students with disabilities who had positive perceptions of their school environment, were more likely to interact with their teachers and complete their studies. Indeed, regardless of skill level, perceptions of students with disabilities have positively impacted their academic effort and motivation (Wentzel, 1997). Noting the need for supportive learning environments, King (2003) concluded that cooperation of general education teachers and special education teachers in co-teaching conditions, provides an educational environment that empowers students with and without disabilities and supports their success (Friend and Pope, 2005). According to international experience, several studies have examined the ideas of students about their views on co-teaching, concluding that this educational method is positive for both students with disabilities and for their peers without disabilities in social and cognitive level (Walter-Thomas, 1997; Mastropieri and McDuffie, 2007; Campell, 2007; Wilson and Michaels, 2006).

In Greece, however, the research mainly focuses on the teachers' perceptions about co-teaching, noting that there are no other published Greek studies that examine students' perceptions about their peers with disabilities in co-teaching environment. This lack of data meant that the starting point for this study should be an exploration of the field in an attempt to generate themes and to formulate the broader picture. In tandem, this preliminary exploration would constitute the stepping stone for the research design and implementation of the main dimension of the research topic, exploring students' concepts about their classmates with disabilities, in co-taught classes. This research focuses on a comparison of the perceptions of students without disabilities who attend classes with and without students with disabilities, highlighting the positive effects of the presence of the former. Specifically, the purpose of this study is to investigate whether co-teaching method affects students' perceptions about their peers with disabilities. For this purpose, a survey was conducted with the participation of students from various primary schools of the region of Epirus. The selection of students was randomly assigned and they were given to complete a closed form questionnaire. The main research hypotheses of this study are the following: i. Students who attend class with students with disabilities, exhibit diverse attitudes of acceptance toward their peers with disabilities, compared with students attending class without students with disabilities. ii. Students who attend class with students with disabilities exhibit differential attitude characterization of their classmates with disabilities, compared with students attending class without students with disabilities.

Research Methodology

Tools

For the main survey of this study, an original questionnaire was designed and used. Developing a questionnaire, however, presupposes the translation of any concepts into a form in which they are measurable. However, operationalizing a questionnaire, those is taking the general purpose and turn it into concrete, researchable fields about which actual data can be gathered, is not an easy and straightforward process but one of continuous refinement (Cohen et al., 2000). It entails a process of moving from the broad to the specific and there are three main concerns involved in the process; clarifying concepts and developing indicators and evaluating them. All three elements were an initial concern for the development of the main questionnaire.

Therefore, apart from the literature review (Koster et al., 2009; Flem and Keller, 2000; Nowicki and Sandieson, 2002), the exploratory phase was also conducted in advance to help clarify the students' perceptions about their peers with disabilities. In addition, the questionnaire was piloted more than once and continuous adaptations were made before it resumed its final form. Following the results of the pilot study, the final form of the main questionnaire was a much shorter version of the pilot one. The revised questionnaire covered two pages and was divided in two parts. The first part examined the demographic characteristics of the participating students, which includes their gender and teaching grade, as well as information about them knowing people with disabilities, or having students with disabilities at their school or in their classroom. At that point it has to be mentioned, that Greek primary school is attended by pupils from 6 to 12 years old. Specifically, grade A students are 6-7 years old, grade B students are 7-8 years, grade C students are 8-9 years old, grade D students are 9-10 years old, grade E students are 10-11 years old and grade H students are 11-12 years. The second part of the questionnaire was divided in two sections. Section A consisted of 20 items at a 5-point Likert scale, regarding social acceptance of students with disabilities. Specifically, section A contained items, which referred to several themes: interaction between the students with disabilities and his/her peers, acceptance by peers, students' beliefs, feelings and behavioral intentions towards peers with disabilities, friendships, cognitive level and abilities that children with disabilities have at school lessons (see Appendix A).

Section B consisted of 27 closed form bivalent questions (yes / no) concerning characterizations of students with disabilities. More specifically, section B contained 10 positive (brave, clever, friendly, happy, lovable, neat, polite, sensitive, soulful, special) and 17 negative characterizations (aggressive, crazy, different, dirty, dumb, fat, idiot, lonely, messy, retarded, sad, scared, shy, silly, stupid, unhappy, weird) about children with disabilities. Participants were asked to answer whether they consider their classmates with disabilities have (or don't have) specific characteristics which distinguish them from the rest of the students. Both negative and positive items were used interchangeably in a 1:1 or 1:2 ratio, so as to avoid an acquiescent response set (De Vaus, 2002; Gillham, 2007). The use of those alternative responses was considered an exhaustive list for the purposes of the questionnaire and at the same time it prevented biasing responses (De Vaus, 2002). Closed items were considered more suitable for the present questionnaire because they are quick to answer, thus increasing response rate in self-administered questionnaires, they do not discriminate against the less talkative respondents or those who do not wish to spend a lot of time with the questionnaire and finally, from a researcher's point of view, closed questions are easier to code (Cohen et al., 2000; De Vaus, 2002; Gillham, 2007).

Reliability

The reliability of the survey questionnaire was initially tested. (Streiner, 2003). The reliability testing was performed by calculating the Cronbach's alpha reliability coefficient for each subcategory (positive and negative questions) of both sections A (closed questions type 5-point scale in Likert) and B (bivalent answer questions Yes/No) of the questionnaire. The resulting values listed in Appendix B, Table 1, support the structural reliability of the questionnaire, since all calculated values are acceptably great (above 0,77).

Area setting

Participants were children in primary education, more specifically attending grades D and E. The participants belonged to the same educational authority in Epirus. Epirus is considered to be a medium to low socio-economic county. However, within its proximity there are schools of higher standards and schools of lower standards. The particular area was chosen based on two parameters. First, the element of heterogeneity among the schools meant that data would also be divergent to some extent and that would add to the credibility of the research and its outcomes. Second, the researcher had worked as a primary school teacher in the area for seven years and was therefore aware of its particularities and specific characteristics. Having a prior knowledge of the area under investigation is an important element for researchers (Robson, 2011; Teddie and Tashakkori, 2009). Additionally and in terms of practice that meant that there would be an easier access to the schools. This was a very vital element for the present research because the study needed to include young and vulnerable children and hence there would always be a question of trust had the researcher been unknown to the head of the educational authority.

Participants

Overall, 336 students were included in the survey by answering all the questions from the questionnaire relating to their perception of their peers with disabilities as part of the co-teaching method.

The researcher visited the participating grades (D, E) to inform the students of the research project and gave out the questionnaires. It was the researcher's intention to provide an online link for the completion of the questionnaire as this was a more practical and more convenient way of collecting survey data. However, given that there would be students who were not familiar with online surveys or were not well acquainted with the use of computers, paper questionnaires had been provided. The paper questionnaires had been collected after a few days by the researcher. All participating students attended either grade D (percent 63,1%) or grade E (percent 36,9%), 168 of them (percent 50%) were in classes that had students with disabilities, while the other half attended classes that hadn't any students with disabilities. According to gender, 156 students (percent 46,4%) were boys while 180 students (percent 53,6%) were girls. All of the participants (percent 100%) had children with disabilities in their school, the majority of them (312 students, percent 92,9%) knew people with disabilities and half of them (168 students, percent 50%) had classmates with disabilities (see Appendix B, Table 2).

Statistical Approach

For the statistical analysis of the questionnaire's quantitative data the statistical package IBM SPSS (Statistical Package for Social Sciences) Version 22 has been used. The frequencies and percentages of demographic characteristics of all participants as well as the statistical measures (mean and standard deviation) of all Likert-scale variables for both student groups (with and without classmates with disabilities) were initially calculated. Furthermore, inferential statistical methodologies were performed in order to test the equality of all scalable variable means between the two student groups (Montgomery, 2001). Given the dissatisfaction of all prerequisites (lack of normality) for the use of parametric tests (t-test), the above statistical tests were performed using the corresponding non-parametric statistical test of Mann-Whitney. Additionally, contingency tables were constructed for all bivalent noun variables (i.e. questions with Yes/No answers) of the two student groups and the degree of statistical association between the group and these variables assessed by the use of Pearson's chi-squared test. The significance levels were set at p-value<0,05 and all statistical tests were 2-sided.

Results

Section A

The research of the influence of students enrolled in classes with students with disabilities in the social acceptance of their classmates with disabilities, presented interesting results. Statistically significant differences were confirmed in a total of 10 variables of section A, while the overview of students enrolled in class with students with disabilities presents differences in social acceptance towards their peers with disabilities. In particular, students attending classes with students with disabilities showed differentiated attitude on the first impression that a student with disabilities gives, being more certain that they will not smile at a child with disabilities on the first day of school (p-value<0,001), neither would understand if a child has disabilities by looking at his face (p-value<0,001) (see Appendix B, Table 3). Moreover, appear less disturbed (by students which attend classes without students with disabilities) to potential nuisance that classmates with disabilities could get from other students (p-value=0,036) (see Appendix B, Table 3).

A clear differentiation is observed in the confidence that exudes a student with disabilities, since students enrolled in classes with students with disabilities exhibit less willingness to confide their secrets to peers with disabilities (p-value<0,001), call them on their birthday (p-value<0,001), or even choose them in their team to play (p-value=0,001) (see Appendix B, Table 3). Additionally, they consider with greater certainty (than students enrolled in classes without students with disabilities) that students with disabilities cannot cope with the same level of mathematics (p-value<0,001), nor can read the same books with them (p-value= 0.007) (see Appendix B, Table 3).

Nevertheless they are put to a greater extent (than students enrolled in classes without students with disabilities) advocates for inclusive education of students with disabilities, arguing that students with disabilities should not be going to a special school (p-value< 0,001), neither attend special classes in the same school (p-value<0,001) (see Appendix B, Table 3). These results taken together confirm the first research hypothesis, namely that student who attend classes with students with disabilities, exhibit diverse attitudes of acceptance toward their peers with disabilities, compared with students attending classes without students with disabilities.

Section B

Multiple statistically significant differences were observed to participating students regarding their views on the characterization of students with disabilities.

In the vast majority of negative characterizations [(crazy p-value<0,001), (different, p-value=0,029), (dirty, p-value<0,001), (dumb, p-value<0,001), (fat, p-value<0,001), (idiot, p-value= 0,006), (lonely, p-value<0,001), (retarded, p-value<0,001), (sad, p-value<0,001), (scared, p-value<0,001), (shy, p-value<0,001), (silly, p-value<0,001), (stupid, p-value< 0,001), (unhappy, p-value<0,001)] (see Appendix B, Table 4) children enrolled in classes with students with disabilities showed a statistically significant difference in the percentage distribution of responses, compared with their peers who attended classrooms without students with disabilities, considering that these negative determinations could not characterize students with disabilities, with the exception of the characterization "fat". At the same time, for three positive assays [(happy, p-value<0,001), (neat, p-value<0,001), (sensitive, p-value=0,001)] (see Appendix B, Table 4) there was a statistically significant difference in the percentage distribution of responses, with students enrolled in classes with students with disabilities confer with greater frequency these characterizations to persons with disabilities. Regarding the characterization "special", students attended classes with students with disabilities consider it less that is appropriate for students with disabilities (p-value=0,028) (see Appendix B, Table 4). These conclusions match identical in equivalent ones observed in Section A, thus strengthening the hypothesis that students enrolled in classes with students with disabilities, develop smoothed criteria and subsequently social acceptance towards peers with disabilities. These results taken together confirm the second research hypothesis, namely that students who attend classes with students with disabilities exhibit different attitude characterization of their classmates with disabilities, compared with students attending classes without students with disabilities.

Discussion

The present study produced interesting quantitative results for participants' perceptions about students with disabilities. Alongside, statistically significant differences were detected for both sections of the questionnaire, indicating the positive influence of classes containing students with disabilities. In particular, according to the first hypothesis, regarding the social acceptance of students with disabilities (Section A), the observed statistically significant differences between several questions indicate that students without disabilities enrolled in class with students with disabilities, exhibit more positive attitudes toward their peers with disabilities, considering that these students can coexist in the same school and classroom environment. Additionally, students enrolled in class with students with disabilities, due to being more aware of the learning difficulties faced by their peers with disabilities, consider with greater certainty that students with disabilities cannot cope with the same level of mathematics. Moreover, students enrolled in class with students with disabilities, express greater weakness in the ability to recognize a student with disabilities based on external characteristics. This can be explained by the fact that students which are co-taught with students with disabilities, having incorporated in their social environment children with disabilities have not developed external standards of exclusion. Still, students which attend classes with students with disabilities, have a neutral attitude towards peers with disabilities.

This conclusion is not surprising, since these students having lived together in the same learning environment with students with disabilities, have probably identify specific learning and/or social difficulties exhibited by students with disabilities and therefore maintain a "distance "from them. The lengthening of the period of cohabitation could change the attitude of students without disabilities multiplying the potentials for social interaction between them. For this reason, future research could be conducted in this direction. Moreover, regarding the second hypothesis of this study, statistically significant differences that students enrolled in classes with students with disabilities indicated in the percentage distribution of responses for a number of characterizations that identify their classmates with disabilities, enhance their image and apparently improve their social acceptance. Therefore, summarizing the perceptions of students enrolled in class with students with disabilities, conclude that co-teaching has a positive impact on students.

There is awareness of students without disabilities to live in harmony with their peers with disabilities, to have the opportunity to create positive attitudes toward these children and enhance the acceptance of diversity. From the above observations results that co-teaching plays an essential role in terms that will shape students without disabilities for their classmates with disabilities and therefore students with disabilities will no longer be a "special" group of the entire educational community. This finding is consistent with the research of Keefe and Moore (2004), who emphasized the importance of co-teaching, since students with disabilities are less likely to be stigmatized because of their disability in relation to whether they were enrolled in special education modules. In a similar way Pugach and Warger (2001) came up to the conclusion that co-teaching is beneficial for students with and without disabilities.

Karagiannis, Stainback and Stainback (1996a) indicate that through co-teaching students without disabilities learn to respect the individual's right to difference. At the same time, through co-teaching opportunities are given to build social relationships between students which coexist in the same class and the risk of categorization is removed. Additionally, the interaction between students enables students without disabilities to support and assist students with disabilities, increasing in this way the feeling of social sensitivity. Inclusion of students with disabilities in general education schools through the implementation of co-teaching, transforms educational structures and relationships of those involved. The perceptions of students (attending classes with students with disabilities) who participated in this investigation lead to the conclusion that inclusion in form of co-teaching promotes social and emotional development of students without disabilities and improves social behavior in issues of acceptance, support and respect for others. So it is necessary to create an appropriate network organization structures accession (by optimizing and strengthening the method of co-teaching) in order to create situations from common life, play and learning among students with and without disabilities, as a first step of preparing students in their common life in society.

Limitations

The present study attempted to investigate the students' perceptions about their peers with disabilities in the framework of the method of co-teaching. This study has several limitations. First, it is only a first attempt to collect empirical data on the perceptions of students. Secondly, students were only a small sample of specific classes of Primary Schools in the region of Epirus. All participants come from schools in the urban area, in which co-teaching is widely implemented. In areas with less administrative support, students may not have the same perceptions about their peers with disabilities. Consequently, the perceptions of students in these locations may vary. Finally, this study focused only on primary school students, without taking into consideration the perceptions of students of other educational levels.

Conclusions

Co-teaching is a method of providing educational services for students with disabilities. However, there is limited research on educational results for students participating in co-teaching (Pugach and Winn, 2011). In this study an attempt was made to evaluate the benefits of co-teaching method so as implemented in Greece, based on the perceptions of students attending classes with students with disabilities, for their classmates with disabilities. Considering the data obtained and the limitations of the research, the following conclusions came up: Co-teaching, in the way that is implemented in Greece and not always successfully, has multiple benefits for students with and without disabilities. Students with and without disabilities improve their socio-emotional skills, while students with disabilities improve their autonomy skills. Finally, students with disabilities enhance their school and social inclusion. However, this does not mean that co-teaching method should not be improved in order to maximize positive outcomes for students with and without disabilities. Educating students with disabilities in general education means that these students are considered equal partners with their peers both in the classroom and in the school community. Students with disabilities can benefit from their studies in an inclusive environment. Therefore, the successful cooperation between school administration, teachers, parents and classmates of children with disabilities is a key factor in establishing an appropriate school culture and positive climate, which will enable students with disabilities to be accepted initially in the school environment and by extension in society.

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Appendix A (Questionnaire Section A Items)

A1. Would you smile to him/her the first day of school?
A2. Would you ask him/her to sit at your desk?
A3. Would you approach him/her during break and chat with him/her?
A4. Would you tell him/her your secrets, such as telling your other friends?
A5. Could this child be your best friend?
A6. Would you invite him/her to your house to play together?
A7. Would you be angry with him/her if he/she did not follow the rules of the game?
A8. Would you invite him/her to your birthday with your other friends?
A9. Would you choose him/her to play in your team?
A10. Would you ask him/her things about himself/herself (e.g. what food he/she likes)?
A11. Would you bother, if other children made fun of him/her?
A12. Do you think that children with disabilities can do the same mathematics as you?
A13. Do you think that he/she can read the same books as you?
A14. Do you think that he/she has the same hobbies and same occupations as other children have?
A15. Would you feel fear of children with disabilities?
A16. Do you think that children with disabilities should attend the same class as other children do?
A17. Do you think that children with disabilities should have their own special class at school?
A18. Do you think that children with disabilities need to go to a special school where all the kids there will be also disabled?
A19. Do you think that children with disabilities prefer to hang out only with children with disabilities?
A20. Could you understand if a child is disabled by looking at his/her face?

Appendix B (Tables)

Table 1

Reliability

Questionnaire Sections	Cronbach's alpha coefficient
Section A	
Positive questions	0,891
Negative questions	0,831
Section B	
Positive questions	0,810
Negative questions	0,772

Table 2

Participants' demographics (N=336)

Variable	Frequency (N)	Percent (%)
Class		
Grade D	212	63,1
Grade E	124	36,9
Gender		
Boy	156	46,4
Girl	180	53,6
Do you know children with disabilities?		
Yes	312	92,9
No	24	7,1
Are there any children with disabilities at school?		
Yes	336	100
No	0	0
Are there any children with disabilities in your class?		
Yes	168	50
No	168	50

Table 3

Descriptive statistics and means statistical tests

Variable	Class with children with disabilities		Class without children with disabilities		Statistic (M-W U)	Significance (p-value)
	Mean	S.D.	Mean	S.D.		
A1	1,40	0,62	1,21	0,56	11728,0	<0,001***
A2	1,74	0,88	1,67	0,81	13656,0	0,575
A3	1,52	0,67	1,52	0,77	13680,0	0,578
A4	2,50	1,01	2,10	0,95	10872,0	<0,001***
A5	1,83	0,85	2,00	0,85	12600,0	0,070
A6	1,86	0,94	1,79	0,78	13984,0	0,877
A7	3,31	0,89	3,29	0,99	14016,0	0,903
A8	1,71	0,99	1,29	0,50	11328,0	<0,001***
A9	1,57	0,85	1,26	0,49	11728,0	0,001**
A10	1,48	0,70	1,36	0,65	12744,0	0,063
A11	1,43	0,70	1,33	0,72	12656,0	0,036*
A12	2,95	0,79	2,33	1,00	9024,0	<0,001***
A13	2,71	0,96	2,40	0,96	11816,0	0,007**
A14	2,69	0,94	2,81	0,85	13280,0	0,325
A15	3,05	1,00	2,90	1,09	13168,0	0,262
A16	2,29	0,94	2,36	1,09	13824,0	0,737
A17	2,83	1,00	1,71	0,88	6048,0	<0,001***
A18	3,07	0,91	2,36	1,24	9488,0	<0,001***
A19	3,31	0,94	3,38	0,85	13808,0	0,702
A20	3,02	0,99	2,43	1,24	10344,0	<0,001***

*$p<0.05$. **$p<0.01$. ***$p<0.001$

Table 4

Crosstabs and Chi-square tests

Variable (Characterizations)	Class with children with disabilities		Class without children with disabilities		Statistic (X^2)	Significance (p-value)
	Frequency (Yes)	Frequency (No)	Frequency (Yes)	Frequency (No)		
Brave	64	104	64	104	0,000	1,000
Clever	84	84	80	88	0,191	0,662
Friendly	116	52	128	40	2,155	0,142
Happy	112	56	72	96	19,222	<0,001***
Lovable	100	68	100	68	0,000	1,000
Neat	56	112	24	144	16,800	<0,001***
Polite	108	60	104	64	0,205	0,651
Sensitive	124	44	96	72	10,322	0,001**
Soulful	84	84	68	100	3,076	0,079
Special	84	84	104	64	4,830	0,028*
Aggressive	12	156	12	156	0,000	1,000
Crazy	0	168	28	140	30,545	<0,001***
Different	76	92	96	72	4,765	0,029*
Dirty	0	168	16	152	16,800	<0,001***
Dumb	0	168	36	132	40,320	<0,001***
Fat	28	140	8	160	12,444	<0,001***
Idiot	4	164	16	152	7,656	0,006**
Lonely	16	152	64	104	37,800	<0,001***
Messy	12	156	20	148	2,211	0,137
Retarded	12	156	40	128	17,837	<0,001***
Sad	16	152	44	124	15,907	<0,001***
Scared	36	132	72	96	17,684	<0,001***
Shy	72	96	112	56	19,222	<0,001***
Silly	0	168	28	140	30,545	<0,001***
Stupid	0	168	20	148	21,266	<0,001***
Unhappy	8	160	36	132	20,503	<0,001***
Weird	40	128	32	136	1,131	0,287

*$p<0.05$. **$p<0.01$. ***$p<0.001$