# 4-6-8 Age Group Children's Knowledge of Gender Norms and Flexibility of Reasoning 

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#### Abstract

This research aims to investigate the 4-6-8 age group children's stereotypical judicial knowledge about gender norms and their flexibilities of reasoning about gender norms when different domains were emphasized. The research was designed as a convergent parallel design, one of the mixed method studies. The participants of this study are 30 girls and 30 boys, 60 children in total, from the age group of $4-6-8$. The qualitative and quantitative data of the research were collected by means of hypothetical stories simultaneously. Two-way ANOVA test was conducted for the independent samples of qualitative data and the quantitative data of the research was analysed descriptively. The results of the research showed that 4-6-8 age group children's knowledge about gender norms was quite high. The boys stated a reversal of gender norms in a different cultural context to be acceptable than the girls. 8 -year-old children tended to show more flexibility regarding gender norms than children at the age group of 4 and 6 . Accordingly, 8 -year-old children judged gender norms may change in line with personal preferences and they evaluated the school rules about gender norms more negatively.


## Keywords

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## Introduction

Gender norms are the accepted qualities and characteristics of being a woman or a man for a particular society or community. Gender norms are ideas of how men and women should be and act. It is internalized early in life in the process of gender socialization, used as standards and expectations that women and men should meet, leading to gender stereotypes (United Nations Statistics Division, 2015). Very early in life, children begin conforming to gender stereotypes and interacting in gendersegregated social groups (Mulvey \& Killen, 2015). Since children grow up in conventional social environments in which gender norms are determined, their gender stereotypes are shaped more as they get older (Martin, Wood, \& Little, 1990). The researches reveal that the stereotypes about gender norms generally show a steady and rapid progress from pre-school period until mid-childhood period (Bigler, 1995; Blakemore, 2003; Serbin, Powlishta, Gulko, Martin, \& Lockheed, 1993). In this process, the children's stereotypes about gender norms increase in fields such as activities, occupations and personality traits; however, old children behave more flexibly than young children while using these stereotype knowledge (Serbin et al., 1993). In addition to this, there are also some contradictory research

[^0]results about the development of gender stereotypes according to age. A meta-analysis study by Signorella, Bigler, and Liben (1993) presents that the children's knowledge about gender norms increases in parallel with the age. When children become five years old, they develop a series of gender norms which are generally funny but wrong. The children believe that these gender norms are valid for themselves and others (Martin \& Ruble, 2004). The rigidity of the children towards the unalterability of gender norms in line with the knowledge they had acquired about gender norms within the process crested at the 5-6-year-old pre-school period. In pursuit of this, a significant increase was observed in the flexibilities of the children aged 7-8 about gender norms (Trautner et al., 2005). Similarly, Stoddart and Turiel (1985) found that young children appraised the violation of gender roles more negatively than the children in the mid-childhood period. Notwithstanding, Carter and McCloskey (1984) expressed that young children relatively accepted their peers' behaviours that were inconsistent with gender but this started to become negative in parallel with the age and older children displayed more negative reactions against the behaviours which were inconsistent with gender accordingly.

Despite of the contradictory research results, it is known that gender role stereotypes are developed as a result of a range of stages such as acquiring awareness about genders, converting this awareness into unchanging characteristics, having an intellection that supports genders are not fixed but flexible (Trautner et al., 2005). While this developmental range is undoubtedly related with general cognitive processes and abilities such as gender invariance, categorization and classification, the process that underlies the change of gender stereotypes is not definitely known (Martin \& Ruble, 2004). There are some findings which show that cognitive development is considerable in the children's development of gender stereotypes in the literature. The flexibility of gender stereotypes after cresting at the age of 5-7 brings to mind that it shows parallelism with cognitive development. Martin, Ruble, and Szkrybalo (2002) expressed that once children become aware of their membership in a gender category, they seek details and scenarios for activities of the same gender and pay more attention to differences between boys and girls. The children's growing awareness, knowledge, and understanding of gender might explain high levels of gender rigidity (Halim, 2016). In addition to this, Bigler (1995) stated that the deficiencies of the children at the pre-school period about the skill of classification are the reason for their rigidities about gender stereotypes. Accordingly, it seems possible that the children who grow up in an environment which has difficulty in accepting that an individual can be categorized under more than one category and in which the individuals are classified routinely according to the gender are more likely to develop strict and rich gender stereotypes.

Another variable that contributes considerably to the prediction of the flexibility of gender is socialization (Katz \& Ksansnak, 1994). Accordingly, gender stereotypes can be related with socialization processes such as children's starting school and spending more time with their peers (Martin et al., 2002). On the other hand, Langlois and Downs (1980), who investigated the effect of the parents and peers on the children's development of gender, revealed that more importance is attributed to the fathers than the mothers in this process. Furthermore, cognitive factors and socialization are not completely independent from each other in the children's development of gender (Maccoby, 2000). Serbin et al. (1993) indicated that the knowledge and flexibilities about stereotypes are a function of children's cognitive maturity levels but some social-environmental factors such as the existence of the father at home are a bit effective on this situation. Similarly, Trautner (1992) mentions that there is an interaction between the developmental condition of the child and the perceived characteristics of the social environment according to the results of his study - a five-year longitudinal study with 4-5-yearold children. In the general sense, the children's gender stereotypes are developed by the contributions of the experiences of both cognitive maturization and socialization (Serbin et al., 1993).

Although it seems that the children's ages and their flexibilities about gender norms are interrelated, this relationship might vary in girls and boys (Levy, Taylor, \& Gelman, 1995). Signorella et al. (1993) state that girls have more gendered stereotype knowledge than boys in spite of low effect size. Miller, Lurye, Zosuls, and Ruble (2009) mentions that girls provided a higher proportion of stereotypes according to the results of their study with 3-10-year-old children. Similarly, the results of the research by Shepard and Hess (1975) show that the girls' opinions of "women and men must get appropriate jobs for gender" increase in a significantly different way in parallel with the age when compared with the boys' opinions. Moreover, there are also some research results which present that boys have more gender stereotypes than girls. Blakemore (2003) determined in his study that boys perceive femalespecific hair styles and clothes more negatively than the girls' perception of male-specific hair styles and clothes.

It is known that the flexibility development of the concepts about genders carries multidimensional characteristics. Accordingly, it is thought that flexibility consists of a heterogenous structure (Levy et al., 1995). Mentioning that children are aware of the possibility to violate the gender norms, Blakemore (2003) states that this flexibility changes from norm to norm. When the related literature is reviewed, it is seen that the flexibilities and rigidities of the children about gender norms vary according to personal preferences (Smetana, 1986), cultural norms or conventions (Carter \& Patterson, 1982; Stoddart \& Turiel, 1985) and moral principles (Killen \& Stangor, 2001; Theimer, Killen, \& Stangor, 2001). Within this framework, Smetana (1986), who investigated the conceptual basis of the pre-school children's evaluations of gender, identified in his study that personal preferences about gender roles are highly related with the flexibility. According to Carter and Patterson (1982), who emphasized the cultural norms or conventions, the flexibility and cultural relativity in the children's beliefs of stereotypes about genders, gender roles and social conventions increase significantly in line with the age. A pre-school child is excluded even from an activity which fits into his gender norms. That has been regarded as a wrong perception in the studies focusing on the relationship of gender norms with the ethical field. Furthermore, the children make these evaluations by presenting some ethical reasons such as equality and injustice (Theimer et al., 2001). Similarly, Killen and Stangor (2001) conducted a study investigating children's and adults' reasoning the exclusion from the peer group in line with their gender stereotypes and offered that a great majority of the children regarded the exclusion as negative by presenting some moral justifications.

In the related literature, it is seen that the studies about the children's gender norms focused on the development of rigidity/flexibility about gender norms substantially (Banse, Gawronski, Rebetez, Gutt, \& Bruce Morton, 2010; Katz \& Ksansnak, 1994; Martin, 1989; Martin et al., 1990; Serbin et al., 1993; Signorella et al., 1993; Trautner, 1992; Trautner et al., 2005) and limited number of studies investigated the development of flexibility by classifying into the subfields of personal preferences, social conventions and moral principles (Conry-Murray \& Turiel, 2012; Levy et al., 1995). It is believed that it will be difficult to generalize the results of this limited number of studies for the societies with various cultural characteristics as they had been mostly conducted in western societies. When the studies that were carried out in Turkish culture were taken into consideration, it is seen that most of them focused on gender stereotypes (Barutcu, 2002; Güney, 2012; Karasaraçoğlu, 1998; Özdemir, 2006; Şirvanlı-Özen, 1992; Şıvgın \& Deniz, 2017; Ünlü, 2012). No studies were found in Turkey about the flexibility of gender norms in the early childhood period so it seems necessary to conduct a study in this context. Within this scope, this study deals with the change of the flexibilities of children in Turkish culture about gender norms considering various cultural contexts, personal preferences and moral implications simultaneously. The results of this research are considered important as parents who are essential for the development of children's gender stereotypes will deepen their knowledge about the issue and they will be guided to make their children gain the flexibility rather than unchangeability of gender norms. Nonetheless, the results will also enable us resource to make comparisons between cultures and it is believed that they will enlarge the way for prospective researches.

It was found remarkable that the studies had been mostly performed with the age groups of 56 in the related literature (Banse et al., 2010; Barutcu, 2002; Berndt \& Heller, 1986; Bigler, 1995; Carter \& Patterson, 1982; Conry-Murray, 2013; Güney, 2012; Katz, \& Ksansnak, 1994; Killen \& Stangor, 2001; Schuette \& Killen, 2009; Serbin et al., 1993; Stoddart \& Turiel, 1985; Şıvgın \& Deniz, 2017; Şirvanlı-Özen, 1992; Trautner et al., 2005). On the other hand, very limited number of studies was carried on with the age group of 4 (Blakemore, 2003; Conry-Murray \& Turiel, 2012; Karasaraçoğlu, 1998; Martin, 1989; Theimer et al., 2001; Ünlü, 2012). It is considered important that the study conducted with the children at the age group of 4-6-8 will enable us to see the development of gender norms flexibility in the early childhood period from a large spectrum.

In the light of the information above, the aim of this research is to evaluate the knowledge and flexibilities of the children at the age group of $4-6-8$ about gender norms. Within this scope, the reasoning flexibilities of the children about gender norms will be investigated according to personal preferences, differentiations in cultural norms and conventions and moral implications on the basis of exclusion from the group. In accordance with this purpose, the following research questions are formulated:

In the context of age and gender:

1. Is there a significant difference between the knowledge of the children about gender norms?
2. How are the flexibilities of the children about gender norms?
3. Do the flexibilities of the children about gender norms vary when the personal preferences, different cultural contexts or conventions and rule legitimacy/moral implications are emphasized?

## Method

## Research Model

Convergent parallel design (QUAN+ QUAL), one of mixed method desings, was used for this research, in which qualitative and quantitative data were collected together, analysed separately and the results were construed together. Convergent parallel design contains the synthesis of qualitative and quantitative results mutually complementarily in order to gain a clear understanding of a case (Creswell \& Plano Clark, 2015). In this study, quantitative data were used to examine the knowledge of gender norms of children in the 4-6-8 age group and their flexibility according to age and gender when different contexts were emphasized. The reasons underlying the preferences of children when different contexts were emphasized were examined qualitatively. The research was conducted with both qualitative and quantitative data simultaneously and co-dominantly. Within this context, the results obtained by qualitative method were compared with the ones obtained by quantitative method in order to acquire more valid results. Thus, it will be ensured that the children's understandings about the flexibility of gender norms will be investigated precisely.

## Participants

The participants of the research were selected from the children with similar parental profile at the age of 4-6-8 attending middle socio-economic level state schools in the province of Adana, in Turkey by means of convenience sampling method. Accordingly, the participants consisted of 60 children in
 of whom were from the age group of $6\left(10\right.$ girl, 10 boy; Agerange $\left.=5.2-6.9 ; \mathrm{Mage}^{2}=5.84 ; \mathrm{SD}_{\text {age }}=.49\right)$ and 20 of whom were from the age group of 8 ( 10 girl, 10 boy; Age ${ }_{\text {range }}=7.8-8.9$; Mage $=8.4 ; \mathrm{SD}_{\text {age }}=.39$ ). The participants from the age groups of 4 and 6 were attending pre-school educational institutions and the participants from the age group of 8 were attending elementary schools. Ethics committee approval was not required because of the research was not an intervention study. However, research application permission was obtained from the Provincial Directorate of National Education for project titled with "4-6-8-year-old Children's Gender-specific Role Acquisitions". The ethical principles were taken into consideration while selecting the participants. An informed consent form was sent to the parents. After the parents signed the informed consent form, oral consents were taken from the children as well.

## Data Collection Tool

The data of the research were collected by means of face-to-face interviews with the children through hypothetical stories developed by Conry-Munray and Turiel (2012). The stories consisted of these titles; a) taking a course to acquire a profession (baby-sitting or computer repairer), b) preference of toys (truck or doll) and c) prefence of clothing for the end-of-year show (ballet or soldier costume). There were six stories in total as two cases that reflected male and female norms for each title. Six questions for each story were asked to the children. These questions were for determining the flexibility of the children about gender norms, their knowledge about gender norms, their judgments about their parents' preference appropriate/inappropriate for gender norms when different cultural contexts, personal preferences and moral implications are emphasized. Evaluations were made on the basis of these questions for each story.

The stories were translated into Turkish by the researchers separetely to ensuare language validity. The two separete forms were re-reviewed by the researchers who come together. The researchers shared decision making on statements that have disagreement. The interview form was presented to three experts in the field of pre-school education and proficient in English to ensuare language validity and content validity. The experts were asked to evaluate the following issues: whether the stories and each questions related the stories correspond to the original, the questions are suitable for the purpose, the language used in the translation is appropriate to development level and vocabulary of the study group, the meaning of the words or concepts in the stories and the questions are the same in both culteres and/or these can be used in the same context. In accordance with the views of the experts, the expressions of "children's family" was changed with "children's parents", "party" was changed with "end-of-year show" and "costume" was changed with "clothing". In order to evaluate the comprehensibility of the questions in the interview by the children, a pilot study was conducted with 12 children in total, 2 of whom were girls and 2 of whom were boys from each group of age. It was found out in the pilot studies that the children at the age of 4 could answer the questions about the story dichotomically while they had difficulty answer the questions for analysing the reasons of their answers. Therefore, the related literature was considered (Conry-Munray \& Turiel, 2012) and only the questions with dichotomical answers were asked to 4 -year-old children, the reasons were left out of the assessment. Furthermore, one of the questions which could not be answered adequately was excluded from the scope of the research as it was not appropriate for the developmental level of the children.

Knowledge of gender norms: To understand children's knowledge of gender norms, they were given six activities grouped under three titles. Then, children were asked whether these activities were mostly performed by girls or boys. The question of "Who do you think usually plays with dolls, boys or girls?" can be shown as an example about the story that reflects the female norm under the title of preference of toys.

Judgments of the parents' choice: To reveal children's judgments of their parents' choice, children were asked for their opinions based on their perceptions of their parents' decision about gender forms. For this purpose, the question of "Whom do you think the children's parents should give this doll: to their son, Hakan or to their daughter, Begüm?" was asked to the children for each story. In addition to this, the question of "Why should the children's parents choose their daughter/son?" was asked to find out the reasons of their judgments of the parents' choice.

Different cultural contexts: Some questions about whether the activities that are inappropriate for gender norms can be accepted in different cultures were asked to investigate the reasoning flexibilities of the children about gender norms when different cultural contexts are considered. A sample question is: "Boys play with dolls more than girls in another country (in a very far away country). Do you think this is right or wrong?" The children were instructed to answer the questions of "Why do you think it is right?" or "Why do you think it is wrong?" so as to determine the reasons of the children's choices.

Personal preferences: The questions about whether the norms can be changed if a child wants to do an inappropriate activity for gender norms were asked in order to investigate the reasoning flexibilities of the children when the personal preferences are emphasized. A sample question is: "If Hakan, the son, likes the doll more than the daughter, Begüm, who do you think should take the doll?". In addition to this, the questions of "Why do you think Begüm should take the doll?" or "Why do you think Hakan should take the doll?" were asked to reveal the reasons that underline their choices.

Rule legitimacy/moral implications: The children were asked for their views about the appropriate rules for gender norms at school to investigate their evaluations of moral implications about exclusion from a group on the basis of the activities based on gender norms. A sample question is: "The children's parents gave the doll to Hakan, their son. Hakan wants to take the doll to school but the school rules allow only girls to bring their dolls to school. Do you think this rule is right or wrong?". The children were instructed to answer the question of "Why do you think this rule is right?" or "Why do you think this rule is wrong?" to determine the reasons of the children for their choices.

## Data Collection Process

Qualitative and quantitative data were collected in parallel with each other simultaneously in this research which was designed according to convergent parallel design. The interviews in the scope of this research were made by one of the researchers. The interviews were made individually with each child in a quiet room which was offered by the school administration. The interview questions were asked to the children in the same rank. Necessary time was allocated for the children to answer the questions and the questions were repeated for the children who couldn't answer. The interviews took about 30 minutes with each child and they were recorded in a written form.

## Data Analysis

The analysis of quantitative data: In the analysis of the quantitative data, the answers of the participants for each question for the stories were scored in two categories (dichotomy). The responses that are compatible with gender norms about the questions for determining the children's knowledge of gender norms were coded as 1 and the answers that are incompatible with these norms were coded as 0 . The children's anwers based on gender norms to the questions for determining their judgments about their parents' choices were calculated as 1 and their answers that are contrary to gender norms were calculated as 0 . The children's answers implying that gender norms can change in different countries for the questions which emphasize different cultural contexts were scored as 1 and their answers implying that gender norms cannot change in different countries were scored as 0 . In the questions that emphasize personal preferences, the children's choices of the child who wants to do the activity that is inappropriate for gender norms were coded as 1 and their choices of the child who wants to do the activity that is appropriate for gender norms were coded as 0 . In the questions for determining the children's moral implications, the children got 1 point if they think the rule of the school is right and they got 0 point if they think the rule of the school is wrong.

The data of the research were computerized and SPSS 18.0 package program was used for the analysis of the data. Independent samples two-way ANOVA test was computed for the analysis of the knowledge and flexibility of the children in the study group of this research about gender norms according to their ages and genders. When there was no significant difference in the the results of the independent samples two-way ANOVA analysis was found, Scheffe Test, a Post-Hoc test, was used to investigate the source of the difference between the groups. Scheffe test was chosen considering that the variances of the groups were equal. Test also allows comparison of all combinations between groups and is sensitive to alpha type error between groups. In all analysis of this research, it was benefited from Eta squared ( $\eta 2$ ) value to determine the effect size of the gender and age variable on the dependent sample. Cohen (1988) considers the small eta squared as $(\eta 2=.01)$, medium eta squared as $(\eta 2=.09)$ and large eta squared $(\eta 2=.25)$ effects (as cited in Tabachnick \& Fidell, 2013).

The analysis of the qualititative data: Descriptive analysis was performed for the qualitative data that were obtained in the scope of this research. Accordingly, the headings in the the coding framework which was prepared by Conry-Munray and Turiel (2012) in according to the related literature was selected as the baseline. The technique of converting the results which is recommended to facilitate comparing different results or correlating two types of data in convergent parallel design was used (Creswell \& Plano Clark, 2015). The themes obtained from the analysis of the quantitive data digitized and compared with the qualitative data. Thus, the findings were combined and supported by each other and the evidences about the results were tried to be made stronger (Jhonson \& Christensen, 2014). In addition to this, direct quotations about each category and themes were presented to provide the realiability of the data. Code names (8yoC1: 8-year-old child 1, 6 yoC25: 6-year-old child 25 etc.) were used to keep the names of the children who participated in the research confidential.

## Results

Independent samples two-way ANOVA test was used for the analysis of the relationships between knowledge and flexibility of the children in the study group of this research about gender norms according to the ages, genders and common effect of age and gender. The results of the descriptive analysis were presented in Table 1, and ANOVA results were presented in Table 2.

Table 1. Frequency and Percentages of Competible and Incompatible/Flexible Responses with Gender Norms of Children with scoring ANOVA of the Knowledge and Flexibility Scores about Gender Norms According to Age and Gender

|  |  | Age |  |  |  |  |  | Gender |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Age 4 |  | Age 6 |  | Age 8 |  | Girl |  | Boy |  |  |  |
|  |  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% |
| Knowledge of | C.G.N | 102 | 85.0 | 105 | 87.5 | 113 | 94.2 | 164 | 91.1 | 156 | 86.7 | 320 | 89.0 |
| gender norms | Flexible | 18 | 15.0 | 15 | 12.5 | 7 | 5.8 | 16 | 8.9 | 24 | 13.3 | 40 | 11.0 |
| Judgements of | C.G.N | 93 | 77.5 | 105 | 87.5 | 118 | 98.3 | 162 | 90.0 | 147 | 81.7 | 316 | 88.0 |
| their parents' choice | Flexible | 27 | 22.5 | 15 | 12.5 | 2 | 1.7 | 18 | 10.0 | 33 | 18.3 | 44 | 12.0 |
| Different | C.G.N | 72 | 60.0 | 85 | 70.8 | 61 | 50.8 | 136 | 75.6 | 82 | 45.6 | 218 | 60.0 |
| cultural contexts | Flexible | 48 | 40.0 | 35 | 29.2 | 59 | 49.2 | 44 | 24.4 | 98 | 54.4 | 142 | 40.0 |
| Personal | C.G.N | 92 | 76.7 | 77 | 64.2 | 22 | 18.3 | 107 | 59.4 | 84 | 46.7 | 191 | 53.0 |
| preferences | Flexible | 28 | 23.3 | 43 | 35.8 | 98 | 81.7 | 73 | 40.6 | 96 | 53.3 | 169 | 47.0 |
| Moral | C.G.N | 82 | 68.3 | 89 | 74.2 | 42 | 35.0 | 110 | 61.1 | 103 | 57.2 | 213 | 59.0 |
| implications | Flexible | 38 | 31.7 | 31 | 25.8 | 78 | 65.0 | 70 | 38.9 | 77 | 42.8 | 147 | 41.0 |

*C.N.G.: Compatible with gender norms

Table 2. ANOVA Results of the Knowledge and Flexibility Scores about Gender Norms According to Age and Gender

| Variable | Source of the <br> variance | Sum of <br> squares | df | Mean <br> square | F | Sig. | $\boldsymbol{\eta}^{2}$ | Significant <br> difference |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge of | Age | Gender | 3.233 | 2 | 1.617 | 2.089 | .13 | .07 |
|  | AxG | 1.067 | 1 | 1.067 | 1.378 | .25 | .02 |  |
|  | Error | 1.233 | 2 | .617 | .797 | .46 | .03 |  |
|  | Total | 41.800 | 54 | .774 |  |  |  |  |

Table 2. Continued


Children's knowledge of gender norms: When the answers of the children to the questions which were asked to determine their knowledge about gender norms were considered, it was found that $89 \%$ of them were appropriate for gender norms.

It was ascertained that the children's knowledge of gender norms were not statistically significant according to their ages $\left[F(2,54)=2.089, p>.05, \eta^{2}=.07\right]$, genders $\left[F_{(1,54)}=1.378, p>.05, \eta^{2}=.02\right]$ and common effect of age and and gender $\left[\mathrm{F}_{(2,54)}=.797, \mathrm{p}>.05, \eta^{2}=.03\right]$. When the responses of the children to the questions to determine their knowledge about gender norms according to their age are examined; it is observed that $85 \%$ of the responses of the 4 -year-old children, $87.5 \%$ of the responses of the 6 -yearold children, and $94.2 \%$ of the responses of 8 -year-old children are compatible with the gender norms. When the compatible with gender norms and flexible responses of children according to their gender were considered, it was revealed that $91.1 \%$ of girls' responses and $86.7 \%$ of boys' responses were compatible with gender norms.

Children's judgements of their parents' choice: It was identified that $88 \%$ of the children's judgements of their parents' choice about who would perform the activities which are appropriate for gender norms was concordant with the gender norms.

When Table 2 was taken into consideration, it was observed that the children's judgements of their parents' choice about gender norms differ significantly according to their genders $\left[\mathrm{F}_{(2,54)}=7.293\right.$, $\left.\mathrm{p}<.01, \eta^{2}=.213\right]$. The results of the Scheffe test which was implemented to find out between which groups this difference was revealed that the 8 -year-old children's responses stating that their parents would make choices appropriate for gender norms were higher than the 4 -year-old children's responses. According to Table 1; it was observed that $98.3 \%$ of the responses of the 8 -year-old children, and $77.5 \%$ of the responses of the 4 -year-old children are compatible with the gender norms. It was seen that the age has an intermediate effect on the children's judgements stating that their parents would make choices appropriate for gender norms when eta squared value ( $\eta^{2}=.213$ ) which was obtained in terms of the age variable was considered. It was also seen that the children's judgements of their parents' choices
about gender differed significantly $\left[\mathrm{F}_{(1,54)}=6.511, \mathrm{p}<.05, \eta^{2}=.108\right]$. When Table 1 was taken into consideration, it was found that $90 \%$ of the participant girls' responses stating that their parents would make choices appropriate for gender norms, $81.7 \%$ of the participant boys' responses were compatible with gender norms. It was revealed that the gender has an intermediate effect on the children's judgements stating that their parents would make choices appropriate for gender norms when eta squared value ( $\eta^{2}=.108$ ) which was obtained in terms of the gender variable was considered. Besides, it was identified that the children's judgements of their parents' choice of gender did not show a significant difference according to the common effect of age and gender $\left[\mathrm{F}_{(2,54)}=.347, \mathrm{p}>.05, \eta^{2}=.013\right]$.

The justification categories, and direct citation examples obtained from 6-year-old and 8-yearold children are presented in Table 3.

Table 3. Justification Categories and Examples of Responses

| Category | Examples |
| :---: | :---: |
| Justifications based on gender | Mostly boys wear soldier costumes. <br> Girls play with dolls, boys play with trucks. <br> Girls do ballet, boys can't do. <br> Boys drive the trucks. <br> It would be wrong if boys wear ballet costume. <br> Boys are more skilful at repairing. <br> Girls look after a baby better than boy. <br> Boys behave a bit rudely but girls are more polite |
| Justifications based on moral norms | The school mustn't discriminate between boys and girls. The one who wants to take the course should be able to take it otherwise it will not be fair. <br> Both girls and boys can attend the baby-sitting course. Everybody can take their favourite toy to school. |
| Justifications based on personal preferences | The girl should take the computer course as she likes it more. The doll must be the one's who wants it more. <br> If the girl wants to wear the soldier costume a lot, she can wear it. |
| Justifications based on cultural differences | There are some cultural differences between our country and the other countries. There might also be some differences in the choices of toys. Boys can wear ballet costumes in another country. Other countries might have their own rules. |
| Justifications based on authority | It is true if the school has established rules. Schools have a rule. We must follow the rules. |
| Subjective condition | I chose the girl because I am girl. I love girls. |
| Inadequate/Irrelevant | I do not know. <br> I just chose the girl, so now I want to choose boy. |

When Table 3 is examined, justifications obtained from 6- and 8-year-olds are categorized; gender based, moral norms emphasizing equality and fair, paying attention to personal preferences, cultural differences, authority, and subjective condition. An additional category was labeled as inadequate/irrelevant for unsuitable responses for coding or responses for which the question was not answered. Each category is exemplified by remarkable expressions. Frequency and percentage of justifications from optained 6 and 8-year-old children are presented in Table 4.

Table 4. Frequencies and Percentages of Justifications Obtained from 6 and 8-year-old Children for Gender Norms
The reasons of the children's judgements of their parents' choices

|  | Gender |  |  |  | Personal preference |  |  |  | Moral norms |  |  |  | Cultural difference Subjective condition |  |  |  |  |  |  |  | Authority |  |  |  | Inadequate/Irrelevant |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  |
|  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% |
| Girl | 35 | 29.2 | 58 | 48.3 | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 1.7 | 1 | 0.8 | - | - | - | - | 23 | 19.2 | 1 | 0.8 |
| Boy | 33 | 27.5 | 56 | 46.7 | - | - | - | - | - | - | - | - | - | - | - | - | 4 | 3.3 | 3 | 2.5 | - | - | - | - | 23 | 19.2 | 1 | 0.8 |
| Total | 68 | 56.7 | 114 | 95.0 | - | - | - | - | - | - | - | - | - | - | - | - | 6 | 5.0 | 4 | 3.3 | - | - | - | - | 46 | 38.3 | 2 | 2.5 |

## The reasons about the choices when different cultural contexts were emphasized

|  | Gender |  |  |  | Personal preference |  |  |  | Moral norms |  |  |  | Cultural difference Subjective condition |  |  |  |  |  |  |  | Authority |  |  |  | Inadequate/Irrelevant |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  |
|  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | f | \% | $f$ | \% | $f$ | \% | $f$ | \% | f | \% | $f$ | \% |
| Girl | 18 | 15.0 | 40 | 33.3 | - |  | 3 | 2.5 | 2 | 1.7 | 9 | 7.5 | 2 | 1.7 | 6 | 5.0 | 2 | 1.7 | - | - | - | - | - | - | 36 | 30.0 | 2 | 1.7 |
| Boy | 10 | 8.3 | 19 | 15.8 | 1 | 0.8 | 13 | 10.8 | - | - | 13 | 10.8 | - | - | 14 | 11.7 | 4 | 3.3 | - | - | - | - | - | - | 45 | 37.5 | 1 | 0.8 |
| Total | 28 | 23.3 | 59 | 49.2 | 1 | 0.8 | 16 | 13.3 | 2 | 1.7 | 22 | 18.3 | 2 | 1.7 | 20 | 16.7 | 6 | 5.0 | - | - | - | - | - | - | 81 | 67.5 | 3 | 2.5 |

## The reasons about the choices when personal preferences are emphasized

|  | Gender |  |  |  | Personal preference |  |  |  | Moral norms |  |  |  | Cultural difference Subjective condition |  |  |  |  |  |  |  | Authority |  |  |  | Inadequate/Irrelevant |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  |
|  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | f | \% |
| Girl | 2 | 1.7 | 15 | 12.5 | 17 | 14.2 | 40 | 33.3 | - | - | - | - | - | - | - | - | 1 | 0.8 | - | - | - | - | - | - | 40 | 33.3 | 5 | 4.2 |
| Boy | 17 | 14.2 | 4 | 3.3 | 18 | 15.0 | 52 | 43.3 | - | - | - | - | - | - | - | - | 1 | 0.8 | 1 | 0.8 | - | - | - | - | 24 | 20.0 | 2 | 1.7 |
| Total | 19 | 15.8 | 19 | 15.8 | 35 | 29.2 | 92 | 76.7 | - | - | - | - | - | - | - | - | 2 | 1.7 | 1 | 0.8 | - | - | - | - | 64 | 53.3 | 7 | 5.8 |

The reasons about the choices when moral implications are emphasized

|  | Gender |  |  |  | Personal preference |  |  |  | Moral norms |  |  |  | Cultural difference Subjective condition |  |  |  |  |  |  |  | Authority |  |  |  | Inadequate/Irrelevant |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  | Age 6 |  | Age 8 |  |
|  | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% | $f$ | \% |
| Girl | 21 | 17.5 | 20 | 16.7 | - | - | 13 | 10.8 | 9 | 7.5 | 22 | 18.3 | - | - | - | - | - | - | - | - | 1 | 0.8 | - | - | 29 | 24.2 | 5 | 4.2 |
| Boy | 16 | 13.3 | 13 | 10.8 | - |  | 6 | 5.0 | 8 | 6.7 | 34 | 28.3 | - | - | - | - | 1 | 0.8 | - | - | 2 | 1.7 | 3 | 2.5 | 33 | 27.5 | 4 | 3.3 |
| Total | 37 | 30.8 | 33 | 27.5 | - | - | 19 | 15.8 | 17 | 14.2 | 56 | 46.7 | - | - | - | - | 1 | 0.8 | - | - | 3 | 2.5 | 3 | 2.5 | 62 | 51.7 | 9 |  |

The reasons of the children's judgements of their parents' choices: The reasons of the children's judgements of their parents' choices were investigated (Table 4) and they were classified under two titles as the reasons based on gender norms and the reasons based on subjective conditions. When the reasons of the children were considered according to their ages, it was found out that the children frequently propounded reasons based on gender norms (8-year-old 95\%; 6-year-old $56.7 \%$ ). When the number of category that was often repeated, it was seen that the 8 -year-old children gave more answers which emphasize gender norms than the 6-year-old children. Accordingly, the 8-yearold children who thought their parents' choices would be appropriate for gender norms presented their opinions for the question about taking a course as "Boys are more skilful at repairing. Boys should take the course." (8yoC9, 8yoC14), "Boys behave a bit rudely but girls are more polite. That's why it would be better if the girls look after the children" (8yoC19). Similarly, the reasons of the 6-year-old children for their judgements stating that their parents would make choices of toys appropriate for gender norms were frequently as "Girls play with dolls" (6yoC26, 6yoC28, 6yoC33), "Boys cannot use dolls, they can only use toy cars" (6yoC38), "Boys play with trucks" (6yoC34).

When the reasons that children presented were considered according to their gender, it was observed that mostly girls (77.5\%) and boys (74.2\%) presented reasons about gender norms.

The flexibility of gender norms when different cultural contexts are emphasized: The participants were instructed to assess the implementations that are contradictory to conventional gender norms in another country so as to find out whether the children's gender norms differ when different cultural contexts are emphasized. Only $40 \%$ of the children's answers stated that these norms can be reversed in another country.

According to Table 2; it was determined that the children's flexibilities of reasoning about gender norms did not show a significant difference according to their ages when different cultural contexts were emphasized $\left[\mathrm{F}_{(2,54)}=2.182, \mathrm{p}>.05, \eta^{2}=.075\right]$. However, it was found that the children's flexibilities of reasoning about gender norms did not show a significant difference according to their genders when different cultural contexts were emphasized $\left[F_{(1,54)}=14.694, \mathrm{p}<.01, \eta^{2}=.214\right]$. Accordingly, the participant boys' flexibilities of reasoning about gender norms were higher than the participant girls' when different cultural contexts were emphasized. According to this; $54.4 \%$ of boys' responses indicate that gender norms may change in different countries, only $24.4 \%$ of girls' responses argue that gender norms can change. It was seen that the gender has an intermediate effect on the children's flexibilities of reasoning about gender norms when different cultural contexts were emphasized when eta squared value ( $\eta^{2}=.214$ ) which was obtained in terms of the gender variable was considered. It was also seen that the children's flexibilities of reasoning about gender norms when different cultural contexts were emphasized did not display a statistical significance according to the common effect of age and gender $\left[F_{(2,54)}=1.557, p>.05, \eta^{2}=.055\right]$

The reasons about the choices when different cultural contexts were emphasized: When the reasons of the children's choices about gender norms when different cultural contexts were emphasized were investigated, the reasons were collected under the titles of reasons based on gender norms, reasons based on moral norms, reasons based on personal preferences, reasons based cultural differences, reasons based on subjective conditions and reasons that are inadequate/irrelevant. When the reasons of the children were analysed according to their ages, it was ascertained that 8-year-old children presented reasons based on gender norms ( $49.2 \%$ ), based on moral norms ( $18.3 \%$ ) and based on cultural differences ( $16.7 \%$ ) and 6-year-old children presented reasons based on gender norms ( $23.3 \%$ ) and based on moral norms ( $1.7 \%$ ). When the reasons of the children were analysed according to their genders, it was observed that the girls presented reasons based on gender norms with the frequenct of 48.3 \% while only 24.2 \% of the boys' reasons were based on gender norms. When the number of category that were frequently repeated was consider, it can be said that the girls gave more answers that emphasize gender norms than the boys. The girls' reasons about the admission of the activities that
are inappropriate to gender norms in different cultures were investigated and it was seen that they presented their reasons as; "The boy should take the course of repairing as the girls cannot repair things" ( $8 \mathrm{yoC} 2,8 \mathrm{yoC} 6,8 \mathrm{yoC7}$ ), "The girls can perform baby-sitting better" ( $8 \mathrm{yoC} 8,8 \mathrm{yoC} 9$ ), "The boys will be more successful at the course of repairing" (8yoC4), "The boys do not like dolls" (6yoC28), "Ballet costume is for the girls. The girls do not wear soldier costumes." (6yoC38). On the other hand, it was seen that the boys presented more reasons based on cultural differences and personal preferences. In this direction, it can be said that the boys can flex the gender norms more by reasons based on cultural differences and personal preferences than the girls. The following expressions of the boys who presented reasons based on cultural differences can be shown as examples for this situation. "There are some cultural differences between our country and the other countries. There might also be some differences in the choices of toys" (8yoC19), "Boys can wear ballet costumes in another country. Other countries might have their own rules." (8yoC11). The expressions of the boys who presented reasons based on personal preferences are as follows: "If the boys like dolls, they can also play with them" (8yoC13, 8yoC14, 6yoC40), "If the girls are interested in repairing, they can also learn it" (8yoC15).

The flexibility of gender norms when personal preferences are emphasized: The judgements of a participant child about whether he/she can flex gender norms when another child makes a request that is inappropriate for gender norms in line with his/her personal preferences were investigated and it was found that only $47 \%$ of the children's answers was toward the approval of the other child who makes (personal) preferences that were inappropriate for gender norms.

As seen in Table 2, it was revealed that the children's flexibilities of reasoning about gender norms showed a significant difference according to their ages when personal preferences were emphasized $\left[\mathrm{F}_{(2,54)}=29.411, \mathrm{p}<.01, \eta^{2}=.521\right]$. The results of Scheffe test which was performed to determine between which groups the difference was revealed that the 8 -year-old children's flexibilities of reasoning about gender norms when personal preferences were emphasized were higher than 6-yearold children's and 4-year-old children's. According to this; it was found that $81.7 \%$ of the responses of 8 -year-old children, $35.8 \%$ of the responses of 6 -year-old children, and $23.3 \%$ of the responses of 4 -yearold children were flexible in terms of gender norms. It was seen that the age has a high level effect on the children's flexibilities about gender norms when personal preferences were emphasized when eta squared value ( $\eta^{2}=.521$ ) which was obtained in terms of the gender variable was considered. It was found that the children's flexibilities about gender norms when personal preferences were emphasized did not differ significantly according to the common effect of age and gender $\left[\mathrm{F}_{(2,54)}=.704, \mathrm{p}>.05, \eta^{2}=.013\right]$.

The reasons about the choices when personal preferences are emphasized: The reasons of the children about gender norms when personal preferences were emphasized were investigated and it was determined that $76.7 \%$ of the 8 -year-old children frequently presented reasons stating that gender norms can be flexed by taking personal preferences into consideration while $29.2 \%$ of 6 -year-old children frequently presented reasons by taking notice of personal preferences. When the number of frequently repeated categories was examined, it can be said that the 8 -year-old children gave more answers based on personal preferences than 6-year-old children. Accordingly, the 8-year-old children who made preferences on the contrary to the gender norms about the activities that were inappropriate for gender norms but were appreciated/wanted/liked by the child in the story presented reasons as "The girl should take the computer course as she likes it more" (8yoC1, 8yoC3, 8yoC4), "The doll must be the one's who wants it more", "If the girl wants to wear the soldier costume a lot, she can wear it" (8yoC21, 8yoC17, 8yoC22).

When the reasons that the children presented were considered according to their ages, it was revealed that $47.5 \%$ of the girls often presented reasons that attribute importance to personal preferences and $58.3 \%$ of the boys frequently presented reasons that show regard to personal preferences. It can be said that the flexibility of the boys was higher than the girls when personal preferences are emphasized.

The flexibility of gender norms when moral implications are emphasized: The children's answers to the question about whether a school can set rules that are appropriate for gender norms on the basis of the exclusion of the children from groups were analysed and it was concluded that only 41 $\%$ of the children's answers claimed that the implementation of that rule was inappropriate.

When Table 2 was taken into consideration, it was determined that the average scores of children's flexibility of reasoning about gender norms when obligatory legal regulations/rules are emphasized show a statistically significant difference $\left[F_{(2,54)}=9.960, p<.01, \eta^{2}=.269\right]$. It was found that the 8 -year-old children's flexibility of reasoning was higher than 6-year-old children's and 4-year-old children's when obligatory legal regulations/rules are emphasized. According to this; it was found that $65 \%$ of the responses of 8 -year-old children, $25.8 \%$ of the responses of 6 -year-old children, and $31.7 \%$ of the responses of 4-year-old children were flexible in terms of gender norms. It was seen that the age has a high level effect on the children's flexibilities about gender norms when obligatory legal regulations/rules were emphasized when eta squared value ( $\eta^{2}=.269$ ) which was obtained in terms of the age variable was considered. It was also found that the average scores of children's flexibilities about gender norms when obligatory legal regulations/rules were emphasized were not statistically significant according to their gender $\left[\mathrm{F}_{(1,54)}=3.818, \mathrm{p}>.05, \eta^{2}=.066\right]$ and according to the common effect of age and gender $\left[\mathrm{F}_{(2,54)}=.704, \mathrm{p}>.05, \eta^{2}=.013\right]$.

The reasons about the choices when moral implications are emphasized: The reasons of the children about gender norms on the basis of moral implications were investigated according to the age and it was determined that $46.7 \%$ of the 8 -year-old children frequently presented reasons based on moral implications while $14.2 \%$ of 6 -year-old children frequently presented reasons based on moral implications. In addition, it was seen that $30.8 \%$ of the children's reasons was often based on gender norms. When the number of frequently repeated categories showed that the 8 -year-old children presented more reasons based on moral implications than 6-year-old children. This finding revealed that the 8-year-old children evaluate the school rules about gender norms more negatively than the children in the other age groups. The 8 -year-old children's views about the rules saying that only girls can attend the course of baby-sitting and only boys can attend the course of computer repairing are as follows: "It must be free to participation to the course. Both girls and boys can attend the course" (8yoC5, $8 y o C 16,8 y o C 17)$. On the other hand, 6-year-old children expressed their opinions mostly as "Girls don't like repairing computers" (6yoC24), "Girls can't repair computers but boys can" (6yoC38, 6yoC42). The school rule saying that only girls can bring dolls to school and only boys can bring toy truck to school was evaluated negatively by the 8 -year-old children and they emphasized the equality and justice in their expressions as follows "Everybody can take their favourite toy to school" (8yoC2, 8yoC3), "It must be free for everybody to take their favourite toy to school" (8yoC15). 6-year-old children expressed their opinions with the emphasis of gender norm as "Girls play with dolls and boys play with toy trucks" (6yoC26, 6yoC27), "Only boys take toy trucks to school" (6yoC33) and "Boys shouldn't bring dolls to school, only girls should bring dolls to school" (6yoC38). The 8-year-old children who objected to the rule saying that only girls can wear ballet costumes and only boys can wear soldier costumes for the end-of-year show as it was unequality mentioned this situation as: "There must be freedom. Boys can come to the end-of-year show with a ballet costume if they want" (8yoC7), "Girls can also wear soldier costumes" (8yoC19), "We must be free to wear what we like" (8yoC15). The sample statements from the group of 6-year-old children in which the reasons appropriate for gender norms were dominant are as follows: "Girls wear ballet costumes and boys wear soldie costumes" (6yoC24, 6yoC45), "Boys wear men's clothing and girls wear women's clothing".

When the reasons of the children were taken into consideration according to their ages, it was seen that $34.2 \%$ of the girls frequently presented reasons based on gender while $35 \%$ of the boys presented reasons based on moral norms. Some sample statements of the children about this situation are: "The school mustn't discriminate between boys and girls." (8yoC19), "The one who wants to take the course of repairing should be able to take it or it will not be fair" (8yoC22).

## Discussion

This research was carried out to contribute to the related literature by investigating the flexibilities of 4-6-8-year old children in Turkish culture about gender stereotypes and to provide opportunities to make comparisons between the cultures by using the results of the researches conducted in western culture.

When the knowledge of gender norms of the children in the sample of this research was considered, it was determined that a great majority of the children ( $89 \%$ ) gave answers that were compatible with gender norms. This finding shows that the gender norms with the children's perspectives have a normative and bounding qualification (Conry-Murray \& Turiel, 2012). Despite not creating a significant difference, it was found that the knowledge of the children about gender norm stereotypes improves in parallel with the age. When the related literature was reviewed, some similar research findings were found (Bigler, 1995; Blakemore, 2003; Martin \& Little, 1990; Serbin et al., 1993). According to Bigler (1995), the gender steretotypes of the children start developing in the early ages and it shows a rapid development during the early childhood period. When the children start elementary school, they already have rich information about the objects, activities and characteristics realed with being a woman or a man (Trautner et al., 2005). This is considered as resulting from the social environment in which the children grow. Pomerleau, Bolduc, Malcuit, and Cossette (1990), who investigated the occurrence of gender differences in the babyhood period, stated that the children are grown up in an environment that differs in many fields from the type and colour of toys to the type and colour of clothes. It is believed that this differentiation might affect the children's preferences and beliefs about gender stereotypes in the future. When it is considered that stereotypes are formed as a result of direct instruction or direct observation (Terwogt \& Rieffe, 2003), it is revealed that the parents play important roles in this process. As a matter of fact, it was presented in a research conducted in Turkey sample that the majority of the parents, especially the fathers, support their children for gaining a gender norm identity (Dilek, 1997).

It was found out that the knowledge of the girls about gender norms was higher than the boys' although it doesn't result in a significant difference. When the related literature was reviewed, various research results can be observed (Blakemore, 2003; Serbin, Poulin-Dubois, Colburne, Sen, \& Eichstedt, 2001; Serbin et al., 1993; Shepard \& Hess, 1975; Signorella et al., 1993; Ünlü, 2012). Signorella et al. (1993) claimed that girls have more knowledge of gender stereotypes than boys even though low effect size is seen. In a study which was carried out in Turkey sample, it was observed that the gender role behaviours of the 4-6-year-old girls were more compatible with the gender norms than of the boys (Ünlü, 2012). Similarly, Serbin et al. (2001) determined in their study in which they investigated the children's preferences of toys compatible with gender stereotypes that 18 -month-old girls were able to match the toys with the gender that was appropriate for gender norms but the boys at the same age were not able to make that matching. It was also seen; however, that 24 -month-old boys managed to make that matching.

High knowledge of gender norms in all age groups is supported with the opinion that claims the children's parents will make choices that are compatible with the gender norms ( $88 \%$ ). Accordingly, it was found that the 8 -year-old children's judgements stating that their parents would make choices appropriate for gender norms were higher than 6-year-old children's and were significantly higher than 4 -year-old children's judgements about their parents' choices. Ashmore and Del Boca (1981) evaluated the formation of stereotypes as a cognitive process and stated that the children frequently created simplified figurations that were structured around prototype samples by adapting and arranging the experiences they faced in their daily lives effectively. According to the direct socialization perspective, the behaviours that are compatible with gender contain a series of habits. If the people who are active in the socialization process of children - parents, teacher, elder siblings etc - reinforce the girls to display female behaviours and if they evaluate the children negatively when they display behaviours which is
believed to be appropriate for boys, girls and boys will develop different behaviours typical to their genders (Maccoby, 2000). Moreover, Bandura (1965) claims that children can learn the gender norms through indirect ways. The children can regulate their behaviours by observing the reactions that the other children get when they display behaviours that are appropriate or inappropriate for gender norms.

Within the context of the research, it was found that the girls'judgements stating that their parents would make choices appropriate for gender norms were significantly higher than the boys'. This result is supported by the qualitative findings of the research. Accordingly, it was determined that the girls presented more rasons based on gender norms than the boys when the reasons of their judgements stating that their parents would make choices appropriate for gender norms. This situation is thought to be resulting from the fact that the parents in Turkey performs different implementations according to their children's gender while upbringing them. According to Kagitcibasi (1982), the boys and the girls in Turkish culture go through different socialization processes. Autonomy, self-confidence and indepedency are the traits which are expected from the boys rather than the girls while the girls are expected to be agreeable. It can be said that the families in Turkish society raise their children appropriate for gender roles.

When the children's views about whether it is possible to violate the gender norms in different cultural contexts were considered, it was observed that the 8-year-old children were more flexible than 4 and 6-year-old children despite not producing a significant difference. It is known that the children attribute more flexibility and cultural relativity to gender stereotypes as their age goes up (Smetana, 1986). Similarly, this finding matches up with the finding of Conry-Murray and Turiel's (2012) study that claims the flexibility increases in parallel with the age and even 4-year-old children can give flexible answers although it is fewer than the elder children's answers. However, it was found in this study, which was carried out in Turkey sample, that only $40 \%$ of the children evaluated the reversing the gender norms in different cultures as acceptable. On othe other hand, it was observed that almost two times more than the children in Turkey (79\%) showed flexibility upon this situation (Conry-Murray \& Turiel, 2012). When it was considered that the children acquire the characteristics special to genders by means of the culture in which they live (Bukatko \& Daehler, 1995), it is thought that the obtained result is derived from intercultural differentiation. It is also believed that the traditional environment in Turkish culture in which male-dominant society reigns affects the gender stereotypes. This result is also supported by the fact that Turkey is on the 131st rank and the USA, where the corresponding study was conducted, is on the 49th rank among 144 countries according to the Global Gender Gap Report 2017, which is prepared to monitor the size of the gender gap between females and males by World Economic Forum (2017).

It was identified in this study that the boys' flexibilities of reasoning were higher than the girls' when different cultural contexts are emphasized. This result is supported by the qualitative findings of the research. Accordingly, it was seen that the girls' reasons stating that the gender norms can be reversed in another country ( $48.3 \%$ ) addressed to gender norms while only $24.2 \%$ of the boys' reasons were compatible with the gender norms. When it was considered that the stereotypes that the children have can affect their opinions, it is thought that this is due to the fact that the boys have less stereotype knowledge than the girls.

It was determined that almost half of the answers (47\%) that the children in the sample of this study gave contained flexibility about gender norms when the gender norms that are inconsistent with gender norms were emphasized. It is believed this was because the young children had difficulty in evaluating the subjectivity of the requests (Terwogt \& Rieffe, 2003). However, similar researches that were conducted in western cultures show that a great majority of the children (86\%) gave approval to the child who made personal choices that were inappropriate for the gender norms. Within this context, it can be said that intercultural differentiations are observed between the flexibilities in the field of
personal preferences. Moreover, it was found that the flexibilities of reasoning of the 8-year-old children who participated in this study about gender norms were higher than of the 6 and 4 -year-old children when personal preferences were emphasized. This finding supports that the 8 -year-old children can flex their gender norms according to personal preferences. Therefore, it can be claimed that the flexibilities of the children about gender norms increase in parallel with their ages. There are some similar research results in the related literature (Blakemore, 2003; Conry-Murray \& Turiel, 2012; Martin, 1989; Serbin et al., 1993; Shepard \& Hess, 1975). Blakemore (2003) suggests that the understanding in which stereotypes and norm violations about gender norms are possible as the age increases. The answers of the children to the questions about gender norms stating that both genders can do show flexibility by a considerable increase starting from pre-school to the eighth grade (Shepard \& Hess, 1975).

The result showing that the flexibilities of the children about gender norms will increase in parallel with their ages when personal preferences are emphasized overlaps the qualitative findings of this research. Accordingly, the 8-year-old children in the sample of this study presented views claiming that they could flex the gender norms by taking personal preferences into consideration (76.7\%) while 6 -year-old children presented irrelevant/inadequate reasons or they could not present any reasons. In addition, it was determined that 6 -year-old children ( $29.2 \%$ ) presented some reasons about paying regard to personal preferences at least.

It was seen that a part of the 4-6-8-year-old children (41\%) rejected the implementation of the school rules about gender norms. In this context, a great majority of the participant children approved the rules that were compatible with gender norms. It was seen that this rate is so low when compared with the results of the research that were carried out in the western culture (Conry-Murray \& Turiel, 2012; Theimer et al., 2001). It is believed that this difference between the research results was deprived from the differentiation between the cultures. Compared to western culture, obedience, rapport and dependence to the authority are seen as the behaviours that are attached importance and are approved (Gültekin \& Voltan-Acar, 2004). Hence, Kagitcibasi (1970) determined in his study which was conducted in Turkish and American culture that Turkish high school students attach more importance to the value of dependence to the authority.

The 8-year-old participant children's flexibilities of reasoning about gender norms were higher than the 6 and 4-year-old participant children's when moral implications were emphasized. This finding shows that the 8 -year-old children evaluate the school rule about gender roles more negatively than the children in the other age groups. It can be said that the flexibility about gender norms increases in parallel with the age. It is seen that there are some similar research results in the related literature (Conry-Murray \& Turiel, 2012; Killen \& Stangor, 2001; Theimer et al., 2001). Accordingly, pre-school children consider playing with dolls as an activity which the girls should do while a group of girls consider retaining a boy from playing with dolls wrong. Similarly, pre-school children consider playing with toy trucks as an activity appropriate for the boys while a group of boys consider retaining a girl from playing with toy trucks wrong (Theimer et al., 2001). Accordingly, the results of the research by Killen and Stangor (2001) showed that children and adults mostly rejected the exclusion from the group in the contexts which could cause exclusion from the group (the exclusion of the boys from the ballet as it was an activity which was primarily for the girls) due to their expectations that were convenient with gender sterotypes. It is thought that the reasons of the children about rejecting the exclusion originate from ethical perspectives based on justice and rights, equal treatment and equal access. In this particular study, it was revealed that the flexibility about gender norms increase in parallel with the age and this finding is supported by qualitative findings of the research. Accordingly, it was seen that almost half of the 8 -year-old children's reasons ( $46.7 \%$ ) about evaluating the school rules about gender norms negatively were based on ethical norms depending on equality and justice. It was also found that the 6-year-old children presented irrelevant/inadequate reasons about this issue and added reasons based on gender norms.

When the children's flexibility of ethical reasoning on the basis of the exclusion from the group by means of obligatory regulations/rules were analysed, it was observed that there was a significant difference according to their genders. It was seen; however, this result which was obtained in the scope of this research was different from the ones which were commonly obtained from the previous researches. Killen and Stangor (2001) determined that the girls attached more importance to justice and equality than the boys. Accordingly, it is thought that the girls treat more sensitively against the exclusion than the boys by grounding on their experiences of exclusion from the activities based on gender norms like sports. Similarly Theimer et al. (2001) determined that the girls were more sensitive about the exclusion of the girls from the activities like playing with toy trucks and being a firefighter which are generally attributed to the boys by the society.

## Conclusion

In this research, it was aimed to determine the 4-6-8-year-old children's stereotypes about gender norms and their flexibilities of reasoning about gender norms when different contexts were emphasized. When the findings of the research were considered in general, it was seen that the knowledge of 4-6-8 age group children about gender norms was quite high. Despite not presenting a significant difference, it was revealed that the girls' stereotypes about gender norms were higher than the boys'. In addition, it was found that the knowledge and flexibilities of the children about gender norms increase in parallel with their ages. The results of the research were compared with the societies in the western culture and it was seen that the stereotypes of children in the western culture about gender norms were high like the children in Turkish culture but they were more flexible than the children in Turkish culture when different fields were emphasized.

## Suggestions

Within the scope of the research, it was found that the stereotypical knowledge of 4-6 -8 age group children was quite high. Considering the importance of socialization process in the process of acquiring children's stereotypical information, it is thought that parents play a major role. In this direction, parents shoul be inform about gender roles, gender equality, toy preference and so on. It is considered important to carry out awareness-raising activities on these issues. The influence of teachers and peers on the socialization process of their children cannot be denied. In this context, it is important for teachers to organize educational environments in line with the Gender Equality Sensitive School Standards, which are prepared by the Ministry of National Education (2016) to develop and guide gender equality.

While the flexibility/rigidity reasons of 6 and 8-year old children about different fields were investigated within the scope of this research but the reasons underlie the opinions of 4 -year-old children could not be investigated. This is believed to originate from the language and vocabulary limitations of 4 -year-old children as the research process was based on verbal expressions of the children. This field is considered to be improved for the research. In this context, forms with illustrations on the basis of the reasons of 6 and 8 -year-old children can be used to find out the views of the 4 -yearold children about this issue in the prospective researches. Children can be wanted to choose their reasons among the illustrations. This is considered important as it enables us to see the results of the research from a larger perspective.

In this study, only the knowledge about gender norms were focused on and behaviours were excluded from the scope of the study. When it was considered that the children's knowledge of gender norms and gender norm uniformity are not predictors for the behaviours (Levy et al., 1995), it is regarded important to plan the researches about the behaviours of the children. Moreover, it can be recommended to investigate the relationship between the children's knowledge and behaviours about gender norms.

The development of the flexibility about the gender norms were investigated in the scope of the research when different fields were emphasized so the data of the research was collected from the 4-68 -year-old children who have similar characteristics to each other. It is considered as a limitation not to be able to monitor the development of the same 4-6-8-year-old children in the process of the research. Therefore, it is thought that it will be important to carry out longitudinal researches about the children's gender norms development as they will provide an opportunity for an objective evaluation.

This research limited by Turkey, Adana province, which shows the different cultural and historical features of society in western culture. This particular research provides an idea about cultural differences but it is seen that comparative studies are needed in this scope. Accordingly, prospective researches can be planned with participants from different cultural groups.

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