A Metaphoric Analysis Regarding Gender Perceptions of Preservice Teachers

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Abstract

The aim of the study is to determine the gender perceptions of preservice teachers through the metaphors they describe women and men. It is a qualitative study conducted with content analysis. Data was collected through a semi-structured questionnaire from 510 final year students and preservice teachers attending teacher certification program at the Gaziosmanpaşa University Faculty of Education. The study showed that the preservice teachers had gender prejudice supporting the patriarchal family structure. About half of the preservice teachers described women using metaphores emphasizing that women were "slender, sensitive, and needing attention". Here, the most frequently used metaphore was "flower". More than a quarter of the preservice teachers (31.2%) described men using metaphores emphasizing that men were "rude, tough, and insensitive". Here, the most frequently used metaphore was "log". Also, while both genders had significantly positive perceptions for themselves, they had significantly negative perceptions for the opposite gender. Thus, there is a need to create gender awareness in all parts of the society starting from the education faculties, and to develop policies for gender equality.

Introduction

The term gender was first used in mid-1950s in psychology as the self-perception of a person being a man or a woman (Marshall, 2000; Cited in Sayer, 2011) while gender roles represent the traditionally accepted roles related to women and men (Dökmen, 2000). These roles take shape historically and socially within the frame of power-governance relationship (Tan, 2008; Sancar, 2011, p. 176; Sayılan, 2012). Therefore, the meaning attributed to gender is not basically a "socializing" process of women and men. It is also an indicator of the unequal power relationships between these two genders. This process of socializing also includes codes related to sexuality of man and woman. These codes have social, cultural, class, religious, moral, etc. aspects, in addition to sexuality. According to Kergoat (2000), this status of women and men is not the production of the biological fate but has been determined as a result of a societal construction. The basis in this context is the labor, and it paves its way through the social sharing of labor between genders–gender based division of labor.

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Gender based division of labor is a form of division of labor stemming from social interactions. It entails men's primarily concentrating on production areas and women on reproduction areas (in-house labor, etc.). Furthermore, professions with high surplus value (political, religious, military, etc.) are occupied by men in gender based division of labor. This gender division of labor has two organizing principles: The principle of separation (there are men's work at one side and women's work at the other), and the hierarchical principle (a men's work is more valuable than a women's work). These principles are valid for all societies within time and space.

Today, it is difficult to understand the concept of gender without referring to the capitalist system and patriarchal structure. These two structures, when viewed from gender perspective, are not two different, disconnected structures or two different mechanisms. These structures/mechanisms sometimes intertwine and sometimes intercept but never disconnect; they indeed nourish each other. As Mitchell (1975) emphasizes, while the economic life is organized by capitalism, it is subconsciously shaped by patriarchy (Cited by Topcuoğlu, 2009). In fact, the history of the formation of the patterns of female and male goes back to precapitalism, and these patterns affect not only the production but also many other areas of life (Topcuoğlu, 2009). It is possible to see the most concrete form of this effect in the society as the occupational segregation, viz. some occupations are only suitable for women and some for men.

Family, society, and educational system have an important role in the formation of these unequal relationships. The parts of this trivet works as one whole structure. In other words, the expectations of the society from a woman or man are transferred, whether consciously or not, to the child by the family from birth, and formalize the child according to the behavioral patterns ascribed to women and men. These expectations are clinched together, reproduced, and taught to the child by the education system. There are two basic returns of these acquisitions one of which is the domestic roles taken shape based on patriarchal structure, and the second being the gender based division of labor in the labor market.

The roles transferred in the socialization process turn into stereotype/bias from the time they are perceived as behaviors specific to women or men. According to Martin and Halverson (1981, p. 1125), stereotypes have negative meanings although they are used also in positive meanings. They legitimatize the discrimination against the members of a certain group. Stereotypes formed related to women and men based on the biological gender mostly include features that subordinate women. The more these stereotypes are reinforced in the educational system and the other areas of life, after the family, the deeper the inequalities between women and men become.

There are studies suggesting that the socialization process in the educational system still contains gender biases; and studies suggesting that teachers treat female and male students differently (Caldarella et al., 2009; Chapman, 2002; Chronaki, 2012; Duffy, Warren and Walsh, 2001; Kokkinos, Panayiotou & Davazoglou, 2004; Sayılan, 2012; Shepardson and Pizzini, 1992; Tan, Ecevit and Üşür, 2000). For example, in a study conducted in the USA at secondary education level, it was found that, in Mathematics and Science classes, teachers asked questions or made explanations to boys more than girls, and encouraged boys more than girls (American Association of University Women, 1995). Schwartz and Sinicrope (2013) conducted a similar study with elementary preservice teachers and found that preservice teachers had gender biases. The study indicated that preservice teachers perceived the attitudes of boys towards Mathematics more positively (58.1%) than the attitudes of girls (44.9%). A study conducted in the United Kingdom revealed that, in a computer awareness class, teachers perceived that girls are less skilled in computers than boys despite their successful performances (Culley, 1988). In another study conducted with 512 secondary school students, Helwig, Anderson and Tindal (2001) investigated whether teachers considered the genders of their students when assessing their Maths skill levels. They found that gender did not have any effect on teachers' assessments. The researchers concluded that the teachers participated in the study might not have gender biases, adding that this finding would not mean that the gender bias has disappeared in the schools.

On the other hand, while students do not come to the school as empty vessels to be filled with knowledge and skills, teachers do not come to the classroom to teach only what the curriculum requires; instead, they come to the classroom to perform an activity in which they reflect their personal characteristics and backgrounds (Hargreaves, 1994, cited in Özbaş and Aktekin, 2013). Thus, in order to understand the educational process and increase learners' academic achievement, it may be important to manifest the self-perceptions and biases of teachers which may affect their attitudes in the classroom.

Three basic mechanisms supporting gender biases in schools could be mentioned: Curriculum (official or hidden), educational materials (text books, supplementary books, and other materials), and teacher attitudes. White emphasizes that the term curriculum is closely related to social class, culture, gender, and power issues (Cited by McLaren, 2011, p. 315). According to McLaren (2011, p. 313-314), education programs claim, through hidden curriculum, that the power is not in women but in men. Yet, Borich (2014) emphasizes the importance of equal distribution of teacher's power among the students in the classroom in terms of classroom management and messages it gives to the students (Borich, 2014).

Textbooks in which the gender perceptions are made visible is one of the most studied topics in Turkey. A significant number of those studies revealed findings/results that demonstrate gender inequalities are reproduced through textbooks (Arslan, 2000; Asan, 2010; Esen and Bağlı, 2002; Esen, 2007; Gürkan and Hazır, 1997; Gümüşoğlu, 2000; Helvacıoğlu, 1996; İnal, 1996; Sayılan 2012; Tanrıöver, 2003). For example, İnal (1996) states that, in the existing applications of gender discrimination in the textbooks, male dominant perspective and masculine discourse were reflected, women were marginalized, men were included in the textbooks more than women, and those women in the textbooks found place only through their traditional roles.

Another mechanism supporting gender biases in school environments is the teacher attitudes. There are studies stating that teachers reproduce gender inequality through classroom activities (Culley 1988; Chapman, 2002; Erbaş, 1995; Kabira and Masinjila, 1997; McLaren, 2011; Mid Atlantic Equity Center, 1993; Poladian, ?; Sayılan, 2012). There are tvalue judgments of teachers in the background of the classroom activities. Those value judgments having gender biases do have a deepening effect on inequality. The question, then, comes to one's mind: Are teachers aware of their gender biases in their relationships with students? To put it in a different way, here the level of their awareness concerning gender equality is to be questioned. Studies reveal that teachers do not generally question the masculine structure in the school, thus they do not pay attention to the gender biased approaches or even the textbooks with gender biased content, nor are they aware of their biased behaviours (Acar, Ayata and Varoğlu, 1999; Slater, 2003; Poladian, ?; Tatar and Emmanuel, 2001).

It brings to mind that teachers are unaware of, do not question, or do not care about their gender roles maybe because they, too, have internalized their own traditional gender roles. Teacher attitudes towards students have a special importance in the analysis of existing gender relations in the education process because they have a significant effect on the students as they are the role models for them, and the students spend second most of their time with their teachers. There are studies showing that attitudes of teachers about any topic affect the attitudes of their students. For instance, Barker and Aspray (2006) determined that there was compliance between the beliefs and attitudes of teachers towards technology and the beliefs and attitudes of female and male students. This effect may be positive as well as negative. Thus, the determination of gender perceptions of teachers determining their social biases/attitudes towards female and male students is important. This would give us clues about with which judgments they would act in the classroom, and thus about their gender perceptions-if they have any.

Metaphors are frequently used in investigating beliefs, attitudes, expectations, and perceptions of people. We can see the reason for this in Morgan's (1980) explanation because according to Morgan metaphors are a way of seeing and understanding the world, as well as being rhetoric. It is seen in the literature that there are a fair number of studies in education based on metaphors (Berliner, 1990; Dikmeyer, 1989; Hoyle and Wallace, 2007; Munby, 1986; Perry and Cooper, 2001; Tobin, 1990; Tobin and Ulerick, 1995, etc.). These studies were more intensed in the international literature in 1990s whereas they became intensed in the Turkish literature starting from the second half of the 2000s. In the review of the Turkish literature, it is seen that the significant number of studies used metaphors predominantly in the determination of the attitudes of students, teachers, administrators or inspectors towards each other, and the attitudes of students towards the school, a course or a concept. Some of those studies could be summarized as teacher perceptions (Aydın and Pehlivan, 2010; Cerit, 2008; Çelikten, 2006; Saban, Koçbeker and Saban, 2006; Seferoğlu, Korkmazgil and Ölçü, 2009; Şaban, 2004), perceptions about teaching profession (Koç, 2014; Özbaş and Aktekin; 2013), school perception (Balcı, 2011; Özdemir and Akkaya; 2013; Örücü, 2014; Saban, 2008), administrator or inspector perceptions (Akan, Yalçın and Yıldırım, 2014; Döş, 2010), perceptions belonging to a course or a concept (Adıgüzel, 2009; Altun and Apaydın, 2013; Sarıtaş and Çelik, 2013; Şenel and Aslan, 2014; Yalçınkaya, 2013), teachers perceptions of their students or administrators (Aktekin, 2013; Özabacı and Başak, 2013).

In light of what has been mentioned above, although there are a number of studies in the literature on metaphors in education, the researcher did not come across any study on the determination of gender perceptions. Morgan (1980) suggested that if metaphors are a way of understanding and interpreting life, and if this way contains dimensions specific to the society and culture, then they could be very helpful for our understanding of the gender concept. This study, trying to put forward the gender perceptions of teachers through metaphors they used, is the first in Turkey on this topic. The purpose of this study is to present the gender perceptions of preservice teachers through metaphors they produce regarding women and men. The following questions were tried to be answered within this framework:

1. What are the metaphors preservice teachers used regarding the concept of woman? What are the conceptual categories consisted of these metaphors?
2. How are the metaphors preservice teachers used regarding the concept of woman used according to gender?
3. What are the metaphors preservice teachers used regarding the concept of man? What are the conceptual categories consisted of these metaphors?
4. How are the metaphors according to gender preservice teachers used regarding the concept of man?
5. What are the meanings preservice teachers attributed to the metaphors they used regarding woman and man (positive-negative-neutral)?

Method

This section includes the study design, working group of the study, data collection, analysis and evaluation of data.

Study Design

This study is a qualitative study which aims to determine the perceptions of preservice teachers regarding women and men through metaphors. There could be various reasons mentioned for the preference of metaphors in this study. According to Collins and Green (1990), metaphors could be used in understanding the feelings, comprehensions, insights, and judgements of the individuals. These are very important as they impact the behaviors of those individuals in the real-life situations. Thus, metaphors are the substantial tools guiding us to understand the relationship between the values and the behaviors of the individuals. Besides, metaphors are affected by the culture (Adler, 2008) which could mean that it would be useful in understanding the gender concept that is formed according to the culture individuals live in.

Study Population

Population of the study includes 956 preservice teachers consisting of fourth year students of the Gaziosmanpasa University Faculty of Education, and preservice teachers attending the teaching certificate program in the 2011-2012 educational year of the same faculty. No sample was used in the study; data was obtained directly from the study population. The questionnaire was applied by the researcher between 6 and 17 May 2011, and 510 of the 956 preservice teachers responded. In the data collection stage, preservice teachers were given 40 minutes to complete the questionnaire. In the selection of the study population, fourth year students and students following the teaching certificate program were preferred because of the reason that they are the most close to the profession.

Collecting Data

Data was obtained through a questionnaire which was composed of two parts: the first part included demographic information about the students and the second part contained an open ended question. The question "If you were compared to woman or man to a living or non-living thing or an object, what would that be? Why?" was asked to the students to help reveal their perceptions of women and men through metaphors: They were asked to produce one metaphor for each gender, and explain why they use those metaphors (Women are like... because .... . Men are like ......, because .....). According to Şimşek and Yıldırım (2008), the metaphor itself could not reveal its descriptive or visual power adequately. The questions of "why" or "what for" should follow the metaphor. The real power of the metaphors is in the question related to these adjectives. Each individual may attribute a different meaning to the same metaphor. These attributions or the purpose of their use could be obtained by the answer given to the "why" question.

Data Analysis

Data collected in the study were analyzed using content analysis method. The main purpose of the content analysis is to reach the concepts and relationships which could be used to explain the data collected. Content analysis requires in-depth analysis of the data, and it enables the determination of initially unspecified themes and dimensions. Thus, through content analysis, data could be defined and the latent facts could be revealed. The data analysis process involves grouping of similar data under specific concepts and themes, and organizing and interpreting those data (Yıldırım and Şimşek, 2008). Three main types of content analysis could be mentioned: summary, explication, and structuring (Mayring, 2000, p. 100).

The process of analysis and interpretation of the metaphors produced by the participants had the following stages:

1. Each questionnaire received from the preservice teachers was given a number.
2. Questionnaires in which preservice teachers left blank for both genders and one gender were eliminated (female: 10, male: 56). The questionnaires in which there was

a metaphor but not an explanation for it and vice versa were also eliminated (female: 3, male: 4). The metaphors the participants produced together with the explanations for the opposite gender were included in the analyses.

3. The metaphors produced for women and men by the preservice teachers were transferred into a computer file, and were listed in the alphabetic order for both women and men.

4. Next, those metaphors produced by the participants were reviewed to see the purpose of the use of the symbol of each metaphor. Metaphors which had no connection with its purpose of use were eliminated (13 metaphors for women and 9 for men were eliminated in this category). Also, 11 statements which were not metaphors were eliminated. During this stage, specialist views were obtained.

5. At the next stage, the metaphors produced by the preservice teachers for women and men were grouped and presented under the conceptual categories for each gender with the consideration of their purpose of use. The same metaphors were placed in different categories ,with a different meaning given to them, from time to time. The reason for this was that in the category formation, the meaning given to the metaphor but not the metaphor itself was the determining factor. Also, in the presentation of the metaphors used by the preservice teachers in categories, they were supported with quotations from their own statements.

6. At the final stage, the numbers of females and males articulating each category and each metaphor, meaning the frequency, were found; percentages for some of the tables were calculated and interpreted.

Measures Related to Reliability and Validity of the Research

Accurately reflecting the data collected and the explanation of how the researcher reached the results are the significant criteria of the qualitative research (Yıldırım and Şimşek, 2008). In this study, the procedure for the determination and analysis of the metaphors was described in detail, and examples with quotes of the participants were given in the findings section. Therefore the course of the study was presented clearly to enable other researchers follow the procedure in a similar way. These could be seen as the measures increasing the validity of the present study. For the reliability of the study, the categories and the metaphors under those categories were submitted for the opinions of two experts in educational sciences and qualitative research, and the intercoder reliability analysis was performed on the categories (themes) obtained. In order to test the reliability of the study, Miles and Huberman's (1994) formula given below was used.

$$\text{Reliability} = \frac{\text{Convergence}}{\text{Convergence} + \text{Divergence}}$$

There was no correlation between the metaphor and the meaning attributed in the 13 of the 496 metaphors preservice teachers produced for women which caused dissensus between the content specialists and the researcher. In the calculations performed using the reliability calculation formula of Miles and Huberman (1994), the reliability of the results related to the "women" concept was found to be .97. There was dissensus in the 9 of the 439 metaphors produced regarding "men" concept. The reliability calculated using the same formula was .98 in this case. Also, some of the qualitative data were digitized with frequencies or percentages. According to Yıldırım and Şimşek (2008), there are a few purposes in the digitization of the qualitative data which are increasing reliability, decreasing subjectivity, and enable comparison between the themes and categories emerged in the analysis.

Findings

Demographic Information

Of the students who participated in the study, 60.4% were female, 39.6% were male, and 92.5% was single. The average age of the students was 23, their average monthly household income was 1.508 TL and the average number of siblings was 4 excluding the student. It could be seen from these figures that the socio-economic level of the students are quite low.

Findings Regarding Metaphors Produced

1. Metaphors Related to Women

484 preservice teachers included in the evaluation produced 178 metaphors related to "woman". These metaphors are presented in 6 conceptual categories. Metaphors excluded from those categories are presented as "other" and as total.

Table 1. Conceptual Categories Formed From the Metaphors Used Related to "Woman" Concept

Categories	Number of metaphors	Female		Male		Total	
		f	%	f	%	f	%
Metaphors emphasizing that women are slender, sensitive, emotional and need attention	30	149	50.5	87	46.0	236	48.8
Metaphors describing women with their characteristics of motherhood, wifehood or reproductivity	63	89	30.2	54	28.6	143	29.5
Metaphors describing women with their appearance or physical features	25	14	4.7	17	9.0	31	6.4
Metaphors describing women with adjectives such as talkative, subtle, evil, stubborn, sly	19	5	1.7	19	10.1	24	5.0
Metaphors emphasizing women as hardworking, resilient and powerful	16	18	6.1	1	0.5	19	3.9
Metaphors emphasizing that women are multi-sided	3	6	2.0	1	0.5	7	1.4
Other	22	14	4.7	10	5.3	24	5.0
Total	**178**	**295**	**100**	**189**	**100**	**484**	**100**

In the following part, metaphors in each category are presented in tables[2], and the properties of those categories are supported with excerpts from the answers given by the participants.

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[2] Metaphors below a certain number are not given because of space limiitation.

1.1. ***Metaphors Emphasizing That Women Are Slender, Sensitive, Emotional And Need Attention***

Of the participants, 50.5% of the females, 46% of the males, and 48.8% of the total described woman as "slender, sensitive, emotional and need attention" in 30 metaphors they produced (Table 1).

Table 2. Metaphors Emphasizing that Women are Slender, Sensitive, Emotional, and Need Attention

Metaphor Produced	Female (f)	Male (f)	Total (f)
Glass/Glass object/Glass vase	6	6	12
Flower (Flower, poppy, sunflower, snow drop, daisy)	93	45	138
Child/Baby	5	3	8
Rose/Rosebud	12	13	25
Cat/Puppy	5	2	7
Butterfly	7	4	11
Bird (bird, pigeon, swan)	5	3	8
Other *	16	11	27
Total	**149**	**87**	**236**

* Metaphors with frequency lower than five

When examining Table 2, the most frequently used metaphors were flower, rose, child, butterfly, glass and such. The metaphors in this category emphasized the fragility, sensitivity, and slenderness of women. More than half of the women and about half of the men described women using these metaphors. For example, "women are like flowers. They are slender, elegant and fragile." A preservice teacher who associated women with glass said "they are fragile and slender. Therefore, they need attention and taken care of like a glass object." Another preservice teacher who associated women with butterfly also emphasized the sensibility of women through saying, "butterflies have a short life span. They have a sensitive structure. However, they have colourful personalities. Every woman wants to be independent like butterflies. They want to stand on their own feet, and make their own decisions, but fall apart with the slightest blow."

1.2. ***Metaphors Describing Women with Their Characteristics of Motherhood, Wifehood or Reproductivity***

The second category includes metaphors that describe women with their "motherhood, wifehood or reproductivity", characteristics which could be regarded as the continuation of gender-based division of labour. Totally 63 metaphors were produced in this category. Of the preservice teachers produced metaphors in this category, 30.2% were females and 28.6% were males (Table 1).

Table 3. Metaphors Describing Women with Their Characteristics of Motherhood, Wifehood or Reproductivity

Metaphor Produced	Female (f)	Male (f)	Total (f)
Tree	10	6	16
Sun	4	8	12
Bird	8	4	12
Angel	5	3	8
Water	9	4	13
Soil	11	5	16
Other *	42	24	66
Total	**89**	**54**	**143**

* Metaphors with frequency lower than five

In this category, women were described with their traditional roles that are generally accepted in the society. One of the male preservice teachers identify women's reproductivity with "soil" expressed that: "Both (women and soil) are the places where seeds are planted that they give, feed, and care without any expectations." A preservice teacher associated women with "Sun" said: "The Sun keeps all the planets in order. All the system disintegrates without the sun. The society and community are like the planets around woman. If she falls apart, deteriorates, the society disappears, family institution vanishes."

1.3. Metaphors Describing Women with Her Appearance or Physical Features

There were 25 metaphors that described women with her appearance or physical features 4.7% (14) of which were females, and 9.0% (17) were males (Table 1).

Table 4. Metaphors Describing Women with Her Appearance or Physical Features

Metaphor Produced	Female (f)	Male (f)	Total (f)
Flower	1	2	3
Rose	1	1	2
Sun	2	-	2
Banana	1	1	2
Water	-	2	2
Other *	9	11	20
Total	**14**	**17**	**31**

* Metaphors with frequency of one

In this category, women were described more with their physical characteristics. For example, a preservice teacher associated women with flowers: "They are beautiful and esthetic. They like to be beautiful". Another preservice teacher associated women with computers: "Women are like computers, because the money spent on accessories is more than the money spent on the computer itself just like what women do for their appearance". Another teacher associated women with a vase: "Women are like a vase. A vase beautifies the environment with the flowers in it. The social role of the women could be similar to that of a vase. They beautify the environment they are in, they have in them peace and beauty".

1.4. Metaphors Describing Women with Adjectives such as Talkative, Subtle, Evil, Stubborn, Sly

19 metaphors describing women with adjectives such as "talkative, subtle, evil, stubborn, sly" could be regarded as a kind of "social bias". Of these, 1.7% was expressed by females, and 10.1% by males.

Table 5. Metaphors Describing Women with Adjectives such as Talkative, Subtle, Evil, Stubborn, Sly

Metaphor Produced	Female (f)	Male (f)	Total (f)
Goat	-	2	2
Parrot	-	3	3
Evil	1	2	3
Other *	4	12	16
Total	**5**	**19**	**24**

* Metaphors with frequency of one

Metaphors in this category could be regarded as "social bias". For example, one of the preservice teachers said "women are like parrots, they become unbearable, because they talk too much and they generally gossip". Another one: "Women are like goats, because they are generally too

stubborn. They perceive it as a revilement or patronizing when their husband tell them something, so they act in the opposite way that their husband tells".

1.5. Metaphors Emphasizing Women as Hardworking, Resilient and Powerful

There are metaphors emphasizing the positive features of women. There are 16 metaphors emphasizing that "women are hardworking, resilient and powerful". Of these, 6.1% were produced by females, and 0.5% by a male. For example, a preservice teacher associated women with bees mentioned that: "Women are like bees. They have to work and produce something all the time. Very good things may be produced when they work and try hard". The only male who produced a metaphor in this category associated women with machines: "Women are like machines because the capitalist system cast the role of a machine to women. They reproduce life at home. They have to compete with men in the work life. Thus, they have to work endlessly like a machine. The result is the alienation of labour."

Table 6. Metaphors Emphasizing Women as Hardworking, Resilient and Powerful

Metaphor Produced	Female (f)	Male (f)	Total (f)
Bee	2	-	2
Ant	2	-	2
Book	2	-	2
Other *	12	1	13
Total	**18**	**1**	**19**

* Metaphors with frequency of one

1.6. Metaphors Emphasizing that Women are Multi-sided

In this sub-category, 3 metaphors were produced. Of those participants, 2.0% were females, and 0.5% were male (Table 1). These metaphors were book, classical music, and seasons. One of the preservice teachers who associated women with book said "women are like books. They cannot be understood immediately. There are always some theories in them waiting to be explored. They need long explanations. They are in many kinds and with many sides like books."

Table 7. Metaphors Emphasizing that Women are Multi-sided

Metaphor Produced	Female (f)	Male (f)	Total (f)
Book	5	-	5
Classical music	1	-	1
Seasons	-	1	1
Total	**6**	**1**	**7**

1.7. Evaluation of Metaphors Produced Related to Women in the Frame of Meanings Attributed

Metaphors produced related to women were evaluated together in terms of meanings attributed to them (positive, negative or neutral). Here, the answer to what meanings the preservice teachers attributed to the metaphors and their explanation of those metaphors.

As could be seen in Table 8, 252 of the total 484 metaphors were accepted as positive, 152 were accepted as negative, and 80 were neutral as they were neither positive nor negative. From this, we could say that the perceptions of women about themselves were generally positive (61%) whereas the perceptions of men towards women were more negative compared to women. About half of the metaphors (46%) produced by men had a negative meaning. The percentage of metaphors used with a negative content by women is 22% which is a notable finding.

Table 8. Meanings Attributed to the Metaphors Produced Related to Women

Gender	Positive	Negative	Neutral	Total
Female	180	65	50	295
%	61.0	22.0	16.9	100.0
Male	72	87	30	189
%	38.1	46.0	15.9	100.0
Total	**252**	**152**	**80**	**484.0**

2. *Findings Regarding Metaphors Produced Related to Men*

In this part, 430 preservice teachers produced totally 196 metaphors related to "men". These metaphors were grouped in 7 categories. Metaphors that could not be placed in any category were placed in a separate category.

Table 9. Conceptual Categories Formed From the Metaphors Used Related to "Man" Concept

Categories	Number of Metaphors	Female (f)	Female %	Male (f)	Male %	Total (f)	Total %
Metaphors emphasizing the protective side of men	31	40	15.2	48	28.7	88	20.5
Metaphors emphasizing that men are rude, though and insensitive	34	109	41.4	25	15.0	134	31.2
Metaphors emphasizing that men are strong, contentious, ambitious, sensible, and rational	39	33	12.5	46	27.5	79	18.4
Metaphors emphasizing that man has leadership or management characteristics	16	15	5.7	11	6.6	26	6.0
Metaphors emphasizing the emotional side of men	10	10	3.8	6	3.6	16	3.7
Metaphors emphasizing man is exploitative, selfish, and untrustworthy	26	26	9.9	13	7.8	39	9.1
Metaphors emphasizing men are shaped up by women	16	14	5.3	8	4.8	22	5.1
Other	24	16	6.1	10	6.0	26	6.0
Total	**196**	**263**	**100.0**	**167**	**100.0**	**430**	**100.0**

2.1. Metaphors Emphasizing the Protective Side of Men

Of the female preservice teachers participated in the study, 15.2%, and of males 28.7% emphasized the "protective" side of man with 31 metaphors.

Table 10. Metaphors Emphasizing the Protective Side of Men

Metaphor Produced	Female (f)	Male (f)	Total (f)
Tree	17	4	21
Lion	2	9	11
Gardener	1	4	5
Plane tree	5	2	7
Home/Head of the home/Foundation of the house	5	1	6
Eagle	1	4	5
Other *	9	24	33
Total	**40**	**48**	**88**

* Metaphors with frequency lower than five

The metaphor females featured related to the function of protection was tree. One of the preservice teachers associated men with tree said "Men are like trees, because a man can stand straight like a tree when it is necessary, and he protects the people in his life like a tree protects the living organisms". The metaphors male preservice teachers featured were lion, gardener, and eagle. One of the male students said "Men are like a lion. They are fearless. They risk every difficulty even death to protect his family and loved ones". A student who associated men with "gardener" said "As women are roses, men are the gardeners since they are the owner of the rose, either giving it life or killing it".

2.2. Metaphors Emphasizing that Men are Rude, Tough and Insensitive

In the second category, there are metaphors that describes men as "rude, though and insensitive". Totally, 34 metaphors were produced in this category. Of the preservice teachers who produced these metaphors, 41.4% were females and 15.0% were males. The category in which the most number of metaphors were produced was this.

Preservice teachers used "rude", "insensitive" very frequently especially in the metaphors in this category. Of the women produced metaphors in this category, 60.5% used the metaphors wood, log, and plank for men. The interesting thing is that 17 of the 25 men produced metaphors in this category produced the same metaphors for men. To illustrate, some of the preservice teachers associated men with wood, expressed: "Men are insensitive and without emotion like wood. Women give shape to men like a carpenter give shape to wood, with a carpenter craftsmanship and with her love, patience and accuracy, and direct him. Men cannot take a shape without women".

Table 11. Metaphors Emphasizing that Men are Rude, Tough and Insensitive

Metaphor Produced	Female (f)	Male (f)	Total (f)
Wood /Log/ Plank	66	17	83
Rock/Stone	8	2	10
Other *	35	6	41
Total	**109**	**25**	**134**

* Metaphors with frequency lower than five

2.3. Metaphors Emphasizing that Men are Strong, Contentious, Ambitious, Sensible, and Rational

These were 39 metaphors emphasizing that men are strong, contentious, ambitious, logical and rational. Of these, 12.5% were produced by females and 27.5% were produced by males.

Through the metaphors produced in this category, the strong and contentious sides of men are emphasized by both female and male participants. The metaphor "lion" stood out as the representation of power. One of the preservice teachers who associated men with lion said "They are powerful just like a lion. The society gave them this power from their birth" while another said "The reason we associated them with lion is that they have an ambitious, go-getter character, they do not like to be under someone else's order".

Table 12. Metaphors Emphasizing that Men are Strong, Contentious, Ambitious, Logical, and Rational

Metaphor Produced	Female (f)	Male (f)	Total (f)
Lion	10	16	26
Plane tree	2	3	5
Iron	4	1	5
Other *	17	26	39
Total	**33**	**46**	**79**

* Metaphors with frequency lower than five

2.4. Metaphors Emphasizing that Men Have Leadership or Management Characteristics

Another category regarding metaphors related to men included metaphors describing men with their "leadership or management" characteristics. In this category, 16 metaphors were produced by 26 people, 5.7% of whom were female, and 6.6% were males.

The metaphor "lion" was also used to describe the leadership characteristics of men. Two preservice teachers who associated men with lion said: "Men want to be in the leading process, want to be leaders in every work, in every way". "He wants to be a leader, wants to impose his behavior even by force. He wants to be with more than one person in his life and wants to overrule her."

Table 13. Metaphors Emphasizing that Men Have Leadership or Management Characteristics

Metaphor Produced	Women (f)	Men (f)	Total (f)
Lion	5	4	9
Light bulb	-	2	2
Sun	2	-	2
Other *	8	5	13
Total	**15**	**11**	**26**

* Metaphors with frequency of one

2.5. *Metaphors Emphasizing the Emotional Side of Men*

The number of metaphors emphasizing the emotional side of men produced by 16 people was 10. Of these, 3.8% of females and 3.6% of males described men with his emotional side. The prominent metaphor in this category was child/baby metaphor.

Some of the preservice teachers said "men are like 'babies'. They cannot provide any of their needs by themselves. Women pick up after them as if they are their mothers. They are in reality very emotional behind their tough and indestructible appearance".

Table 14. Metaphors Emphasizing the Emotional Side of Men

Metaphor Produced	Women (f)	Men (f)	Total (f)
Baby/Child	5	2	7
Other *	5	4	9
Total	**10**	**6**	**16**

* Metaphors with frequency of one

2.6. *Metaphors Emphasizing Men are Exploitative, Selfish, and Untrustworthy*

Of the 26 metaphors emphasizing men as exploitative, selfish and untrustworthy, 9.9% were produced by females, and 7.8% by males. The prominent metaphors in this category were "bee" and "chameleon".

One the preservice teachers who associated men with "bees" expressed: "Men are like a bee, want to get every kind of honey". A preservice teacher who associated men with "chameleon" said: "Men are like chameleon. They behave in a way to manage women".

Table 15. Metaphors Emphasizing Men are Exploitative, Selfish, and Untrustworthy

Metaphor Produced	Female (f)	Male (f)	Total (f)
Bee	1	3	4
Insect	1	2	3
Chameleon	3	1	4
Other *	21	7	28
Total	**26**	**13**	**39**

* Metaphors with frequency lower than three

2.7. *Metaphors Emphasizing Men are Shaped Up by Women*

Lastly, of the 16 metaphors expressing that men are shaped up by women, 5.3% were produced by females, and 4.8% were produced by males.

A preservice teacher associated men with "cars" said "Men are like cars. As long as you put gasoline and take to the service, they do not break down. Even they go in the direction women want them to go". Another preservice teacher associated men with "dough" saying "Men are like dough. Women give them shape and most of the time what women says in effect. Although we have a patriarchal family structure, women are more successful in directing men".

Table 16. Metaphors Emphasizing Men are Shaped up by Women

Metaphor Produced	Women (f)	Men (f)	Total (f)
Car	2	2	4
Dough	2	-	2
Zero Number	3	-	3
Other *	7	6	13
Total	**14**	**8**	**22**

* Metaphors with frequency of one

2.8. Evaluation of Metaphors Produced Regarding Men In Terms of Meaning Attributed

Under this heading, meanings attributed to metaphors produced related to men were evaluated as a whole. Here, the metaphors produced by preservice teachers as regards to themselves and the opposite gender as well as what meanings were attributed to the the metaphors produced related to their gender of the opposite gender, and what meanings they attributed to the explanations related to these metaphors were sought.

When Table 17 is examined, 172 of totally 430 metaphors were positive, 288 were negative, and 30 were neutral as no decision was made for them to be positive or negative. We can say from the results that the perceptions of females about males are generally negative (68.3%). On the other hand, perceptions of males about themselves are more positive (60.1%) than females. It is significant that the percentage of the metaphors used with a negative content by males was 29.2%.

Table 17. Meaning Attributed to Metaphors Produced Related to Men

Gender	Positive	Negative	Neutral	Total
Women	71	179	12	262
%	27.1	68.3	4.6	100
Men	101	49	18	168
%	60.1	29.2	10.7	100
Total	**172**	**228**	**30**	**430**

Discussion and Conclusion

The issue of gender equality in education has been one of the important issues since 2000s despite its being on the agenda of national or international education policies. Two causes for this could be mentioned: One is that the gender equality policies focus mainly on educational access and completion, and neglect or do not put sufficient effort on the other dimensions, and the second is that although there are number of studies on gender equality; their results are not taken into account by the politicians and implementing bodies. As Stromquist points out (2006), the issue of gender equality has become a "window-dressing in the hands of the governments".

The results of this study confirm and support the findings of a number of studies on gender. One of the results of the study reveals that metaphors used and meanings attributed to those by male and female preservice teachers defining either gender support gender inequality. For example, 50.5% of women and 46.0% of men described women with metaphors emphasizing that "they are weak, sensitive, emotional, and need attention". This perception may be formed within the family, school, society triangle, the socialization process of the individual. Navaro (2003) states that the socialization processes of women and men are different. According to him, during the socialization process, while men base their being on competition, having power, and getting strong, women base their being on sensibility, empathy, and values such as being closer to the emotional state. Whereas women get support when revealing weaknesses, they are marginalized when they are in a competitive and powerful state. It is not any different in schools. According to a study by European Commission (2009, cited in Sayılan, 2012), schools empower the dominant female and male culture. Even if the curricula is freed from sexism, the hidden curricula could come to the surface in the traditional images such as "good, quiet, and successful girl", and "tough, rebelliant boy", in the attitudes of some teachers, and in the cultural environment and activities at school.

Another significant result of this study is that women internalize their traditional roles. Especially, "mother" and "wife" roles expected of them by the traditional society –roles that define women in relations of production- are internalized significantly by the women themselves. Of the women, 30.2%, and of the men, 28.6% defined woman with "mother, wife, or fertility" characteristics. In the study Aslan (2011) conducted with 647 preservice teachers, 38.5% of men and 12.2% of women fully agreed with the "the most important duty of a woman is to take care of her children and family", and 21.6% of men and 2.6% of women fully agreed with the "working of a woman prevents her from

being a good mother" statements. It can be said that this traditional perception has impact on labor force participation rates of women. Turkey's labor force participation statistics for thirteen years and so indicate that 71,5% of men and 30,8% of women work (TUIK, 2014). Moreover, a considerable number of working women are unpaid family workers in the agriculture sector.

Metaphors describing women with their "appearances" and "physical features", and metaphors describing them with adjectives such as "talkative, subtle, devil, stubborn, sly" together comprise 11.4% of the total. In a study cited by McLaren (2011) from Psychology Today, administrators and teachers were directed to watch a video that showed a section from in-class discussions, and were questioned about who talked more than the others. The majority responded to this question with the answer "women" while men in the video talked three times more than the women. This perception is not limited to the schools. It is possible to see the offsets of this perception in the workplace. Nichols and Nichols (2014) found in their study that the biases towards female school principals continued. In the schools with female and male principals where students scored the same in the state exams, teachers and other staff were asked to evaluate their principals in terms of effective leadership characteristics. In the evaluation, the perceptions related to the effective leaderships of the female principals were found to be significantly lower than their male counterparts.

It can be suggested that this perception has a negative impact on labor charging of women. According to 2010 TUIK statistics, gender pay gap by educational attainment was 16,5% at primary school and below, 16,7% at primary education and secondary school, 10,1% at high school, 19,5% at vocational high school, 16,1% at higher education. The gap was 19,4% even for professional occupations (TUIK, 2010, p. 71). Women make less money than men in many countries eventhough they have the same educational level and professional qualifications (OECD, 2012, p. 195-200). Perception of male superiority, make labor of women invisible (like in hosehold labor) and devalues it (like in charging).

The percentages of the metaphors emphasizing women being "hard working, tough and powerful", and being "versatile" were 3.9% and 1.4% respectively whereas the percentage of the metaphors emphasizing men being "powerful, competitive, ambitious, logical, and rational" was 18.4%. About one out of five preservice teachers described men with these features. McLaren (2011, p. 313) mentions that teachers, unconsciously, give more intellectual interest, praise, and academic help to male students than to females. They generally accept when the male students make comments without raising hand, but tell off the female students when they do the same. It was found that teachers give twice as much explanation to male students than females in class activities. In a citation by Slater (2003), a study conducted by the American Association of University Woman (AAUW) in 1991 showed that gender biases had negative effect on the education of female students, and these effects increased with the level of education.

There are also studies revealing that female and male students have different learning styles. Dickman (1993) mentions this difference and states that there is evidence that male students gain more from education methods based on competition and reward whereas female students gain more from those based on cooperation. Dickman concludes that competitive classroom activities contribute to the success of male students in Mathematics while harming the female students. Schwartz and Hanson (1992) also points out these differences in the learning styles and state that female students have "conversation type" learning styles while males are more into the "debate-based" individual activities. Evidently, it could not be expected from a teacher without sensitivity to gender equality to pay attention to those differences, and to provide activities accordingly.

Metaphors emphasizing that men are "impolite, tough, insensitive" were used by 41.4% of the female participants and 15.0% of the male participants of the study. This finding may be related to the recent increase in the violence against women in Turkey. Domestic Violence Against Women Research in Turkey (KSGM, 2009) shows that women are subjected to violence by their husbands (4 out of 10 women). Besides, the lower the socio-economic level gets, the higher the percentage of women who are subjected to domestic violence becomes. The perceptions given above might be implying the fact that especially women may have witnessed different forms of violence in the family or/and through media.

Metaphors emphasizing the "protectiveness" aspect of men were produced by 15.2% of women and 28.7% of men. The socialization process regarding women and men might be conveying women the message that they are "slender" whereas the message given to men is that they are "strong" and thus "protective". Hence, the women used "tree" metaphor the most, and mentioned taking refuge under the tree, its branches, and its shadow. In a study conducted by Aslan (2011) with 647 preservice teachers, 46.6% of them completely agreed with the statement "Head of the family should be men". It could be inferred from these two studies that the "protective" role of men takes shape through the "family head" concept.

Metaphors emphasizing the emotional aspect of men was 3.7% which, when considered together with the metaphors produced for women being "slender, sensitive, emotional, and need attention" (48.8%), shows that sensibility is perceived as woman feature. This finding confirms the gender stereotypes. This sensitivity is seen equivalent with weakness/slenderness, and may mean that girls should behave accordingly in their school life. For example, there are findings that the school administrators have different attitudes towards girls and boys in cases of disciplinary issues, that they punish girls more severely when they commit a disciplinary act (Sayılan and Özkazanç, 2012). Thus, the culture formed in and outside the school supports and maintains the social structure. This also has offsets related to the working life. Similarly, Morgan (1998, p. 216-217) mentions gender stereotypes related to women and men some of which for men are rational, aggressive, exploitive, strategic, independent, leader, and decisive for men and for women, they are intuitional, emotional, submissive, empathetic, nourishing, open to cooperation, faithful supporter, and observant. According to Morgan, there is a relationship between gender stereotypes and traditional organization principles. Generally, there is an effort for the organizations to be rational, analytical, strategic, powerful, and aggressive. In other words, organization principles support the stereotypes related to men. Women are criticized and seen contradictory if they try to improve these principles.

On the other hand, the perceptions used when describing women and men that men are superior to women in leadership or women have softer characteristics than men may form bases to the gender discrepancies/inequalities. The adjectives, that have been used historically, such as protective, compassionate, emotional, expressive, social, passive, indecisive, and subjective to describe women, and smart, strong, skillful, objective, independent, systematic, and ambitious to describe men (Porat, 1991, cited in Nichols and Nichols, 2014), support the social perception especially in the leadership positions that men were superior and women were worthless. This perception formed a base in the under-representation of women in the leadership positions (Nichols and Nichols, 2014).

When considering the meaning attributed to the metaphors mentioned in the study, 61.0% of the metaphors produced by women for themselves, and 60.1% of the metaphors produced by men for themselves were positive. The perceptions of women or men towards their gender being positive are consistent with the findings of the study by Dökmen (2000). In her study, she tried to determine the relationship between perceptions regarding the opposite sex, gender perceptions, and depression, and found that subjects had more positive perceptions towards their gender than the opposite gender. On the other hand, in the metaphors produced related to women, 46.0% of men, and in the metaphors produced related to men, 68.3% of women describe the opposite sex with negative meaning attributions which is worrying. Her findings might be addressing two points: First, it could be addressing the lack of more significant basic information in the Turkish educational system (sex

education) together with gender inequality, and second, it might be addressing the point that preservice teachers will be entering the education system with their gender biases.

Emphasis on the male superiority may affect all areas of social and economic life in the socializing process of individuals. The inequality of woman is reproduced during her socializing process when statements on woman's being emotional, sensitive, weak, needy and man's being powerful, leader, smart, protective, etc. are adopted by the vast majority of a society. Data from Gender Gap Index, an international index on social gender inequality, reveal that the situation in Turkey is critical. Turkey ranked 124th out of 135 countries in 2012 inequality report (Hausmann, Tyson and Zahidi, p. 314). This should be understood as a visible sign of necessity of taking urgent precautions against social gender inequality in Turkey.

From the findings of the study it could be said that preservice teachers have biases and value judgments that are traditional, and reflecting patriarchal structure. The patriarchal structure that causes inequality can be reproduced through perceptions/messages such as the consideration of women less valuable than men. For this reason, the processes of education policies in general and teacher training programs in particular that support gender inequality need to be revised. There is also a need to generate data to create gender equality awareness in the education faculties as well as among the education staff and different parts of the society, and share this data through panels, meetings, conferences, mass media, and non-formal education.

Although women's benefiting from the educational opportunities more than before is a positive development, it is insufficient in the provision of gender equality. On the other hand, in 2005 gender equality by school enrollment could be provided only in 59 countries out of 181 countries, where data were available (UNESCO, 2007). Considering the fact that school enrollment gap between men and women remains unsolved, educating girls and overcoming any kind of obstacles and prejudices in that sense are vital. For this reason, educational institutions should take over the task of creating new equitable roles regarding gender equality. The realization of this should be monitored and evaluated systematically and on a regular basis. Teachers working in the system should go through "gender equality" awareness training. There is a need for further research in Turkey related to classroom environment to answer the questions on how teachers perceive female and male students, whether teachers have gender biases, and what the results of gender bias are if and when it is present. In this respect, the curriculum of educational faculties, course books, and the attitudes of faculty members are also worth researching.

On the other hand, educational system is not independent of the other systems of the society. Thus, measures should be taken to ensure the participation of women in every area of the economic, social, and political life. The problem of equality should be not only a matter of educational policies, but also social policies. The social policies for empowering women should not be temporary and irregular. Permanent policies, which consider gender equality as a right, should be followed systematically. Efforts to manage equality require social transformation. Hence maybe the most important of all, we need to question all the processes contributing to gender inequality in all areas and, concluding with a metaphor, we need to focus on the "hidden part of the iceberg".

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