

Woman, Man, Society and Sex: How Pre-Service Teachers Perceive Basic Gender Concepts?

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Abstract

The aim of the study is to reveal Turkish pre-service teachers' gender perceptions. For this, cognitive structures of pre-service teachers were analysed with minds maps created with the word association test (WAT) and their mental models were analysed by drawing. In this context, a holistic single case study was adopted depending on the purpose of the research and the data collection process. According to the findings obtained from the WAT, it was determined that the cognitive structures of pre-service teachers were built on the *sex*, *society* and *woman*, and the *man* was in a weakly related in the cognitive structure. On drawing analysis, it was seen that most of the pre-service teachers depicted *man* and *woman* with visuals reflecting traditional stereotypes. On the other hand, visuals reflecting an egalitarian and contemporary perspective. In the light of both analysis results, Turkish teacher education curricula were discussed and specific suggestions were presented.

Keywords: Gender Perceptions, Pre-Service Teachers, Teacher Training, Word Association Test, Drawing.

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INTRODUCTION

Gender stereotypes are dominant in educational settings, and students are exposed to both explicit and implicit gender discrimination. Important steps have been taken for gender policy and women's studies at Turkey's universities, but still it is the beginning of the road (Göker and Polatdemir, 2019). Indeed, according to the OECD's 2019 data in Turkey, 43% of women aged between 18-24 are neither in education nor in employment (OECD average 16%) and this figure is 18% for men (OECD average is 13%). According to this, Turkey has the highest gender inequality gap between men and women (TEDMEM, 2019). According to 2018 data, the schooling rate of women in higher education was 47.4%. Turkey's 11th Development Plan which covers the period 2019-2023 has envisaged that this rate will increase to 60% until 2023 (Directorate of Presidential Strategy and Budget, 2019). Yet, it is rather important to highlight that no bigger targets were set. "Higher Education Institutions Gender Equality Attitude Certificate", which is one of the latest developments in universities to raise awareness about gender equality created controversy when it was introduced but also when it was abolished in 2019. In addition, research shows that that gender equality discourse literally cannot be implemented in Turkey (Aratemur-Çimen and Bayhan, 2018). According to, 2020 The Global Gender Gap Report, Turkey ranked as 130th among 153 countries for gender equality; this indicates Turkey needs to take more rigorous steps towards gender equality (World Economic Forum [WEF], 2020).

Ensuring gender equality in education is not only the focus of research in Turkey, but also international platforms have emphasized the importance of gender in education. In the Global Gender Gap Report's published by UNESCO since 2006 draws attention to the importance of education in ensuring gender sensitivity and equality. In this context, the report mentions that "*Education, can be a locus of gender inequality, where stereotypical behavior and views are reinforced, or a catalyst or transformation, providing individuals with opportunity and capability to challenge and change discriminatory attitudes and practices*" (UNESCO 2016, 12). The OECD report by the ABC of Gender Equality in Education pointed out the need for teachers to be free of gender stereotypes in the teaching-learning process; it emphasized the importance of the training given to teachers on gender equality in Sweden, Belgium and the United Kingdom (OECD, 2015). The report titled "Gender Equality Index" published by the European Institute for Gender Inequality shows that the factors that increase the education levels of women in the European Union countries and gender inequalities in their educational status (EIGE, 2019). In the light of these data, it is important that all stakeholders in political, economic, health and education sector take responsibility for ensuring gender equality and developing gender awareness. In this process, education and especially teacher training is very important.

Teachers' behaviours, feedback, classroom management, teaching materials, language, expectations, behaviour styles, values and attitudes shape children's perceptions of gender (Frawley, 2005; Younger and Warrington, 2008). Gender bias in education is explained by treating male and female students differently during the education process. It can be caused by many factors, from how students are encouraged to work to how gender roles are represented in textbooks (Owens, Smothers and Love, 2003). Smith, Hardman, and Higgins (2007) found that primary school students had gender imbalance in their classroom interactions. Boys were more active in the classroom than girls, responding to questions, receiving more praise and guidance from the teacher. In the research of Gray and Leiht (2004) with teachers, it was stated that the school and teachers unintentionally brought the gender stereotypes of the society to the class. Muntoni and Retelsdorf (2018) stated that classroom teachers expect higher performance from female students in reading. Similarly, the research of Saldıray and Doganay (2017) shows that teachers in Turkey reflect their gender stereotypes to teaching-learning process and they show behaviors towards to gender discrimination.

Teachers should be attentive to not promoting traditional masculinity and femininity roles. In this context, teacher education appears to be the focus area aiming to provide students with this perspective (Sayman, 2007). However, according to the study of Lumadi and Shongwe (2010), there is a gap between teacher theory and practice regarding gender sensitivity in teacher education. Also Gray

and Leith (2004) reached similar results and they concluded that pre-service teachers did not take any gender-related courses during their education and they discussed gender issues indirectly, not directly. Similarly, Mhlauli (2011) stated that teachers do not know how to teach gender equality. Tantekin-Erden (2009) mentioned that issues related to gender equality in teacher training process had been ignored in Turkey and teachers started their profession unprepared to teach gender equality. In the teacher education process, it is necessary to give importance to the issues and problems related to gender equality (Gray and Leht, 2004). In this context, in Turkey, the undergraduate program of primary school teaching program, which was renewed in 2018, does not have a mandatory gender course. In addition to that the responsibility of opening elective courses left to initiative of the faculty member (YÖK, 2018). This may cause negligence of gender issues in the primary school teaching program. On the other hand, some studies show that the primary school pre-service teachers have high perception of gender (Seçgin and Tural, 2011; Ünal, Tarhan and Çürükvelioğlu-Köksal, 2017). For example, the research of McDowell and Klattenberg (2019) show that the factors affecting both female and male teachers' use of language strategies for discipline is explained as workplace / school culture, not gender roles. The research results are undoubtedly insufficient in making generalizable judgments for pre-service teachers regarding gender perception and more research is needed. Therefore, studies that draw on multiple data sets to examine different perspectives and alternative views on gender perception play an important role. In the process of teacher education, revealing the existing situation is a prerequisite for developing gender sensitive policies. It can provide much-needed recommendations on facilitating the integration of gender issues into teacher education programs. This research is considered important in terms of demonstrating the capacity of the primary school pre-service teachers to create a gender-free learning atmosphere when they start the profession. In this context, the aim of the research is to reveal primary school pre-service teachers' gender perceptions by using alternative assessment and evaluation techniques. The study aims to seek responses to following research questions:

- What are the cognitive structures of primary school pre-service teachers for gender roles?
- What are the pre-service primary school teachers' images of male and female?

Literature Review

The societies' adoption to technological innovations and recovery of their financial, political and culture will provide the foundation for social transformation. Equal contributions of women and men to achieve this deep economic and social transformation is very important (World Economic Forum, 2018). Indeed, bias and prejudice in workplace towards to male-female interaction affect the productivity of the country (Sadker and Sadker, 1986). This situation prevents the realization of social transformation and makes it necessary to develop awareness about gender. Gender is to classify a person as masculine or feminine in a social context (Oakley, 1985). Gender describes the individual in the context of the biological components of masculinity and femininity. The term is traditionally used to describe the psychological, social and cultural aspects of masculinity and femininity (Kessler and McKenna, 1985). In other words, it represents the characteristics that women and men experience with socialization and adopt social life and cultural activities (Wharton, 2005). Sex is conceptualized as man and women; gender is conceptualized as masculinity or femininity, which means being a man or a woman (Kimmel, 2011). Gender refers to learned behaviors rather than innate behaviors that change according to time and place (Mannathoko, 1999). Gender, which contains a series of expectations about what behaviors are appropriate for sex, it represents roles attributed to the individual (Kessler and McKenna, 1985). In other words, the duties and responsibilities that society deems appropriate for female and male are explained in the context of gender roles.

The precondition for women and men to benefit equally from right to education is ensuring gender equality (ERI, 2017). Walker, Pearce, Boe and Lawson (2019) addressed right to equal education with different factors. In addition to the common factors such as urban / village distinction, family income level, ethnic, religious and linguistic identity, geographical region in the world, they made strong emphasis on gender perception. Esen (2013a) emphasized on important role of gender in

education environments, stated that perception of gender role identity started in the family and continued in school life. Mannathoko (1999) stated that gender inequalities are built in social, political, economic and legal institutions such as family, school, and teacher education institutions. As a matter of fact, research shows that teachers have a great influence on stimulating awareness of gender equality (Baba, 2007; Mhlauli, 2011; Younger and Warrington, 2008).

Children's perceptions of gender roles at an early age show themselves through the clothes they wear, the games they play, their conversations and their behavior in the classroom (Frawley, 2005). Parents have an impact on the formation of gender stigmatization and gender stereotypes of children (Wharton, 2005). Even parents raise their children in the context of the identities and expectations created by the community (Tantekin-Erden, 2009). These expectations, consisting of gender stereotypes, include beliefs that girls are submissive, and trucks are boys' toys (Wharton, 2005). These gender stereotypes directly shape the child's individual, social life and career choices (Gündoğan and Erbey, 2020). Schools, the first social institution encountered after the family, have a critical role in the development of gender perception. When children start school, the teacher has a greater impact on children's social life than their families (Tantekin-Erden, 2009). Indeed "*Teachers are key players in children's evolving understanding of gender issues*" (Younger and Warrington, 2008, p431). Social learning plays an important role in primary school students' developmental characteristics. In addition to skills and attitudes in the education process, the social learning allows them to internalize every behaviour displayed by the teacher through observation and imitation. Therefore, in order to ensure gender equality in schools, it is necessary to focus on teachers' beliefs and attitudes (Tantekin-Erden, 2009).

Whether it is desired or not, the effect of teacher characteristics on shaping students' behaviours requires teachers to be careful and attentive. Teachers' own perception of gender affects how they treat their students and interact with them (Frawley, 2005). In this context, teachers need to teach gender equality in order to develop men's and women's potential at the highest level (Mhlauli, 2011). According to Owens, Smothers, and Love (2003), training pre-service teachers on gender equality makes a great contribution to dismantling gender bias in education. If a pre-service teacher learns to behave gender-neutral in an undergraduate program, then it is likely that s/he will use adequate strategy-method-techniques for this and will have a high gender equality sensitivity. In this way, teachers will create a democratic learning atmosphere in the class, and they will see their students as "human" rather than girls and boys.

METHOD

The research employs holistic single case study. According to the report of Stake (1974, as quoted in Çepni (2014), several data collection tools can be used in accordance with the purpose of the research to investigate a given phenomenon. According to Gillham (2000), a case subject to research must exist in the current time period and must be a human activity attached to the real world. Gender, the special case examined in this study, is thought to be a very current topic of discussion, which reflects these characteristics with its basic concepts and is discussed in many international reports and scientific research. (UNESCO, 2016; [WEF], 2020). Punch (2005) stated that the case study provided a holistic meaning to the obtained data by associating a single event with various phenomena and thus defined it as a detailed analysis of this singular event. Accordingly, the associations of the most basic, relevant and inclusive concepts thought to represent gender in the minds of pre-service teachers were described in detail through drawings and WAT. In this context, the associations of the most basic, relevant and inclusive concepts thought to represent gender in the minds of pre-service teachers were described in detail through drawings and WAT. The data obtained were analysed holistically according to common and different findings. Consequently, this research aims to explore the perceptions of pre-service teachers about gender roles using different data collection tools and employs a special case study.

Participants

The participants of this research are 63 pre-service teachers studying at Uşak University Faculty of Education, Department of Primary School Teaching. 40 participants (63.5%) are female and 23 of them (36.5%) are male students. We used convenient sampling to recruit participants. According to Büyükoztürk et al. (2009), the appropriate sampling method is created by considering the limitations such as time, money and workload. Similarly, Patton (2002) stated that in the appropriate sampling method, the participant groups selected in easy-to-reach and inexpensive ways to study can be preferred. In this study, which was conducted with pre-service teachers who were educated in the institution where the researchers work, it is thought that the selection of the participants is in accordance with the nature of the study. We collected the data during 2019-2020 academic year and the participation was voluntary.

Data Collection Tools

The first of the data collection tools used to reveal the cognitive structures of pre-service teachers' perceptions regarding gender roles is the Word Association Tests (WAT). WATs are used to examine the schemes, models, concepts and the relationships between them. They are also used to explore "cognitive structure", "mental model" and "mental image". They are used for a similar purpose in this research. The stimulus words of Woman, Man, Society and Gender selected within the scope of gender roles and they are presented to teachers in a sub-section under WAT. Sample WAT pages presented to each participant are shown in Figure 1.

Page 1	Page 2	Page 3	Page 4
SEX.....	SOCIETY.....	WOMAN.....	MAN.....
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
SEX	SOCIETY	WOMAN	MAN
Related Sentence.....	Related Sentence.....	Related Sentence.....	Related Sentence.....

Figure 1.WAT Pages

Participants were asked to write the words or concepts that evoke in their minds in the space next to each stimulus words and they were given 45 seconds for each stimulus words.

Another data collection tool used to reveal the cognitive structures of participants regarding gender roles is the Drawing. According to Rennie and Jarvis (1995), drawing can be used as an alternative technique for students who have difficulty in verbally expressing their thoughts. In the research, the drawing technique, which is considered to complement the WAT findings, was used. Dove, Everett and Preece (1999) emphasized that drawing technique is an easier tool to reveal some thoughts such as environment and human figures in comparison to written definitions. Accordingly, it was considered appropriate to use the drawing technique for the images of men and women, which constitute the main content of the research. Pridmore and Bendelow (1995) emphasized that the drawings reflect the models and the general structure in the minds and stated that they serve as a window to reveal students' feelings and thoughts. In this context, two different forms were presented to prospective teachers with the instructions "Draw the Image of Woman in Your Mind" and "Draw the Image of Man in Your Mind". They were asked to draw the learning environments in their minds on the provided space in the forms. In addition, participants were asked to explain their drawing verbally. Ethical principles were taken into consideration in all processes of the research. In this context, the participants were clearly informed about the study and the confidentiality of the participants was ensured.

Data Analysis

As a result of the WAT, a key frequency table was created showing the response words generated against each stimulus words (Table 3). The first analysis method used by using this frequency table is the relatedness coefficient (RC) method Index. In the calculation of this index developed by Garskof and Houston (1963), rank values (degrees) are given according to the number of stimulus words produced by students. Taking these values into account, RC is calculated, which reveals the strength of the relationship between any two stimulus words. While calculating, the common (same) words produced for the two stimulus words selected are taken into account. HR is calculated according to the formula is presented in Figure 2.

$$RC = \frac{\text{Sum of Multiplications of Sequence Numbers of Common Words}}{\sum n^2 - 1}$$

n = the number of words with many words

Figure 2. Formula

Table 1 presents the formula and sample table to calculate the related connectedness for any two stimulus words (eg: WOMAN and SEX).

Table 1. Response words for WOMAN and SEX.

Response words and frequency for Woman	Degree	Response words and frequency for Sex	Degree
WOMAN*	7	SEX*	6
Society (f=33)	6	Society (f=38)	5
House (f=29)	5	Man (f=27)	4
Man (f=24)	4	Force (f=21)	3
Child (f=20)	3	Woman (f=13)	2
Mother (f=19)	2	Discrimination (f=9)	1
Businesswoman (f=11)	1		

According to Table 1, for example, the common words in the WOMAN-SEX are woman (degrees 7 and 2), society (degrees 6 and 5), men (degrees 4 and 4). Since there are 7 words in the long list, n = 7. Accordingly, the Related Coefficient between the concepts of WOMAN and SEX;

$$RC = \frac{(7 \times 2) + (6 \times 5) + (4 \times 4)}{7^2 + 6^2 + 5^2 + 4^2 + 3^2 + 2^2 + 1^2 - 1} = \frac{45}{139} = 0,431$$

RC values for all stimulus words are calculated separately according to the formula and the values are shown in the table. Based on this table, mind maps showing the relationships between stimulus words are drawn.

Another analysis method used in WAT is the Cut-off Point (CP) technique. While the strength of the relationship between stimulus words is shown in RC analysis, in KN analysis, the direction of this power and the most common words are revealed. First, the most produced answers for stimulus words was determined as 3-5 points below the cut-off point. The concepts and words that repeat above this frequency are associated with interconnection lines and linked to the first part of the mind maps. Then, the cut-off point was pulled down at certain intervals and the process continued until all the keywords appeared in the mind map (Bahar, Johnstone and Sutcliffe, 1999; Nakiboğlu, 2008). Each

cut-off point range shows the frequency range of the words produced. Thus, how often the words are produced is shown starting from the stronger and proceeding to the weaker.

We employed Content analysis and analyzed the studies using drawing technique as a data collection tool. (Dove, Everett, and Preece 1999; Miele 2014; Taşdere and Özsevgeç 2012; Thomas, Pedersen, and Finson 2001). The themes, categories, classifications, etc., which were put forward in the related studies, were examined. Those who are considered to be suitable for the content of this research have been used. The verbal expressions explaining the drawings, visuals, physical features, facial expression, current environment, having / not having children, -material features were analyzed. Subcategories representing each feature have been created. Some drawings evaluated under these categories are presented in the findings. Common categories and themes that represent repeated situations, concepts, emphasis are unearthed.

FINDINGS

Cognitive Structures of Pre-Service Teachers for Gender Roles

In this context, the first method used in the analysis of the findings from the WAT is RC analysis. Accordingly, RC values among stimulus words are presented in Table 2.

Table 2. The mean relatedness coefficients (RC).

	2	3	4
1	0,398	0,297	0,689
2		0,368	0,307
3			0,258

1. SEX, 2. WOMAN, 3. MAN, 4. SOCIETY

RC values are mapped from strong to weak to visualize the strength of the relationship between stimulus words. We used cut-of point technique introduced by Bahar et al. (1999). Accordingly, the cutting-point range with the strongest relationship was preferred as $RC \geq 0,400$. Breakpoints that are drawn down at certain intervals are terminated in the range of $0,200 \geq RC \geq 0,299$, where relations between all stimulus words occur. Relations between stimulus words are shown in the Figure 3, from strong to weak:

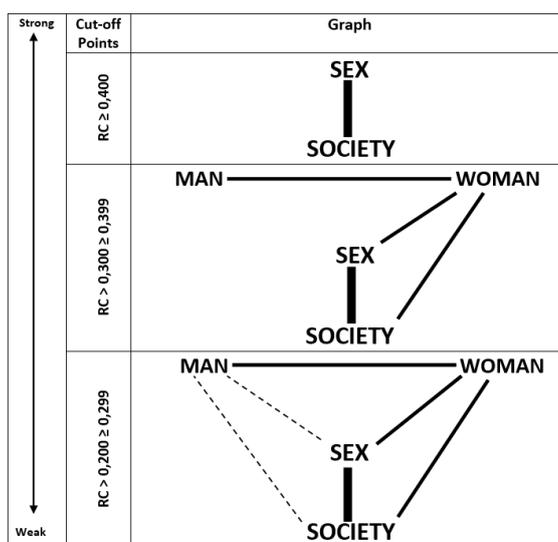


Figure 3. Relationship among the stimulus words according to RC values

For $RC = 04.00$ and above: The strongest relationship is between the GENDER and SOCIETY. Pre-service teachers produced the most common words for these two concepts.

$RC = 03.00 - 0.399$: The stimulus words for this range are of WOMAN and MAN. WOMAN has been included in the network with multiple associations with GENDER, SOCIETY and MAN.

$HR = 0.200 - 0.299$: In this range, the MAN has been associated with weak links to the GENDER and SOCIETY. Accordingly, the least number of common words were produced between the MAN and other stimulus words.

Another technique used in the analysis of the findings from the WAT is the cut-off point technique. The frequency table consisting of the words given to the stimulus words are presented in Table 3:

Table 3. Response words to stimulus words of the frequency table.

Response Words	STIMULUS WORDS			
	<i>SEX</i>	<i>WOMAN</i>	<i>MAN</i>	<i>SOCIETY</i>
Sex		4	3	8
Woman	48		1	14
Man	50	1		13
Society	11	2	3	
Equality	11	3		7
Girl	11	6		
Child	9	11	4	
Role	9			
Differences	8			6
Discrimination	6	2		
Feminism	6	3		
LGBT	6			
Mother		39		
Violence/Pressure		8	2	11
Altruist		7		
Power		6	13	
Family	1	6	2	12
Love		6		3
Wife		6	4	
Murder		6		
Father			33	
Patriarchal			8	
Job		3	7	
Income			7	
Human	2	2	1	10
Culture				10
Person				9
Rule				7
Respect				7
Crowd				7
Inequality		1	1	7
Unjustness		1	1	6

The most frequently response words were placed at the top of the cutting-point in mind map. Figure 4 shows the mind map demonstrating the cognitive structure of pre-service teachers when cutting points are drawn down at certain intervals until all stimulus words are revealed:

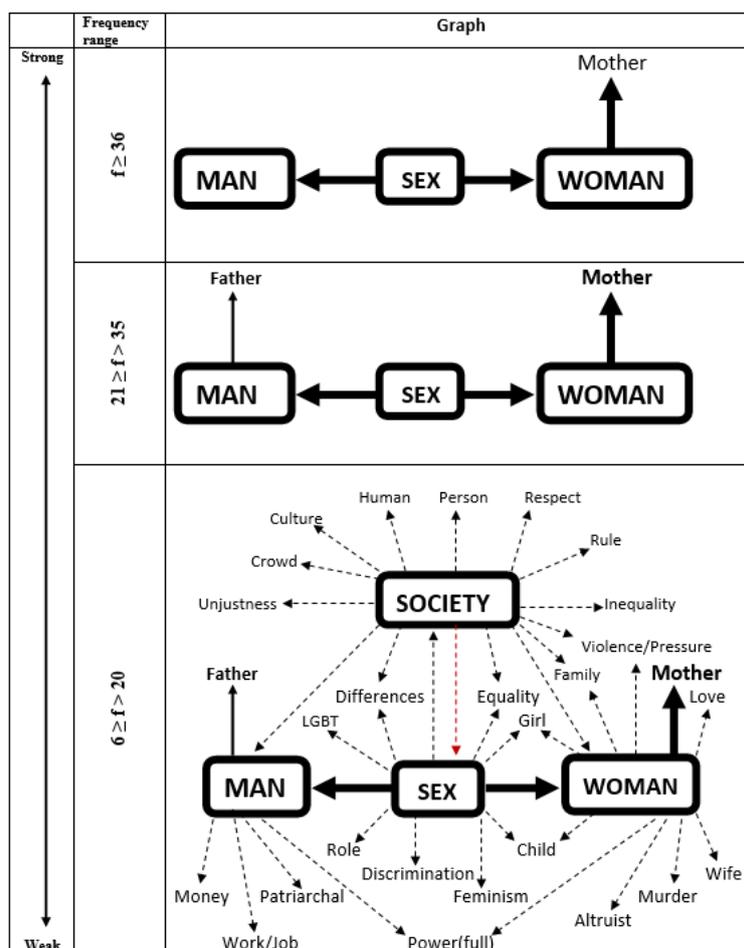


Figure 4. The Cognitive Structure of Pre-service teachers according to Cut off Point technique

Cut off Point 36 and Above: MAN and WOMAN were produced in response to the GENDER. WOMAN is associated with the word “Mother”.

Cut off Point Between 21-35: In this range, a mind map similar to the previous cut point range has emerged. In addition to that, the word “father” was for the MAN.

Cut off Point Between 6-20: In this range, all stimulus words and words emerged with multiple connections and associations. The words of equality and difference are common responses for GENDER and SOCIETY, violence / pressure for SOCIETY and WOMAN, girl and child for GENDER and WOMAN, and the power for WOMAN and MAN. In this range, relationships such as MAN-work, WOMAN-altruist are frequently used in everyday language and evoked semantic affinity. Gender-feminism-LGBT-discrimination and WOMAN-murder associations are related to contemporary issues and have also emerged in this range. However, the stimulus words of SOCIETY and GENDER were produced as a mutually common word and a strong relationship between these concepts was revealed. The cognitive structure was built on these three stimulus words according to the CP technique, in which the most common association and word arises between the stimulus words of GENDER, SOCIETY and WOMAN.

The Images of "Woman" and "Man" of Pre-Service Teachers

“Woman” Images

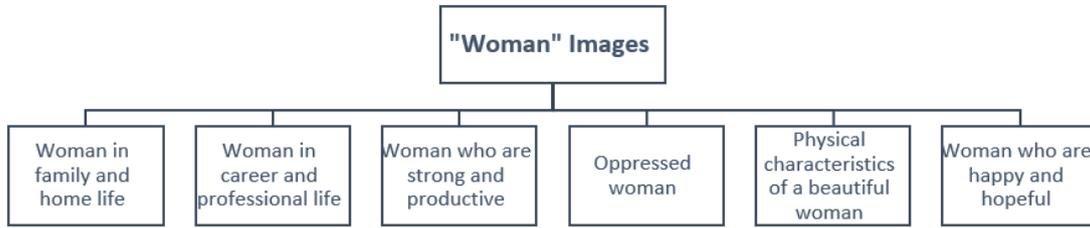


Figure 5.The images of woman

As can be seen in Figure 5, the image of women created by participants consists of six themes. The categories related to the theme of “woman in family and home life” are presented in Table 4.

Table 4.Woman in family and home life

Woman in Family and Home Life	
Maternity	Home Life
<ul style="list-style-type: none"> • Mother • Childcare • Fertility • Devoted • Compassion • Educator • Heaven • Glory 	<ul style="list-style-type: none"> • Housework • Home • Responsible • Protector • Order • Boss • Supporter

Table 4 shows that the theme of “woman in family and home life” consists of two categories: “maternity” and “home life”. Maternity category consists of mother, childcare, fertility, devotion, compassion, educator, heaven and glory codes. PT2 remarked the following in relation to fertility code: “I tried to draw attention to the fertility of the woman. The woman is fertile, productive. It is the basis of the family”. The visuals of PT2 emphasizes fertility and they are in Figure 6.

The images of “home life” category consisted of housework, home, responsible, protector, order, boss and supporter codes. PS27 made the following state in relation to boss code: “The woman is the head of the house. Order and harmony never happen where there are no women. It does not happen”. The visual of PT27 is presented in Figure 7.

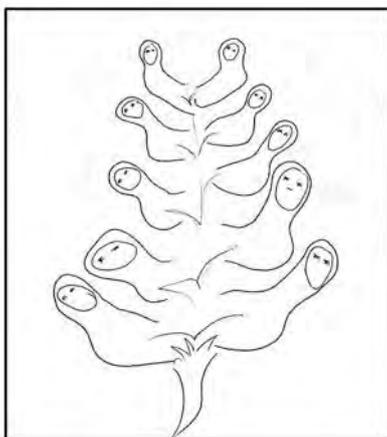


Figure 6.“Fertility”



Figure 7.“Boss”

Table 5 shows the codes produced by pre-service teachers for the theme "Woman in Career and Professional Life".

Table 5. Woman in Career and Professional Life

Woman in Career and Professional Life
<ul style="list-style-type: none"> • Laborer • Rush • Hardworking • Facultative • Successful • Career • Businesswoman • Earning money

The images of this theme consisted of labourer, rush, hardworking, facultative, successful, career, businesswoman and earning money codes. The image drawn for this is presented in Figure 8.

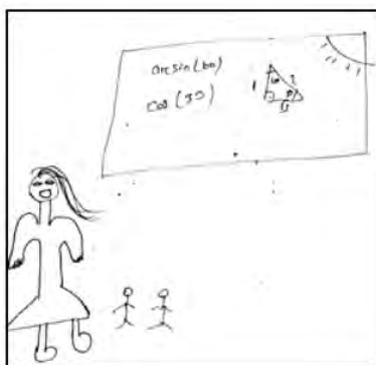


Figure 8. "Woman in Career and Professional Life"

Images of pre-service teachers on the theme of "Strong and Productive Woman" are shown in Table 6.

Table 6. Strong and Productive Woman

Strong and Productive Woman	
<i>Representation of Power</i>	<i>Representation of Production</i>
<ul style="list-style-type: none"> • Warrior • Woman standing on their feet • Hero • Free • Intelligent • Powerful 	<ul style="list-style-type: none"> • Skilled • Nutritious • Fertile • Productive

Table 6 shows the images related to the theme of "Strong and Productive Woman" which consisted of two categories as "representation of power" and "representation of production". The images for the "representation of power" category consisted of warrior, woman standing on their feet, hero, free, intelligent and powerful codes. For the "representation of production" category, it consists of skilled, nutritious, fertile and productive codes. PT40 made the following statement regarding the skilled code: "If a woman laughs, the world will laugh. If a person normally has ten fingers, the woman has twenty fingers. Because the things women can do are not what a normal person can do". The corresponding drawing is the Figure 9.

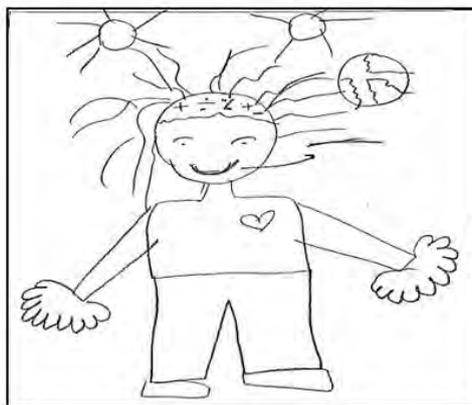


Figure 9. “Skilled”

The images regarding the theme of "Oppressed Woman" are shown in Table 7.

Table 7. Oppressed Woman

Oppressed Woman		
Woman who is subjected to violence	Woman who is ignored	Woman whose labor was exploited
<ul style="list-style-type: none"> • Violence • Oppressed • Despised • Slave 	<ul style="list-style-type: none"> • Preoccupied • Helpless • Silenced • Exhausted • Lonely 	<ul style="list-style-type: none"> • House painter • Building worker • Portage

For the former category, codes are violence, oppressed, despised, slave. PT 13 stated: “While a woman cries out that I do not want to die here, another woman finds it appropriate for her peers to be visible in outdoor or freely mobile”. The corresponding drawing for this statement is Figure 10.

For the second category, the codes are as preoccupied, helpless, silenced, exhausted, and lonely codes. PT54, for the silenced code (Figure 11), said, “Women add colour to our lives. Instead of silencing them, we should free them to speak and express their ideas.” As for the category of women whose labor was exploited, PT12 says “We see the labor of women. A woman who supports her household and works to make money bears the burden alone. It is difficult to be a woman.” The visual that emphasizes this statement is Figure 12.

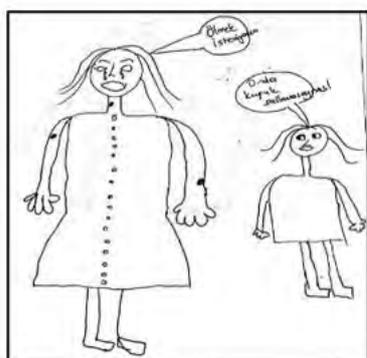


Figure 10. “Violence”



Figure 11. “Silenced”

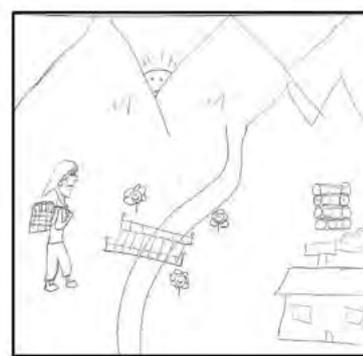


Figure 12. “Portage”

Beauty, well-groomed, fancy, make-up and radiant codes have been produced for the theme of “Physical characteristics of a beautiful woman”. PT30 drew Figure 13 regarding the well-groomed code “Women must be well-groomed. The fact that they care about themselves makes them beautiful”.

The words produced for the theme of “Woman as a Source of Happiness and Hope” are flower, happy-hopeful, love-respect, everything and cheerful-laughing. PT19 said: “*Woman is everything. Without a woman, everything is incomplete. She is the reason for happiness*”. The visual reflecting this view can be seen in Figure 14.



Figure 13. “Well-groomed”



Figure 14. “Everything”

“Man” Images

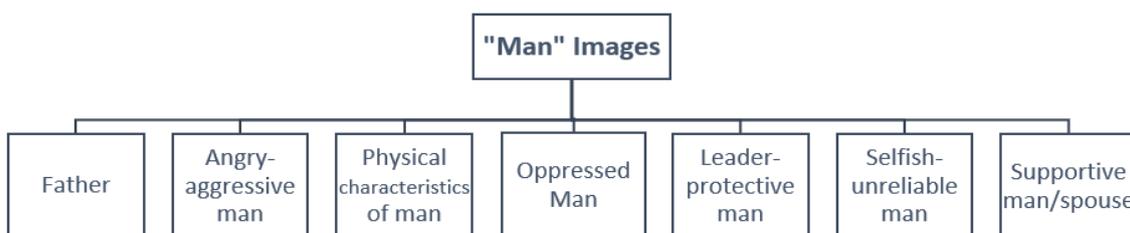


Figure 15. The Images of Man

As can be seen in Figure 15, the male images consist of seven themes. The opinions on the theme of “Father” are presented in Table 8.

Table 8. Father

Father	
<i>Dominant</i>	<i>Domestic</i>
<ul style="list-style-type: none"> • Patriarchal • Pillar of the house • Chief of the family 	<ul style="list-style-type: none"> • Breadwinner • Someone who cares about his family • Raises happy child

Table 8 shows that man as a father figure has two categories “dominant” and “domestic”. For the former category, words such as patriarchal, pillar of the house and chief of the family were produced. PT21 made the following statement in relation the chief of family code: “*I think of a father figure when you say man. At the same time, I think of a strong pole.*” The latter category was associated with the words such as breadwinner, someone who cares about his family and raises happy child. For instance, Figure 16 by PT35 shows that “*today, although bad events happen in our society, there are also good men. We should not always see every man guilty. Our fathers are also men. There are fathers who raise happy children.*”



Figure 16.“Father”

The images regarding the theme of "Angry-Aggressive Man " are shown in Table 9.

Table 9.Angry-aggressive man

Angry-Aggressive Man
<ul style="list-style-type: none"> • Angry • Aggressive • Oppressive • Compassionate • Harmless creature • Terror • Violent • Ax • Evil

As can be seen in Table 9, the codes of angry, aggressive, oppressive, compassionate, harmless creature, terror, violent, ax and evil have been created for the theme of "Angry-Aggressive Man". PT12 expressed more than one of these codes in his statements: *“the man is nervous; his hand is on the waist and the fist is ready. I think he is aggressive. I see it as someone who believes that power is only physical”*. The drawing that reflects these views of PT12 is presented in Figure 17. PT56 explained the image in Figure 18 as *“unfortunately men, not all of them, always show their fists in this way in our society”*.

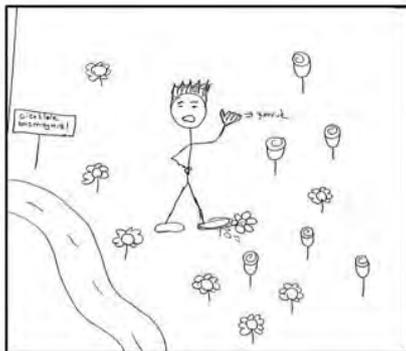


Figure 17. “Aggressive”



Figure 18. “Violent”

The codes for the theme of “Man in terms of Physical-Visual Feature” were listed as for handsome, muscular, strong, someone who wears shirt or do not pay attention to the dress code. In relation to his strong code, PT38 said, *“In society, men are always seen as power factors. Therefore, I also emphasized this in the picture.”* The pre-service teachers have also created the codes of sad, oppressed, troubled, unhappy, anxious and ignored for the theme of “Oppressed Man”. The Figure 19

shows that under pressure code, PT13 explained his drawing with the expression *“Although the man does not want to do it, the public pressure is dragging him to do it”*. Regarding the sad code in Figure 20, PT 59 said *“The sad clown entertains but does not have fun. It doesn't matter if you're sad. The show must continue.”*

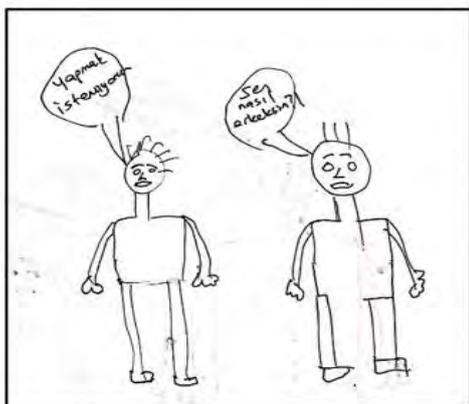


Figure 19. “Pressure”

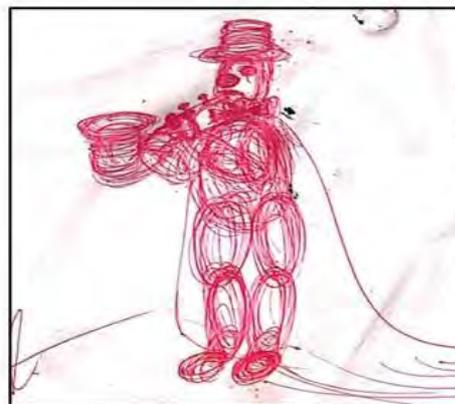


Figure 20. “Sad”

Another theme that emerges in the opinions of teacher candidates is the “Leader-Protective Man” theme. Protecting, solid, power, authoritarian, manager, success and role-model codes have been created for this theme. Again, the opinions on the theme of “Selfish-Unreliable Man” are presented in Table 10.

Table 10. Selfish-unreliable Man

Selfish-Unreliable Man	
<i>Selfish</i>	<i>Unreliable</i>
<ul style="list-style-type: none"> • Materialism • Self-oriented • Supremacy • Unbalanced 	<ul style="list-style-type: none"> • Careless • Fun-loving • Wandering • Ignorant • Unfaithful • Flirtatious

As can be seen in Table 10, the "Selfish-Unreliable Man" theme consists of selfish and unreliable categories. Selfish code includes associations related to materialism and self-oriented acts and behaviors whereas unreliable entailed words such as careless, fun-loving, wandering, ignorant, unfaithful and flirtatious. PT48 explained his drawing (Figure 21) about selfish man as *“The man has a stick in one hand and a flower in the other hand. I wanted to explain with the objects what we want and don't want. I left the man's facial gesture blank. Because he is lost. He wants to be nice to his wife but at the same time cause a mess as a reflection of his selfish character.”* PT54 reflect the unreliable category in her drawing (Figure 22). *“I think every man is cheating. I think they are unreliable. I don't trust any of them. The phone in their hands is what gives them away.”* Figure 23 reflects the lazy code and PS 11 says *“Men are always looking for an easy way to do thing. The difficult tasks always frighten them.”*



Figure 21. “Selfish”

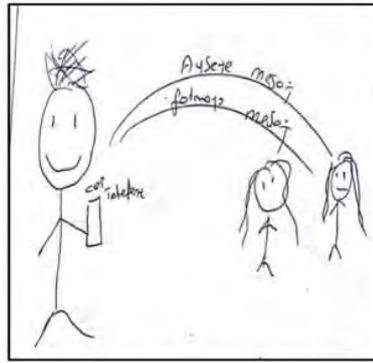


Figure 22. “Unreliable”

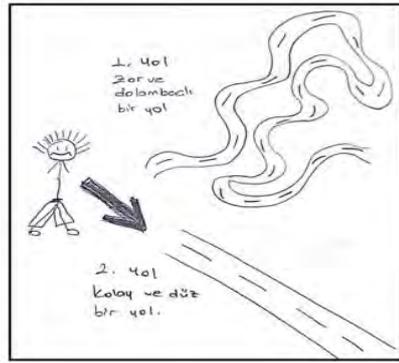


Figure 23. “Lazy”

The opinions on the theme of “Supportive Man/Spouse support” are presented in Table 11.

Table 11.Supportive Man/Spouse Support

Supportive Man/Spouse support		
Emotional Support	Financial Support	Spouse Support
<ul style="list-style-type: none"> • Good • Understanding • Respectful • Tolerant • Happy 	<ul style="list-style-type: none"> • Self-sufficient • Man of hard days • Employee • Money making • Livelihood • Sweat • Laborer 	<ul style="list-style-type: none"> • Comrade • Assistant • Housework • Food • Childcare

Table 11 shows the theme of “Supportive Men/Spouse support” which consists of “emotional support”, “financial support” and “spouse support” categories. “Emotional support” category is defined by the codes of good, understanding, respectful, tolerant, happy; “Financial support” category is associated with self-sufficient, man of hard days, employee, money making, livelihood, sweat and labourer codes, “Spouse support” category consists of comrade, assistant, housework, food and child care codes. PT 42 expressed financial support through Figure 24 with the expression “A man who preserves and, works, and brings money to the house and sheds sweat for it”. As for the spouse support, PT45 stated “A male role-model should support his spouse, cook and look after the child” and drew the Figure 25.

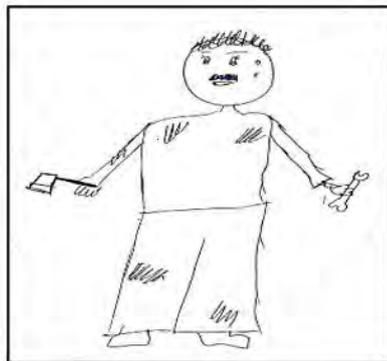


Figure 24. “Financial support”

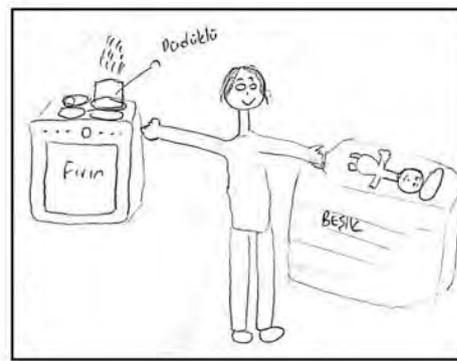


Figure 25. “Spouse Support”

DISCUSSION

According to the findings of the WAT analysis, the cognitive structures of pre-service teachers were built on the *gender*, *societ* yand *woman*. According to RC analysis, the strongest relationship arises between the *gender* and *society* and the *woman* is associated with these two concepts. According to the CP technique, the most common words are produced for these three stimulus words. *Man* was partly and weakly correlated in both the CP and CR analysis findings. *Society* and *gender* emerged in a stronger and multiple relation structure with the *woman*. This can be interpreted as preservice teachers' making sense of gender through the traditional perspective/image of *woman*. Another finding that supports this result is that the words "Mother, Altruist, Child" listed for the *woman*, and "Father, Work, Money" words produced for *man*. All these words represent the traditional roles for woman and man in the society. Aslan (2015) has reached similar findings and found that pre-service teachers had gender prejudices. In contrast, few of them have made associations that reflect their contemporary perspective on gender, such as Gender-Equality-Society, Woman-Violence / Pressure, Gender-Discrimination. Also, the relationship between the concept of *gender* and the controversial concepts such as LGBT, Feminism and Murder show that pre-service teachers have a partial awareness about gender. In studies that support these partial findings, it was found that pre-service teachers have an egalitarian attitude towards gender roles (Almutawa, 2005; Bayraktar and Yağan-Güder, 2019; Yaşar, 2018) and positive perception (Çuhadaroğlu and Akfırat, 2017).

When the pre-service teachers' images of man and woman are analysed, traditional and egalitarian perspectives emerge in each theme. Codes such as motherhood, childcare, kindergarten, house chores, and fertility have been produced in traditional views on the theme of "woman in family and life". These codes generally represent traditional stereotypes. As for the images of man, the themes of "father" and "supportive man/Spouse support" have emerged. Codes such as patriarchal, chief of the house, pillar of the house and breadwinner are included for the father's role. In the theme of "supportive man/Spouse support", codes such as tolerant, livelihood, breadwinner, and laborers were produced. The codes produced both for man and woman reveal the traditional perceptions. Likewise, in the research of Zelyurt (2018), the children stated their mothers are responsible for the house cores whereas the fathers do the outdoor chores. In addition, the fact that pre-service teachers produce codes such as house chore, cooking, childcare within the scope of the category of spouse support may reflect a more egalitarian perspective that is beyond social expectations.

One of the themes that pre-service teachers stated about women was "The oppressed woman". the codes produced for the category of exploited women within the scope of this theme are oriented towards traditional understanding such as wall painting, construction worker. Similarly, the codes that such as underdogs, undervalued, working like slaves are also presented for the same category. As a matter of fact, one of the representation forms of women in newspapers is that they are shown as victims of violence (Toker-Erdoğan, 2009). However, some of the participants represented theme of "oppressed man" with codes such as sad, oppressed and anxious, which show that some of them have a view that is far from traditional stereotypes.

Codes such as successful, career, conscious, and breadwinner, which are produced in the theme of woman in career and business life, reflect their contemporary thoughts. In the theme of "spouse support", codes such as those that do every job, earn money, and work for the financial support are produced. This finding can be interpreted that some pre-service teachers have stereotypes about women in their professional life, while others attribute more effective modern roles. Çetin-Gündüz and Tarhan (2017) stated that gender stereotypes restricted women to roles such as being responsible for kids, spouse and household chores. Despite these views, which are similar to the theme of women in mother and home life, it can be said that there are opinions that differ with the theme of women in professional life. In the research of Özen (2018), primary pre-service teachers indicated that men should work in professions that produce numerical and tangible products, and women should look for guaranteeing their emotional and physical security in their professions. Similarly, Hand, Rice, and Greenlee (2017) found that students attribute more masculinity to jobs dealing with science and more feminine to those dealing with humanities. Unlike these findings, according to Özyaydınlık (2014), it is

known that, although the professional differentiation between women and men is still evident, it also has indicators that show that this distinction has weakened. As a matter of fact, some of the findings of this research support this view.

Lastly, these research results do not provide data to generalize the pre-service teachers' perceptions of woman and man. However, it is observed that some pre-service teachers have gender stereotypes, they do not think about man and woman independently, and they make inferences in relation to society. Elmore (2000) stated that the learning experiences that primary school teachers acquired before entering the classroom were effective in transforming schools. In this context, it can be said that all education stakeholders are responsible for providing gender training to pre-service candidates. To emphasize this responsibility, Gullberg et al. (2018) determined that the gender-sensitive teaching model they developed balanced the gender stereotypes of pre-service teachers. Esen (2013a), on the other hand, demonstrated that pre-service teachers questioned traditional stereotypes and gained motivation to change their own lives after going through a teaching process focused on gender issues. Similarly, Tantekin-Erden (2009) found that training on gender issues has an important effect on the attitudes of pre-service teachers. Elmore (2000) determined that teachers who take gender courses in the teacher training process focus more on gender issues in their classes than those who do not take such courses. These results reveal the importance of gender education in teacher education processes. Observing this reflection on students, Gillanders and Vazquez (2018) found that the inclusion of a gender perspective in the teaching process positively affects students' daily lives as well as their teaching practices. In this context, the skills and values of the teacher, especially at the primary education level, are transferred to students through society and affect their social development / transformation. The relevant development / transformation process also shows the effect of schools on the internalization of universal skills and values such as rights, justice, responsibility, equality, love, respect, and individuals that form the basis of gender. The results found in the literature and this research highlight gender emphasis on teacher education undergraduate programs. However, the lack of a course on gender in university degree programs in Turkey lead to difficulties in ensuring that awareness and sensitivity. Koyuncu-Şahin, Esen-Çoban, and Korkmaz (2018) revealed that the pre-service teachers believe in gender equality, but that there is no compulsory course on gender equality in preschool teacher training undergraduate programs.

Conclusion

The data obtained through WAT and drawing are analysed together and the findings mostly reflect the traditional perspective. Accordingly, women are most frequently associated with being a mother figure in the WAT and drawing analysis reflected quite a lot of code reflecting for motherhood category. Similarly, for the woman, the child association in the WAT and the childcare code in the drawing are emphasized. In terms of men, the most common association in the WAT is the Male-father; and the most dominating theme in the drawing is the father. Similarly, for man, WAT shows money and job association, in the drawings man is portrayed as a person who provides for the household. However, both data collection tools indicate the word of power for men and draw attention to different meanings associated with men. The traditional perspective for men are leadership, protection and authority. The power is associated with being independent and warrior for men and whereas for women it is linked with someone who can stand on her own feet. Also, violence against women, which is a current issue in the national and international arena, is a common finding indicated in both data collection instruments. The relationship between women and violence/pressure in the WAT and violence, pressure codes in the drawings show the pre-service teachers' awareness on this issue.

The results show that even though the pre-service teachers have egalitarian views on gender issues, they mostly have stereotypical judgments. This attitude can relate with the fact that teacher training in Turkey does not focus on gender issues. As a result, pre-service teachers do not fully develop awareness about gender differences. In this context, it may be suggested that teacher training programs need courses focusing on gender issues. In these courses' classroom activities, pre-service teachers can be provided with universal skills such as equality and justice. When these suggestions are

incorporated into the education system in Turkey, the perceptions of women and men in society can change and we can see some progress based on justice and equality. As Esen (2013b, 2551) stated, "Education is the main driver for triggering social change on gender equality".

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