



Araştırma Makalesi • Research Article

Essentialist Views on Women and Men in Engineering Academia in Turkey

Türkiye’deki Mühendislik Akademiyasında Kadınlar ve Erkekler Hakkındaki Özcü Görüşler

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MAKALE BİLGİSİ

Makale Geçmişi:

Başvuru tarihi: 10 Ağustos 2018
Düzeltilme tarihi: 24 Kasım 2018
Kabul tarihi: 04 Ocak 2019

Anahtar Kelimeler:

Mühendislik alanında kadın akademisyenler
Toplumsal cinsiyet özcülüğü
Türkiye’de kadın akademisyenler
Türkiye’de mühendislik akademiyası

ARTICLE INFO

Article history:

Received 10 August 2018
Received in revised form 24 November 2018
Accepted 04 January 2019

Keywords:

Women academics in engineering
Gender essentialism
Women academics in Turkey
Engineering academia in Turkey

ÖZ

Bu çalışma, Türkiye’deki mühendislik fakültelerindeki toplumsal cinsiyet temelli özcü tutum deneyimlerini betimlemeyi amaçlamaktadır. Çalışma, 9 kadın ve 6 erkek akademisyenle 2017 yılında yapılan yarı-yapılandırılmış görüşmelere dayanan fenomenolojik bir araştırmadır. Araştırma öznelerine ulaşmak için kartopu örnekleme ve kolay ulaşılabilir durum örnekleme birlikte kullanılmıştır. Verileri yorumlamak için betimsel analiz yapılmıştır. Sonuçlar, kadın akademisyenlerin hem kadınlığın genel yönleri hem de annelik, bedensel güç, otorite, sosyallik ve duygusallıkla ilgili olarak özcü görüşlerden acı çektiklerine işaret etmektedir. Bu çalışma, erkek egemen üniversitelere, öğretim üyeleri arasındaki toplumsal cinsiyet hakkındaki özcü varsayımları arayarak işe başlamalarının tavsiye edilebileceğini önermektedir.

ABSTRACT

This study aims to describe experiences of gender essentialist attitudes in engineering faculties in Turkey. It is a phenomenological research based on semi-structured interviews made with 9 women and 6 male academics in 2017. A mix of a snowballing sampling and convenience sampling were used to reach the research subjects. Descriptive analysis was made to interpret the data. The results indicate that women academics suffer from essentialist views in relation to general aspects of womanhood as well as in relation to specific aspects such as motherhood, bodily strength, authority, sociality and emotionality. The results suggest that male dominated universities would be well advised to begin by looking for essentialist presuppositions about gender among the members of their staff.

1. Introduction

Barriers faced by women in science in the Western world have been documented extensively at least for the last six decades (Lewin & Duchan, 1971; Jones & Lovejoy, 1980; Tripp-Knowles, 1995). However, according to a large part of the existing research on academic women in Turkey, women’s discrimination in academia is not a major problem (Acar, 1983; Köker, 1988; Acar, 1991; Özkanlı & Korkmaz, 2000a, 2000b; Öztan & Doğan, 2015, Özkanlı et al., 2008). This view has been challenged by more recent research. For instance, Poyraz (2013), Yenilmez (2016), and Adak (2018)

have problematized the large gap between the low percentage of women professors and the higher percentage of women academics in junior and lower academic positions. The existence of such a gap made them conclude that gender discrimination in academia is indeed an important problem.

According to Ergöl et al. (2012), 27.2 per cent of 246 women research assistants working in a university in Ankara believed that there is sex discrimination in the workplace (Ergöl et al. 2012, 44). In a similar study conducted in another university in Ankara, Gönenç et al. (2013) stated that 44.3 per cent of the women academics there had experienced

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discrimination and 54.8 per cent of these women believed that this was due to their gender. Moreover, in recent years there has been an increasing number of studies on the low representation of academic women at the level of university management and decision-making positions in Turkey (Adak & Cömertler, 2005; Şentürk, 2012; Ayyıldız Ünnü, Baybars, & Kesken, 2014; Öztan & Doğan, 2015; Adak, 2018; Yıldız, 2018). The present study contributes to this emerging trend, by discussing a specific probable cause of gender discrimination in Turkey, namely, the presence in Turkish academia of essentialist views of women as well as of men.

Low representation of women at the professorial level is especially apparent in engineering faculties in Turkey. According to *She Figures*, only 19.1 per cent of the professors in Turkish engineering and technology faculties are women (European Commission, 2013: 93). Although this figure is much higher than the corresponding EU average and almost twice the figure of an allegedly progressive country such as Sweden, it still cannot be used as evidence for the absence of gender discrimination. That men outnumber women by five to one can certainly not be regarded as a gender equality success story. Moreover, that women academics are allowed to make a professional career does not mean that they are allowed to make a professional career on the same conditions as their male colleagues. And the fact that Turkish women academics often deny being the victims of discrimination does not necessarily contradict the hypothesis that they have indeed suffered from discrimination. Instead it might suggest either that they have internalized the norms and practices of their workplace or of society in general (so that they do not perceive these norms and practices as discriminatory) or that they refrain from complaining about being the victims of gender discrimination for the sake of not sabotaging their own academic careers. Interestingly enough, once women academics have reached a secure position at the professorial level, they seem more willing to admit that there is indeed gender discrimination in Turkish academia. Hence, while “academic women generally do not consider there is institutionalised gender discrimination in academic promotion and management ... older and often more senior women consider that male academics are advantaged in academe” (Özkanlı et al., 2008: 105).

Now, essentialism about gender is the belief that there are biologically given differences between men and women that explain and sometimes also justify differences in social outcomes. Accordingly, essentialism involves descriptive as well as normative components. From a feminist point of view, essentialist views obstruct efforts to achieve equality between men and women by making such efforts look pointless:

Essentialism entails the belief that those characteristics defined as women's essence are shared in common by all women at all times: It implies a limit on the variations and possibilities of change – it is not possible for a subject to act in a manner contrary to her nature. Essentialism thus refers to the existence of fixed characteristics, given attributes, and

ahistorical functions that limit the possibilities of change and thus of social reorganisation (Grosz, 1989: n. pag.).

Individual women, regardless of their merits, are often denied the opportunities they should have simply because of essentialist views of their gender: “The problem here is one of over-generalisation, stereotyping, and a resulting inability even to ‘see’ characteristics that do not fit your preconceptions. In practice, this leads to discrimination” (Phillips, 2010: 50). Hence, feminists have early on criticized essentialist views of women and men. “Essentialism was originally identified by second wave feminists as the mode of thinking that assumes that all manifestations of gender difference are innate and transcultural and historical” (Pilcher and Whelehan, 2017: 45). Sometimes feminists specify the criticized target as *biological essentialism*:

Biological essentialism is a specific form of essentialism that conveys the idea that the essence of a person is rooted in their biology; that is, that their personality and characteristics are caused by something internal to the body (such as hormones or genes). An alternative term is biological determinism, meaning that biology determines, or causes, the traits concerned. One example is the claim that women are naturally maternal because of their hormones (Birke, 2000: 46).

One remarkable feminist approach to biological essentialism appeared in Shulamith Firestone's *The Dialectic of Sex* (1970). Firestone recognized the tenets of biological essentialism to the extent that she viewed the subordination of women in the light of women's biological capacity to give birth and the division of labour that follows from this capacity. She extended the Marxist criticism of capitalist ownership to the unit of the biological family. While Marx saw the root of oppression and social inequality in capitalists' ownership of the means of production and the proletarians lack of such ownership, Firestone wanted to go beyond such a strictly economic analysis, instead focusing on the division of labour and power that follows from the biological fact that women can give birth and men cannot: “Unlike economic class, sex class sprang directly from a biological reality: men and women were created different, and not equally privileged. ... The biological family is an inherently unequal power distribution” (Firestone, 1970: 8).

The solution to the problem of gender inequality, according to Firestone, can only be to dissolve the division of labour that nature and biology have created for us. Just as Marxists advocate that workers liberate themselves by taking control of the means of *production*, Firestone recommends a more far-reaching revolution in which women take control of the means of *reproduction*: “not only the full restoration to women of ownership of their own bodies, but also their (temporary) seizure of control of human fertility – the new population biology as well as all the social institutions of childbearing and childrearing ... not just the elimination of male *privilege* but of the sex *distinction* itself: genital differences between human beings would no longer matter

culturally” (Firestone, 1970: 11). The solution envisaged by Firestone involves the development of a technology of artificial reproduction according to which “children would be born to both sexes equally, or independently of either” (ibid.). Consequently, while Firestone on the one hand recognizes biological essentialism as a historical fact, she does not accept it as unchangeable. Biological conditions, too, can be modified.

While Firestone invoked biological essentialism with the purpose of liberating women from it, Sherry B. Ortner (1972) attempted to show that biological essentialism as a doctrine about superior and inferior qualities of men and women should be understood as a product of culture rather than as an account of biological facts. While Ortner does not deny facts about biological differences between men and women, she wants to emphasize that “these facts and differences only take on significance of superior/inferior within the framework of culturally defined value systems” (Ortner, 1972: 9). Gender essentialism may speak in biological terms, but it does so with the voice of culture. Ortner believes that all cultures share in a negative evaluation of women in relation to men, and this is so since “woman is being identified with, or, if you will, seems to be a symbol of, something that every culture devalues, something that every culture defines as being at a lower order of existence than itself” (Ortner, 1972:10).

According to Ortner, woman is associated with *nature*, while man is associated with *culture*, and since all cultures tend to define themselves in opposition to nature, this identification has negative implications for women’s status. In cultural narratives “humanity transcends the givens of natural existence, bends them to its purposes, controls them in its interest” (ibid.). Nature is opposed to culture as animal is to human; it is an object of conquest and subjugation. Nature is related to the body, culture to the mind. And woman is associated with the body and its functions, not only because of her reproductive capacity, but also because of her menstruation which “frequently has negative emotional correlates and in any case involves bothersome tasks of cleansing and waste-disposal; ... it interrupts a woman’s routine, putting her in a stigmatized state involving various restrictions on her activities and social contacts” (Ortner, 1972: 13).

Likewise, woman’s association with children and child-rearing also brings her closer to nature: “Infants are barely human and utterly unsocialized; like animals they do not walk upright, they excrete without control, they do not speak” (Ortner, 1972: 17). In contrast, the male, lacking reproductive capacities, “must (or has the opportunity to) assert his creativity externally, ‘artificially,’ through the medium of technology and symbols. In so doing, he creates relatively lasting, eternal, transcendent objects, while the woman creates only perishables – human beings” (Ortner, 1972: 14).

This, according to Ortner, is the cultural explanation of biological essentialism: all cultures share a high regard for cultural products – philosophy, science, art, buildings and monuments, cities, states, and so on – while they look down upon nature as the opposite of reason, refinement, and civilization, and since they tend to associate women with nature and men with culture, they will also be disposed to assign an inferior status to women. And, as Robert Murphy

has observed, the cultural devaluation of women could also be thought of as a male coping strategy. Given that women have greater (natural) capacities than men to have sex and enjoy sexual satisfaction, men have compensated for this by creating a (cultural) order in which woman is required to restrain her sexuality, waiting for the man to take the initiative. Hence, according to Murphy, “woman and man may not be the metaphor of nature and culture, but, rather, culture and nature may well be the metaphor of male and female”, reflecting “an unconscious anxiety that male dominance in sex, and by extension in society, rests on fragile ground” (Murphy, 1977: 22).

Gender essentialism sometimes impose itself also on scholars who overtly want to detach themselves from such views. Anthropologist Edwin Ardener, for instance, while rejecting the idea that women’s inferior social status in societies studied by ethnographers should be explained by biological reasons, still argued that a certain kind of female muteness causes a bias towards male informants: “Ethnographers report that women cannot be reached so easily as men: they giggle when young, snort when old, reject the question, laugh at the topic and the like. The male members of a society frequently see the ethnographer’s difficulties as simply a caricature of their own daily case” (Ardener, 1975: 2). For Ardener, the women’s closeness to nature is central to an understanding of the ethnographers’ difficulties in extracting information from them:

It is not enough to see this merely as another example of ‘injustice to women’. I prefer to suggest that the models of society that women can provide are not of the kind acceptable at first sight to men or to ethnographers, and specifically that, unlike either of these sets of professionals, they do not so readily see society bounded from nature. They lack the metalanguage for its discussion. To put it more simply: they will not necessarily provide a model for society as a unit that will contain both men and themselves. They may indeed provide a model in which women and nature are outside men and society (Ardener, 1975: 3).

Ardener’s account of women’s lack of linguistic capacity was criticized by Nicole-Claude Mathieu for its essentialist implications. She accused him of turning anthropology into a kind of zoology as far as women were concerned: “the study of women is on a level with that of ducks or birds – ‘a mere bird-watching’” (Mathieu, 1978:55). More specifically, Mathieu complained that Ardener treated anthropologists’ inability to give a voice to the women they studied as reflecting not a failure on their part, but rather as reflecting “a supposed *truth about the societies studied* – viz. inarticulateness of women/articulateness of men”, resulting in a reification of gender “based on the model of *biological differences*: men and women have ‘naturally’ different behaviours, reasoning, and views of themselves and of the world” (Mathieu, 1978: 59). Men’s alleged better capacity to express themselves and women’s corresponding muteness are turned into biological facts about a culture – nature gap

between them: “Basically, man is biologically cultural. Woman on the contrary is biologically natural” (Mathieu, 1978: 60). Mathieu’s conclusion, repeated in standard feminist discussions of essentialism (see, for instance, Humm, 1995), is that instead of relying on generalizations about women being closer to nature than men, we should study the social background conditions and causes of the positions that women occupy in different societies.

Now given that there indeed are biological and genetical differences between men and women, it might be tempting to argue that perhaps also some of the social differences between men and women have a “natural” foundation. However, as Anne Phillips has pointed out, we should resist such a conclusion, since “differences involve categories, and categories are the kind of thing that human beings produce to achieve some social purpose” (Phillips, 2010: 53). The feminist criticism of biological essentialism can be summed up in three main points:

First it denies external, cultural influence and posits biological causes as the root of who we are, i.e. biologically essentialist ideas ignore sociocultural production of gender. Second, it oversimplifies scientific accounts of how biological bodies work; it ignores, for example, the influence of environment on the body (hormones can be affected by stress, lifestyle and so on). Third, it is usually generalized to describe specific groups of people; thus differences associated with gender, sexuality or race may be attributed to biological bases (Birke, 2000: 46).

Essentialism is hence rejected by feminists in favor of a more social constructionist view of gender relations (Pilcher and Whelehan, 2017: 45) and “the term ‘essentialist’ has come to be associated with outmoded and incorrect conceptions of womanhood and sometimes operates rhetorically as an expression of disapproval” (Stoljar, 2000: 177). This is also true for most of Western academia, where, in general, essentialist arguments especially about women are not welcome. However, in this study of women and male engineering academics from Turkey, it was found that academics from both sexes still subscribe to essentialist ideas about women and men. These essentialist ideas are related to, womanhood in general, motherhood, bodily strength, authority, women’s sociality and emotionality, and their carefulness. These themes of essentialism will be summarized and illustrated below, and it will also be shown that essentialist attitudes pertain even to the very coping strategies that women try to develop to protect themselves against inferiorization. The term “essentialism” is here understood as referring not only to assumptions associated with biological determinism, but more generally to any view that tries to explain or justify that men and women are treated differently by pointing to women (and men) as carriers of certain attributes or dispositions specific to their gender.

2. Method

In this section, information on the model of the research, sample group, instrument of data gathering, data gathering

and analysis of data will be presented. Applying qualitative rather than quantitative methods, the present research aims at revealing attitudes and belief systems rather than provide empirical generalizations. The details of this methodological approach are outlined below.

2.1. Model of Research

The present study relies on qualitative rather than quantitative methods, taking its point of departure in interviews with academics, all working within engineering departments of Turkish universities. The reason for choosing engineering department faculty for this study is that engineering is a male dominated field and to the extent that there are genderized essentialized views about women academics they are more likely to be found within academic workplaces where women traditionally have constituted a minority. In qualitative research, “[r]ather than determining cause and effect, predicting, or describing the distribution of some attribute among a population, we might be interested in uncovering the meaning of a phenomenon for those involved. Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (Merriam, 2009: 5; for a similar view, see Blaikie, 2009: 204–205). Accordingly, in this study the focus will be on evidence of essentialist views about women in the accounts of male as well as women academics in engineering departments.

The design of the present research can best be described as phenomenological, as it explores the experiences of individuals to clarify phenomena of which they might be aware but of which we do not have a detailed or deep understanding. In research conducted along these lines, interviews play a prominent part in the data collection. As is the case with oral history studies (McCracken, 1988), the point is not to provide statistically valid generalizations but rather to establish the existence of a particular way of thinking or acting and to suggest new research directions (Reinharz, 1992). The analysis of the data collected in these interviews focuses on conceptualization and on uncovering thematic structures. Phenomenologically designed studies, like other qualitative research, do not lend themselves to generalizations or representative quantification; however, they help us recognize and understand the phenomena studied, with the help of the testimony and lived experience of the informants (Yıldırım & Şimşek, 2008: 72–75). In the present study, the aim is to track essentialist attitudes and actions in the narratives of the informants.

2.2. Sample Group

The sample group of the present study includes nine women academics (of whom one is a divorced research assistant, one is a single post-doc, six are married professors with children, one is a married associate professor with children) and six male academics (of whom two are married professors with children and grandchildren, one is single, two are associate professors (one of whom is single while the other is married and has children), and one is a married assistant professor). All academics in this research come from various engineering departments or faculties. All of them, except for the woman research assistant, have international publications.

2.3. Instrument of Data Gathering

The data presented in this research comes from semi-structured interviews made with the sample group. Below are listed five questions that were asked to the research subjects. Not all of the data gathered with the help of these questions are being used in this article. The five questions are: *“Have you ever felt being treated differently (positive or negative) at the university because of your gender? What are the difficulties you experienced in your academic career due to your gender? What kind of difficulties might young women academics encounter at the universities due to their gender? What kind of difficulties might young male academics encounter at the universities due to their gender? What are your advices to young women and male academics?”* The research subjects’ answers to these questions revealed essentialist ideas of women and male academics, as will be shown below.

2.4. Data Gathering

A mix of a snowballing sampling and convenience sampling were used to reach the research subjects. The snowballing method is often used in qualitative research and involves the researcher’s being led from one research participant to another by benefiting from the first participant’s personal network. This method is especially useful if the research topic is a sensitive one (Biernacki & Waldorf, 1981, p. 141). The interviews were made in 2017 in the offices or laboratories of the academics and recorded by the researcher with a digital voice recorder.

2.5. Data Analysis

Interviews were transcribed and data was analysed with the help of a close reading technique. In this research, data were analysed with the help of a close reading technique which was structured according to the interpretation strategies of the documentary method (Güvercin & Nohl, 2015). According to this method, the first step is to read the transcribed data while looking for answers to the question *“What is being said in this text?”* At the second step, attention is paid to how the specific content is expressed in the text. At the third step, the researcher looks for themes in the text. In the case of the present study, one such theme would be essentialist attitudes. Specific interview pieces are selected to exemplify these themes. The present study does not claim any generalizability.

3. Findings and Comments

The interviews provided examples of six different forms of essentialism, relating to general aspects of womanhood, motherhood, bodily strength, authority, women’s sociality and emotionality, and women’s carefulness. They also revealed coping strategies whereby women academics try to deal with essentialist attitudes and expectations. These coping strategies may themselves reveal essentialist views.

3.1. General Aspects of Womanhood

While motherhood is a very popular subject for both men and women to essentialize about, womanhood itself might also function as a source of essentialist ideas. For instance, a male assistant professor told that he is very careful in his relations with women academics, and that he tries not to turn them down when they come to him asking for help. Moreover, he

said that he is very polite to them just because they are women. The underlying essentialist idea here is that women are delicate creatures that require special care and concern. A related but opposing essentialist idea that surfaced in this research is that women receive more support than they really deserve just because they are women. According to this view, women academics face less resistance than male academics when it comes to getting sufficient office or laboratory space. Not only male academics but also women academics essentialize about womanhood. For instance, according to one woman research assistant, young women academics, just because they are women, might have adaptation problems in academia. According to her, this is why they have to work harder than men to prove themselves. Moreover, one woman professor reported that women when facing a conflict with male colleagues, choose to defer to men rather than to challenge them. Women do this, she said, because male academics always expect to have the last word and because women think it is their responsibility as women to avoid creating a bitter work place environment:

It is like this, as I always tell my women friends, men really have the last word. Unfortunately, they do. You can see it in the family, as well. It does not matter how good your relations are with your husband – although it would seem as if we might have the last word, in fact it is always theirs. We tell ourselves that we should not lose our sense for what is tactful and appropriate. There is always such an expectation on us.

Women academics in engineering faculties also find themselves the victims of a negative essentialization about women being generally incompetent. Male directors believe that women cannot do the required work and that a man would be better at solving problems. At the same time women academics hold an opposing positive essentialist view of themselves: Because they are women, they are in fact better at finding solutions:

There is this thing in our profession: *“A woman cannot do it”*. ... In the Turkish male structure, there is such a belief, even if he would not admit it, there is at least an unconscious belief that a man would solve a problem in a better way. ... They are more comfortable talking man to man. Especially in meetings such as academic board meetings. It makes a great difference whether a woman or a man chairs an academic board meeting. When a man chairs it or when the majority of the board members is made up of men, the meeting turns into a series of jokes and things get unserious. But when a woman chairs the meeting, it is very different, since they are more object-oriented, more focused on the target at hand, and more structured and systematic. Women do not laugh away things. ... Because she knows that she

will be affected by the results, she is more conscious and works more seriously. There is also this: In institutions men have a tendency to get angry more easily and to get into fights. They can treat each other in ways very different from those in which women treat others. Suddenly they can change into a fighting mood. Women are not like this. Women find it easier to agree.

To develop such a positive self-essentialism can be seen as a coping strategy to deal with the negative essentializations coming from male colleagues. However, some women academics accept negative essentializations. According to some informants, there are women who use their very womanhood to climb academic ladders and that this damages the reputation of women in general. Generalizing like this about women benefiting from their womanhood in academia, and about women themselves being responsible for the negative views of their gender, can in itself be considered as a form of harmful or negative essentialization. Moreover, to the extent that views like these are internalized by women themselves, they might undermine their efforts to overcome essentialization. This is also known from the literature on gender essentialism. Anne Phillips, for instance, has noted “the enormous power of self-stereotyping according to dominant gender codes in ‘creating’ gender difference” (Phillips, 2010: 51).

3.2. Motherhood

One of the most frequently recurring essentialist arguments about women in engineering academia relates to their reproductive capacity. According to this particular essentialist argument, women get married, get pregnant, and become mothers, after which they go on maternity leave. Accordingly, women will lag behind scientifically. Therefore, women should understand that they might have to choose between child-rearing and academic work. If women want to do both, they should know that it will be difficult. They should do their career planning according to their biological and psychological nature. If women really want to have a child, they should do so after they have proven themselves at the university.

The premises of this anti-motherhood idea in academia is similar to the premises of Firestone’s biological essentialism which elaborates on the view that women are imprisoned by their reproductive capacities. Male academics sometimes overtly see their women colleagues in such a light. This comes out in the words of a male engineering professor below:

Men are more often preferred. There is this concern. ... A woman will become a mother, will give birth to a child; she will get married. ... Women take leaves. ... Because this goes against the continuity principle of work, directors prefer men over women. They try not to, but it can be a reason for preferring men.

Here women’s reproductive capacities are seen as the reason for their career difficulties. As mothers they are expected to

give priority to their children rather than to their work, taking leaves to stay home, and for this reason they are considered less useful to their employers. Women are aware of these views. For instance, one woman professor told about her experiences:

Our engineering faculties have more male-dominated departments compared to the social science faculties. Therefore, at the time of hiring, you can hear people asking: “Hmm, is it a woman?” Even the departmental management and the people who work close to them talk like this. How do they think? They think that she will get married, that she will have a child. But this should be a natural thing and to bring it up like this is negative discrimination. I still believe that women academics in our country are victims of discrimination.

However, also women academics sometimes essentialize motherhood as a problem. In these cases, women accept that there is a biological reason why women might be less successful than men in the competition for academic positions. Accordingly, they might be willing to accept this outcome as simply a fact of nature. For instance, one woman professor told that giving birth to and raising a child could make academic competition difficult for women:

[W]e are the ones who have to give birth. In this period, of course, you will be distracted. But nothing similar applies to men. So the baby grows inside the mother for nine months and also in the following process the baby will be in immediate need of its mother... This means that the woman academic will be slowed down for at least two years.

Moreover, one woman professor reported that women give priority to motherhood over academic work and that this impedes their careers. Accordingly, while motherhood might be the number one subject for male essentialization about women, also women academics seem to internalize these views. In so doing, they self-essentialize their capacity for motherhood as an explanation for poor career outcomes.

3.3. Bodily Strength

The present study suggests that there are also essentialist ideas about women’s physical characteristics in Turkish engineering faculties. For instance, physical features typically associated with women such as slender built, fragility, or vulnerability might be given as reasons why they are not preferred for work in some laboratories. Such reasons rely on an assumption that women *qua* women:

Some professions require men for their work. For instance, in these kinds of professions there are no limits regarding work hours. For reasons related to environmental conditions, noise, toxic emissions, physical requirements, and so on, our profession

is one in which men are likely to be more comfortable than women. When I analyse it from the perspective of our profession, our field of engineering, as well as other similar fields, directors prefer to work with men. It is like this in factories, too. And the same goes for universities, as well.

In the above interview excerpt, a male professor reports that due to the physical conditions of work of some engineering fields, and because of an implied judgement that women are less fit to cope with these conditions, women are not preferred when it comes to hiring staff. Likewise, according to a corresponding essentializing view about men, men's manual skills, as regards repairing and maintenance in technical departments, are better than those of women, and since few technicians are employed by the university, men will benefit more than women from these few positions:

In engineering, the worst thing that could happen is a breakdown in the laboratory. ... When it really matters, men's hand skills are better. They can lift, bring down, manage themselves or find someone else to do it just by making a phone call. The problem is maintenance work and so on, considering also that there are few technicians at the university. I have myself encountered this kind of laboratory problems. I use my social circles to deal with it. I can do it myself, too, but me doing the repair work... This requires physical power. Generally, women have a problem with this.

3.4. Authority

Women academics' interaction with their students is also an object for essentialist arguments. For instance, a male assistant professor stated that in a male dominated society, young women academics are less respected as teachers by their students than are male academics, for the double reason that they are young and women. What is reported here is an essentialist view that is ascribed to students, but which of course also can be used by university managers to obstruct the careers of women academics. Whether or not the people in charge of hiring academic staff themselves share the beliefs of these students, it might be sufficient for them to be reluctant to hire female staff that they believe that women academics will have difficulties asserting their authority in relation to their students.

A woman Ph.D. confirmed the views of the male assistant professor mentioned above. According to her, male students make a lot of negative generalizations about women academics. One such generalization is that women academics are spinsters, substituting an academic career for married life. Another and related generalization is that women academic, because of their spinsterhood, are tense and nervous, the background assumption being that lack of a regular sex life has a negative impact on women's psychological stability:

Women academics might be targeted by students' gender discrimination. Of course, women academics are also discriminated against by their colleagues and by the academic management. But right now, while I am far away from the academic management level, I am much more aware of the gender discrimination that emanates from the students. According to them, all single women academics are spinsters. And with this comes negative remarks, such as "She is very nervous, isn't she?" As far as I know, the angriest of all professors were the male ones; still, all the negative metaphors and bad jokes are directed at women professors. Yes, there are many single women academics. Are they too many? I do not know. Right now, I can think of three single women academics. I am not even sure if the male ones are single or married. I know that students are curious and want to look for the rings of women professors. I, too, experienced this, both when I was a student, and later, when I was a lecturer.

Moreover, according to this woman Ph.D., male students harass young women academics with sarcastic remarks during lectures. Sometimes these remarks also contain sexual insinuations, as when an exchange about "taking" and "giving" courses suggests the active and receiving aspects of a sexual relationship. When a woman academic is being asked from whom she herself took a course, this is not necessarily just a neutral question about her educational background, but could just as well imply a suggestion that she used to be sexually involved with her professor. Here the implication is, at least sometimes, that she has gained her position not only on her academic merits but also because she has been willing to offer intimate services to her former superiors:

Women academics are humiliated by sarcastic comments but also by comments referring to sex. It happened to me when I was a research assistant. I asked students if they had taken the course in probability. They said yes, and then they asked me from whom I had taken that course, and I answered that I took it from this or that professor, and then they asked whether I myself give this course. It was all very unnecessary. I think they would not do this to a male academic. This happened in a course that I lectured jointly with a male research assistant. Because I had had enough of such comments, I asked him to come to my lecture. I wanted him to be in the audience, since I thought they would not say anything in

his presence. And it really happened like this. There are only a few years of age difference between the research assistants and the students, so we can be like friends with most of them. ... Perhaps, when they socialize male to male they can make such comments and be comfortable with it? Or are they saying these things just to harass women? However, generally speaking, I often hear disturbing words from students and see them behave in a disturbing manner.

3.5. Women's Sociality and Emotionality

Another essentialist belief that male academics apply to their women colleagues relates to their social networking. According to this belief, women are by nature more social than men, and for this reason they are unwilling to accept difficult work conditions which might separate them from the social groups they belong to. Moreover, according to another essentialist belief, female and male research assistants gather together in their respective gender groups from which they derive support but from which they also derive a tendency to be jealous of the other group. In addition to this, some women academics in this study believe that women, in general, are emotional and less professional. One woman academic said that women have less courage to tell when they do not want to undertake a task since they worry about what will happen to their position, promotion, access to laboratory, and so on, if they say no. According to her, men are braver in this respect:

You ask me about the difficulties of women and men. Suppose that we are in a meeting. You were assigned a task and you know you cannot do it or that you do not want to do it. Sometimes women do not have the courage to say that they will not do this and that someone else should do it instead. Men are not like this. They say "I do not want to do it" and then they leave. And men are very aggressive in meetings. Women tend to take a more moderate perspective or do not raise their voices at all. A woman would say that there should be no violence: "I should not raise my voice". But the other side can move to a very high pitch. On such occasions, what I do is to leave the meeting. I cannot deal with this kind of stuff. If I were to try, I know I might transcend my own borders. Then I would not be able to look at myself in the mirror. So I leave. ... Men can always try to manage their work conditions by speaking in a high-pitched voice. If you go one tone higher than that, there will be a fight. So women escape from such situations. Or they prefer to be silent. I show my reaction by leaving in protest. I do not listen, I go, I leave. So he will talk on

his own. Some women do what men say because they raise their voice. This is one way of doing things – it depends on what kind of person you are, in my opinion.

3.6. Women's Carefulness

Some essentialist arguments, coming from male academics, indicate a positive view of women academics' capacities. For instance, in this study some male academics reported that "women are more careful, disciplined and hardworking at work. This might be a reason to prefer them to men when it comes to hiring". Women academics expressed similar views. For instance, one women professor reported the following: "A woman can think in a more detailed way. It seems to me she can do the implementation better". Moreover, she added, "working with details, acting in a solution-based manner, thinking in a long-term, future-directed way about solutions to problems – these are women's qualities. Thus I think a woman director can be more detailed and just in her work."

3.7. Coping Strategies

Previously we have seen how women might internalize men's negative essentialist views of them, making these views part of their self-conception. However, women also develop coping strategies that, at least to some extent, counter and limit the impact of hostile male views of them. One such coping strategy could be to develop a positive self-essentialization, emphasizing that women might in fact be better than men as academic workers. (An example of this was given above, in the section "General Aspects of Womanhood".) Another coping strategy could be to try to diminish the alleged negative aspects of womanhood. For instance, some women academics claimed that raising a child for six months or one year does not cause much academic loss when one takes into consideration that the retirement age is 67. They reported that, after all, one can ask male colleagues for help with laboratory work during one's pregnancy, or one can study while taking care of the child. As one woman professor told me:

But it is possible to deal with [motherhood] in a successful way, too. During this period of one's life, one should focus on enjoying it. I did not see it as a disaster that happened to me. But when you look at the competitive environment that we share with men, it seems like you are wasting your time when you are pregnant or raising a baby. Sometimes women academic friends can get stressed because of this. We talk to them. One needs to enjoy everything, and to do everything moderately. We work during the nine months of pregnancy, but with the condition that the baby should be protected. One should pay attention to everything. This means that it is absolutely normal to continue to work as long as you do not go into the lab and do things that would hurt the baby. One needs to take care that the work is not

too tiresome. Maybe we need to get some help from the men. We have assistants. We have other friends. One can get help from them. In the time that is spent at home, one can read in one's free time. As for me, I closed the book of work and focused on my child for one, two, or three months. I was never the kind of person who wanted to do many things simultaneously. Now I have a child to raise, and then I will deal with this. This was what I told myself. Other things will have to wait a bit. This short time loss is not important. When we look at our work life, we work until the age of 67. I don't see this period of one year or six months as a loss. But whatever you do, you should concentrate on it. When you are at work, you will not deal with the child. One should balance this, too. There are people who stress themselves in this period. We have this kind of friends, too. I think this is the most critical period in a woman's life.

In the above interview excerpt, we see that although this woman professor thinks that women should enjoy all their experiences, including pregnancy, she is also quite aware that competition with men at the university transforms that workplace into a gendered one. At this point, pregnancy stops being regarded as a natural phenomenon relating to both women and men, and women feel the need to justify their pregnancy by arguing that it is possible to work even during and after the pregnancy. This is also part of a strategy whereby women devise a method to cope with the role conflict of being a mother and being an academic. The solution, according to this woman professor, is to concentrate on the goal at hand, whether it is raising a child or doing one's academic work. Here we also see how women talk to each other in order to create a positive aura around the pregnancy phase of their life, thereby also softening the experience of a role conflict. Some other women academics add that motherhood in fact could have a positive impact on academic work:

A woman can think in a more detailed way. It seems to me she can do the implementation better. Because she works in details and she is more just. She has that justice which comes with motherhood and womanhood. She is more understanding. She can produce solutions. Thus when I talk to my students ... I always defend the idea that the women are the ones who are best in this profession. Because, as I told you, working with details, acting in a solution-based manner, thinking in a long-term, future-directed way about solutions to problems – these are women's qualities. Thus I think a woman director can be more detailed and just in her work.

In the above interview excerpt, a woman professor develops a coping strategy to deal with negative essentialist views of motherhood and womanhood by formulating an opposing positive essentialist view. According to her, being both a woman academic and a mother is better than being just a male academic. Despite this, she also indicates that she is not naïve in her expectations about academic life for women:

There might be woman directors who are influenced by male directors. This will be something quite different. We cannot say that whenever the director is a woman, then everything else is solved. Even if the head of the department is a woman, the dean is a man. The rector is already a man. The direction of power can be top-down.

Another coping strategy women academics use to fight negative essentialist views about themselves is to overwork. For instance, one woman professor reported that "After being hired, women have to work more than their male friends in order for them promote their careers. This is very important". This woman professor went on to complain about younger women academics who, according to her, were not sufficiently motivated to do the work necessary to promote their careers. Most important, they did not understand the need to work hard both at home, taking care of their children, and at the university:

We should never mix our private lives and work lives. We should not talk like "I have a child and therefore...". I think that some people really abuse this [making excuses for themselves]. Although I am a woman professor, I can get angry with the new generation. I sometimes find them lazy in some respects. I mean, just looking after their careers with the attitude of "I cannot do this or that at home because I am working". Yes, we must be egalitarians, but I do not know if we, the old generation, were raised that way. It is the same at home and at the work place. They have to make more of an effort. We will work very hard.

The woman professor quoted here seems to adopt, at least to some extent, the *women as a problem* approach (Husu, 2001), that is, the idea that it is women and their choices rather than academia that should be blamed for women academics' career problems. In so doing, she also combines an essentialist approach to women as mothers with a coping strategy focusing on hard work to compensate for the time spent on child-rearing.

4. Conclusion, Discussion, and Suggestions

In the interviews on which this study is based, the informants refer to essentialist views according to which women are (or are expected to be) less successful in academic work due to various aspects of their gender. Some of these aspects are explicitly referring to biological features, such as motherhood, lack of bodily strength, and emotionality. Others, such as women's lack of competence or authority,

are not in themselves explicitly biological, but are still derived from generalizations about the nature of women. Moreover, when women, in contrast to the above negative generalizations, are perceived as being in fact better equipped than men for academic, this is also related directly or indirectly to biological factors. Motherhood and a natural capacity for carefulness, for instance, are described as attributes of women that might make them better qualified than men for academic work, enabling them to find constructive solutions to problems instead of involving themselves in bitter conflicts. Hence, the views described here are indeed examples of essentialism as this concept has been outlined by, for instance, Grosz (1989), Birke (2000), and Phillips (2010), and as described in the Introduction.

This study suggests that one major difficulty faced by Turkish women academics in the promotion of their careers in engineering faculties has to do with essentialist views of women. Contrary to much of previous research that has claimed that Turkish universities have no problem with discrimination, this study has proceeded beyond the quantitative assessment of the numbers of female professors and tried to capture how women academics are perceived by themselves as well as by their male colleagues. The essentializing views found in this study relate to general aspects of womanhood as well as to more specific aspects such as motherhood, bodily strength, authority, sociality and emotionality. Gender essentialism in academia is hence quite comprehensive, including the physical, social, and emotional aspects of being a woman. The essentialization of women implicitly supports an opposite essentialization of men – to the extent that women are thought of as problematic, men are thought of as free from such problems. Sometimes women academics also self-essentialize negative views of themselves as women. On the other hand, women academics also rely on essentialist self-descriptions to oppose negative stereotypes and to promote a view of themselves as being equally if not better suited than men for academic positions. However, one problem with such an approach is that it reinforces essentialist thinking rather than helping individuals – men as well as women – to free themselves of gender stereotypes. If engineering faculties of Turkish universities are serious about promoting gender equality, one way in which they can approach this goal is to reveal and counteract gender essentialism at the workplace. A first step on this path is to create awareness regarding the existence of essentialist attitudes and beliefs in the academic workplace. This study is a contribution to such an approach.

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