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## Environmental and Productivity Perceptions Affecting The Female Labour Force Participation Rate<sup>1</sup>

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### Abstract

Increasing female's participation in the labour force is an important issue for countries that aims sustainable economic growth. Although the female labour force participation rate in Türkiye has increased since 2006, it is quite low compared to developed countries. There is a consensus in the literature that the environment affects the labour force participation rate of females. In addition, the perception whether women who have children and undertake housework will be productive in business life also affects the decision to participate in the labour force. The aim of this study is to investigate the environmental and productivity perception factors that affect women's participation in the labour force. For this purpose, a survey was conducted on working women in Türkiye and Exploratory Factor Analysis (Exploratory Factor Analysis) and hypothesis tests were conducted. It was concluded that environmental and efficiency perception factors affect each other positively and significantly. It has been revealed that factors such as marital status, having children, and working in the private sector also affect environmental and efficiency perceptions.

**Keywords:** Women's Participation in the Labour Force, Women's Employment, Female Labour Force, Gender Inequality, Labour Force Participation Rate

**JEL Classification:** J16, J64, E24

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## Kadınların İşgücüne Katılım Oranını Etkileyen Çevresel ve Verimlilik Algıları

### Öz

Kadınların İşgücüne katılımının artırılması sürdürülebilir ekonomik büyümeyi amaçlayan ülkeler için önemli bir unsurdur. Türkiye’de kadınların işgücüne katılım oranı 2006 yılından beri artmış olmasına rağmen gelişmiş ülkeler ile kıyaslandığında oldukça düşüktür. Literatürde çevrenin kadınların işgücüne katılım oranını etkilediği yönünde genel bir uzlaşma vardır. Ayrıca çocuk sahibi olan, ev işlerini üstlenen kadınların da iş hayatında verimli olup olmayacağına dair algısı da kadınların işgücüne katılımı kararını etkilemektedir. Bu çalışmanın amacı kadınların işgücüne katılımını etkileyen çevre ve verimlilik algısı faktörlerini araştırmaktır. Bu amaçla Türkiye’de çalışan kadınlara yönelik bir anket yapılmış ve Açıklayıcı Faktör Analizi (Açıklayıcı Faktör Analizi) ve hipotez testleri yapılmıştır. Çevre ve verimlilik algısı faktörlerinin birbirini olumlu ve anlamlı bir şekilde etkilediği sonucuna varılmıştır. Medeni durum, çocuk sahibi olma, özel sektörde çalışma gibi faktörlerin de çevre ve verimlilik algısını etkilediği ortaya çıkmıştır.

**Anahtar Kelimeler:** Kadınların İşgücüne Katılımı, Kadın İstihdamı, Kadın İşgücü, Cinsiyet Eşitsizliği, İşgücüne Katılım Oranı

**JEL Sınıflandırması:** J16, J64, E24

### 1. Introduction

One of the important conditions for an economy to reach its growth targets is the effective usage of all production factors, especially labour. The efficient use of the labour force has a positive effect on the long-run growth rates of the country's economy. For this reason, it is thought that using male and female labour force effectively is important for economic goals. There is empirical evidence that women's participation in the labour force has a positive impact on the long-term economic growth of countries (Goldin, 1994; Klasen & Lamanna, 2009; Çağatay & Özler, 1995). However, it is seen that women's labour force participation is below men's labour force participation in most countries. Women's labour force participation rate in Türkiye has been increasing since 2006 but is still far behind other OECD countries. While the labour force participation rate of women in Türkiye is only 34.16%, the same rate is 56.46% in the USA; 56.37% in Germany; 52.55% in France, and 61.25% in the Netherlands (Worldbank, 2023). These figures show the importance of increasing women's labour force participation rate for Türkiye. Due to this importance, many publications are investigating the factors affecting women's participation in the Labour force in Türkiye (Talaş & Çakmak, 2013; Çelebioğlu, 2017; Bilik, 2020; Koç & Şahpaz, 2020; Yavaş, 2021; Gençtürk, 2022) and worldwide (Cascio et.al. 2015;. Gehringer & Klasen, 2017; Taşseven, 2017; Kang, 2017; Tunç, 2018; Dhar,

2020; Sasongko et.al. 2020; Nasir et.al. 2020; Chema et.al. 2021; Morrar, 2022; Alvi, 2023).

Previous studies have generally examined women's labour force participation rate in time series and they generally stated that there is relationship between female participation to labour force and environment (Tansel, 2002; Talaş & Çakmak, 2013; Gehringer & Klasen, 2017; Dhar, 2020; Koç & Şahpaz, 2020; Gençtürk, 2022). However, in our study, women's opinions were collected through a survey and their perceptions are studied. In this way, women's perceptions of whether their productivity at work decreases due to reasons such as housework and having children were also investigated. The decision of whether to participate in the labour force belongs to the woman. When making this decision, it is very important that she considers that her productivity at work is not behind men's due to her responsibilities such as housework and children. However, no study has been found in the literature on the effect of productivity perception on the decision to participate in employment. In addition, the support of the woman's environment is also important when making her decision to participate in labour force. In some societies, the dominant view is that "a woman stays at home, does the housework and takes care of her children" and this view affects the employment decision of woman. It is seen that studies investigating the effect of women's environment on their decision to participate in employment are also qualitative (Korkmaz & Korkut, 2012; Yılmaz & Zogal, 2015; Akdemir et.al. 2019; Yavaş, 2021). Our study examines productivity and environmental perceptions that affect women's labour force participation rate.

In the first part of our study, the reasons for women participating the labour force mentioned in the literature will be discussed. Then, information about the method of the study and the findings obtained as a result of the survey will be mentioned. At the end, the findings of the study will be discussed using the existing literature.

## 2. Female Participation to Labour Force

The most important events that increased the rate of female's participation in the labour force were wars. In times of peace, the idea that women's primary duty was housework became dominant. However, the labour shortage that emerged during the wars enabled women to enter business life. In this respect, the First and Second World Wars had significant effects on women's participation in the labour force (Kılıç & Öztürk, 2014, pp.110; Yılmaz, 2015, pp.8). In the literature, the female labour force function is evaluated as U-shaped. Goldin (1994) argues that during the development process of the economy, the labour force participation rate of married women first decreases, but in the later stages of the development process, the labour force participation ratio of women increases. In the early periods of development, migration from rural to urban areas increases and women working in agricultural activities leave the labour force. In developed economies, women's education level is increasing, opportunities such as nurseries are increasing, and women's participation in the labour force is increasing. It is possible to list the factors affecting women's participation in the labour force as follows.

*Social Structure:* Societies impose the role of mother and housewife on women, and therefore women have a heavy burden. Obligations in family life also negatively affect women's decision to participate in the labour force. In order for women to participate in the labour force, housework must be shared between spouses (Korkmaz & Korkut, 2012, pp.45; Kılıç & Öztürk, 2014, pp.107; Yılmaz & Zogal, 2015, pp.8). Even in families where both men and women work, women are seen as the main responsible for housework (Aldan & Öztürk, 2020, pp.142). As a result, it has been seen in various studies that single women's participation in the labour force is higher (Yamak et.al. 2012, pp.57). In Europe and the USA, women were viewed as reserve labour until World War II. However, the labour force gap that emerged during the war was filled by women. Women did not leave the labour force after the war ended. The society's view on women's participation in the labour force has changed radically (Kılıç & Öztürk, 2014, pp.110). In countries such as Türkiye, which did not enter the Second World War, there was no significant change in the role of women in society. Society also divides jobs in the market into "men's jobs" and "women's jobs", which limits women's participation in the labour force (Yılmaz & Zogal, 2015, pp.6). The U curve hypothesis also explains that the tendency for women to participate in the labour force in developing countries will first decrease and then increase. Women's participation in the labour force is high due to the fact that the society is employed in the agricultural sector in the first stage of development. When migration from villages to cities increases, women withdraw from the labour force due to the responsibility of housework imposed on them by society. In later stages of development, women's education level and therefore their participation in the labour force increases (Goldin, 1994). Zeren & Savrul (2017, pp.101) found evidence that high growth and urbanization rates in developed economies increase the labour force participation rate of women, while low growth rates and therefore insufficient urbanization rates in underdeveloped or developing countries reduce the labour force participation rate of women.

*Education:* There are academic studies showing that women's labour force participation rate will increase with the increase in education level (Korkmaz & Korkut, 2012, pp.47-48; Yamak et.al. 2012, pp.57; Koç & Şahpaz, 2020, pp.509). As the level of education increases, the expected wage level also increases. The increase in the expected wage level also increases the alternative cost of not working. This process shows that an increase in education level will increase women's participation in the labour force. Bilik (2020, pp.324) found evidences showing that education is the strongest factor affecting women's participation in the labour force. The education level of the spouse also has a positive impact on women's decisions about participation in the labour force (Yılmaz & Zogal, 2015, pp.14; Akgeyik, 2017, pp.37; Tunç, 2018, pp.223).

*Fertility rate:* In addition to this workload, working outside in a workplace is not encouraging to women. Therefore, as the number of children increases, women's labour force participation rate decreases (Akgeyik, 2017, pp.37; Güçlü, 2017, pp.97; Kılıç & Öztürk, 2014, pp.117; Gehringer & Klasen, 2017, p.16; Aldan & Öztürk, 2020, p.143-144; Nasir et.al. 2020, p.5; Gençtürk, 2022, pp.374). The lack of people to help care for children and inadequate nursery facilities also reduce the participation of women with

children in the labour force or cause them to turn to part-time jobs (Yılmaz & Zogal, 2015, pp.18).

*Technology:* As the technology of the products used at home (refrigerator, washing machine, dishwasher, etc.) improves, women's household workload decreases. Thanks to technology, the time women spend on housework decreases, making it easier for them to participate in the labour force (Kılıç & Öztürk, 2014, pp.110; Akdemir et.al. 2019, pp.187). In addition, the increase in technology has increased labour productivity and created part-time job opportunities. Part-time job opportunities have also increased the labour force participation of women who cannot work full-time due to housework.

*Policies:* Governments generally implement various policies to increase women's participation in the labour force. For example; Parents can be given the opportunity to take a break from work to raise their children without losing their jobs (Cascio et.al. 2015, pp.65-66). Governments can open nurseries or give fathers maternity leave (Gehring & Klasen, 2017, pp.18; Aldan & Öztürk, 2020, pp.142). Laws and regulations that increase part-time job opportunities also increase women's participation in the labour force. There is evidence that the legal regulations made in Türkiye positively support women's participation in the labour force (Çetin & Sevüktekin, 2014, pp.81). Legal regulations to assist with child care have positively affected the labour force participation rates of women, especially those with 1 and 2 children, in the European Union (Yılmaz & Zogal, 2015, pp.22). Çelebioğlu (2017, pp.70) recommends more positive discrimination in terms of wages and flexible working hours to increase women's participation in the labour force.

*Gender Pay Gap:* There is evidence that even if women work in the same jobs as men, their wages are lower (Dilek & Yıldırım, 2022, pp.198-199; Akdemir, 2019, pp.190). It is also observed that women leave the labour force due to wage inequality between them and men (Çelebioğlu, 2017, pp.64; Morrar, 2022, pp.3005). Additionally, there are various obstacles to women being promoted in the workplace (Küçük et.al. 2018). For these reasons, there are many women who leave business life at an early age or do not join the labour force at all. There are academic studies on the necessity of directing women to start their own businesses and do high-income jobs (Akdemir et.al. 2019, pp. 196). There are findings in the literature that gender inequality has a strong impact on human development, especially in underdeveloped countries (Tunç, 2018, pp. 246).

*Inflation and cost of living:* Due to inflation and high cost of living, families may not be able to survive on a single person's salary, and in these cases, women also join the labour force (Nasir et.al., 2021, pp.12). Unemployment of men may also cause women to be forced to join the labour force (Koç & Şahpaz, 2020, pp.503). The labour force participation of women who are divorced and experiencing economic difficulties is increasing (Akgeyik, 2017, pp.49-50).

These are the factors that affect women's labour force participation rate. However, one of the important factors affecting the decision is perceptions. First, women may have

the perception that their work positively affects society, the workplace, and their families. If they have such a perception, they can convince their environment more easily and participate in the labour force. The second element is perceptions about their efficiency. It can be said that women who have the perception that their productivity is at least as much as the men in the workplace can make the decision to work more easily.

### 3. Literature Review

In their analysis, Korkmaz & Korkut (2012) revealed that rural and urban women's employment have different characteristics. Especially in countries where rural-to-urban migration occurs, it can be seen that rural women's employment decreases while urban women's employment increases.

Er (2013) examined data from 26 regions in Türkiye and revealed that the level of education, men's labour force participation rate, women's share in the agricultural sector and fertility rate affect women's labour force participation.

Eryar & Tekgüç (2014) found in their study in Izmir that working women were more likely to leave the labour force than men. It is thought that household responsibilities play an important role in women leaving the labour force.

In their research, Kılıç and Öztürk (2014) found that women's participation in the labour force is affected by gender perception, education, marital status, economic resources and place of residence. They stated that the effect of education level on women's participation in the labour force is greater than expected and suggested that steps should be taken to increase the education levels of women in order to increase their participation in the labour force.

Güçlü (2017) concluded that the factors determining women's participation in the regional labour force are education, marital status, rate of dependent children, migration, spatial dependence between regions and unemployment.

Akgeyik (2017), in his research with TUIK data, found that education is the most important factor affecting women's participation in the labour force; It has been revealed that age at marriage, fertility and divorce rates also affect women's labour force participation.

In his study examining G8 countries, Taşseven (2018) found evidence that per capita national income increases women's participation in the labour force and unemployment reduces it. Increasing job opportunities in the labour market encourages women to start their business life.

Aldan & Öztürk (2020) discussed a different factor affecting women's participation in the labour force, the Generation factor. According to the study, new generations are more active in the labour market compared to the old ones, and this is called the generation effect.

Bilik (2020) examined the 2014 Household Budget Survey implemented by TÜİK; showed that education and income effects are important for increasing women's labour force participation.

Koç and Şahpaz's (2020) study found that a 1% increase in per capita income, the number of women with university degrees, and divorce rates in Türkiye between 2004 and 2017 increased women's labour force participation rates. The increase in the men's labour force reduces women's participation in the labour force.

Sasongko et al. (2020) found that minimum wage and education level positively affect women's labour force participation in the econometric model they prepared by using 2014-2018 data from 34 provinces of Indonesia, thus they confirmed the results of most studies in the literature. However, it could not detect the impact of economic growth on women's labour force participation rate.

Chema et.al. (2021) established a logit model using Pakistan 2013-2014 Social and Living Standard Measurement Survey data. With this model, they found a positive relationship between the woman's age and women's labour force participation. Their husbands' occupation also affects women's participation in the labour force.

#### 4.Method

The population of the research consists of women over the age of 18 working in Türkiye. The Convenience Sampling Method was applied. In the Convenience Sampling Method, the sample from the population is determined by the researcher's judgment. Data is collected from the population in the easiest and fastest way (Haşiloğlu et.al. 2015, pp.20). 453 people were reached through the survey administered via Google Forms. For a population of 100 million people, it is sufficient to select a sample of 384 people with a margin of error of 5% (Yazıcıoğlu & Erdoğan, 2004, pp.50). As of July 2023, a total of 10,4 million women are working in Türkiye (Türkiye Statistical Institute [TÜİK], 2023). Therefore, a sample of 453 people is sufficient for our study. The survey form consists of two parts. The first part includes demographic questions while the second part provides questions to measure the perceptions affecting women's participation in the labour force. The article authors prepared the questions in the second part. The survey was approved at the 8th meeting of Kastamonu University Social and Human Sciences Ethics Committee dated 09.03.2023. Since the questions had not been used before, Exploratory Factor analysis was conducted.

The research model is given in Figure 1.



**Figure 1.** Research Method.

#### 4. Findings

Demographic results are shared in Table 1.

**Table 1.** Demographic Results

<b>Age</b>	<b>F</b>	<b>%</b>	<b>Education</b>	<b>F</b>	<b>%</b>
<b>18-25</b>	99	21,9	<b>Primary</b>	26	5,7
<b>26-30</b>	146	32,2	<b>Lycee</b>	74	16,3
<b>31-35</b>	76	16,8	<b>Vocational</b>	93	20,5
<b>36-40</b>	50	11,0	<b>Bachelor</b>	218	48,1
<b>41+</b>	82	18,1	<b>Graduate</b>	42	9,3
<b>Total</b>	453	100	<b>Total</b>	453	100
<b>Household Income</b>	<b>F</b>	<b>%</b>	<b>Sector</b>	<b>F</b>	<b>%</b>
<b>&lt;8500 TL</b>	52	11,5	<b>Public</b>	254	56,1
<b>8501-13000</b>	139	30,0	<b>Private</b>	199	43,9
<b>13001-20000</b>	145	32,0	<b>Total</b>	453	100
<b>&gt;20001</b>	117	25,8			
<b>Total</b>	453	100			
<b>Marital status</b>	<b>F</b>	<b>%</b>	<b>Do you Have Child?</b>	<b>F</b>	<b>%</b>
<b>Married</b>	266	58,7	<b>Yes</b>	216	47,7
<b>Single, widow</b>	187	41,3	<b>No</b>	237	52,3
<b>Total</b>	453	100	<b>Total</b>	453	100

While 32.2% of the participants are between the ages of 26 and 30, 21.9% are between the ages of 18 and 25. That is, more than half of the participants are younger than 30 years old. Nearly half of the participants (48.1%) have a bachelor's degree. Since our sample is working women, it is not surprising that the education level of the participants is high. While the income of 32% of the participants is between 13001 TL and 20000 TL, the income of 25.8% is over 20001 TL. Considering that the Minimum Wage is 8500 TL, it is noteworthy that 57.8% of the participants have an income above 13000 TL. The number of employees in the public sector is slightly higher than the number of employees in the private sector. 56.1% of the participants work in the public sector. 58.7% of the participants are married, which will allow us to learn more about the difficulties married women face in working life. Again, approximately half of the participants (47.7%) have children.

We prepared the questions in the second section to measure the perceptions affecting women's participation in the labour force. Cronbach's Alpha value was found to be 0.866, and since it was above 0.70, the scale was found to be reliable. In the study, the skewness and kurtosis values of the questions were examined. Questions whose skewness and kurtosis values were not between -2 and +2 were assumed not to comply with normal distribution and were excluded from the analysis (George & Mallery, 2010).

Exploratory factor analysis results showed that the scale consists of two dimensions. KMO (0.946) and Bartlett Sphericity test (chi-square: 6473.870 and sig: 0.000) results made it possible to perform factor analysis. We performed the analysis using Principal Components and direct oblimin rotation method. The first factor aims to measure perceptions about whether women's work positively affects society, family, workplace and environment. We called this factor the environmental perception factor. The second factor aims to measure perceptions about whether women's productivity in the workplace lags behind men's. We called this the productivity perception factor. It was observed that the average of the environmental perception factor was 4.08, while the average of the efficiency perception factor was 3.49. High value if it is above 3.67 on a five-point Likert scale; A value between 2.33 and 3.66 is considered to be average (Küçük, 2016, p.239). The environmental perception factor is therefore of high value. The productivity perception factor has an average value, but it is very close to the limit value of 3.67, that is, close to the high value.

The scale explains 66.364% of the total variance, which A rate above 50% is statistically sufficient. Two factors with eigenvalues of 1 and above 1 were identified. The first of the factors; 56.5% of the total variance; The second explained 9.8%. Explained Variance information is given in Table 2.

**Table 2.** Total Variance Explained

Component	Initial Eigenvalues		Extraction Sums of Squared		Rotation
			Loadings		Sums of
	Total	% of Variance	Total	% of Variance	Squared
Enviromental	9,612	56,543	56,543	9,612	Cumulative Total
Productivity	1,670	9,821	66,364	1,670	9,313

The first factor consists of 12 items and the second factor consists of 5 items. Pattern matrix of these factors is given in Table 3.

**Table 3.** Pattern Matrix

İfadeler	Component	
	1	2
Women's employment in the workplace increases economic development.	0,977	
Women's employment in the workplace affects society positively.	0,957	
Women's employment in the workplace does not pose a moral problem	0,934	
Women's employment in the workplace will not increase unemployment.	0,890	
As a woman, I can easily adapt to the workplace environment where I will work.	0,884	
As a woman, I positively affect the workplace environment	0,883	
If I work in a workplace, my family's welfare will increase.	0,873	
If I work in a workplace, my family's peace will not be negatively affected	0,827	
There is no religious obstacle for women to work in the workplace.	0,774	
I think that working with women in the workplace will not disturb the men in the workplace.	0,726	
Working of women in the workplace increases competition in the workplace and increases productivity.	0,539	
Turkish society is not against a woman working in the workplace.	0,429	
Working in a workplace will not strain me psychologically.		0,802
Children do not prevent me from working in a workplace.		0,796
Working in the workplace does not strain me physically		0,737
My monthly discomfort or my chances of getting pregnant will not negatively affect my ability to work at work.		0,736
Household chores (cleaning, cooking, ironing, etc.) do not prevent me from working in a workplace		0,707

The AVE value of the first scale was calculated as 0.51 and the CR value was calculated as 0.96. The scale ensured compositional validity as  $AVE > 0.50$ ,  $CR > 0.70$  and

CR>AVE. The AVE value of the second scale was found to be 0.57 and the CR value was 0.87. Since AVE>0.50, CR>0.70, and CR>AVE, this scale also achieved compositional validity.

In our hypothesis tests, two hypotheses were accepted. These hypotheses are as follows.

H1: Environmental factors vary according to marital status.

H2: Environmental factors vary according to having children

While the average of environmental factors was 4.00 for married people, this average was 4.21 for singles. This shows a difference between married and single people at the 5% significance level (Independent Sample T-test, Tamhane, sig:0.033). However, while the average of participants who do not have children is 3.94, the average of participants who have children is 4.21, which is a significant difference at the 5% level (Independent Sample T-test, sig:0.002).

**Table 4.** Correlation Matrix

<b>Component</b>	<b>Environmental</b>	<b>Productivity</b>
	1	,610
Enviromental		,000
	453	453
	,610	1
Productivity	,000	
	453	453

As seen in Table 4, there is a positive correlation between the Environmental and Efficiency perception factors and is significant at the 1% significance level. The correlation coefficient is 0.610, which reveals that the relationship is strong (Küçük, 2016, pp.250).

We also performed regression analysis for the relationship between productivity and environmental perception factors. The results of regression model is given in Table 5. It is possible to say that there is no autocorrelation since the Durbin-Watson value is between 1.5 and 2.5 in both regression models. Regression analysis revealed a positive significant relationship between productivity and environmental perception factors. The R2 value for Model 1 was found to be 0.372, which showed that 37% of the environmental perception was explained by the perception of efficiency. The R2 value for Model 2 was found to be 0.372, which showed that 37% of the productivity perception was explained by environmental perception. Since the standardized coefficient for model 1 is 1.366, it was concluded that a one-unit increase in productivity perception increases the environmental factor by 1.366 units. For Model 2, the standardized coefficient was found

to be 0.272 and it was concluded that a one-unit increase in the environmental perception factor increased the productivity perception by 0.27.

**Table 5.** Regression Model

<b>Model 1</b>	<b>R<sup>2</sup> (adjusted)</b>	<b>DB (Dur.Wat)</b>	<b>Anova, (F), sig</b>	<b>β<sub>0</sub>, (t), sig.</b>	<b>B<sub>1</sub>, (t), sig.</b>
Dependent: Enviromental, Independent: Productivity	0,372	1,957	19733,957 266,857 0,000	25,138 16,623 0,000	1,366 16,336 0,000
Dependent: Productivity Independent: Environment	0,372	1,991	3932,641 266,854 0,000	4,109 4,919 0,000	0,272 16,336 0,000

## 5. Conclusion

One of Türkiye's most important economic problems is the low rate of women's labour force participation. Even though the female labour force participation rate in Türkiye has increased in recent years, it is still far behind other OECD and EU countries. Our study aims to investigate the environmental and productivity perceptions that affect women's participation in the labour force.

Our research revealed that participants have the perception that female labour force will positively affect society, workplace and family. This result is not surprising because one of the limitations of our study is that it was conducted on working women. We witness studies in the literature showing that social pressure affects women's decision to join the labour force (Korkmaz & Korkut, 2012; Kılıç & Öztürk, 2014; Yılmaz & Zogal, 2015; Çelebioğlu, 2017; Zeren & Savrul, 2017; Akdemir et.al. 2019; Almiaçık et.al. 2019; Aldan & Öztürk, 2020; Nasir et.al. 2021; Gençtürk, 2022). Working women can be considered as individuals who have overcome social pressure. Therefore, it is not surprising that working women think that women's employment positively affects society, family and workplace.

It was also revealed that the participants had nearly high perception that women were not behind men in terms of productivity at workplace. It is thought that the fact that our participants were working women also affected this result. Because there is nothing more natural than women working in a workplace having self-confidence and thinking that their productivity is high. There are studies in the literature that as women's education increases, their productivity and participation in the labour force will increase (Taşseven, 2017; Yamak et.al. 2012; Er, 2013; Kılıç & Öztürk, 2014; Yılmaz & Zogal, 2015; Akgeyik, 2017; Taşseven, 2017; Tunç, 2018; Akdemir et.al. 2019; Koç & Şahpaz, 2020; Cheema et.al. 2021; Gençtürk, 2022). In fact, this result can be expected to be higher, which encourages new studies in this field in the literature.

Environmental factors vary according to marital status and environmental factors vary according to having children. It is seen that the environmental perception factor of singles is higher. This may be because singles have to struggle more with environmental pressures. This result also applies to those who have children. The environmental perception factor of those who have children was found to be higher. Current literature (Kılıç & Öztürk, 2014; Yılmaz & Zogal, 2015; Gehringer & Klasen, 2017; Güçlü, 2017; Zeren & Savrul, 2017) states that it is more difficult for women with children to participate in the labour force, but it is a surprising result that the environmental perception factors of those with children are higher in our study. This may be because those who have children are exposed to more social pressure, and to combat this, they defend the benefits of women's employment to society more faithfully. Additionally, Yamak et al. (2012, pp.57)'s approach that the increase in the dependent population (children and the elderly) may facilitate women's participation in the labour force should also be taken into consideration. There are academic studies showing that marital status and child ownership affect women's participation in the labour force (Yamak et.al. 2012; Kılıç & Öztürk, 2014; Yılmaz & Zogal, 2015; Güçlü, 2017; Tunç, 2018; Aldan & Öztürk, 2020; Gençtürk, 2022).

It is important to note that our study was limited by being applied to working women in Türkiye. Applying environmental and productivity perceptions to non-working women will fill a gap in the literature. Possibly, different results may be obtained in a study conducted on unemployed women. The results of our study and the results of the academic study conducted on unemployed women may be guiding for politicians and scientists. In addition, this study can be applied in countries other than Türkiye and may lead to different results due to the differences in culture.

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