



## **BUSINESS ETHICS CHALLENGES AND A COMPREHENSIVE UNDERSTANDING OF** TACKLING CHILD LABOR IN TURKEY

Mehmet Emirhan Kula, <sup>(D)</sup> https://orcid.org/0000-0002-4564-0170 Ph.D., Erzurum Technical University, Turkey İkram Yusuf YarbaSi, 🕩 https://orcid.org/0000-0003-4689-5121 Ph.D., Erzurum Technical University, Turkey Corresponding author: Mehmet Emirhan Kula, emirhan.kula@erzurum.edu.tr **Type of manuscript:** research paper

**Abstract:** Until a few decades ago, ethical issues were defined in terms of fraudulent behavior and workplace working conditions, but the concept itself has now expanded. Child labor, considered cheap and easily manageable labor in the globalizing world, is one of the chronic problems of many developing and developed countries, including Turkey. Recent studies show that child's work areas are increasingly diversified, and child labor has become an important factor in the global cheap labor market. For whatever reason, it is a universal ethical issue that children work as young adults in many different sectors, from mining to textiles and agriculture to the automotive industry. In this context, the issue of child labor in Turkey has been discussed in the context of business ethics principles. In the study, three main factors were determined as demographic, educational life, and business life variables as the determinants of the reasons for the involvement of children in work life. The multinomial logit model was used to test the relationships between the variables. The research used data from 1128 children in employment obtained from the Child Labor Force Research Micro Data Set carried out by the Turkish Statistical Institute in 2019. According to the results of the research, it has been determined that the variables related to the education life (educational status of the child, family education status, apprenticeship education status) and the variables related to the business life (working sector, working time, income and family working status) affect the working reasons of children. As a result, in an environment of increasing cooperation and competition between countries with the effect of globalization, each country's reflection of a common definition of child labor in its own national legislation is one of the most important steps to be taken in preventing child labor. In addition, in underdeveloped and developing countries, eliminating poverty, expanding school attendance conditions, and raising awareness about the existence of children's rights as individuals will be important steps. It must be admitted that it will not be possible to end child labor in all its aspects without developing a society, and public and private sector management that acts with a sense of ethical responsibility.

Keywords: business ethics, child development, child labor, human resources, work preference. JEL Classification: E24, I24, M54, Z22

Received: 23 January 2023

Accepted: 18 March 2023

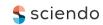
Published: 31 March 2023

Funding: There is no funding for this research. Publisher: Sumy State University, Ukraine

Cite as: Kula, M. E., & YarbaSi, I. Y. (2023). Business Ethics Challenges and A Comprehensive Understanding of Tackling Child Labor in Turkey. Marketing and Management of Innovations, 1, 64-74. https://doi.org/10.21272/mmi.2023.1-06

 $<sup>\</sup>odot$ Copyright: © 2023 by the author. Licensee Sumy State University, Ukraine. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/ 4.0/).





Introduction. The competitive structure of today's global business world forces managers to face different ethical dilemmas. Until a few decades ago, ethical issues were defined in terms of fraudulent behavior and workplace working conditions, but the concept itself has now expanded. Increasing social awareness towards the environment, developing global perspectives on health issues, cross-border mobility in the financial world, and child labor issues spreading like an epidemic worldwide. Child labor, considered cheap and easily manageable labor in the globalizing world, is one of the chronic problems of many developing and developed countries, including Turkey. Considering that this problem has political, social, and economic reasons is necessary. Recent studies show that children's work areas are increasingly diversified and child labor has become an important factor in the global cheap labor market. For whatever reason, it is a universal ethical issue that children work as «little adults» (Yayla, 2017) in many different sectors, from mining to textile, from agriculture to the automotive industry. In this context, answers to several research questions were sought in the study: On which parameters do child labor concentrate in Turkey? What is the relationship between education and child labor? For what reasons do children feel the need to work? The study discusses the principles of business ethics through the current child labor data of the Turkish Statistical Institute (Turkstat). Theoretically, it has a unique value in terms of making an ethical discussion with child labor data on a national scale. In addition, the findings obtained from the study will also guide the development of regulations for the employment obligations of children and the development of policies to improve the living conditions of children in employment. In the study, first of all, a literature review on business ethics and child labor was made. Then, the results were evaluated in the axis of the findings related to estimating the multinomial logit model.

Literature Review. Businesses are no longer just commercial organizations. They are considered social, cultural, and politically organized structures as well as economic and commercial. This acceptance reveals the need for businesses to change their behavioral standards and creates social pressure in this direction. For businesses to adapt to international business standards, being competitive and innovative, taking social responsibility towards society, and adopting ethical values have emerged as issues that have increased in importance in recent years (Gok, 2008). It must be admitted that people can hold on to life by working. Work, as a social activity ensuring the continuity of life, is one of the most central areas of human life, which dates back to the existence of humanity (Tinar, 1996). In a sense, it is the center of purpose, belonging, and identity in searching for meaning in existence (Michaelson et al., 2014). Work is the actions that people perform by using their physical or mental powers in return for a fee to meet their needs to maintain their lives (Talas, 1990). Working is not only a necessity for the individual to continue his life, but it is also a moral attitude that must be carried out under the responsibility of the individual (Aktan, 1999). A person performs a job or service for an agreed price. In this sense, ethics presents a framework of values that guide and limit the employee during work (Erken, 2010). Generally, business ethics deals with the ethical dimensions of behavior at both the business and employee levels in producing and distributing products or services. It includes the rules that guide these behaviors or is simply understood as the everyday moral instructions-in-practice in organizations (Chell et al., 2016). Business ethics are the rules that companies must comply with while carrying out their activities and have a universal character (Atar and Sener, 2021). In addition, business ethics covers the processes related to the execution of all functions related to a business administration, evaluates commercial organizations as a whole, and observes ethical principles with a holistic approach (Broni et al., 2017; Velentzas and Broni, 2010). In summary, business ethics offer instructions and recommendations on how business practices could be changed and improved to better demonstrate human values in business life than before; also a philosophical field and set of universal values that question the connections between good and bad, right and wrong business behaviors (BektaS and Koseoglu, 2008).

The concept of child labor consists of both the concept of a child tied to age criteria and the worker, which means a person who works dependently against an employer for a certain wage. Based on these concepts, we can define a child working as a person under a certain age who works dependently against an employer for a certain wage (Sahin, 2010). Child labor is often broadly defined as work that deprives children of their childhood, diminishes their potential and dignity, and harms their physical and mental development. Child labor prevents children from attending school regularly, causing them to be deprived of their right to education and leaving school early, as well as mental, physical, social, or moral hazards (ilo.org<sup>1</sup>). It is forbidden to employ children under fifteen in Turkiye and European Union countries. However, children who have completed the age of fourteen and compulsory primary education may be employed in light jobs that will not hinder their physical, mental, social, and moral development and the attendance of those who continue their education at school. Children who have not completed the age of fourteen can be employed in arts, culture, and advertising activities that will not prevent their physical, mental, social, and moral development and the





attendance of those who continue their education to school, provided that they make a written contract and get separate permission for each activity (Nagy, 2003).

A total of 160 million children, 63 million girls and 97 million boys, in other words, one out of every 10 children, are currently working as child laborers. According to the report published by the International Labor Organization (ILO) and the United Nations Children's Fund (UNICEF) on 10 June 2021, the number of children working as child laborers has increased by 8.4 million in the last four years to 160 million worldwide; Another 9 million children are at risk due to the effects of the COVID-19 pandemic (www.ilo.org<sup>2</sup>). It would be useful to approach the issue from two different perspectives when identifying the causes that lead to child labor. The first of these is to determine the factors that force the child to supply labor, and the other is to clarify why employers direct their labor demands to children (Tunccan, 2012). So much so that child labor is largely caused by structural problems such as the income level of countries, degrees of industrialization and globalization, population growth rate, and approach to education. Child labor has many short- and long-term negative effects, such as decreased human capital growth and contrary effects on future labor market values. Such negative effects will obstruct individual and national well-being (Tang and Zhao, 2022). It should be noted that the inadequacies in the physical conditions of education opportunities, especially in economic conditions, and the parents' perception of education are among the determining factors in children leaving education life at an early age and turning to business life (Tunccan, 2012). In other words, concrete data obtained from studies conducted on different continents show that as the school enrollment and school attendance rates of individuals in the child worker age group increase, their tendency to work decreases (Kozhaya and Flores, 2022). In this sense, it can be said that the social order-providing role of education in school is not to be underestimated.

**Methodology and research methods.** In the study, three main factors were determined as demographic, educational life, and business life variables as the determinants of the reasons for the involvement of children in working life. The model of the research is shown in Figure 1.

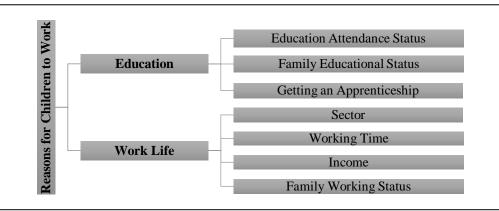


Figure 1. Research Model

Sources: developed by the authors.

The study established two main hypotheses and seven sub-hypotheses under these two main hypotheses.

**H**<sup>1</sup>: Variables related to education life affect children's working reasons.

 $\mathbf{H}^{1a}$ : The educational status of the child has an effect on the reason for working.

 $\mathbf{H}^{1b}$ : The educational status of the child's family has an effect on the reason for working.

 $\mathbf{H}^{1c}$ : The child's apprenticeship training has an impact on the reason for working.

 $\mathbf{H}^2$ : Variables related to work-life affect children's working reasons.

 $\mathbf{H}^{2a}$ : The sector in which the child works has an effect on the reason for working.

 $\mathbf{H}^{2b}$ : The child's working time has an effect on the reason for working.

 $\mathbf{H}^{2c}$ : The income earned by the child has an impact on the reason for working.

 $\mathbf{H}^{2d}$ : The working status of the child's family has an impact on the reason for working.

Information on the variables used in the study is shown in Table 1. In this study, the factors affecting the reasons for working preferences of the children in employment were investigated by using the unordered qualitative preference models with the variables expressed in Table 1. In this study, the data related to the variables in question were used from the Child Labor Force Research Micro Data Set conducted by TURKSTAT in 2019 (TUIK, 2019). The survey was conducted on 25190 children. Only 1128 children in employment were included in the study.





 Table 1. Variable Descriptions

<ul> <li>School, 4: General High School, 5: Vocational or technical high school)</li> <li>Education Continuation</li> <li>Apprenticeship Participation</li> <li>Apprenticeship Participation</li> <li>Ketex (0: No, 1: Yes)</li> <li>Education</li> <li>Attendance to education (1: Those who continue education, 2: Those who do not continue education, 3: Those who are below the compulsory school starting age)</li> <li>Mother Education</li> <li>Education</li> <li>Education</li> <li>Education</li> <li>Education</li> <li>Education</li> <li>Education</li> <li>Education</li> <li>Attendance to education (1: Those who continue education, 2: Those who do not continue education, 3: Those who are below the compulsory school starting age)</li> <li>Mother Education</li> <li>Father Education</li> <li>Fathers' educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Father Education</li> <li>Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 4: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>Mother Staus</li> <li>Monthy cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>Reason for Working</li> <li>Household Staus</li> <li>Employment staus of the household head (1: employed, 2: unemployed, 3: not included in th labor force)</li> </ul>	Code		Variable Description						
<ul> <li>S2 Education Continuation</li> <li>S3 Apprenticeship Participation</li> <li>S4 Education</li> <li>S4 Education</li> <li>S5 Mother Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education</li> <li>S6 Father Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education</li> <li>S6 Father Education Educational or technical high school, 5: higher education)</li> <li>S7 Child Employed</li> <li>S9 Occupation</li> <li>S9 Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation</li> <li>S10 Work Time</li> <li>Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group</li> <li>S01 Work Time</li> <li>S12 Reason for Working</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> <li>S14 Mother Status</li> </ul>	<b>S</b> 1	School Completed Last completed school (1: did not complete a school, 2: Primary school, 3: General Secondary							
<ul> <li>Continuation</li> <li>Apprenticeship Participation</li> <li>Kany apprenticeship training organized by the Ministry of National Education in the Last Participation</li> <li>Kany apprenticeship training organized by the Ministry of National Education in the Last Weeks (0: No, 1: Yes)</li> <li>Education</li> <li>Attendance to education (1: Those who continue education, 2: Those who do not continu education, 3: Those who are below the compulsory school starting age)</li> <li>Mother Education</li> <li>Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Father Education</li> <li>Fathers' educational or technical high school, 5: higher education)</li> <li>Child Employed</li> <li>Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>Sector</li> <li>Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>Occupation</li> <li>Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 1 technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>Work Time</li> <li>Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>Income Group</li> <li>Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-80 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>Reason for</li> <li>What is your main reason for Working in a Business? (1: Contributing to household income ar helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>Household Status</li> <li>Employment status of the household head (1: employed, 2: unemployed, 3: not included in th labor forc</li></ul>									
<ul> <li>Apprenticeship Participation</li> <li>Any apprenticeship training organized by the Ministry of National Education in the Last Weeks (0: No, 1: Yes)</li> <li>Education</li> <li>Education</li> <li>Education is the action of the education (1: Those who continue education, 2: Those who do not continue education, 3: Those who are below the compulsory school starting age)</li> <li>Mother Education</li> <li>Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Father Education</li> <li>Fathers' educational or technical high school, 5: higher education)</li> <li>Child Employed</li> <li>Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>Occupation</li> <li>Employees is SCO 08 Occupation code (1: managers, 2: professional occupational groups, 4: 0: frice and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>Work Time</li> <li>Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>Income Group</li> <li>Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>Reason for</li> <li>Working</li> <li>Household Status</li> <li>Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>Mother Status</li> </ul>	S2	Education	Educational attendance (0: Continuing education, 1: Not continuing education)						
<ul> <li>Participation Weeks (0: No, 1: Yes)</li> <li>S4 Education Attendance to education (1: Those who continue education, 2: Those who do not continue education, 3: Those who are below the compulsory school starting age)</li> <li>S5 Mother Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education Educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees is SCO 08 Occupation code (1: managers, 2: professional occupational groups, 4: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for What is your main reason for Working in a Business? (1: Contributing to household income ar helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> </ul>		Continuation							
<ul> <li>S4 Education Attendance to education (1: Those who continue education, 2: Those who do not continue education, 3: Those who are below the compulsory school starting age)</li> <li>S5 Mother Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800, 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>	<b>S</b> 3	Apprenticeship	Any apprenticeship training organized by the Ministry of National Education in the Last 4						
<ul> <li>education, 3: Those who are below the compulsory school starting age)</li> <li>S5 Mother Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for What is your main reason for Working in a Business? (1: Contributing to household income ar helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> </ul>		Participation	Weeks (0: No, 1: Yes)						
<ul> <li>Mother Education Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>Occupation Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>Occupation Employees' economic activity (1: agriculture, 5: service and sales personnel, 6: skilled agriculture, 6: sembloyees, 9: non-qualified jobs)</li> <li>Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800, 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>Reason for Working their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> </ul>	<b>S</b> 4	Education	Attendance to education (1: Those who continue education, 2: Those who do not continue						
<ul> <li>school, 4: Vocational or technical high school, 5: higher education)</li> <li>S6 Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in thabor force)</li> <li>S14 Mother Status</li> </ul>			education, 3: Those who are below the compulsory school starting age)						
<ul> <li>S6 Father Education Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: hig school, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800, 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in thabor force)</li> <li>S14 Mother Status</li> </ul>	S5	Mother Education	Educational status of mothers (1: illiterate, 2: those with less than high school education, 3: high						
<ul> <li>School, 4: Vocational or technical high school, 5: higher education)</li> <li>S7 Child Employed</li> <li>Sector</li> <li>S9 Occupation</li> <li>Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation</li> <li>Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800, 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for What is your main reason for Working in a Business? (1: Contributing to household income an helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> </ul>			school, 4: Vocational or technical high school, 5: higher education)						
<ul> <li>S7 Child Employed Employment status in the 5-12 age group (1: In employment, 2: Not in employment)</li> <li>S8 Sector Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>	<b>S</b> 6	Father Education	Fathers' educational status (1: illiterate, 2: those with less than high school education, 3: high						
<ul> <li>S8 Sector</li> <li>S9 Occupation</li> <li>S9 Occupation</li> <li>S9 Employees' economic activity (1: agriculture, 2: industry, 3: service)</li> <li>S9 Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time</li> <li>S10 Work Time</li> <li>Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>S11 Income Group</li> <li>S12 Reason for Working</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> <li>S14 Mother Status</li> </ul>			school, 4: Vocational or technical high school, 5: higher education)						
<ul> <li>S9 Occupation Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3: technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)</li> </ul>	<b>S</b> 7	Child Employed	Employment status in the 5-12 age group (1: In employment, 2: Not in employment)						
<ul> <li>technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agricultur forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40, 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800, 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)</li> </ul>	<b>S</b> 8	Sector	Employees' economic activity (1: agriculture, 2: industry, 3: service)						
<ul> <li>forestry, and aquaculture, 7: craftsmen and related jobs, 8: plant and machine operators an assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working What is your main reason for Working in a Business? (1: Contributing to household income ar helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>	S9	Occupation	Employees ISCO 08 Occupation code (1: managers, 2: professional occupational groups, 3:						
<ul> <li>S10 Work Time assemblers, 9: non-qualified jobs)</li> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>			technicians, 4: office and customer service, 5: service and sales personnel, 6: skilled agriculture,						
<ul> <li>S10 Work Time Actual weekly working time (hours) of those employed (1:1-7, 2:8-15,3:16-30.4:31-39, 5:40 42, 6:43+, 7: not at work)</li> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12 Reason for Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>									
<ul> <li>S11 Income Group</li> <li>S11 Income Group</li> <li>S12 Reason for Working</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> <li>S14 Mother Status</li> <li>S14 Mother Status</li> <li>S12 Reason for Working in the properties of the properties o</li></ul>									
<ul> <li>S11 Income Group Monthly cash income of working children (TL) (1:0-200, 2:201-400, 3:401-600, 4:601-800 5:801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income) What is your main reason for Working in a Business? (1: Contributing to household income an helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>	S10	Work Time							
<ul> <li>S12 Reason for Working</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> <li>S14 Mother Status</li> <li>S15801-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S1001-1000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S11000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S12000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1001-1200, 7:1201+, 8: Those who do not want to declare their income)</li> <li>S14000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6: 1000, 6:</li></ul>									
<ul> <li>S12 Reason for Working</li> <li>S13 Household Status</li> <li>S14 Mother Status</li> <li>What is your main reason for Working in a Business? (1: Contributing to household income and helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status</li> <li>Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status</li> </ul>	S11	Income Group							
<ul> <li>Working helping with their economic activities, 2: learning a job, having a profession, 3: Meeting the own needs)</li> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)</li> </ul>									
own needs)S13Household StatusEmployment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)S14Mother StatusEmployment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)	S12		What is your main reason for Working in a Business? (1: Contributing to household income and						
<ul> <li>S13 Household Status Employment status of the household head (1: employed, 2: unemployed, 3: not included in the labor force)</li> <li>S14 Mother Status Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)</li> </ul>		Working	helping with their economic activities, 2: learning a job, having a profession, 3: Meeting their						
S14Mother StatusIabor force)Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)			own needs)						
S14 Mother Status Employment status of mothers (1: employed, 2: unemployed, 3: not in the labor force)	S13	Household Status	Employment status of the household head (1: employed, 2: unemployed, 3: not included in the						
S15 Eather Status Employment status of fathers (1, amployed 2, unemployed 2, and in the labor famo)									
515 Famel Status Employment status of latners (1: employed, 2: unemployed, 5: not in the labor force)	S15	Father Status	Employment status of fathers (1: employed, 2: unemployed, 3: not in the labor force)						

Sources: developed by the authors.

Information on the descriptive statistics (frequency and percentage) of the variables is given in Table 2. According to Table 2, 4.3% of the employed children stated that they did not finish any school, 14% completed primary school, 80% secondary school, 1% general high school, and 1.1% vocational high school.

Table 2. Descriptive Statistics								
Code	Variable	Variable Description	Frequency	Percentage				
<b>S</b> 1		Did not finish school	49	4.3				
		Primary school	159	14.1				
	School Completed	General Secondary School	902	80.0				
		General High School	6	0.5				
		Vocational High School	12	1.1				
S2	Apprenticeship Participation	No	722	64.06				
	-	Yes	405	35.94				
<b>S</b> 3	Education	No	836	92.7				
	Continuation	Yes	66	7.3				
<b>S</b> 4	Education	continuing education	763	67.6				
		not continuing education	365	32.4				
S5	Mother Education	illiterate	255	23.4				
		Below high school education	783	72.0				
		High school	25	2.3				
		Vocational or technical high school	21	1.9				
		High education	4	0.4				
S6	Father Education	illiterate	41	4.1				
		Below high school education	837	83.8				
		High school	47	4.7				





## Continued Table 2

Code	Variable	Variable Description	Frequency	Percentage
		Vocational or technical high school	56	5.6
		High education	18	1.8
<b>S</b> 8	Sector	Agriculture	415	36.8
		Industry	222	19.7
		Service	491	43.5
S10	Work Time	1-7	123	10.9
		8-15	133	11.8
		16-30	395	35.0
		31-39	65	5.8
		40-42	61	5.4
		43+	349	30.9
		those not at work	2	0.2
S11	Income Group	0-200	24	3.7
	Ĩ	201-400	85	12.9
		401-600	204	31.1
		601-800	64	9.7
		801-1000	55	8.4
		1001-1200	28	4.3
		1201+	127	19.3
		Those who do not want to declare their income	70	10.7
S12	Reason for	Contributing to household income and assisting in their	696	61.7
	Working	economic activities		
	U	learn a job	369	32.7
		meet your own needs	62	5.6
S14	Mother Status	in Employment	582	53.5
		Unemployed	39	3.6
		not included in the workforce	467	42.9
S15	Father Status	in Employment	857	85.8
		Unemployed	49	4.9
		not included in the workforce	93	9.3
Souro	as · developed by	the authors		

Sources: developed by the authors.

To the question of whether or not they received apprenticeship training, 93% of the children answered «no» and 7% answered «yes». 68% of the employed children stated that they continued their education, and 32% did not continue their education. 23% of mothers of employed children are illiterate, 72% are educated below high school, 2% are high school graduates, 2% are vocational high school graduates and 0.4% are university graduates. 4.1% of the fathers of employed children are illiterate, 84% have less than a high school education, 5% are high school graduates, 6% are vocational high school graduates, and 2% are university graduates. 37% of children are employed in the agricultural sector, 20% in industry, and 44% in the service sector. Within a month, 4% of children are earning 200 Turkish liras (TL) or less, 13% are earning 201-400 TL, 31% are earning 401-600 TL, 10% are earning 601-800 TL, 8% are earning 801-1000 TL, % 4 of them earn 1001-1200 TL and 19% earn 1201 TL or more.

Considering the reasons for the children working, which is the dependent variable of the study, 62% of the children stated that they work to contribute to the household income and help their economic activities, 33% to learn a job and have a profession, and 6% to meet their own needs. Children stated that 54% of their mothers are employed, 4% are unemployed, and 43% are not in the labor force. Children stated that 86% of their fathers are employed, 5% are unemployed, and 10% are not in the labor force.

It is possible to talk about preferences in every condition of human existence. People usually continue life by choosing the best alternative for themselves. At this point, categorical variables are observed in many areas. Situations where categorical variables are observed as dependent variables, are also frequently encountered. Multiple models are divided into two unordered qualitative preference models, which are used to predict dependent variables consisting of more than two categories with nominal scale, and ordinal qualitative preference models, which predict dependent variables with more than two categories with ordinal scale (Davidson and Mackinnon, 2004). Unordered qualitative preference models are used when the dependent variable has more than two alternatives, and there is no ordering between these alternatives. Unordered qualitative preference models were preferred since the reasons for the study of the children, which constitute the study's dependent variable, also fit this situation.





The multinomial logit model is an extended version of the binary logit model with respect to the J alternative, and the dependent variable has a multinomial distribution. In the multinomial logit model, the categories that make up the dependent variable should be independent, and there should be no ordering between these categories. The individual will choose the best alternative for himself/herself, or he/she will prefer the category that gives him/her the most benefit. The random utility theory underlies this choice to be made. According to this theory, the individual will make a good choice and it is assumed that they will provide the highest benefit (Amemiya, 1981; Bartels et al., 1999).

In multinomial logit models, linearity and normal distribution assumptions must not be satisfied. The dependent variable is not an ordered categorical variable; the dependent variable must be classifiable (Long, 1997) among M categories constituting the dependent variable. Probabilities are calculated to determine the extent to which the option would be realized. The probability of m option occurring for a determined value of the explanatory variable of the dependent variable with category M is  $P(Y_i = m/X_i)$ . This function is a linear function of  $X_i\beta$ . According to the multinomial logit model, the probability of individual i choosing the m-category among M categories is shown in Equation 1.

$$P(Y_i = m/X_i) = \frac{e^{Z_m}}{\sum_{j=1}^{M} e^{Z_{ij}}} = \frac{e^{X_i'\beta_i}}{\sum_{j=1}^{M} e^{X_i'\beta_j}}$$
(1)

The multinomial logit models are estimated using the maximum likelihood method. Considering the situation in which there are n individuals in the study and the children who are the dependent variable of the ith individual are faced with 3 categories of reasons for working (contributing to household income and helping their economic activities, learning a job, having a job and meeting their own needs), the log-likelihood function can be found in the equation. It is expressed in 2.

$$lnL = \sum_{i=1}^{n} \sum_{j=1}^{j} Y_{ij} lnP_{ij} = \sum_{i=1}^{n} \sum_{j=1}^{j} Y_{ij} ln \frac{e^{\beta' X_{ij}}}{\sum_{k} e^{\beta' X_{ij}}} = \sum_{i} \sum_{j} Y_{ij} \beta' X_{ij} - \sum_{i} \sum_{j} Y_{ij} \ln\left(\sum_{k} \beta' X_{ij}\right)$$
(2)

The log-likelihood function is maximized using the Newton-Raphson method, and the parameters are estimated. The estimators obtained from this model are consistent, asymptotic normal, and asymptotic efficient (Long, 1997). In Equation 2, Y is the dependent variable, X is the vector of the independent variables, and  $\beta$  is the parameter vector.

In the multinomial logit model, the assumption of «independence of irrelevant alternatives (IIA)», which states that adding a category to the dependent variable or changing the properties of existing categories, has no effect on the different rates (Hensher et al., 2005). The Hausman test developed by Hausman and McFadden (1984) is used to test the validity of the IIA assumption. In the Hausman test, in the first stage, the model, including all the dependent variable categories, is estimated. In the second stage, the limited model is estimated by removing one or more categories. If the difference between the two models is insignificant, it is decided that the IIA assumption is valid (Long and Freese, 2006). The Hausman test statistic conforms to the  $\chi^2$  distribution with k degrees of freedom. The basic hypothesis is «the assumption of independence of irrelevant alternatives is valid». If the basic hypothesis is rejected, the multinomial logit model is not used. Alternatively, analyzes are carried out with the multinomial probit model (Cheng and Long, 2007).

If the IIA assumption is met, goodness-of-fit criteria should be used to determine whether the model estimation obtained in the multinomial logit model is statistically appropriate and which of the alternative models gives better results (Maddala, 1986). McFadden's Adjusted R2, Pseduo-R2, and log-likelihood function value are used to determine the model's goodness of fit, and Akaike Information Criteria (AIC) and Bayesian Information Criteria (BIC) criteria are used for model selection. The model that minimizes the AIC and BIC criteria is the preferable model (Raftery, 1995).

**Results.** Alternative independent variables were included in the model and it was determined that the model, considering the AIC and BIC criteria, are the variables that affect the preferences of the children's reasons for working. The results are given in Table 3. Also, in Table 3, the coefficients ( $\beta$ ) obtained for each coefficient of the dependent variable in the first column and the marginal effects (dy/dx) in the second column are given. The variables S1, S4, S7, S9, S13 were excluded from the model because they were highly correlated with some other independent variables in the model.

According to the results of the Hausman-McFadden test statistics given in Table 3, it was determined that the IIA assumption was met for all categories of the dependent variable. According to the result of Wald test





statistics (Wald  $X^2(14) = 6122.80$ ; Probability Value = 0.0000), the model as a whole was determined to be statistically significant.

According to the marginal impact values, children who continue their education are 14.6% less likely to work to contribute to the household income and provide economic benefits to their families, while 10.2% more likely to learn a job and have a job, and 4.5% more to meet their own needs, than children who do not continue their education found to be excessive.

Varabile			Α	В		С	
varablie		β	dy/dx	β	dy/dx	β	dy/dx
S2		-	-0.146***	1.451***	0.102**	1.433***	0.045
			(0.033)	(0.404)	(0.040)	(0.494)	(0.029)
S3		-	-1.420***	19.645	1.910***	1.480**	-0.490***
			(0.145)	(1121.336)	(0.156)	(0.633)	(0.093)
S5							
	S5_2	-	-0.013	0.213	0.024	-0.060	-0.010
			(0.040)	(0.405)	(0.043)	(0.544)	(0.035)
	S5_3	-	-0.354***	15.595	0.069	16.723***	0.285**
	<b>a-</b> 4		(0.034)	(2702.939)	(0.112)	(1.144)	(0.113)
	S5_4	-	-0.115	1.434	0.135	0.399	-0.021
	<b></b>		(0.102)	(1.246)	(0.083)	(1.668)	(0.078)
	S5_5		-0.353***	17.217	0.447***	-1.436	-0.093***
97			(0.034)	(5239.968)	(0.0371)	(1.235)	(0.031)
<b>S</b> 6	87 A		0.064	0 645	0.049	0 565	0.017
	S6_2	-	-0.064	0.645	0.048	0.565	0.016
	56.2		(0.078)	(0.947)	(0.086)	(1.495)	(0.085) -0.057
	S6_3	-	0.054	-0.255	0.003	-1.858	
	SC 4		(0.098)	(1.132)	(0.106)	(1.730) -0.517	(0.083)
	S6_4	-	-0.023 (0.100)	0.455 (1.192)	0.055		-0.032 (0.091)
	S6 5		-0.164	(1.192)	(0.098) 0.129	(1.898) 1.415	0.035
	S6_5		(0.104)	(1.423)	(0.129	(1.819)	(0.114)
S8			(0.107)	(1.423)	(0.123)	(1.019)	(0.114)
50	S8_2	-	-0.298***	2.974***	0.297***	1.184	0.001
	50_2		(0.102)	(1.153)	(0.105)	(0.953)	(0.047)
	<b>S8_3</b>	-	-0.316***	2.960***	0.277***	1.792*	0.0387
	20_0		(0.104)	(1.149)	(0.106)	(0.942)	(0.047)
S10			(01-0-1)	()	(00000)	(01)	(01011)
	S10_2	-	0.049	-0.854	-0.137	0.007	0.089
	—		(0.207)	(2.016)	(0.228)	(1.864)	(0.209)
	S10_3	-	0.035	0.283	0.156	-1.875	-0.191
	_		(0.173)	(1.779)	(0.193)	(1.607)	(0.151)
	S10_4	-	0.005	0.585	0.185	-1.661	-0.191
			(0.309)	(3.142)	(0.309)	(2.774)	(0.153)
	S10_5	-	0.195	-1.302	-0.067	-1.859	-0.128
			(0.193)	(1.903)	(0.219)	(1.798)	(0.169)
	S10_6	-	0.233	-1.617	-0.109	-1.962	-0.123
			(0.179)	(1.817)	(0.206)	(1.592)	(0.157)
S11							
	S11_2	-	0.083	0.047	0.159	-2.212	-0.242
	~		(0.136)	(1.297)	(0.169)	(1.447)	(0.183)
	S11_3	-	0.026	0.593	0.221	-1.949	-0.246
			(0.128)	(1.229)	(0.159)	(1.454)	(0.183)
	S11_4	-	0.134	-0.395	0.110	-2.527*	-0.244
	G44 -		(0.132)	(1.254)	(0.162)	(1.489)	(0.185)
	S11_5	-	0.234	-1.198	0.016	-3.106*	-0.250
	011		(0.138)	(1.279)	(0.168)	(1.604)	(0.186)
	S11_6	-	0.383**	-2.622*	-0.182	-2.936*	-0.202
			(0.160)	(1.402)	(0.183)	(1.717)	(0.203)





						Continu	ed Table 3
Varabile		Α		В		С	
		β	dy/dx	β	dy/dx	β	dy/dx
S	511_7	-	0.193	-1.124	-0.010	-2.058	-0.183
			(0.132)	(1.256)	(0.167)	(1.399)	(0.187)
S	511_8	-	0.215	-1.722	-0.183	-1.543	-0.091
			(0.139)	(1.287)	(0.186)	(1.396)	(0.187
S14							
S	514_2	-	0.085	-0.827	-0.061	-0.805	-0.024
			(0.080)	(0.739)	(0.062)	(1.201)	(0.052)
S	514_3	-	-0.007	0.114	0.012	-0.022	-0.005
			(0.034)	(0.377)	(0.034)	(0.453)	(0.026)
S15							
S	15_2	-	0.042	-0.274	-0.008	-0.686	-0.034
			(0.048)	(0.533)	(0.053)	(0.799)	(0.042)
S	15_3	-	0.029	0.083	0.040	-1.475**	-0.068***
			(0.041)	(0.454)	(0.041)	(0.749)	(0.024)
Fixed Term		-		-3.081		0.125	
				(2.601)		(2.133)	
Hausman-Mc Fadden		1.39	90	10.350 10.3		10.35	50
Probability Value	0.96	56	0.241		0.24	1	

Log-likelihood: -244.64001; Wald  $X^2(14) = 6122.80$ ; Olasılık Degeri=0.0000; Pseudo  $R^2=0.4646$ 

*Notes:* (a) \*\*\*, \*\* and \* indicate statistical significance levels of 1%, 5% and 10%, respectively. (b) Values in parentheses are standard errors. (c) A: Contributing to household income and providing economic benefits, B: Learning a job and having a profession, C: It refers to those who work to meet their own needs.

Sources: developed by the authors.

Based on the model test, it was determined that children who received apprenticeship training were 142% less likely to work to contribute to household income and provide economic benefits to their families, 49% less likely to work to meet their own needs, and 191% more likely to work to learn a job and have a job, compared to children who did not receive apprenticeship training. It has been determined that the probability of working to contribute to the household income of children whose mothers are less than high school degrees is 35.4%, and the probability of working to meet their own needs is 28.5% more compared to children whose mothers are illiterate. It has been determined that children whose mothers are graduates of higher education are 35.3% less likely to work to contribute to the family economy, 9.3% less to meet their own needs, and 44.7% more to learn a job and have a profession, compared to children whose mothers are illiterate.

Children working in the industry sector are 29.8% less likely to contribute to the family economy than children working in the agricultural sector. In comparison, the probability of working on learning a job and having a profession is 29.7% higher. It has been determined that children working in the service sector are 31.6% less likely to work to contribute to the family economy than children working in the agricultural sector. In comparison, the probability of working on learning a job and having a profession is 27.7% more. It has been determined that children with a monthly income of 1001-1200 TL are 38.8% more likely to work to contribute to the family economy than a monthly income of 200 TL or less. Children whose fathers are not in the labor force are 6.8% less likely to work to meet their needs than those whose fathers are employed.

**Conclusions.** It can be observed that social resistance has started in recent years against the working life conditions that encourage the endless production and consumption of globalization. Illegal and unethical practices are among the main motivations that cause this resistance, and child labor is one of the sources of motivation (Asad et al., 2018). Firms that present themselves as ethical company to society claim that they do not use harmful products for consumers and declare that they are committed to labor and labor law and universal ethical values (Ferrell et al., 2019). In this sense, international companies especially try to determine their position in the market based on the perception that they are sensitive to issues such as children's rights and health because children have always been the most vulnerable members of any society. Since humans started to produce, children also helped their elders in their families. Although this helping work contributes to their physical and mental development from time to time, exploitation, starvation, being forced to work for long hours, injury, and death of children are also situations encountered from past to present (Tat, 2016). Child labor has become a conscious choice in many countries, especially since the industrial revolution, with pioneering reasons such as reducing labor costs and easy control of the workforce. At the same time, business



ethics aims to have value judgments in line with common goals and purposes in the business world by covering the whole world universally (Atacan and Genc, 2020). The extent to which this goal has been achieved is debatable. Because the religious beliefs, cultural codes, and value judgments of the society to which the companies belong can also affect the perception and practice of business ethics (Gallego-Alvarez et al.,2020).

Since the children constituting the study's dependent variable had more than two reasons for working, the multinomial logit model was used to test the relationship between the variables. The research used data from 1128 children in employment obtained from the Child Labor Force Research Micro Data Set carried out by TURKSTAT in 2019. According to the research results, it has been found that children who continue their education are more likely to work to learn a job, has a profession, and meet their own needs. In contrast, the children who do not continue their education are more likely to work to contribute to the household income and provide economic benefits. In this case, it is seen that the socio-economic factors that children sustain their lives directly affect the working preferences of children.

On the other hand, the probability of working for the purpose of learning a job and having a profession was found to be significantly higher for the children who received apprenticeship training. It has been determined that children who do not receive apprenticeship training have a high probability of working to contribute to the family income and meet their needs. In this sense, the importance of evaluating and disseminating apprenticeship training organized for the training of intermediate staff in needed sectors as a human resource training policy emerges.

When we look at the education-oriented findings of the study, it was found that the children of mothers who graduated from high school or lower were more likely to work for their own needs than those of illiterate mothers. At the same time, they were less likely to work to contribute to the family economy. Children whose mothers are higher education graduates are more likely to learn a job and work for a profession than children whose mothers are illiterate. On the other hand, children whose fathers are not in the labor force are less likely to work to meet their own needs than children whose fathers are employed. In another study on child labor in Turkiye, it was determined that child labor is higher in rural areas and parental education levels are lower in the same regions (Acaroglu, 2010; AvSar and Ogutogulları, 2012).

As a result, in an environment of increasing cooperation and competition between countries with the effect of globalization, each country's reflection of a common definition of child labor in its own national legislation is one of the most important steps to be taken in preventing child labor (Sahin, 2010). In addition, in underdeveloped and developing countries, eliminating poverty, expanding school attendance conditions, and raising awareness about children's rights as individuals will be important steps. It must be admitted that children have been working or are being made to work for a reason since human beings existed. On the other hand, some children must work due to their family conditions and provide for their families. In addition to the fact that children in this obligation, which should be questioned in terms of ethical principles, are forced to work, they should be preferred, especially as cheap labor. In this sense, besides the national and international legal regulations, this situation is the ethical responsibility of the employers. It must be admitted that it will not be possible to end child labor in all its aspects without developing a society, and public and private sector management that acts with a sense of ethical responsibility. Ultimately, it is obvious that this issue will remain unresolved as a universal violation of business ethics unless the ties of any child who has to work with the labor market are cut by the hands of the states.

First of all, it should be noted that there is no complete consensus in the existing literature on the definition of child labor, even though there are similar reasons that encourage children to work based on countries, as well as legal and social differences at the national or regional level. In this sense, the study has some limitations when discussing a concept that has not yet completed its conceptualization stage. In addition, although the data from a national survey conducted in Turkey were used, the fact that employers were not consulted in the survey is another limitation. In addition, there are some future suggestions for the study. First of all, it is seen that the measures taken by supranational organizations on child labor are not sufficient. The advisory decisions of these institutions should be supported by legal regulations with high sanction power to prevent child labor.

Furthermore, steps should be taken to consider child labor as an ethical violation through employers' organizations from a comprehensive human resources perspective. Finally, although many countries have compulsory school attendance up to a certain age or education level, it is clear that there are areas where this obligation cannot be applied. Social policies should be developed and broadened, especially for those children who must make a living or support their families.

**Author Contributions:** conceptualization, M. E. K; methodology, M. E. K. and I. Y. Y.; software, M. E. K and I. Y. Y; validation, I. Y. Y; formal analysis, M. E. K and I. Y. Y; investigation, M. E. K. and I. Y. Y; resources, I. Y. Y; data curation, M. E. K; writing-original draft preparation, I. Y. Y; writing-review





and editing, M. E. K and I. Y. Y; visualization, I. Y. Y.; supervision, M. E. K; project administration, I. Y. Y.; funding acquisition, M. E. K

**Conflicts of Interest**: Authors declare no conflict of interest. **Data Availability Statement**: Not applicable.

Informed Consent Statement: Not applicable.

## References

Acaroglu, H. (2010). An empirical approach about some important features of child labor in Turkey. *Business and Economic Horizons*, (03), 135-146. [Google Scholar] [CrossRef]

Aktan, C. C. (2008). Toplam ahlak felsefesi ve toplam ahlak yonetimi. *Hukuk ve İktisat AraStırmaları Dergisi*, *3*(2), 65-78. [Google Scholar]

Amemiya, T. (1981). Qualitative response models: A survey. *Journal of economic literature*, *19*(4), 1483-1536. [Google Scholar]

Asad, M., Haider, S. H., & Fatima, M. (2018). Corporate social responsibility, business ethics, and labor laws: A qualitative study on SMEs in Sialkot. *Journal of Legal, Ethical and Regulatory Issues*, 21(3), 1-7. [Google Scholar]

Atacan, T. & Genc, K.Y., (2020) İS Etigi, Astana Yayınları: Ankara. [Google Scholar]

Atar, B., & Sener, E. (2021). CaliSma hayatında ahlak ve etik uzerine bibliyometrik bir cozumleme. [Google Scholar]

AvSar, Z., & Ogutogulları, E. (2012). Cocuk iSciligi ve cocuk iSciligi mucadele stratejileri. *Sosyal Guvenlik Dergisi*, 2(1), 9-40. [Google Scholar]

Bartels, K., Boztuæg, Y., & Muller, M. (1999). *Testing the multinomial logit model* (No. 1999, 19). SFB 373 Discussion Paper. [Google Scholar]

BektaS, C., & Koseoglu, M. A. (2008). İS etigi ve iS etiginin yayılım sureci. Suleyman Demirel Universitesi İktisadi ve İdari Bilimler Fakultesi Dergisi, 13(1), 145-158. [Google Scholar]

Broni, G., Velentzas, J., & Papapanagos, H. (2017). Marketing Ethics and Communication Strategy in the Case of Enron Fraud. In *Advances in Applied Economic Research: Proceedings of the 2016 International Conference on Applied Economics (ICOAE)* (pp. 269-278). Springer International Publishing. [Google Scholar]

Cheng, S., & Long, J. S. (2007). Testing for IIA in the multinomial logit model. *Sociological methods* & *research*, *35*(4), 583-600. [Google Scholar] [CrossRef]

Chell, E., Spence, L. J., Perrini, F., & Harris, J. D. (2016). Social entrepreneurship and business ethics: Does social equal ethical?. *Journal of business ethics*, *133*, 619-625. [Google Scholar] [CrossRef]

Davidson, R., & MacKinnon, J. G. (2004). *Econometric theory and methods* (Vol. 5, pp. 189-196). New York: Oxford University Press. [Google Scholar]

Edmonds, E. V., & Theoharides, C. (2021). Child labor and economic development. In *Handbook of labor*, *human resources and population economics* (pp. 1-29). Cham: Springer International Publishing. [Google Scholar]

Erken, B. (2010). *CaliSma ahlakının orgutsel vatandaSlık davranıSı uzerine etkisi ve bir uygulama* (Master's thesis, Bilecik Universitesi, Sosyal Bilimler Enstitusu). [Google Scholar]

Ferrell, O. C., Harrison, D. E., Ferrell, L., & Hair, J. F. (2019). Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, 95, 491-501. [Google Scholar] [CrossRef]

Gallego-Alvarez, I., Rodríguez-Domínguez, L., & Martín Vallejo, J. (2020). An analysis of business ethics in the cultural contexts of different religions. *Business Ethics: A European Review*, 29(3), 570-586. [Google Scholar] [CrossRef]

Gok, S. (2008). İS etigi ile iS ahlakı arasındaki iliSki ve calıSma yaSamında iS etigini etkileyen faktorler. *Uluslararası İnsan Bilimleri Dergisi*, 5(1), 1-19. [Google Scholar]

Hausman, J., & McFadden, D. (1984). Specification tests for the multinomial logit model. *Econometrica: Journal of the econometric society*, 1219-1240. [Google Scholar] [CrossRef]

Hensher, D. A., Rose, J. M., Rose, J. M., & Greene, W. H. (2005). *Applied choice analysis: a primer*. Cambridge university press. [Google Scholar]

Kozhaya, M., & Flores, F. M. (2022). School attendance and child labor: Evidence from Mexico's Full-Time School program. *Economics of Education Review*, 90, 102294. [Google Scholar] [CrossRef]





Long, J. S. (1997). Regression models for categorical and limited dependent variables: Advanced quantitative techniques in the Social Sciences Series. 204 Kalter. [Google Scholar]

Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata* (Vol. 7). Stata press. [Google Scholar]

Maddala, G. S. (1983). Methods of estimation for models of markets with bounded price variation. *International Economic Review*, 361-378. [Google Scholar] [CrossRef]

Maddala, G. S. (1983). *Limited-dependent and qualitative variables in econometrics* (No. 3). Cambridge university press. [Google Scholar]

Michaelson, C., Pratt, M. G., Grant, A. M., & Dunn, C. P. (2014). Meaningful work: Connecting business ethics and organization studies. *Journal of business ethics*, *121*, 77-90. [Google Scholar] [CrossRef]

Tang, C., & Zhao, Z. (2023). Informal institution meets child development: Clan culture and child labor in China. *Journal of Comparative Economics*, *51*(1), 277-294. [Google Scholar] [CrossRef]

Velentzas, I., & Broni, G. (2014). Business ethics, corporate governance, corporate social responsibility. Accounting and Auditing Ethics & Deontology (in Greek), IuS, Thessaloniki. [Google Scholar]

Мехмет Емірхан Кула, Ph.D., Ерзурумський технічний університет, Туреччина

## Ікрам Юсуф Ярбаші, Ph.D., Ерзурумський технічний університет, Туреччина

Виклики бізнес-етики та комплексне розуміння боротьби із дитячою працею в Туреччині

Кілька десятиліть тому етичні питання визначалися в термінах шахрайської поведінки та умов праці на робочому місці, наразі саме поняття розширилося. Дитяча праця, яка в глобалізованому світі вважається дешевою та легко керованою робочою силою, є однією з повсякчасних проблем низки розвинених країн та країн, що розвиваються, включаючи Туреччину. Останні дослідження показують, що сфери застосування дитячої праці дедалі більше диверсифікуються, а сама дитяча праця стає важливим фактором на глобальному ринку дешевої робочої сили. При цьому універсальною етичною проблемою є те, що діти працюють на рівні дорослих в різних галузях, від гірничодобувної промисловості до текстильної, від сільського господарства до автомобільної промисловості. У рамках даного дослідження, питання дитячої праці в Туреччині розглянуто в контексті принципів ділової етики. Авторами визначено три головні фактори (демографічні, освітні та ділові) як детермінанти причин залучення дітей до трудового життя. Для перевірки взаємозв'язків між змінними була використана багатофакторна логіт-модель. Емпіричне дослідження грунтується на даних для 1128 дітейпрацівників, отриманих з мікробази даних дослідження дитячої робочої сили, проведеного Турецьким статистичним інститутом у 2019 році. За результатами дослідження встановлено, що змінні, пов'язані з освітнім життям (освітній статус дитини, освітній статус сім'ї, освітній статус учнівства) та змінні, пов'язані з діловим життям (робочий сектор, робочий час, дохід та робочий статус сім'ї), впливають на трудові мотиви дітей. За результатами дослідження автори приходять до висновку, що в умовах посилення міжнародної співпраці та конкуренції під впливом глобалізації, відображення загального визначення дитячої праці кожною країною у власному національному законодавстві є одним з найважливіших кроків, які необхідно зробити для запобігання використанню дитячої праці. Крім того, у слаборозвинених країнах та країнах, що розвиваються, важливими кроками будуть подолання бідності, покращення умов для відвідування школи та підвищення обізнаності про існування прав дітей як особистостей. Авторами наголошено, що припинення використання дитячої праці є неможливим без розвитку суспільства, а також втручання керівництва державного та приватного секторів, які діють з точки зору етичної відповідальності.

Ключові слова: етика бізнесу, розвиток дитини, дитяча праця, людські ресурси, перевага роботи.