# 2022 Turkish COVID-19 Values Study (TCVS) Report

Sociology Data Lab

BOĞAZİÇİ ÜNİVERSİTESİ 1863

# 2022 Turkish COVID-19 Values Study (TCVS) Report

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**Ceylan Engin**
Assist. Prof.
Boğaziçi University
Principal Investigator

**Authors**

Ceylan Engin

F. Giray Demirci

Gece Kaya

Rabia Nur Önder

Cansu Mine Yıldırım

Ladin Toplu

**Proofreading & Editing**

S. Sena Akkoç

Daniela Kızıldağ

Binnaz Poşul

Meryem Uyaver

E-mail: socdatalab@bogazici.edu.tr
Website: sdl.bogazici.edu.tr



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Finally, we are grateful to the BU Research Fund for supporting this project.

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# INTRODUCTION

COVID-19 has not only impacted the “demographic metabolism” (Ryder 1965) of societies but also induced significant transformations across economic, political, and social dimensions of life. The rapid spread of the virus led to a tenacious effort to overcome the pandemic. The immediate focus has been on treating and preventing the disease, including the development of vaccines. However, the long-term consequences of COVID-19 extend beyond health and mortality, as the pandemic has not only influenced health status of populations, but also reshaped the broader demographic and social fabric. These changes need further and continuous investigation in the future to better understand the evolution of social values.

In this light, 2022 Turkish COVID-19 Values Study (TCVS) examines social values among Turkish citizens in three major areas: the institution of family, institutional trust and attitudes toward vaccination, and gender norms. The study is based on a cross-sectional survey conducted with a sample of 1500 respondents. The survey modules include sociodemographic characteristics, family dynamics, trust in institutions and vaccination, and gender values.

# SURVEY DESIGN

The Turkish COVID-19 Values Study (TCVS) survey was designed by the Boğaziçi University Sociology Data Lab (SDL) research team under the supervision of the Principal Investigator (PI) Dr. Ceylan Engin.

Fieldwork was carried out by a research company, *Binom Research and Consulting Services* under the supervision of SDL. The survey was conducted face-to-face, using the Computer Assisted Personal Interviewing (CAPI) method. Response cards were shown to the participants for all questions, and for sensitive questions[1], participants were given tablets to enter their answers privately at the end of the survey. Pre-pilot studies with 10 participants and post-pilot studies with 15 participants were conducted to test and refine the questionnaire prior to final implementation.

The survey was conducted in accordance with the COVID-19 safety requirements:

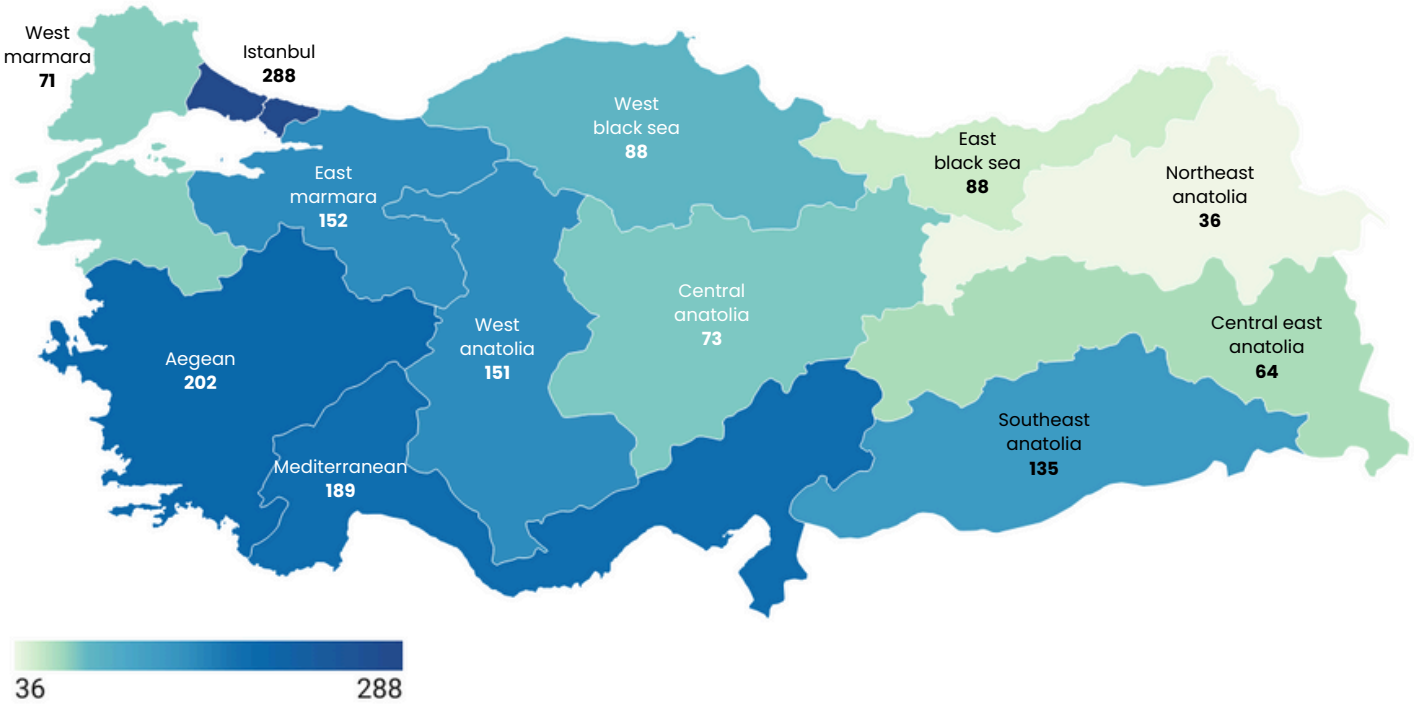
- The HES codes[2] of the surveyors and personnel working in the field were regularly checked.
- The surveyors changed their masks several times a day.
- The surveyors adhered to the social distance rule.
- Participants were offered hand sanitizers before each interview.

The fieldwork took place between April 15 and May 28, 2022.

# SAMPLE

In order to select the sample, the 12 NUTS-1 statistical units of Turkey that are established by the Eurostat's classification of Nomenclature of Territorial Units for Statistics were used. These units include Istanbul, West Marmara, Aegean, East Marmara, West Anatolia, Mediterranean, Central Anatolia, West Black Sea, East Black Sea, Northeast Anatolia, Central East Anatolia, and Southeast Anatolia regions. Within each region, 12 provinces were randomly selected for fieldwork: Istanbul, Tekirdağ, Izmir, Bursa, Ankara, Antalya, Kayseri, Erzurum, Gaziantep, Trabzon, Malatya, and Zonguldak.

**Figure 1a. NUTS-1 regions and sample size**




A proportional quota sample was used to collect 1500 surveys according to Turkey's age and gender distribution and population size. Overall, 1849 potential respondents were asked to take part in the survey. Of these, 68 were excluded due to quota restrictions, 90 started the survey but did not complete it, and 201 declined to participate. In total, 1500 valid samples were collected.

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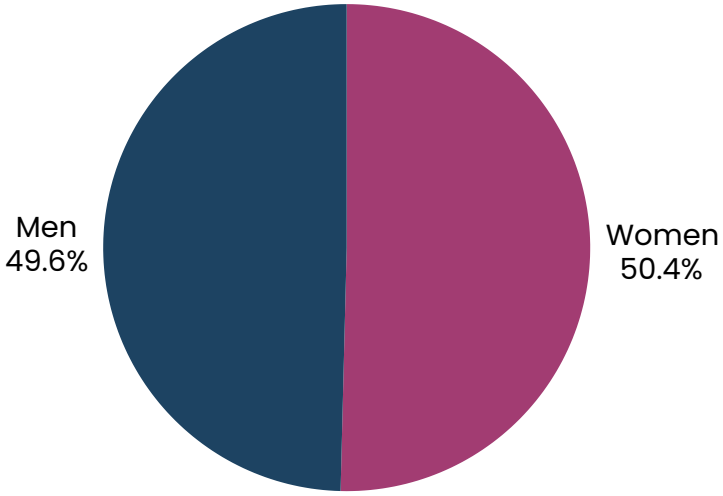
# SOCIODEMOGRAPHIC CHARACTERISTICS

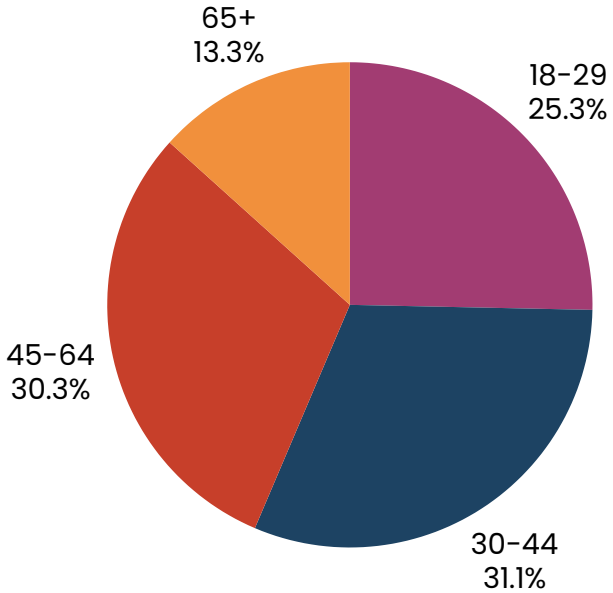
This section captures the sociodemographic characteristics of the respondents, including their gender, age, marital status, education level, employment status, class status, and political and religious beliefs.[3]

**Figure 1.1 Gender distribution, N=1500**




The TCVS survey sample consists of 50.4% women and 49.6% men.

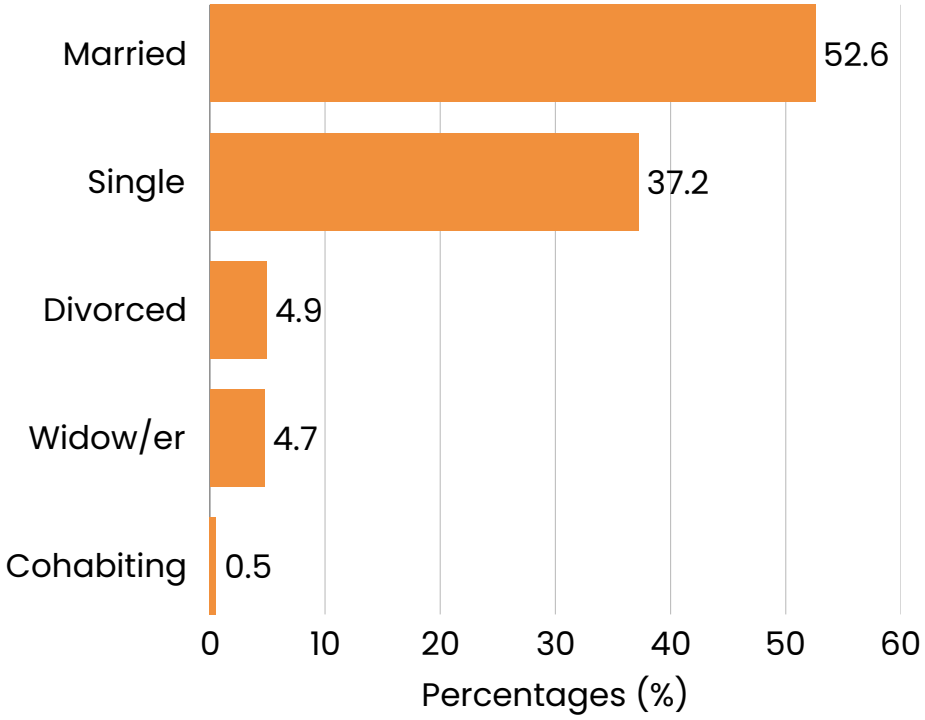
**Figure 1.2 Age distribution, N=1500**




The respondents' age ranges from 18 to 82. The categorization of age groups show that 25.3% of the respondents are 18-29 years old, 31.1% are 30-44 years old, 30.3% are 45-64 years old, and 13.3% are 65 years old or older.

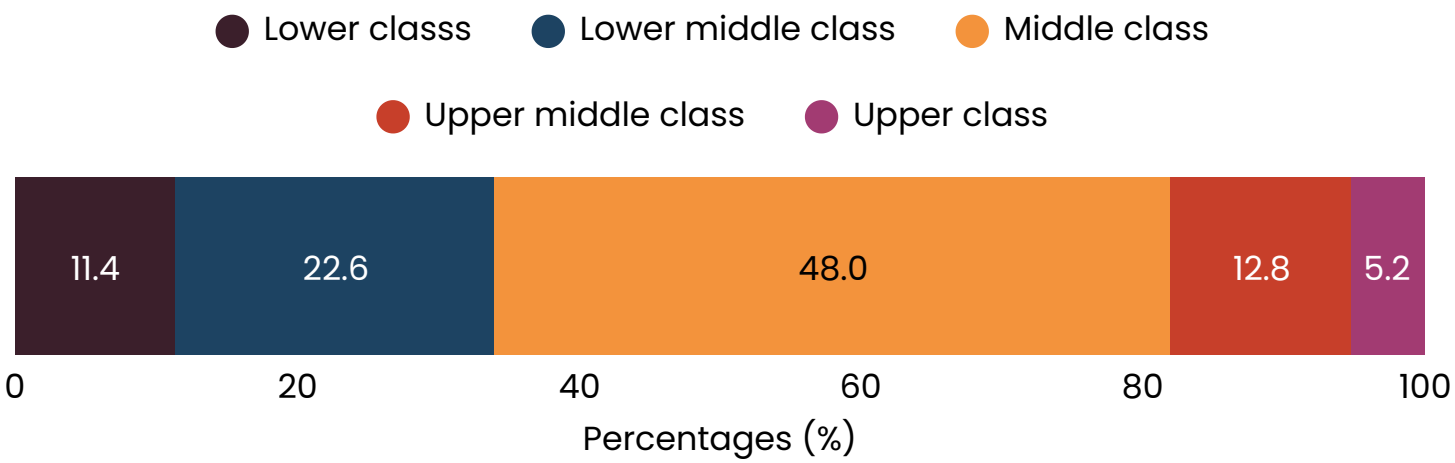
# SOCIODEMOGRAPHIC CHARACTERISTICS

**Figure 1.3 Marital status, N=1500**




52.6% of the participants are married, 37.2% are single, and 4.9% are divorced. The remaining 4.7% are widow(er)s. Only a very small proportion of participants are cohabiting with their partners (0.5%).

**Figure 1.4 Perception of class, N=1449**




Almost half of the respondents (48.0%) consider themselves middle class, followed by those who consider themselves lower-middle class (22.6%) and upper-middle class (12.8%). Meanwhile, 11.4% consider themselves lower class and 5.2% report that they are upper class.

**Figure 1.5 Level of education by gender[4], N=1500**

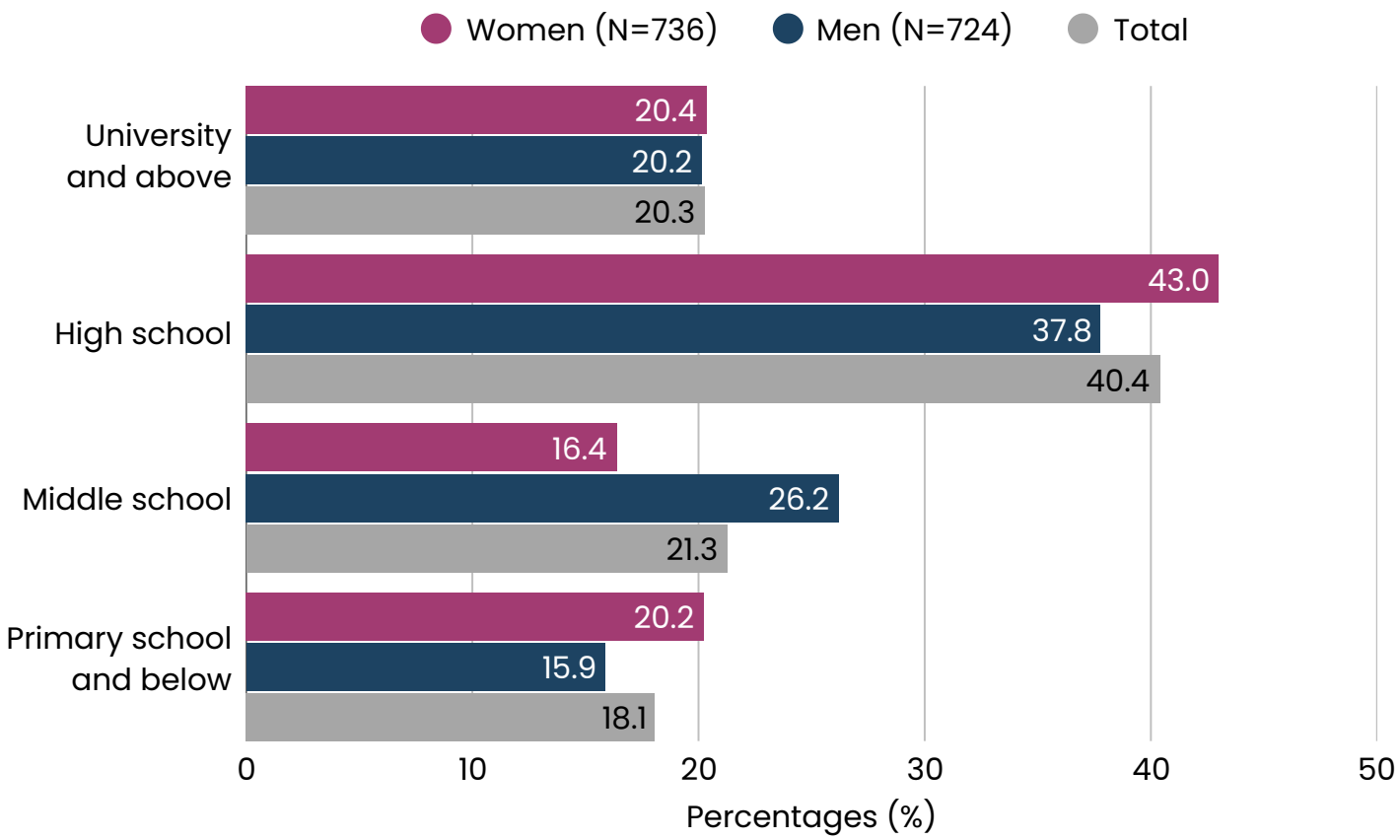



**Figure 1.5** shows differences in education level between men and women. While the proportion of men (20.2%) and women (20.4%) with a university degree or higher is nearly equal, there are more noticeable gender differences at lower education levels. A higher percentage of women (43.0%) have completed high school education compared to men (37.8%). Meanwhile, 26.2% of men have middle school education compared to 16.4% of women. Overall, gender gaps in education are most pronounced at the primary and secondary levels, whereas higher education has a more equal distribution of men and women.

**Figure 1.6 Employment status by gender, N=1500**

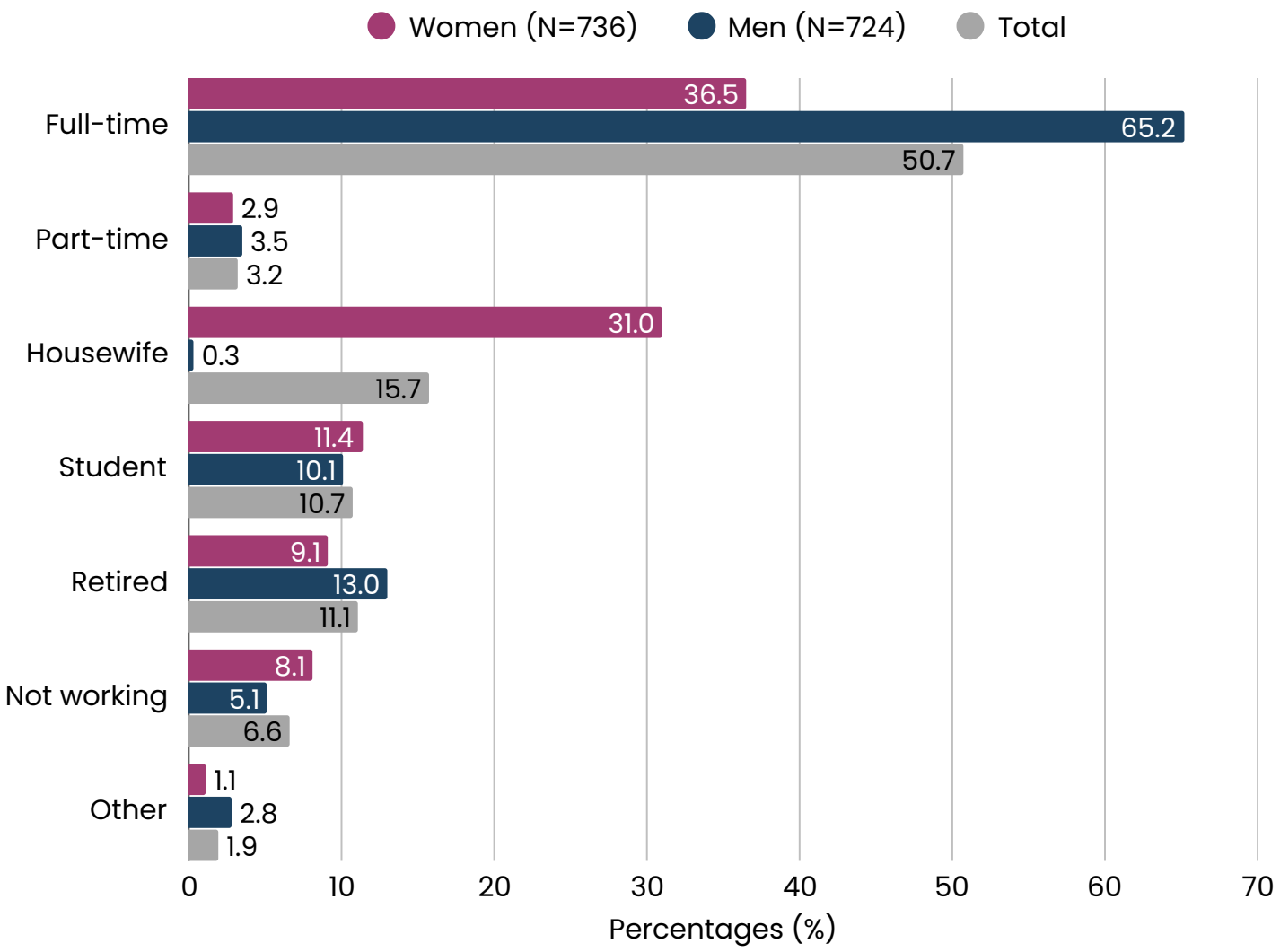



**Figure 1.6** shows differences in employment by gender. While 50 percent of the population is employed full-time, a higher proportion of men (65.2%) are employed full-time compared to women (36.5%). Additionally, 15.7% of the population, almost all of whom are women, are housewives. These figures highlight the gender gap in labor force participation, with women being less likely to hold active employment.

**Figure 1.7 Importance of god, N=1468**

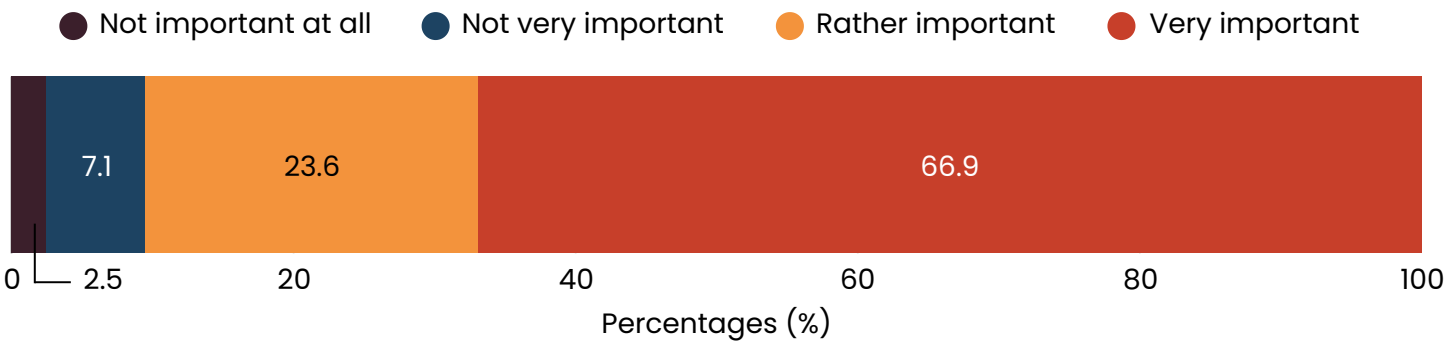



**Figure 1.8 Importance of religion, N=1469**

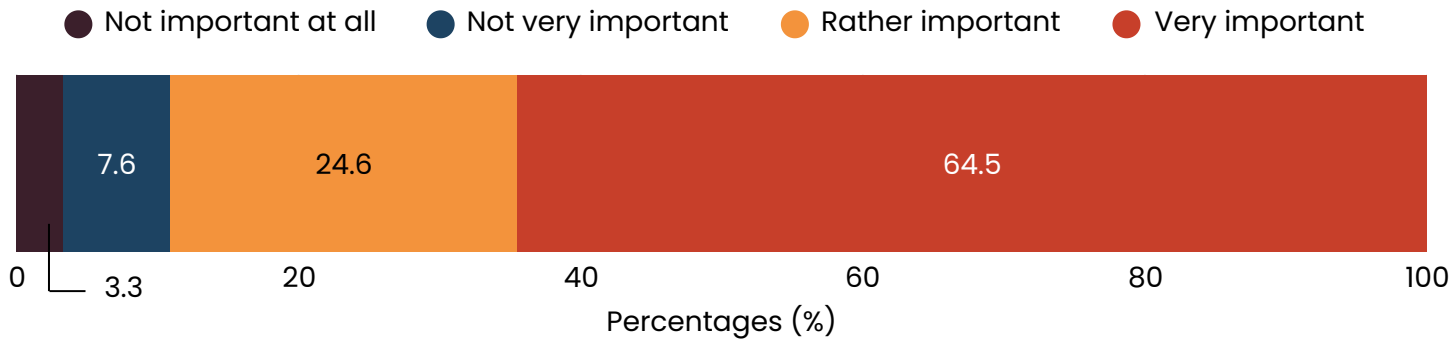



**Figure 1.7** shows that a significant majority of the respondents (66.9%) consider God to be very important in their lives. Additionally, 23.6% find God to be rather important, while smaller shares report God as not very important (7.1%) or not important at all (2.5%).

**Figure 1.8** presents the importance attributed to religion more broadly, revealing a similar pattern with the previous figure: a large portion (64.5%) view religion as very important, followed by 24.6% who regard it as rather important. Only a small fraction finds religion not very important (7.6%) or not important at all (3.3%).

Overall, both figures highlight a strong sense of religiosity among respondents, with slightly higher importance attributed to God compared to religion.

## Figure 1.9 Political stance (left-right scale), N=1312

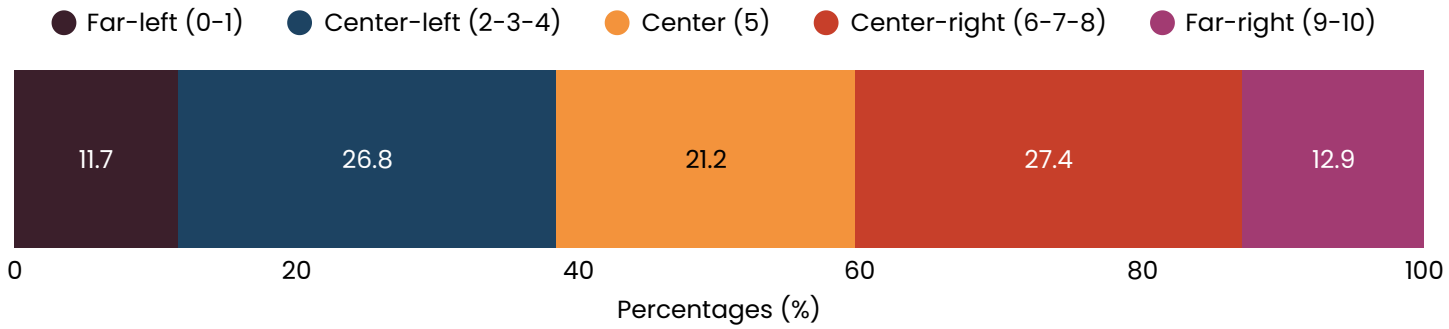
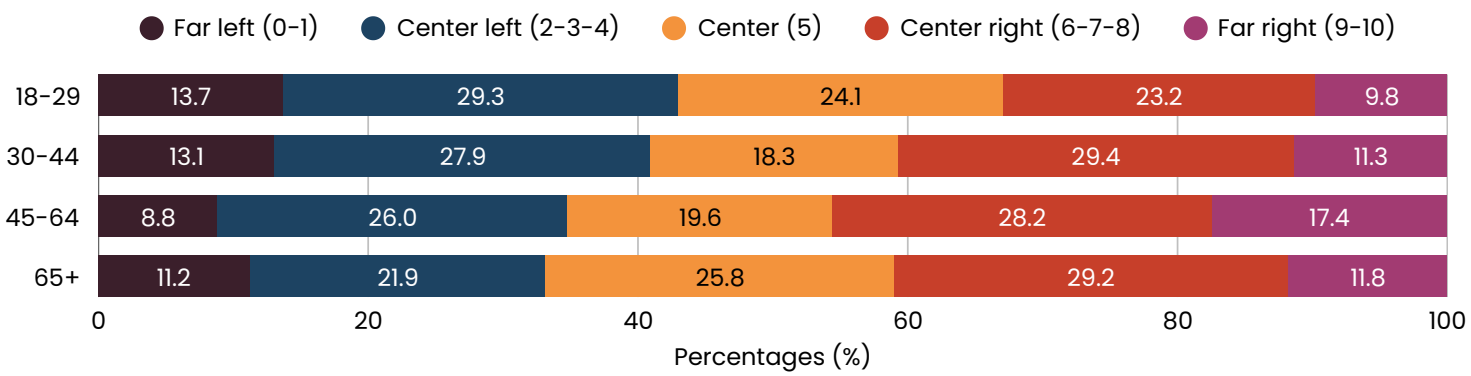



**Figure 1.9** shows the distribution of political stance in Turkey based on a left–right scale. The majority identifies with the center-right ideology (27.4%). This is followed by those who place themselves in the center-left at 26.8%, and those at the exact center at 21.2%. Respondents who identify as far-right and far-left represent 12.9% and 11.7% respectively. Overall, political identification in Turkey appears to cluster around the center and center-right, with fewer individuals placing themselves at the far ends of the spectrum. As shown in **Figure 1.10**, younger people are slightly more likely to identify as center-left or far-left compared to older groups, while older adults tend to lean more toward the center-right and far-right. The proportion of far-right identification reaches 17.4% among those aged 45–64, and declining to 11.8% among those 65 and older.

## Figure 1.10 Political stance (left-right scale) by age, N=1312



2

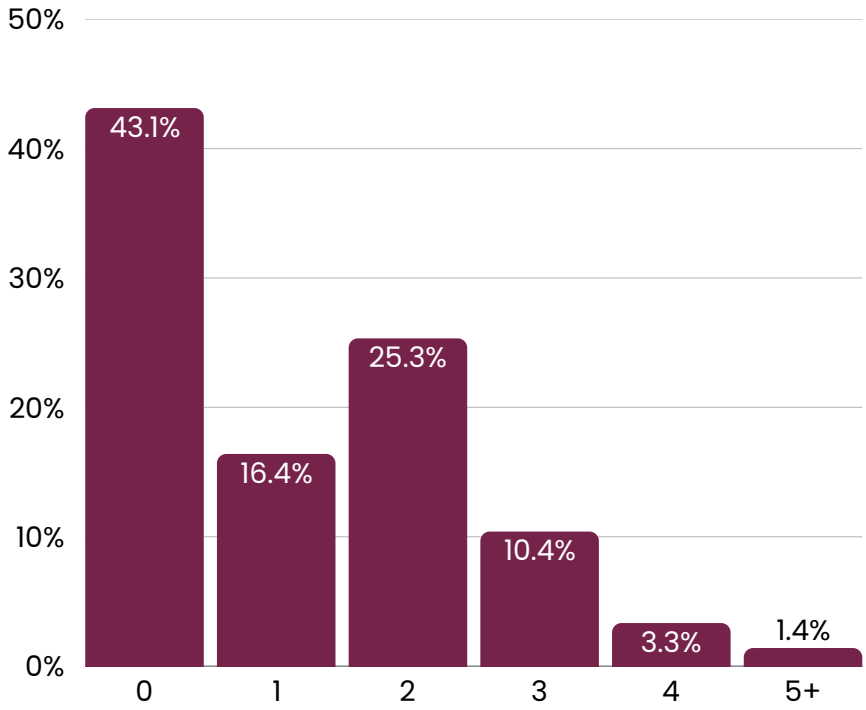
# FAMILY

Turkey has been experiencing a rapid transformation in family structure and fertility rates, a trend that began even before the COVID-19 pandemic. In 2017, fertility rate fell below the replacement level, and this decline continued in subsequent years, reaching 1.76 in 2020 and 1.48 in 2024 (TURKSTAT 2025a). In the meantime, the average size of households decreased from 4.00 in 2008 to 3.11 in 2024 (TURKSTAT 2025b). Accordingly, the proportion of single households has been steadily increasing while that of nuclear families (households comprised of two parents and children) has been declining.

Despite the prominence of pro-family social policies for over the past two decades, the COVID-19 pandemic seems to have accelerated these demographic transformations. Historical evidence shows that people are more prone to postpone childbearing during widespread crises, such as economic recessions, political instability, or outbreaks of infectious diseases (Lee et al. 2023). Hence, if current socio-economic and political conditions persist, these demographic trends are likely to continue shaping Turkey's population dynamics in the coming years.

In the next chapter, questions regarding participants' family structure, along with their attitudes and behavior regarding family will be examined, including the number of children, intentions about future parenthood, reasons for not intending to have children, contraceptive use, and changes in romantic relationship dynamics during the COVID-19 pandemic.

**Figure 2.1 Number of children, N=1500**




While the majority of individuals do not have children (43.1%), 16.4% have one, 25.3% have two, and 10.4% have three children. Only 4.7% of have four or more children.

**Figure 2.2** shows respondents' attitudes toward having (more) children in the future. While 40.1% do not intend to have children in the future, 30.9% express a desire to do so, and 7% remain indecisive. In addition, 22% of indicate that it is not possible for them to have children.

**Figure 2.2 Intention of having children in the future, N=1439**

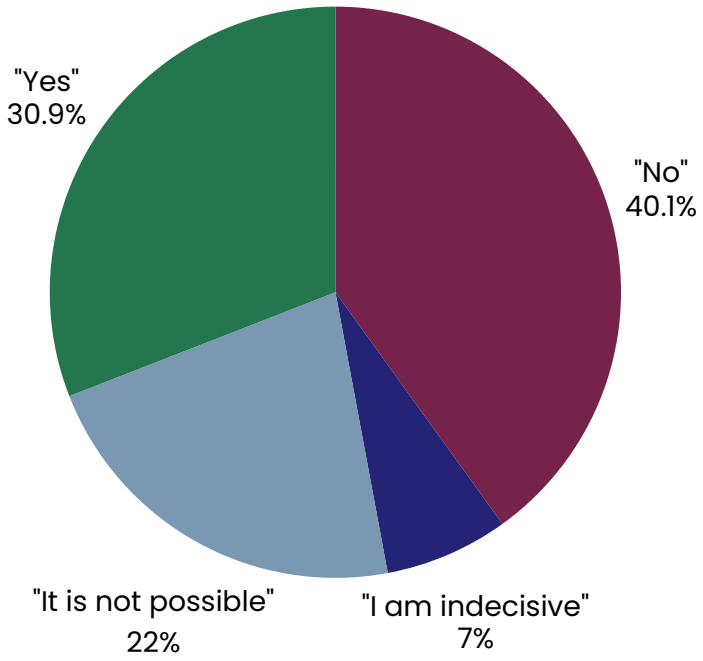


**Figure 2.3 Reasons for not intending to have children, N=576**

**Participants can choose more than one option.**

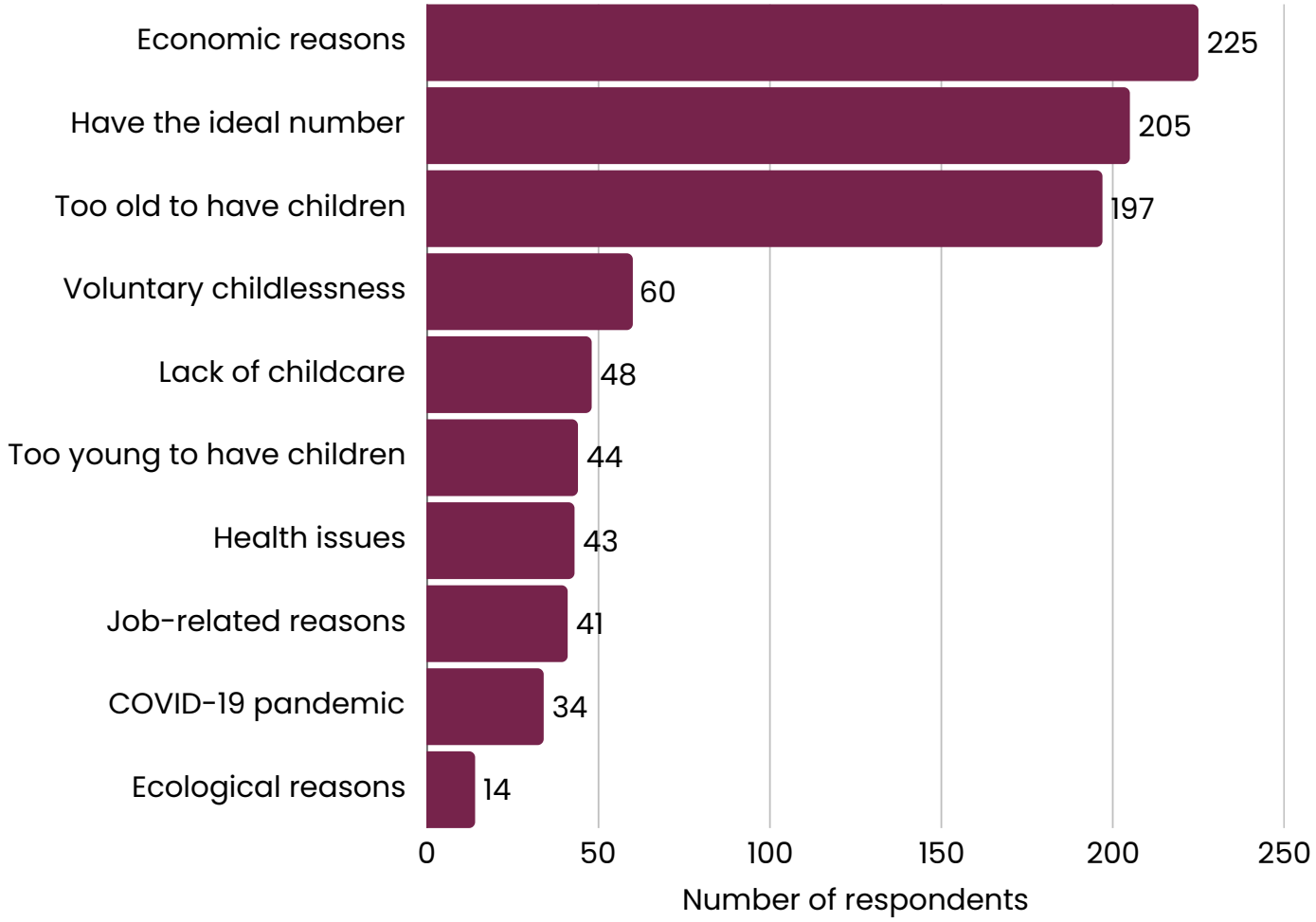



**Figure 2.3** shows the most common reasons cited by those who do not intend to have children in the future. The most common reasons were economic reasons (225), already having the ideal number of children (205), and being too old for childbearing (197). On the other hand, ecological (14), pandemic-related (34), and job-related (41) reasons were among the least frequently mentioned. Options such as lack of childcare, being too young to have children, and health issues ranked in the middle in terms of preference.

**Figure 2.4 Contraceptive use[5], N=1500**

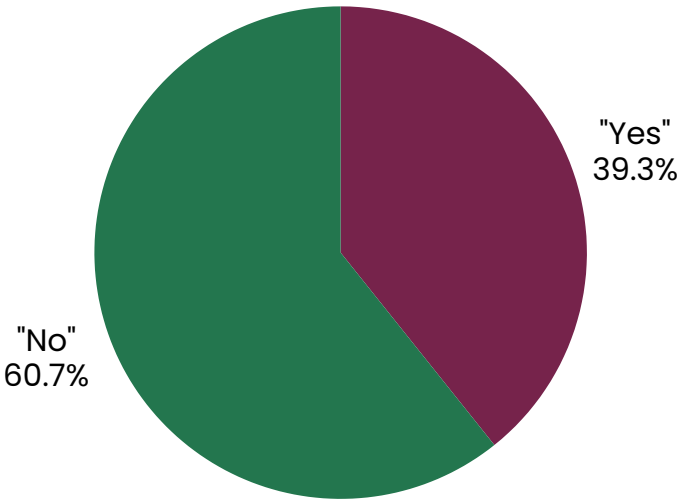



**Figure 2.4** shows that 39.3% of the respondents use a contraceptive method, while 60.7% reported not using any.

**Figure 2.5 Contraceptive use by marital status, N=1492**

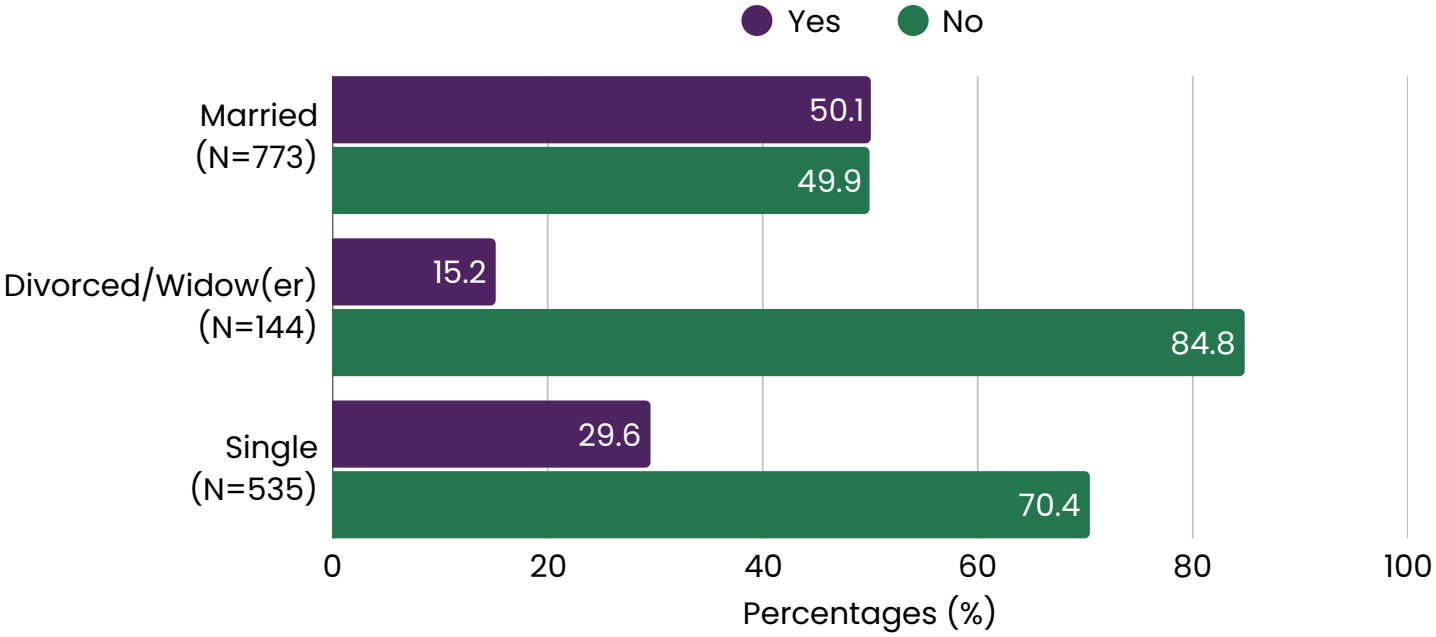



**Figure 2.5** shows that 50.1% of married participants use contraceptive methods, while 49.9% reported not using them. Among divorced and widowed respondents, 15.2% use contraceptives and 84.8% do not. Among single participants, 29.6% reported using contraceptive methods, compared to 70.4% who do not.

**Figure 2.6 The preferred method of contraception, N=589**

**Participants can choose more than one option.**

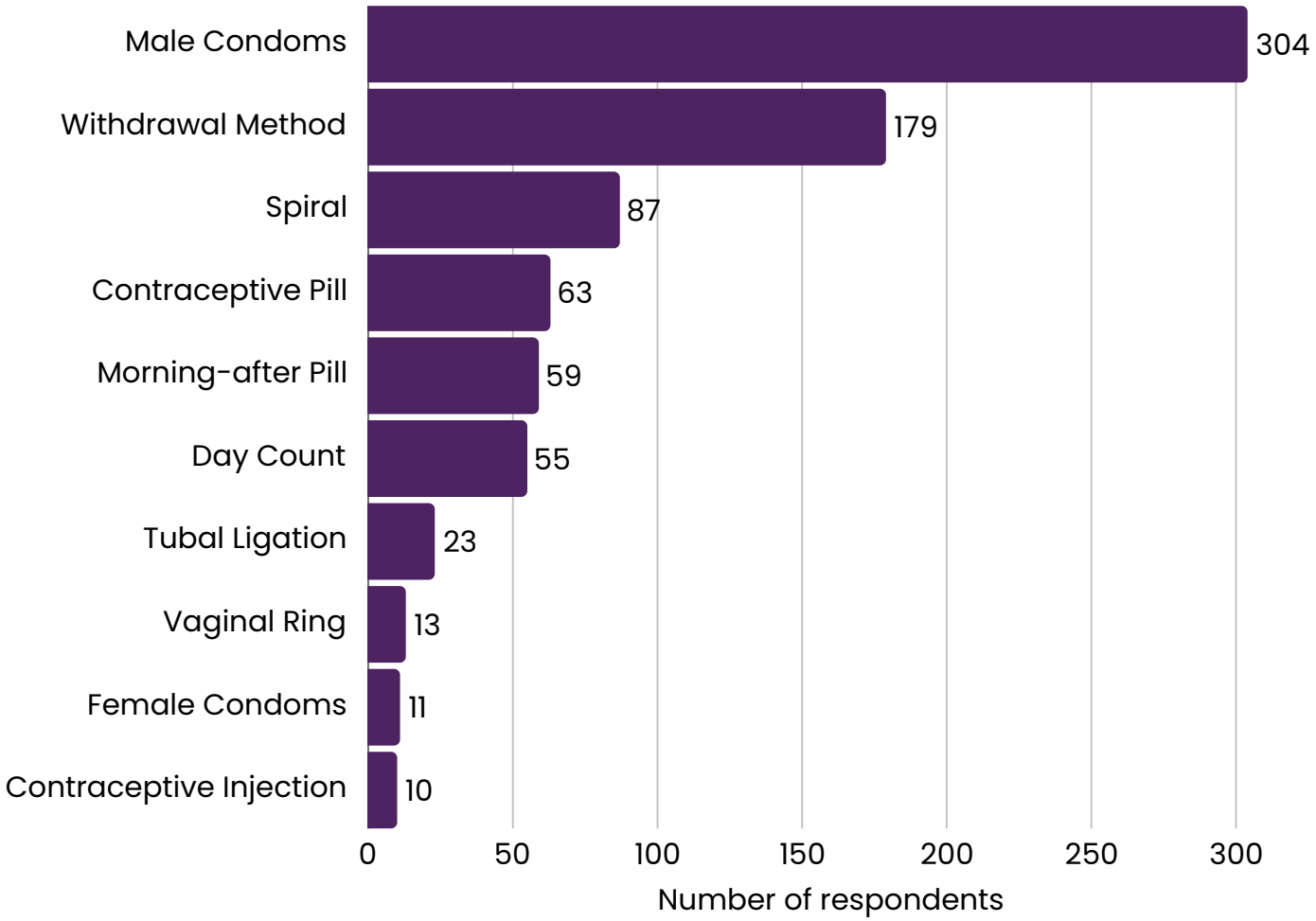



**Figure 2.6** shows the preferred methods of contraception among those using contraception. The most common methods include the male condom (304), the withdrawal method (179), the intrauterine device (IUD) or spiral (87), the contraceptive pill (63), and the day count method (55). The least common methods are tubal ligation (23), the vaginal ring (13), the female condom (11), and the contraceptive injection (10).

**Figure 2.7 Changes in romantic relationships during the COVID-19 pandemic**

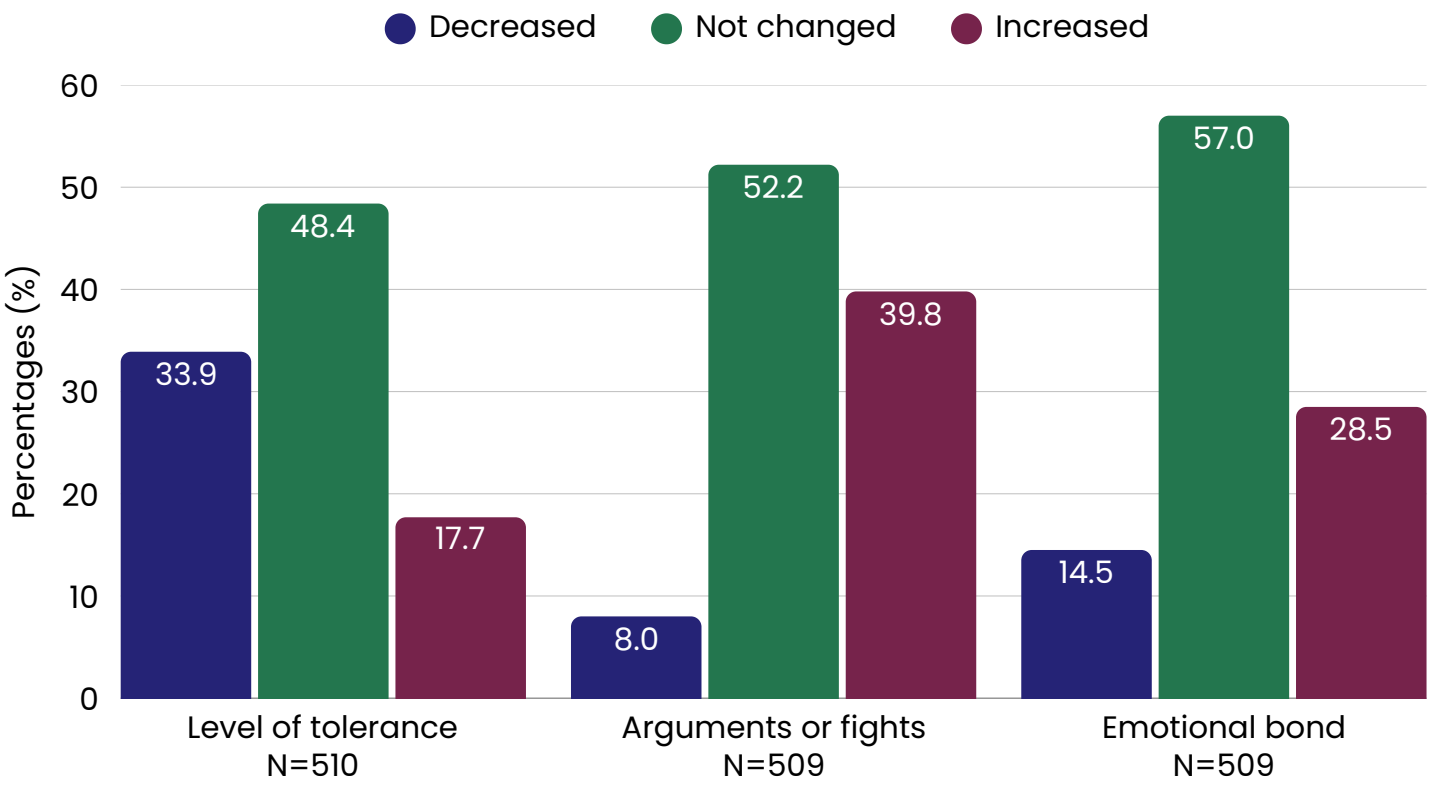



**Figure 2.7** shows changes in tolerance levels, frequency of fights or arguments, and emotional bond among those who were in the same household with their partners during the COVID-19 pandemic. While 33.9% participants stated a decrease in tolerance levels in their romantic relationship, 39.8% stated having more arguments or fights. On the other hand, only 17.7% reported a greater level of tolerance, and 8.0% reported a reduction in arguments and fights. Additionally, 28.5% of respondents indicated an increase in emotional bonding with their partner, 57.0% indicated no change, and 14.5% experienced a decrease. The results reveal that many romantic relationships went through emotional and behavioral changes during the pandemic.

3

# INSTITUTIONAL TRUST AND VACCINATION

The COVID-19 pandemic has affected people's trust in both the government and science, particularly regarding vaccines. Even before the pandemic, anti-vaccination sentiment was already prevalent in Europe and the United States (Engin and Vezzoni 2020). A global survey found that 21% of the world's population expressed doubt about the safety of vaccines, highlighting an upsurge in vaccine skepticism, a significant health concern for populations (Gallup 2019).

In Turkey, vaccination coverage declined from 98% to 96% between 2017 and 2019 (Özceylan et al. 2020). Similar to other European countries, Turkey's decreasing trend in vaccination coverage may be linked to lower levels of generalized trust (Dubé et al. 2013) and increasing distrust in governmental and healthcare institutions (Engin and Akkoç 2024).

Vaccine skepticism has become an increasing concern as countries administer COVID-19 vaccines to combat the pandemic. In Turkey, 93% of the adult population has received at least one dose of the vaccine, and 86% of the total population received at least two doses (T.C. Sağlık Bakanlığı 2023). Considering the public health risks posed by vaccine skepticism and anti-vaccine sentiments, this section aims to assess the prevalence and distribution of vaccination attitudes in Turkey.

**Figure 3.1 Trust in other people, Turkey 2022 (N=1473)**

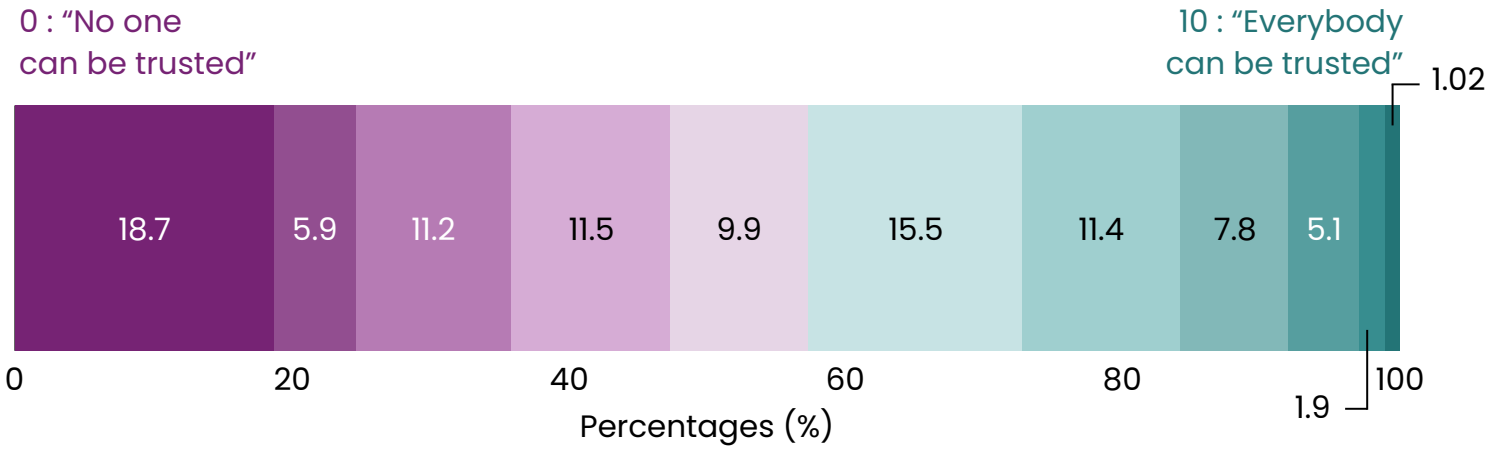



**Figure 3.1** shows people's trust levels toward other people on a scale of 0 to 10, where 0 means "No one can be trusted" and 10 "Everybody can be trusted". About 18.7% of respondents stated no one can be trusted in other people, whereas only 1.02% of respondents expressed complete trust in everyone. Overall, the findings signal a general lack of trust in other individuals.

**Figure 3.2 Trust in institutions: Police, legal system, political parties, and government**

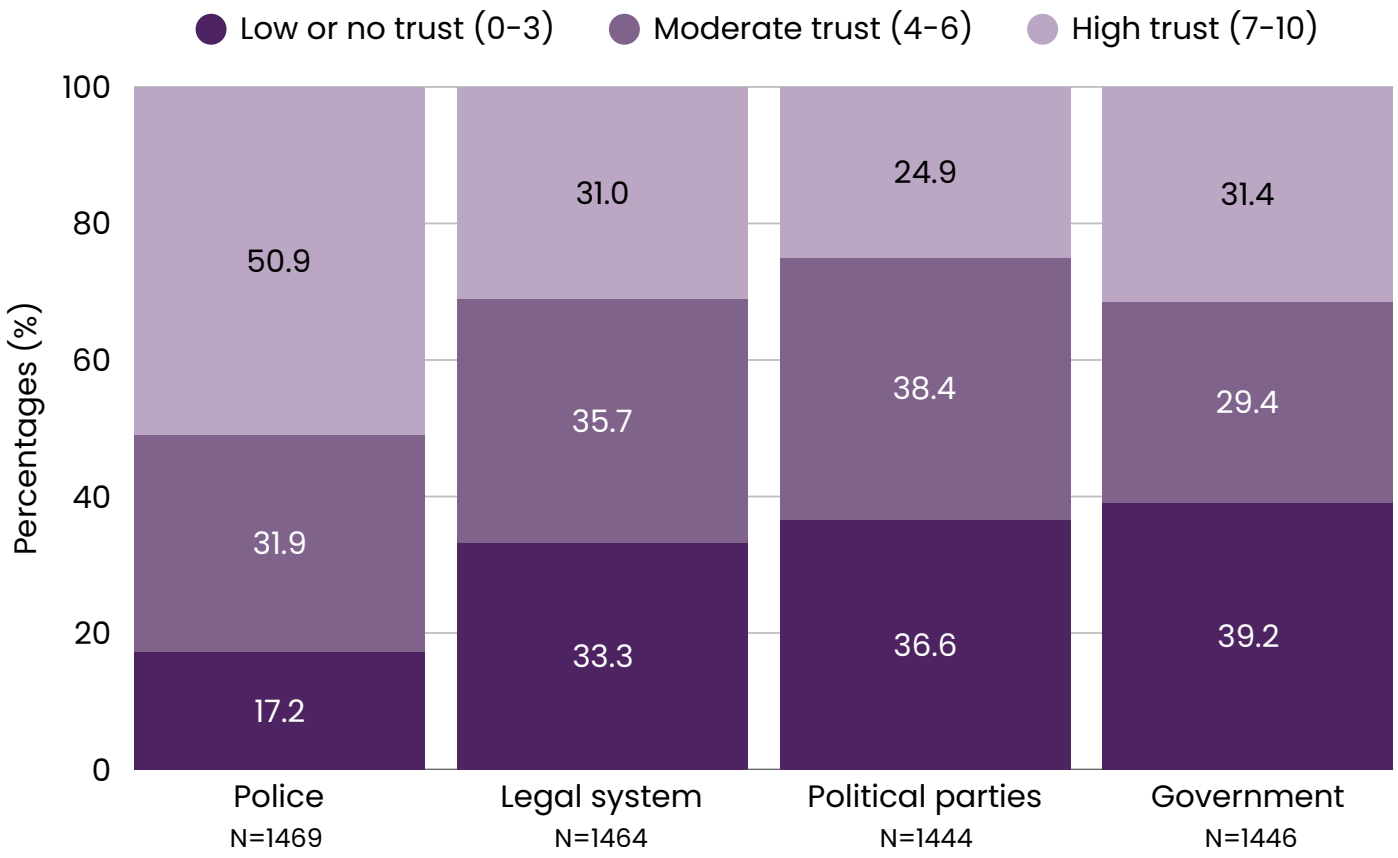



**Figure 3.2** shows the distribution of people's trust in institutions, namely the police, the legal system, the political parties, and the government in Turkey on a scale of 0 to 10. According to their responses, respondents were then divided into 3 groups: low or no trust at all (0-3), moderate trust (4-6), and high trust (7-10). Out of all the institutions, respondents expressed the highest level of trust in the police at 50.9%. On the other hand, the government is the least trusted institution (39.2%). Trust in the legal system and political parties are at moderate levels, with political parties being slightly less trusted (36.6%) compared to the legal system (33.3%).

**Figure 3.3 Trust in different COVID-19 vaccine brands: BioNtech, Turkovac, and Sinovac**

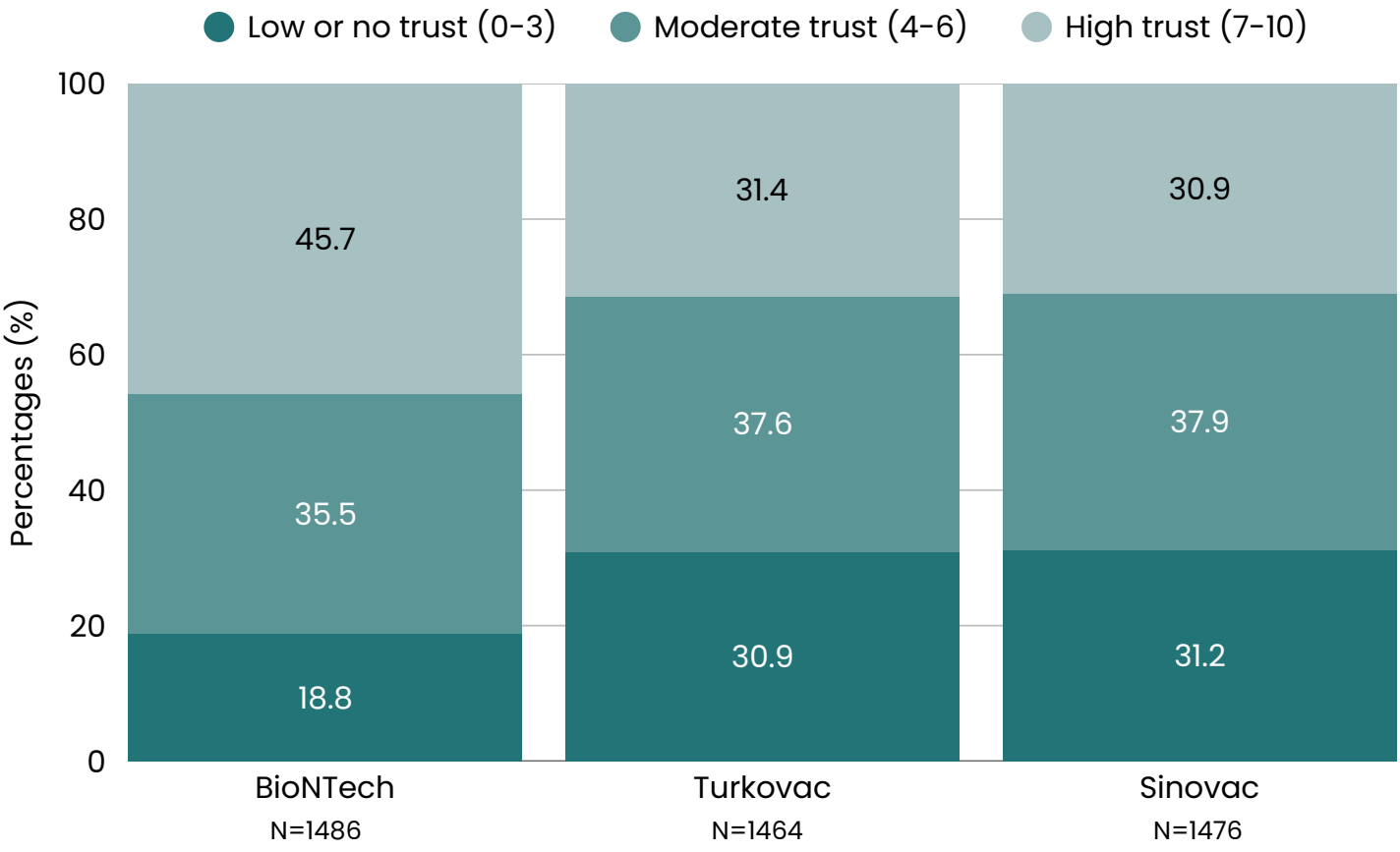



**Figure 3.3** illustrates the distribution of people's trust in COVID-19 (Turkovac, Sinovac, and BioNtech) on a scale of 0 (no trust at all) to 10 (complete trust). Out of all the COVID-19 vaccines, respondents had the greatest degree of trust in the BioNtech vaccine with 45.7% reporting high levels of trust. On the other hand, the trust levels are similar for Sinovac and Turkovac.

**Figure 3.4 Opinion about the current state of the public health system in Turkey (N=1468)**

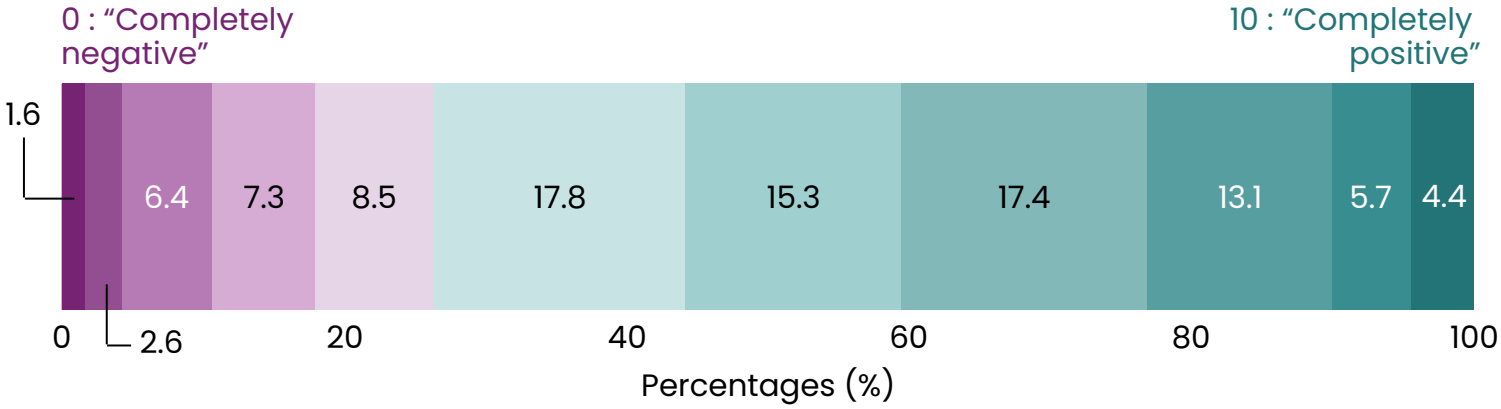



**Figure 3.5 Satisfaction with the way the government is handling the COVID-19 pandemic (N=1446)**

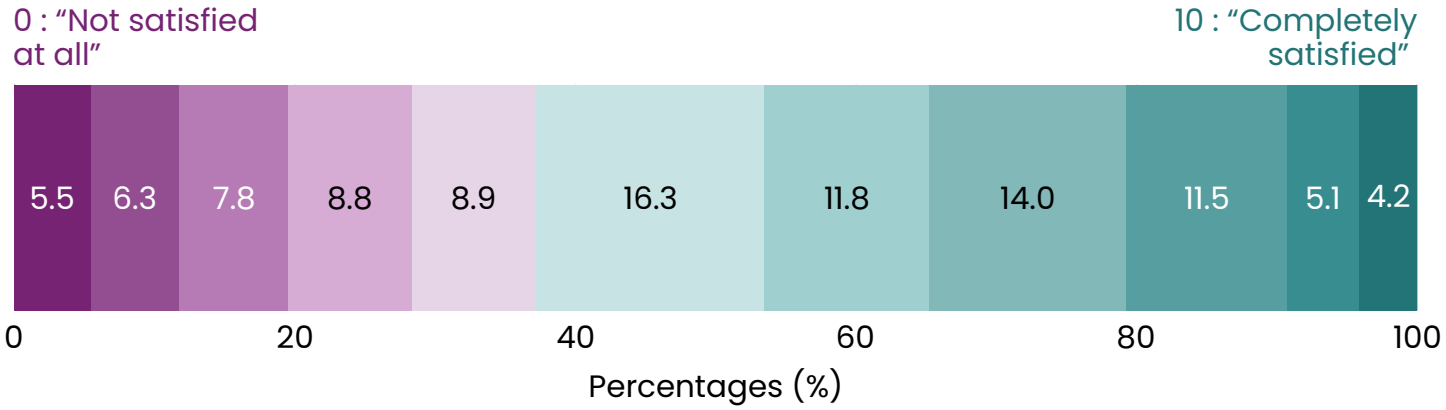



**Figure 3.4** shows individuals' perception of the state of the public health system on a scale of 0 (completely negative) to 10 (completely positive). 40.6% of the respondents placed the current state of the public health system between 7 to 10. Meanwhile, only 17.9% placed themselves between scores of 0 and 3.

**Figure 3.5** presents the respondents' satisfaction with the way the government handled the COVID-19 pandemic in Turkey on a scale of 0 (not satisfied at all) to 10 (completely satisfied). 34.8% of individuals indicated that their satisfaction with government's handling of the pandemic was between 7 and 10. Meanwhile, level of satisfaction was between 0 and 3 for 28.4% of the respondents.

**Figure 3.6 Level of agreement with health-related conspiracy theories**

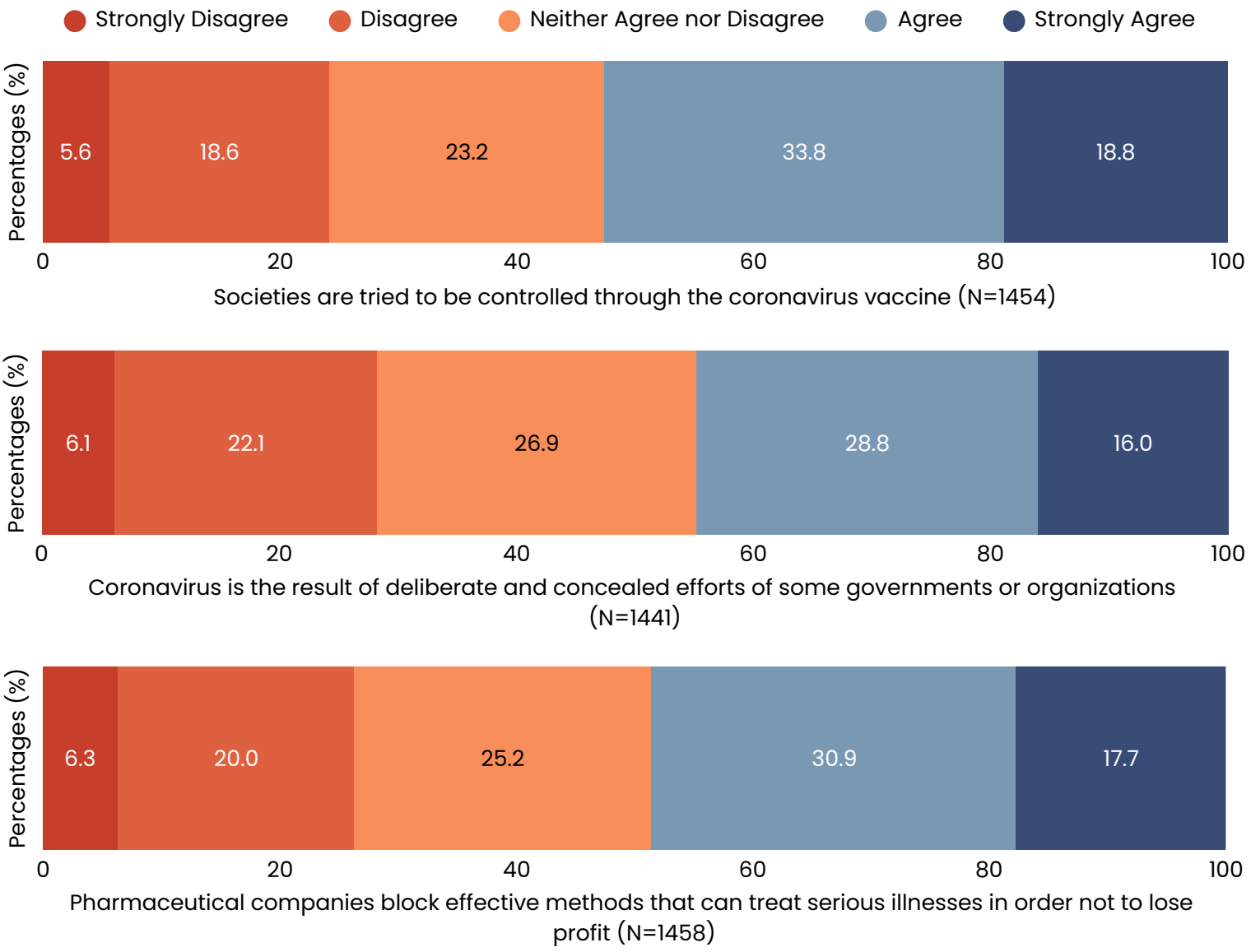



**Figure 3.6** reports the percentage of those indicating their level of agreement with the three health-related conspiracy theories on scale of 1 (strongly disagree) to 5 (strongly agree). While 52.6% believe that societies are tried to be controlled through the Coronavirus vaccine, 44.8% believe "Coronavirus is the product of deliberate and concealed efforts of some governments or organizations," and 48.6% believe "Pharmaceutical companies block effective methods that can treat serious illnesses in order not to lose profit".

**Figure 3.7 Agreement with health-related conspiracy theories among participants' close social circle**

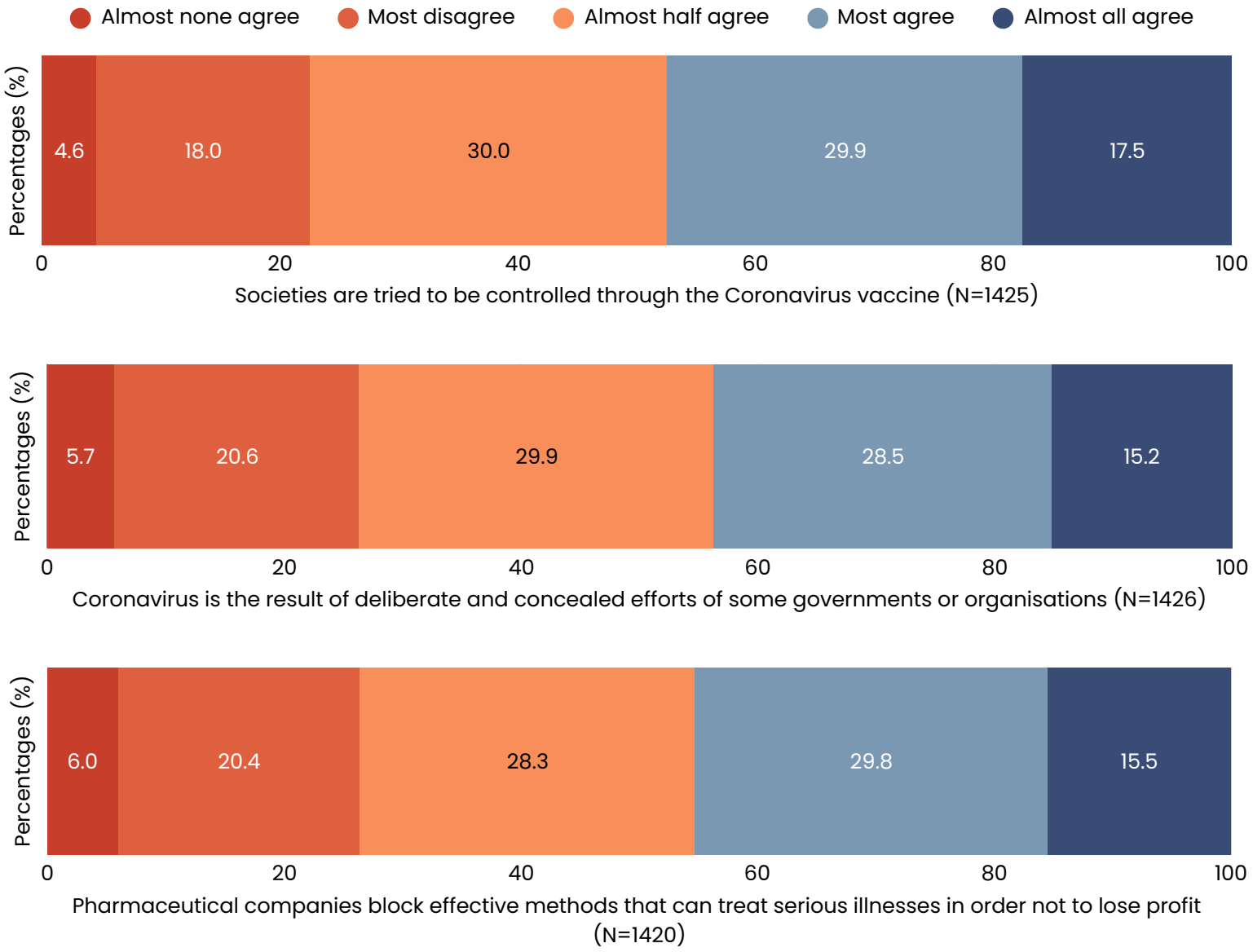



**Figure 3.7** reports how many of the the respondents' close social circle would agree to common health-related conspiracy theories. While 47.4% of respondents stated that most or almost all would endorse the Coronavirus vaccine conspiracy theory in their small circle, 22.6% said only a few or none would agree. Respondents think that the theories about the origin of the virus (43.7%) and pharmaceutical companies (45.3%) would be endorsed by their small circle.

**Figure 3.8 Coronavirus infection history (N = 1500)**

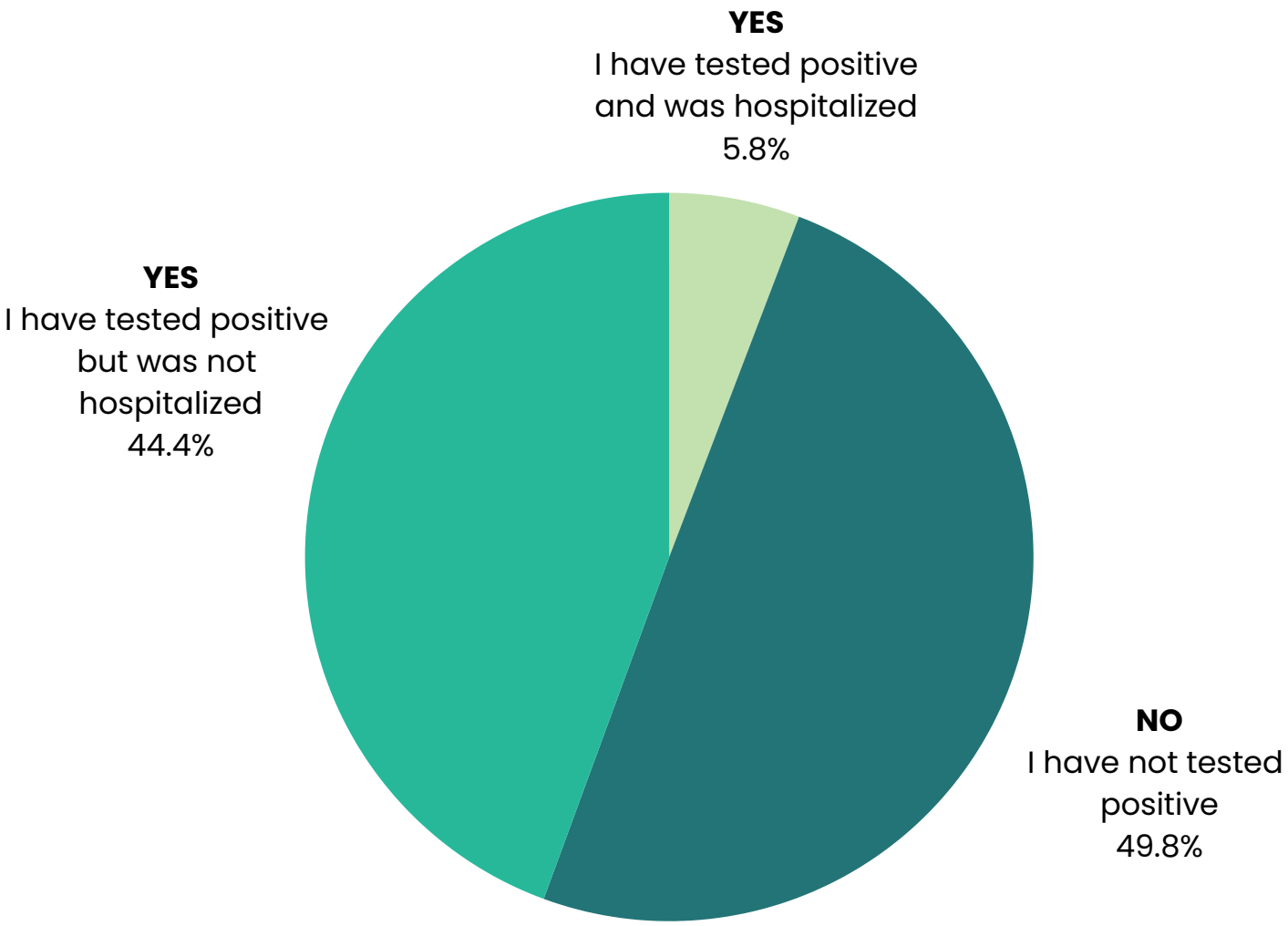



**Figure 3.8** shows that 50.2% tested positive for COVID-19. Of those who tested positive, 5.8% indicated that they were hospitalized while 44.4% were not. On the other hand, 49.8% of participants expressed that they did not test positive for COVID-19 at all.

**Figure 3.9 Number of COVID-19 vaccination doses (N = 1484)**

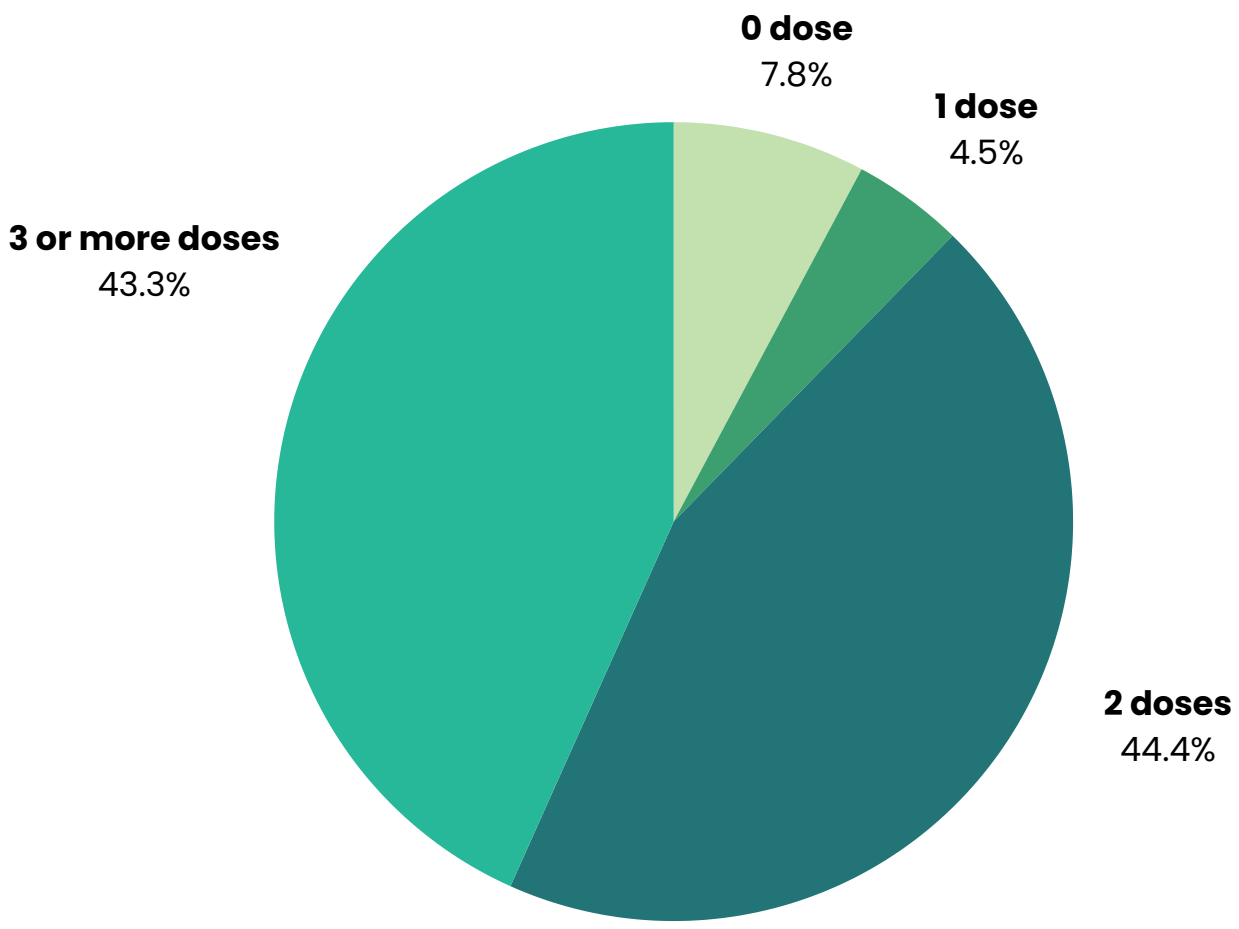



**Figure 3.9** shows that 43.3% of respondents received 3 or more doses of COVID-19 vaccines. While 92.2% received at least one dose of COVID-19 vaccine, 7.8% of participants were not vaccinated at all.

**Figure 3.10 Likelihood of getting COVID-19 vaccine in the future if the pandemic continues (N = 1454)**

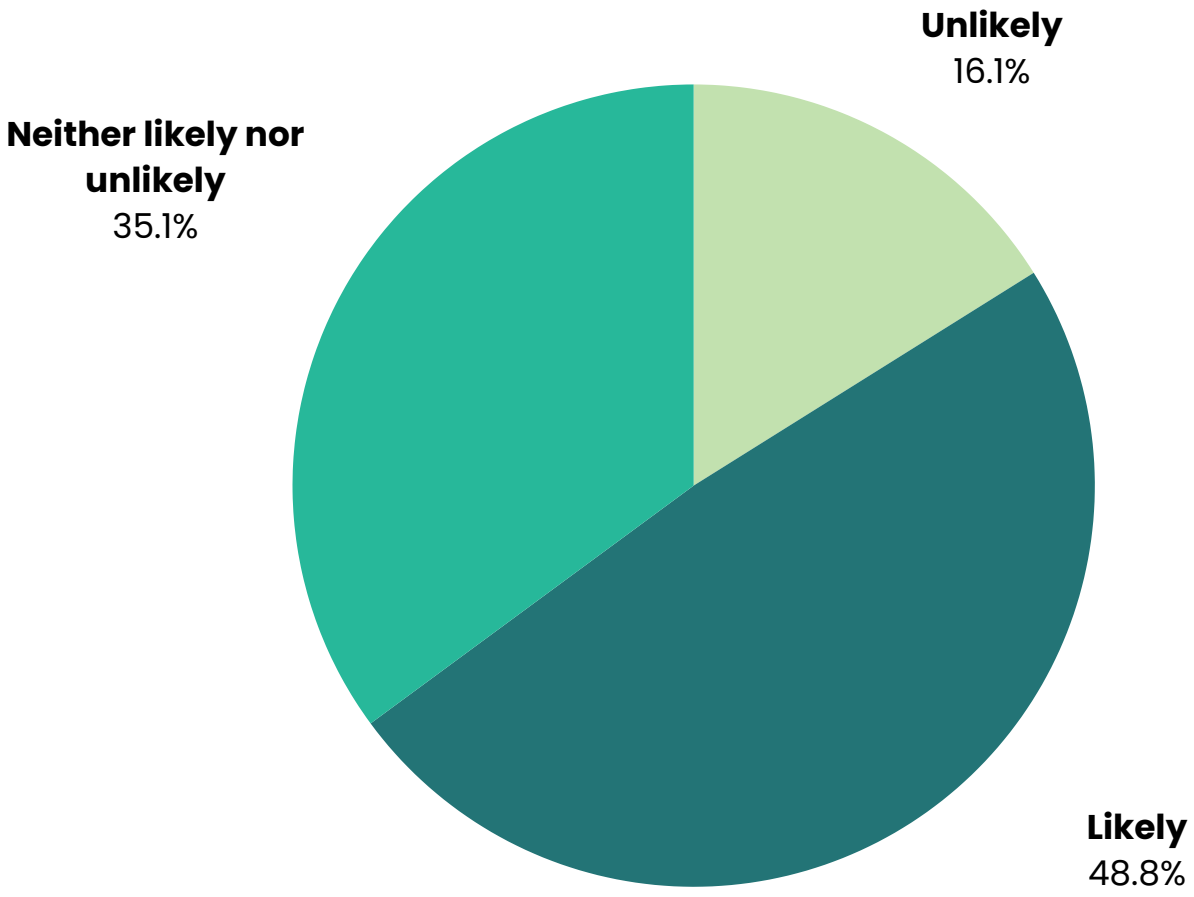



**Figure 3.10** shows whether the respondent would be vaccinated in the future if the pandemic continued. A total 48.8% stated that they are likely to get vaccinated in the future in that case. In contrast, 35.1% claimed to be indecisive, and 16.1% stated that it was unlikely for them to get vaccinated in the future.

**Figure 3.11 Reasons behind being neither likely nor unlikely to get vaccinated in the future (N=494)**

**Participants can choose more than one option.**

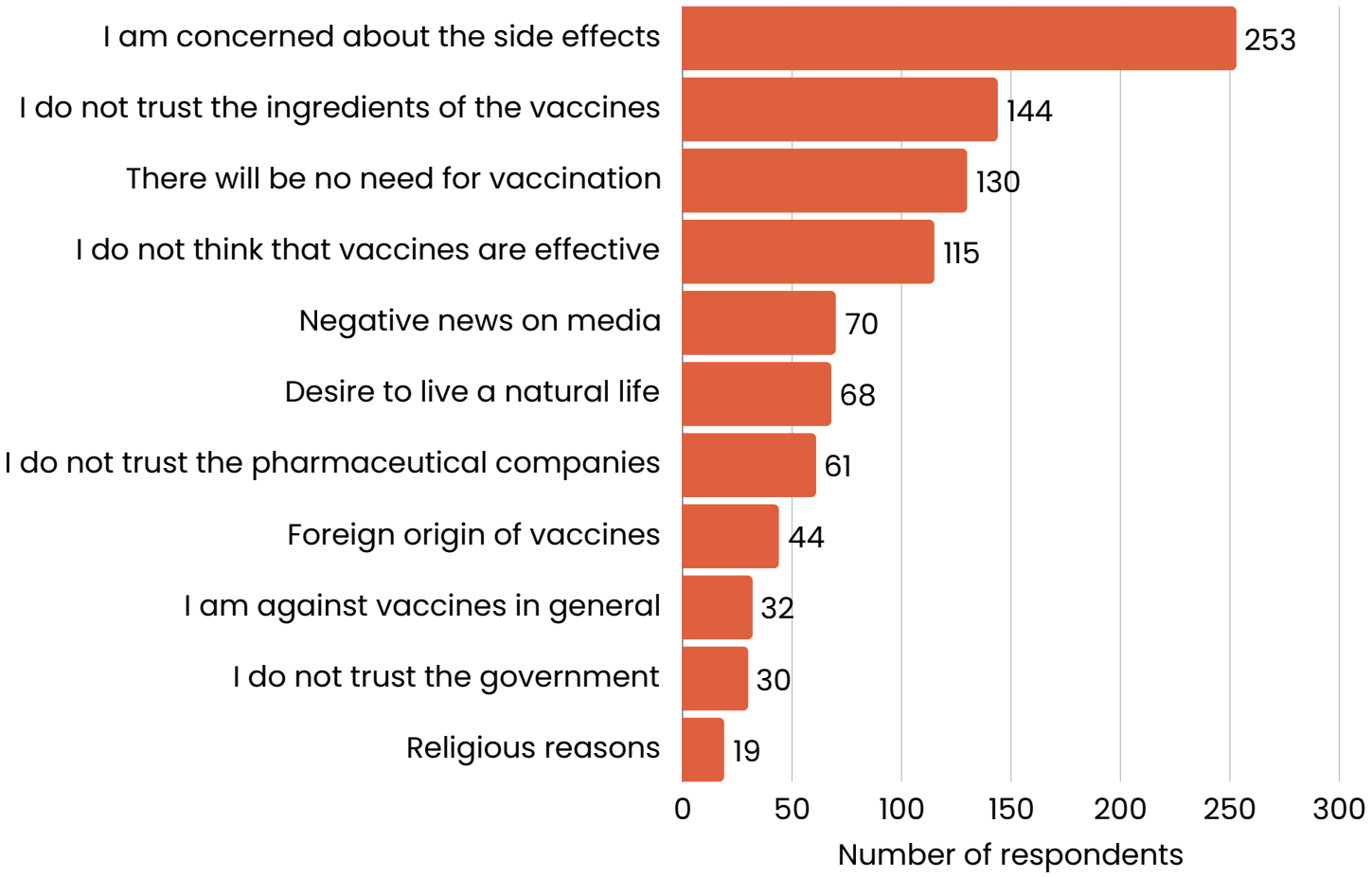



**Figure 3.11** demonstrates the reasons behind people's indecision to get vaccinated for COVID-19, assuming that the pandemic will continue. The most frequent responses are the concerns about the potential side effects of the vaccine (253), distrust in vaccine ingredients (144), and believing that there will be no need for vaccination (130). On the other hand, religious beliefs (19) and lack of trust in the government (30) were the least stated reasons for being indecisive about future vaccination .

**Figure 3.12 Reasons behind being unlikely to get vaccinated in the future (N=230)**

**Participants can choose more than one option.**

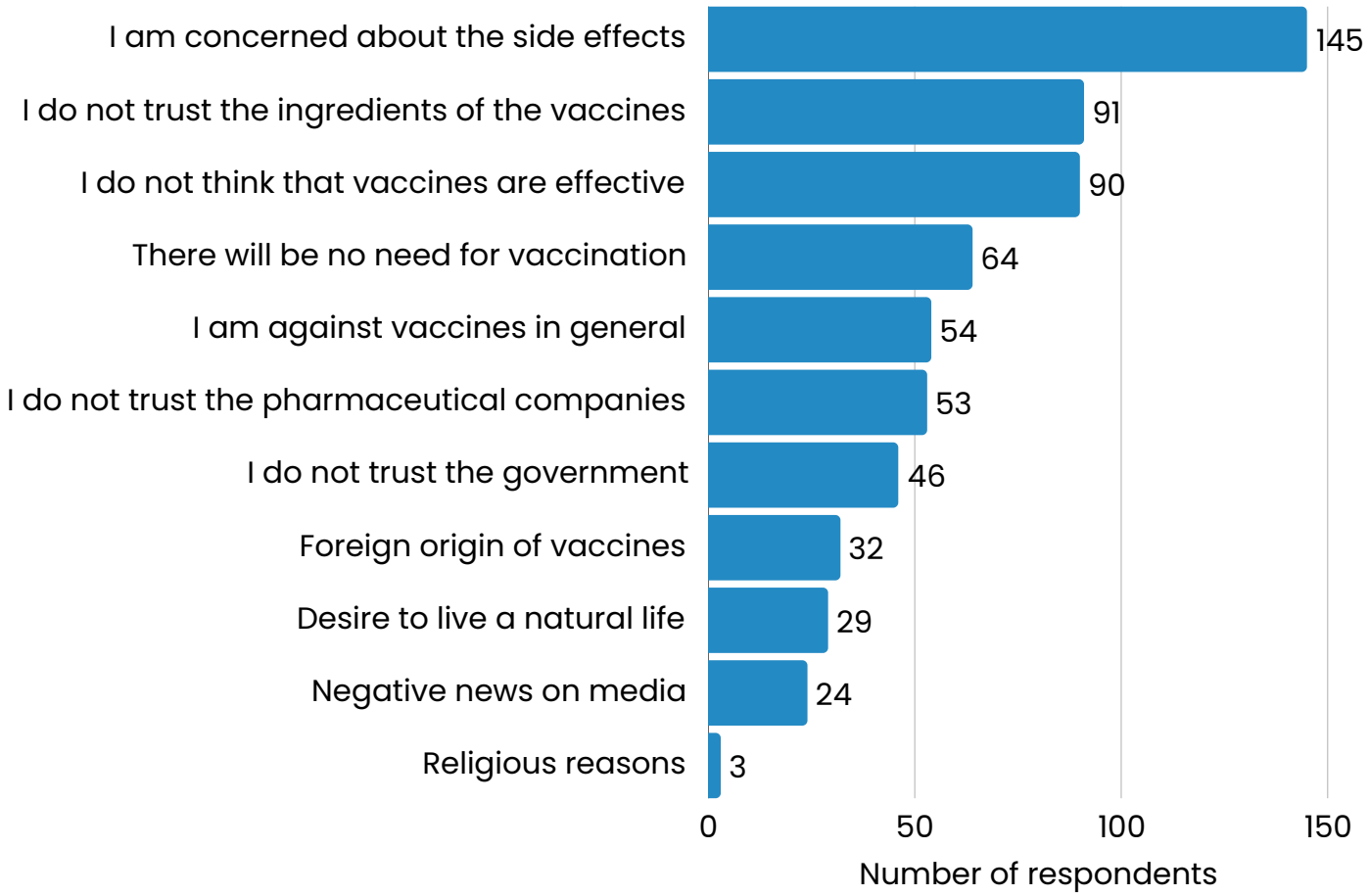



**Figure 3.12** shows the reasons for not wanting to get the COVID-19 vaccinate in the future, assuming that the pandemic will continue. The most common reasons for vaccine refusal were concerns about the side effects of the vaccine (145), distrust in vaccine ingredients (91), and distrust in the effectiveness of the vaccine (90). On the other hand, religious beliefs (3) and negative news in the media (24) were the least stated reasons for refusing future vaccinations.

4

# GENDER

The COVID-19 pandemic has impacted individuals from different social strata unequally: it has created more disadvantageous outcomes for women than men (UN Women 2020). In 2024, approximately 25% of countries reported a backlash against women's rights, a phenomenon that UN Women (2025) attributes to the cumulative impacts of global crises like COVID-19, which worsened existing gender disparities. The gap was especially evident in the domestic sphere, where women carried out the majority of unpaid household work throughout the COVID-19 lockdowns, even though men have become more involved in housework (Sánchez et al. 2021). Similar to other countries, in Turkey, there has been an upsurge in the unequal distribution of housework and caretaking responsibilities among men and women. Women's average daily unpaid labor hours nearly doubled during the COVID-19 period, while men's nearly quadrupled. However, the gender gap remained, as women continued to carry a substantially bigger load of unpaid care, especially for childcare and housework (İlkkaracan and Memiş 2021).

Moreover, patriarchal values play a crucial role in the persisting gender inequality in economic, familial, political, and educational domains. Data from the 1990-2011 World Values Survey (WVS) has shown that Turkey's patriarchal attitudes were particularly rising between 2007 and 2011 (Engin and Pals 2018). In light of the COVID-19 crisis that reinforce existing gender inequalities, this section focuses on the distribution of household responsibilities and patriarchal values among individuals.

**Figure 4.1 Average time spent on childcare per week by gender (N=853)**

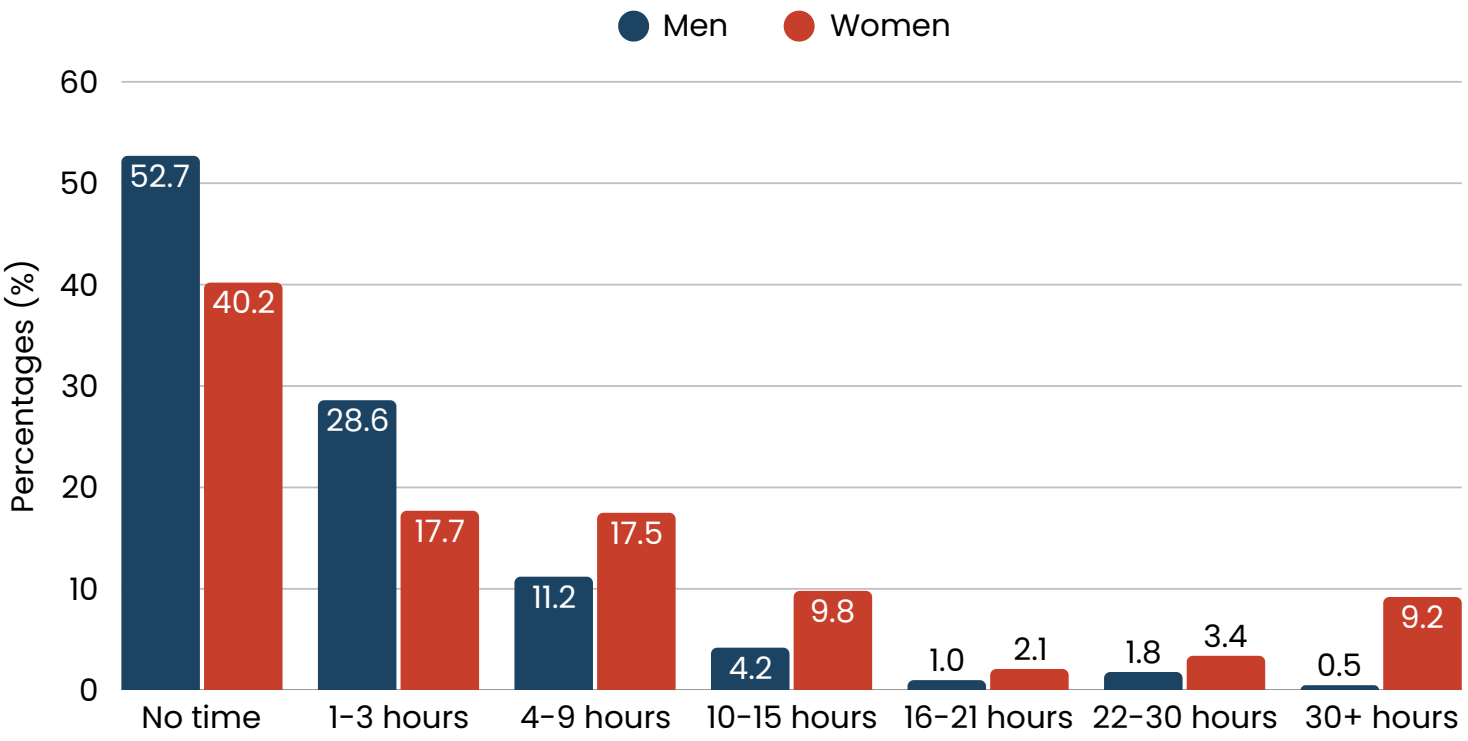



**Figure 4.1** shows the average weekly time spent on childcare among men and women who have children. Men are much more likely to report spending no time on childcare: 52.7% of fathers said they spent no time on childcare, compared to 40.2% of mothers. As hours spent on childcare increase, the difference between men and women widens. Women are consistently more represented in the higher time brackets, and especially so at the extreme end: 9.2% of women report spending over 30 hours per week on childcare, compared to only 0.5% of men.

**Figure 4.2 Average time spent on housework per week by gender, N=1500**

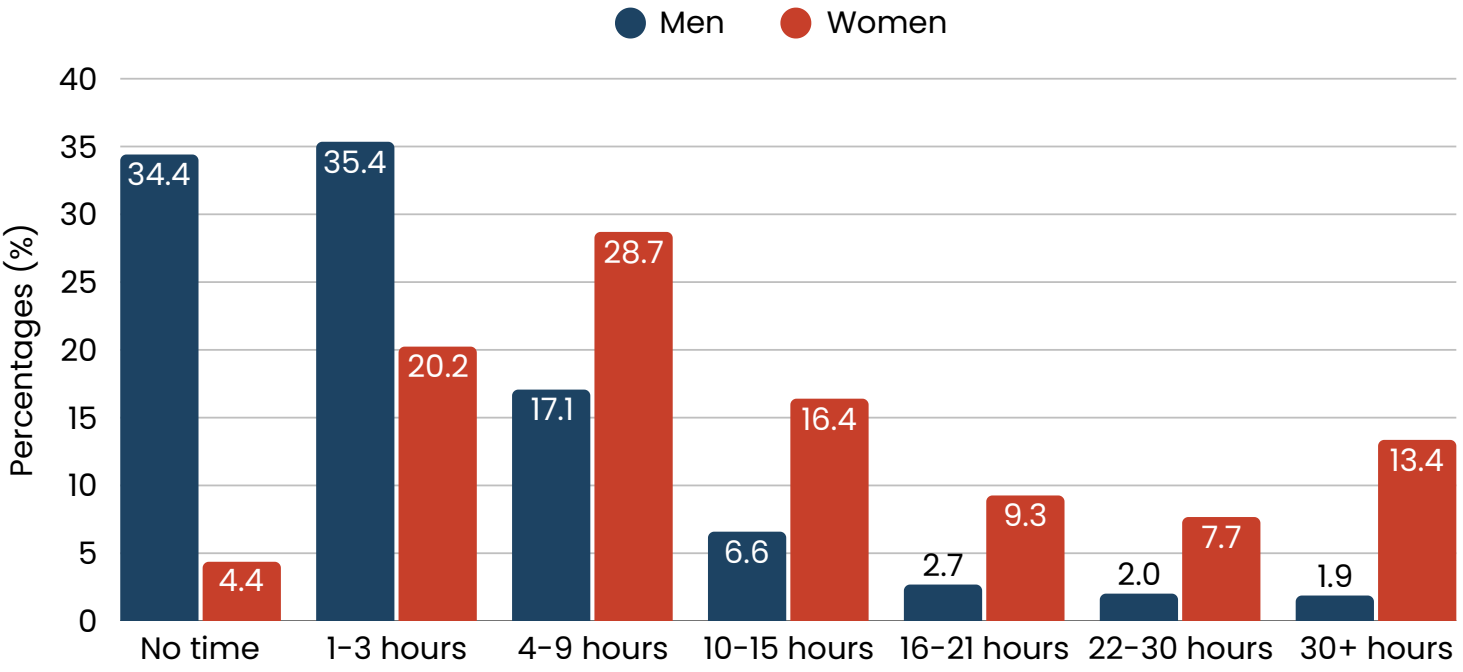



**Figure 4.2** illustrates the average weekly time spent on housework by women and men. The graph reveals a similar gender imbalance in the time allocated to housework per week. A substantial amount of men (34.4%) reported spending no time on housework, while only 4.4% of women said the same. Nearly one-third of women (28.7%) indicated they spend between 4 to 9 hours per week on housework, compared to only 17.1% of men. Furthermore, 13.4% of women spend over 30 hours weekly on housework, a rate 7 times more than that of men (1.9%).

## Figure 4.3 Gender values

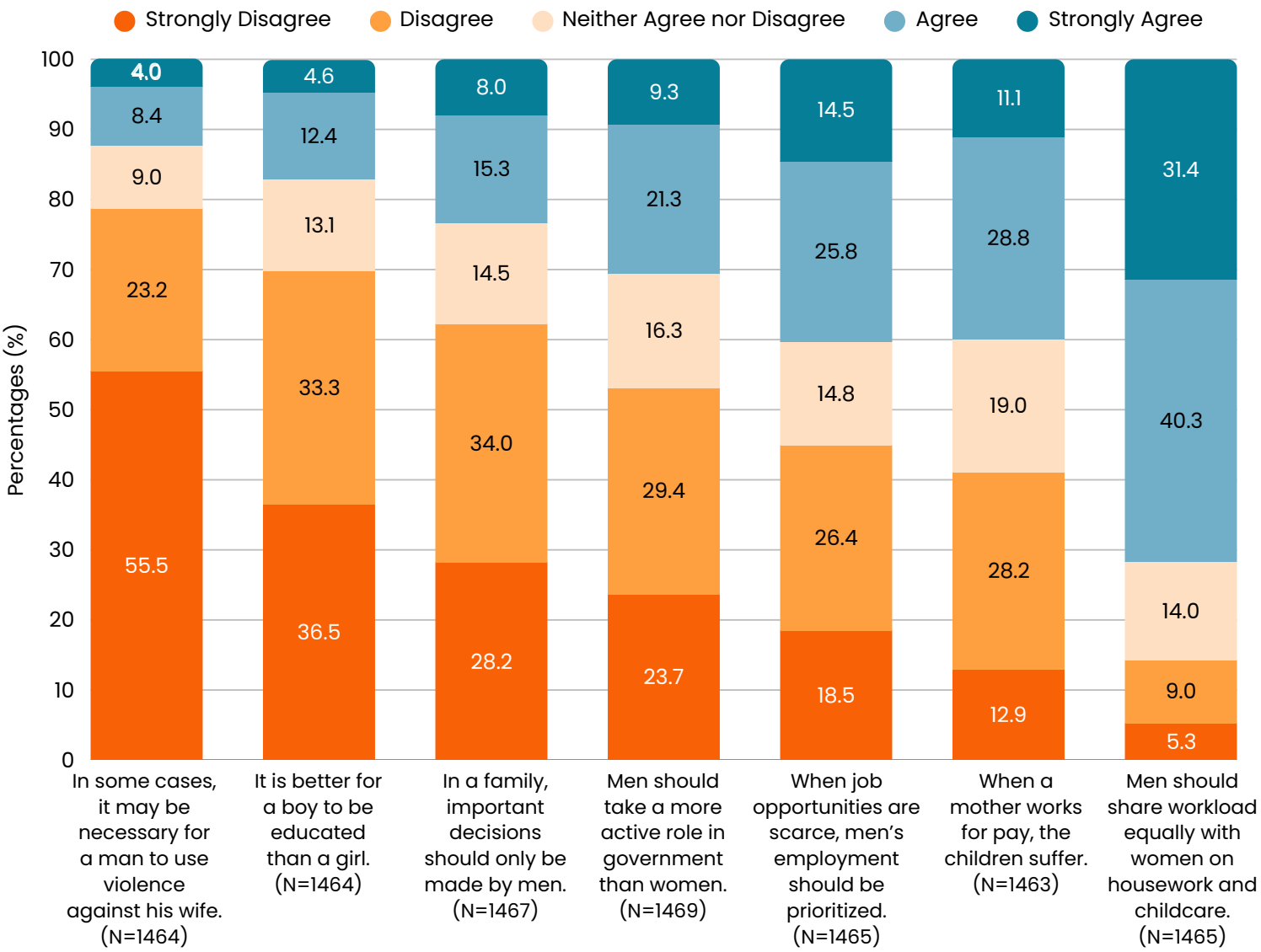



**Figure 4.3** illustrates the public's perceptions of gender roles and family dynamics in Turkey. 12.4% of respondents agree or strongly agree that it may be necessary for a man to use violence against his wife. 17.0% agree or strongly agree that it is better for a boy to be educated than a girl, while 23.3% think that important family decisions should only be made by men. 30.6% agree or strongly agree that men should take a more active role in government than women. When job opportunities are scarce, 40.3% believe men's employment should be prioritized. 39.9% of respondents believe that children are negatively affected when their mothers work for pay. In contrast to these traditional views, 71.7% of respondents said that men should share household and childcare responsibilities equally with women.

**Figure 4.4 "In some cases, it may be necessary for a man to use violence against his wife" by gender (N=1464)**

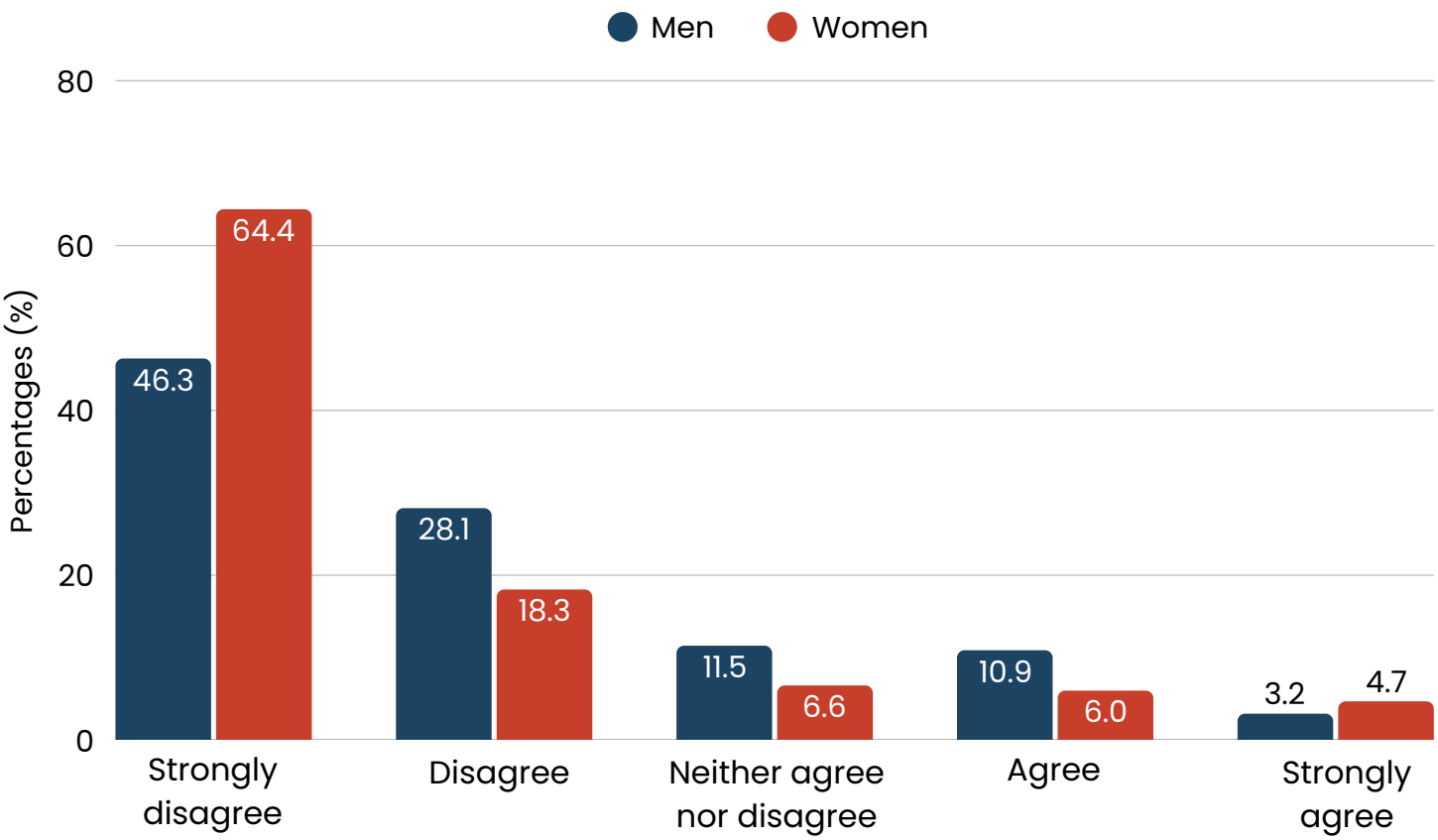



**Figure 4.4** shows levels of agreement with the statement "In some cases, it may be necessary for a man to use violence against his wife" by gender. The majority of women (64.4%) strongly disagreed with this statement, compared to 46.3% of men. Moreover, 10.7% of women said they agreed or strongly agreed, compared to 14.1% of men. According to the findings, a concerning percentage of individuals still normalize domestic abuse.

**Figure 4.5 "Men should take a more active role in government than women" by gender (N=1469)**

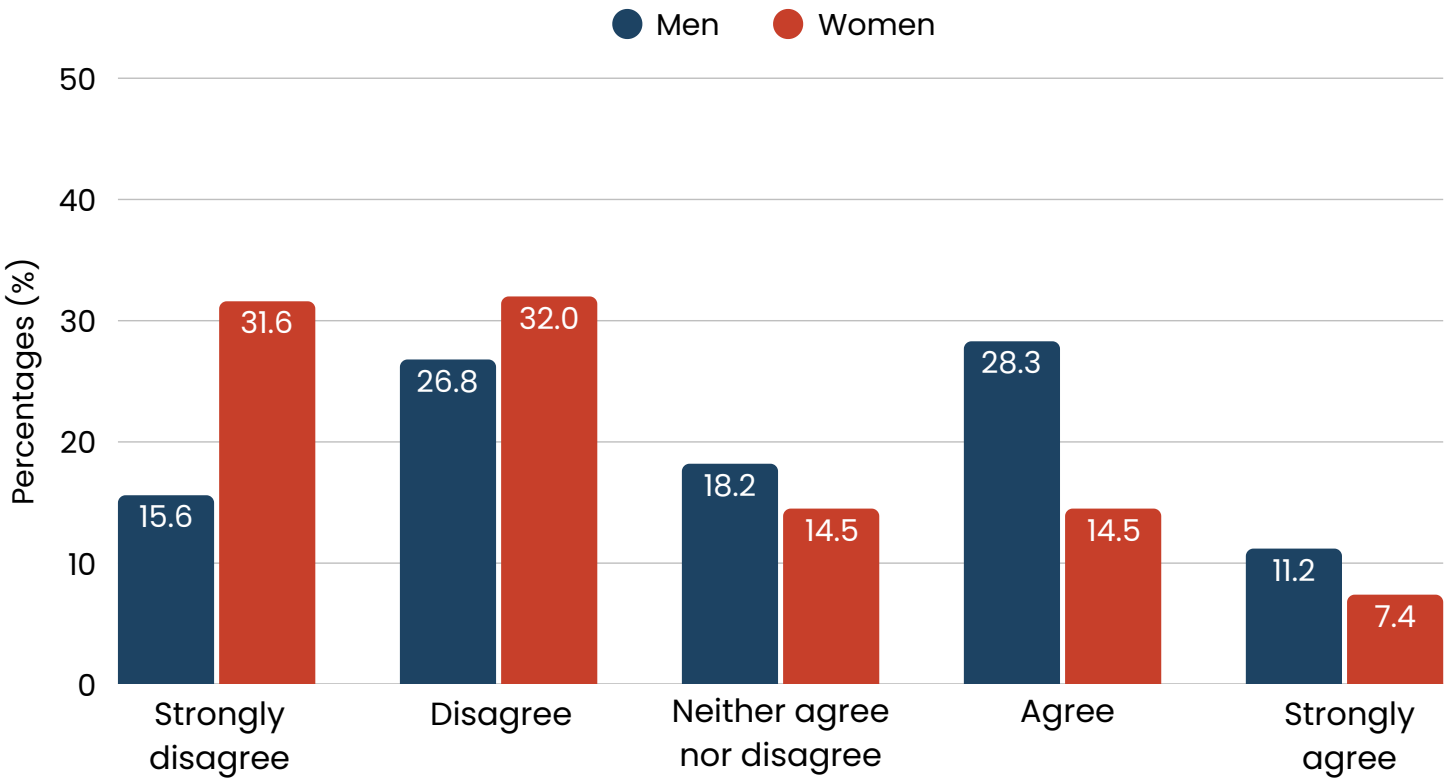



**Figure 4.5** shows the level of agreement with the statement "Men should take a more active role in government than women" by gender. Women are more likely than men to either disagree or strongly disagree with the statement (63.6% vs. 42.4%), suggesting that they are more in favor of gender equality in political leadership. In contrast, 39.5% of men somewhat agreed with the statement, while it is 21.9% for women. The difference indicates that while men are more willing to conform to traditional gender role expectations in politics, women are more supportive of equal political participation.

**Figure 4.6 Attitudes towards sexual minorities**

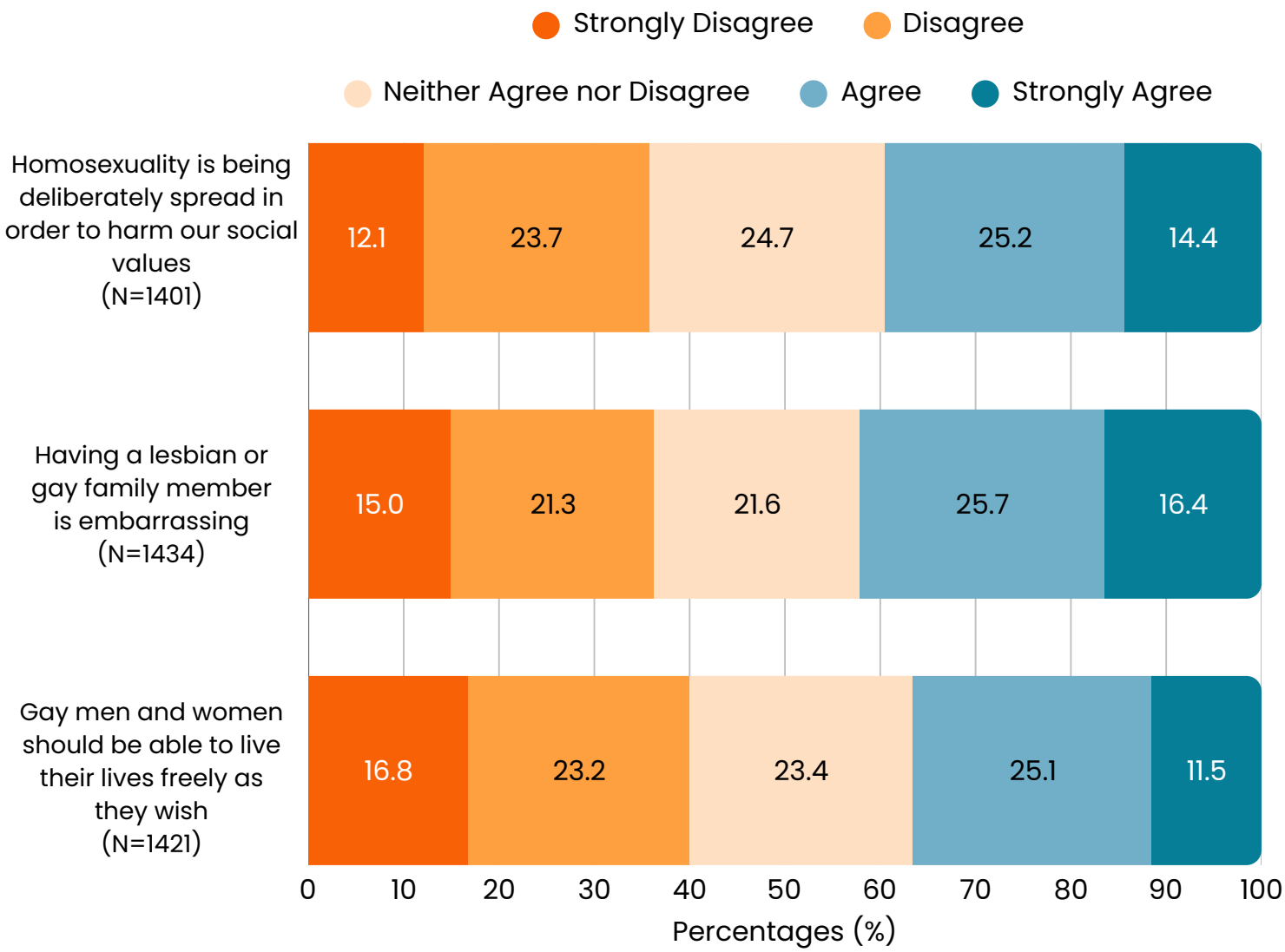



**Figure 4.6** presents public opinion toward sexual minorities in Turkey, indicating a high prevalence of intolerant attitudes. While 39.6% of respondents state homosexuality is being deliberately spread to harm social values, 24.7% remain neutral. On the other hand, 42.1% believe that having a lesbian or gay family member is embarrassing, and 21.6% express a neutral stance. Moreover, 40% oppose the idea that gay men and women should live freely as they wish, while 23.4% express neutrality.

**Figure 4.7 "Having a lesbian or gay family member is embarrassing" by gender (N=1434)**

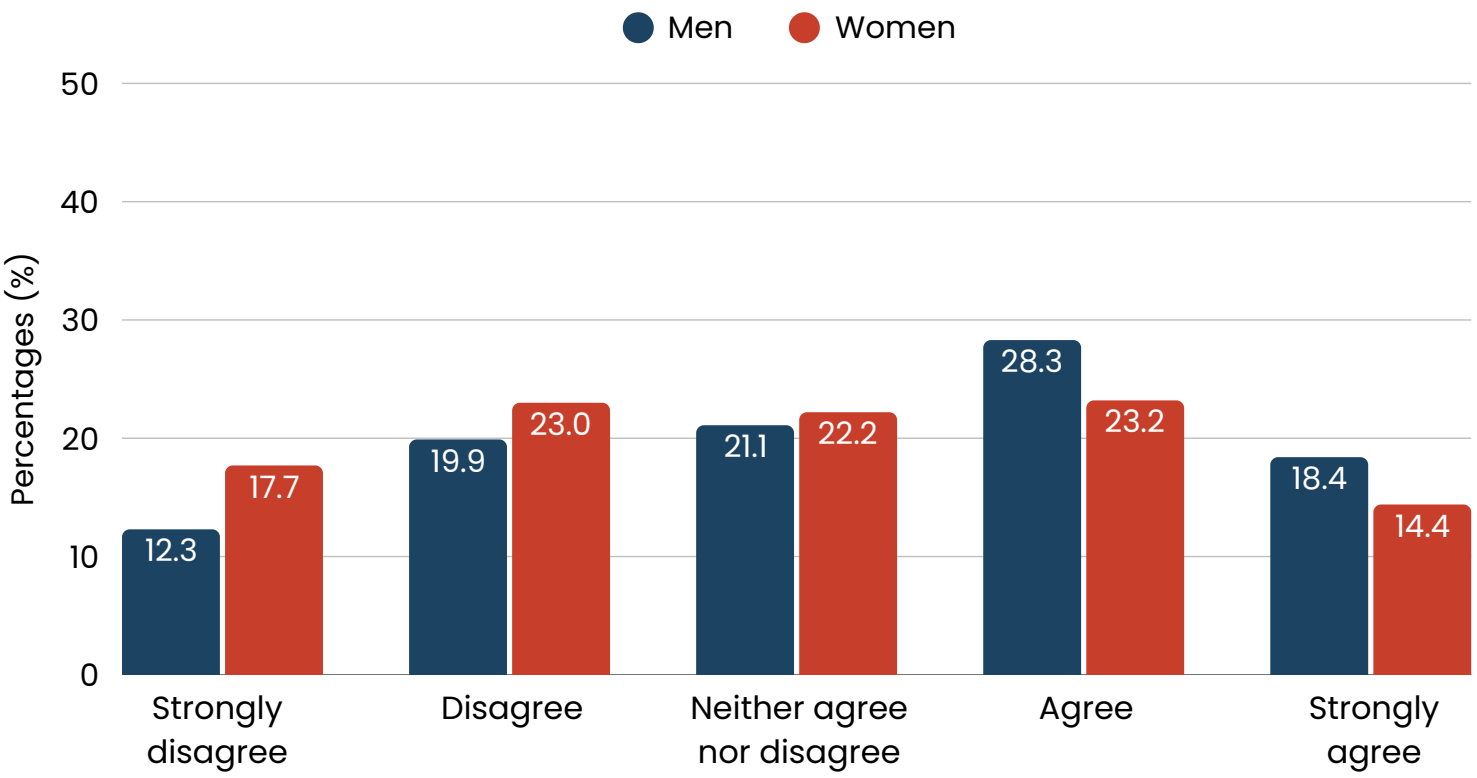



**Figure 4.7** shows the extent to which respondents agree with the statement "Having a lesbian or gay family member is embarrassing" by gender. The statement was rejected by 32.2% of men, compared to 40.7% of women. In contrast, a higher percentage of men (46.7%) indicated agreement or strong agreement with the sentiment compared to women (37.6%). These results reflect higher levels of intolerance among men.

# NOTES

1. Sensitive questions answered via tablet include birth control use, frequency of birth control use before and after the pandemic, and changes in sexual activity frequency.

2. In Turkey, the HES code was a personal ID used to track COVID-19 health status. It helped people share their health information for activities like travel or visits, allowing others to assess COVID-19 exposure risks.

3. For all figures in the report, cases with non-response were excluded using listwise deletion. Also, due to rounding, the sum of percentages may not add up to exactly 100%.

4. The educational categories presented in Figure 1.5 are defined as follows: “Primary school and below” includes individuals with no formal education, primary school dropouts, and those who completed primary school. “Middle school” refers to those who completed middle school. “High school” includes high school graduates, college dropouts, and current college students. Finally, “University education and above” comprises college graduates as well as individuals with a master’s degree or higher.

5. In this question, contraceptive use includes both traditional and non-traditional methods.

# REFERENCES


Dubé, E., Laberge, C., Guay, M., Bramadat, P., Roy, R., and Bettinger, J. 2013. "Vaccine Hesitancy: An Overview." *Human Vaccines & Immunotherapeutics* 9(8): 1763-73.

Engin, Ceylan. 2025. *2022 Turkish COVID-19 Values Study*. doi:10.48623/aperta.286039

Engin, Ceylan, and S. Sena Akkoç. 2024. "Why do people doubt vaccines? Predictors of COVID-19 vaccine hesitancy in Turkey." *Turkish Studies* 25(5):962–981.

Engin, Ceylan, and Cristiano Vezzoni. 2020. "Who's Skeptical of Vaccines? Prevalence and Determinants of Anti-vaccination Attitudes in Italy." *Population Review* 59(2):156-179.

Gallup 2019. "Wellcome Global Monitor - First Wave Findings." Retrieved November 29, 2023 (https://wellcome.org/sites/default/files/wellcome-global-monitor-2018.pdf).

İlkkaracan, İpek, and Emel Memiş. 2021. "Transformations in the Gender Gaps in Paid and Unpaid Work During the COVID-19 Pandemic: Findings from Turkey." *Feminist Economics* 27(1–2):288–309.

Lee, Susie D, Ewa Batyra, Andres Castro, and Joshua Wilde. 2023. "Human fertility after a disaster: a systematic literature review." *Proceedings of the Royal Society B* 290(1998):20230211.

Özceylan, Gökmen, Dilek Toprak, and Elif Serap Esen. 2020. Vaccine rejection and hesitation in Turkey. *Human Vaccines and Immunotherapeutics* 16(5):1034–1039.

Pals, Heili, and Ceylan Engin. 2018. "Attachment to Society and Cognitive Deviance: The Case of Turkey." *Deviant Behavior* 39(6):799–815. doi:10.1080/01639625.2017.1411037.

Ryder, Norman. B. 1965. "The Cohort as a Concept in the Study of Social Change." *American Sociological Review* 30(6):843–861.

Sánchez, Alejandra Rodríguez, Anette Eva Fasang, and Susan Harkness. 2021. "Gender Division of Housework during the COVID-19 Pandemic: Temporary Shocks or Durable Change?" *Demographic Research* 45: 1297–1316.

T.C. Sağlık Bakanlığı 2023. "COVID-19 Bilgilendirme Platformu." Retrieved November 29, 2023 (https://covid19.saglik.gov.tr/).

TURKSTAT. 2025a. "İstatistiklerle Aile, 2024." Turkish Statistical Institute. Retrieved June 25, 2025 (https://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Aile-2024-53898)

TURKSTAT. 2025b. "Doğum İstatistikleri, 2024". Turkish Statistical Institute. Retrieved June 25, 2025 (https://data.tuik.gov.tr/Bulten/Index?p=Dogum-Istatistikleri-2024-54196)

UN Women. 2025. "One in Four Countries Report Backlash on Women's Rights in 2024". March. Retrieved June 26, 2025 (https://www.unwomen.org/en/news-stories/press-release/2025/03/one-in-four-countries-report-backlash-on-womens-rights-in-2024).