

## Parenting in Risk Society: Vaccine Decision of Parents for Their Children During Covid-19 Pandemics

### *Risk Toplumunda Ebeveynlik: COVID-19 Pandemisinde Ebeveynlerin Çocukları için Aşı Kararı*

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DOI: [10.33709/ictimaiyat.1255134](https://doi.org/10.33709/ictimaiyat.1255134)

ABSTRACT	ÖZ
<p>The current study is a literature review to analyze the parents' burden in deciding to vaccinate their children against COVID-19, during the pandemic while utilizing Ulrich Beck's risk society term. The definition, perception, and experience of risk in society are all important and developing topics of risk studies in the social sciences. According to Beck's idea of risk society, risk is a human construct that takes many forms due to technological advancement and global influence. Parents are primarily responsible for protecting their children against risks that have been amplified or otherwise attenuated. The COVID-19 pandemic has increased parental obligations by making the heightened risk a reality. These responsibilities include preventing contamination and vaccinating children. As the vaccines are promptly developed for a new disease, it is also seen to be risky. The study concludes that the COVID-19 vaccine decision is a recent and significant parental responsibility because of the risk society, which attributes the protection of individuals against primarily human-made and global threats. Moreover, opinions toward vaccination rely on several variables, including confidence in institutions, the health concerns associated with vaccination, and the influence of the virus on young children.</p>	<p>Çalışmamız, Ulrich Beck'in risk toplumu teriminden yararlanarak, pandemi sırasında ebeveynlerin çocukları için COVID-19 aşısını seçerken yaşadıkları yükü analiz etmek ve anlamak amacıyla gerçekleştirilen bir literatür taramasıdır. Toplumda riskin tanımı, algısı ve deneyimi, sosyal bilimlerdeki risk çalışmalarında önemli ve gelişmekte olan konulardır. Beck'in risk toplumu konseptine göre risk, teknolojik ilerleme ve globalleşme sonucu insan yapısı olan ve pek çok çeşidi bulunan bir yapıdadır. Ebeveynler, çocuklarını artırılan (abartılan) veya azaltılmış risklere karşı korumaktan birincil derecede sorumludur. COVID-19 salgını artırılan riski gerçeğe dönüştürerek ebeveyn yükümlülüklerini artırmıştır. Bu sorumluluklar arasında bulaşının önlenmesi ve çocukların aşılınması yer almaktadır. Yeni bir hastalık için hızlı geliştirilen bir aşı olduğu için aşının da riskli olduğu görülmektedir. Çalışmanın sonuçlarına göre, COVID-19 aşı kararı, bireylerin insan yapımı ve global risklere karşı korunması yükümlülüğünü bireylere bırakan risk toplumu çerçevesinde, ebeveynlere yeni ve önemli bir sorumluk getirmektedir. Ayrıca aşılama yönelik kararlar, kurumlara duyulan güven, virüsün ve aşının küçük çocuklar üzerindeki etkisi gibi sağlıkla ilgili kaygılar dahil olmak üzere bir dizi değişkene dayanmaktadır.</p>
<p><b>Keywords</b></p> <p>Risk Society, Parenting, COVID-19, Pandemics, Vaccine</p>	<p><b>Anahtar Kelimeler</b></p> <p>Risk Toplumu, Ebeveynlik, COVID-19, Pandemi, Aşı</p>

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## 1. Introduction

This study aims to examine the burden of the pandemic on parents, through their decision to vaccinate<sup>1</sup> their children, based on theories on risk such as social amplification of risk framework (SARF), psychometric paradigm, cultural theory, and governmentality of risk and focusing on the risk society concept of Ulrich Beck (1992).

COVID-19 is a recent issue that poses significant risks, the full effects of which are still being analyzed. It has tremendously impacted social, personal, and family life. As a health concern, COVID-19 is associated with care work, contamination, lockdowns, and precautions. All of these regulations and obligations have also affected family life, relationships, and the responsibilities of parents towards their children and society. Therefore, even though the vaccine is primarily a health issue, it also has sociological aspects that must be carefully considered. Our study aims to investigate the sociological aspects of COVID-19 and the concept of taking risks associated with its vaccine.

COVID-19 has revived the debate about vaccines combined with new risks and concerns about the vaccine. While sociological studies on risk are relatively few, the risk is calculated numerically via quantitative studies. Considering the relevant areas, it can be understood that parenting and vaccine, parenting and COVID-19, and parenting and COVID-19 vaccine have been studied in various regions. However, parenting and the COVID-19 vaccine have not been studied with the framework of “risk”. Our research aims to examine how parents make decisions about administering the COVID-19 vaccine to their children, taking into account both the perceived risk and the social and cultural factors that may influence their decision-making processes.

The vaccine is a significant issue argued through parenthood obligations and state intervention since the vaccine is applied through the childhood phase. Even though vaccine rejection contains a significant study area, COVID vaccine rejection is a relatively new issue, and the issue is argued with terms such as “vaccine hesitancy” and “vaccine acceptance” instead of rejection; thus, there is not any study on vaccine rejection and covid or parents’ COVID vaccine rejection. However, there are studies with significant content, number, and variety of research on the vaccine decisions of parents to analyze the parents’ position and situation considering COVID vaccine and risks.

The study starts with an inquiry into the definition of risk and argumentations regarding risk in the social sciences to provide a sociological framework for the construction of risk. It focuses on the basic understanding of risk in social sciences and how the term risk society can be understood considering these historical backgrounds of the risk theory. Additionally, the main theories on risk and society are elaborated with a basic interest in the “risk society” term of Ulrich Beck. Supported by this theoretical variety, our basic theory, risk society, can be understood and analyzed better from a wider sociological perspective. Depending on this theoretical base on risk, research is conducted on parents’ decision on vaccinating their children's COVID-19 vaccine. Therefore, the relationship and analysis of COVID-19 and parenting can be comprehended considering the obligation of parents to the risk society.

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<sup>1</sup> Since the focus of our study is on parents' decisions on the shooting of the COVID-19 vaccine on their children, when we refer to vaccine opposition, support, or hesitation in any other context, we are referring to the COVID-19 vaccines.

## 2. Risk in Social Sciences

Risk can be considered a vague idea and can also be used to identify distinct groups of people who are more susceptible to dangers. (Füredi, 2007: 27) Short defines risk also stating the positive dimension of risks. According to that, even, if the risk is more specifically the chance or probability of a hazard's negative effects, the idea of risk does not need to have such a limited scope or negative meaning. A more impartial definition plainly says that risk is the potential of a possible event. There is a lot of research on the advantages of risk and uncertainty in people's lives (Short, 1984: 711).

Füredi (2007: 27-28) discusses how risk profiles are determined and calculated and suggests that children who are considered to be at risk often exhibit a specific lifestyle. Furthermore, social workers may examine the background of parents to assess whether their children are at risk. The numerous risk factors that impact individuals can constrain their choices and prospects for the future. Some situations, encounters, and experiences are also classified as being at risk. The introduction of the concept of "at-risk" creates a division from the conventional connection between human behavior and the probability of particular risks.

People have risk profiles related both to who they are and what they do and it is created by specialists from many fields. They think this knowledge can be helpful. Risk factor analyses extract the behaviors that are characteristic of persons who are most likely to be at risk. The risk factors that receive the most attention in the field of health promotion include stress, obesity, and smoking. To be at risk also indicates that the threats one faces are independent.

Even Beck's statement on how risk is human-made (even the major and grand projects and problems such as nuclear bombs, and global warming) and each individual is considered to be responsible for each risk (Beck, 1992: 7), Füredi remarks that external risk exists and they are independent and completely separate from the actor and is not only the result of any particular action. As a result, the best course of action is to completely avoid a risk once it is recognized that it exists in and of itself and requires little to no human participation (Füredi, 2007: 27-28).

While defining risk, Füredi also points to specific characteristics of the risk concept in the Modern World and points out that risk is referred to as the possibility of damage, injury, illness, death, or another unfortunate event associated with a danger is referred to as risk. In general, the concept of "hazard" refers to a threat to individuals and their values. Hazards go beyond the obvious dangers like hurricanes, poison, germs, and toxic waste. Various things like peanuts, tampons, cars, and birth control pills, to mention a few, have been depicted as dangers. (Füredi, 1997: 25). Beck also remarks on the increasing risks on family life, work life, ecological balance, social ties and due to scientific innovations and reflexive modernity (Beck, 1992: 13) Along with all of these, the modern period is often presented as an age of disaster, of global conflicts, genocides, and ethnic cleansings, catastrophes of industrial and rural transformation, disasters of technological arrogance, and environmental calamities (Füredi, 1997: 19-20). Beck also claims that risk is different in the modern world compared to pre-modern times stating that the idea of risk is closely intertwined with the concept of reflexive modernization and that risk may be characterized as a systematic method for dealing with the dangers and insecurity that modernity itself presents and generates. Thus, risks can be defined as the outcomes of modernization's globalization and its alarming force (Beck, 1991:21).

To sum up, both Beck and Füredi agree that the risk, at present, is the responsibility of the individuals. Misfortune and accidents are not accepted as explanations and excuses for risks and danger, but as the responsibility of individuals (Füredi, 2007: 10; Beck, 1992: 46). Füredi adds that today's society has a difficult time comprehending misfortune and hardship, since people's problems are increasingly considered to be the result of reckless or malicious behavior. Our society has a difficult time accepting the possibility that we might occasionally experience negative events. Public health authorities frequently assert that most injuries suffered by people are preventable and that it is irresponsible to attribute such an incidence to an accident; thus, advocates for health promotion and safety specialists reject the word accident. (Füredi, 1997: 10).

Research on risk has been mainly studies based on more quantitative study areas until recent decades. However, risk has been recognized also as a social issue. Understanding, defining, and analyzing the risk, perceptions of risk, sociological structure, and the process of producing risk can be summarized as the basic concerns of social sciences concerning risk studies.

Basic theorists and theories on qualitative studies on risk studies in social sciences can be listed as Mary Douglas and Cultural Theory, Foucault and governmentality of risk, Slovic and psychometric approach, and Ulrich Beck and concept of risk society which is the main theory of this research questioning the relationship of risk and vaccine decision of parents considering risk.

Wilkinson states that sociologists' evaluations of the risks we face seem to have a major impact on how they conceptualize the social development of "risk consciousness" and its political implications for the potential futures that lie ahead. (Wilkinson, 2002: 7) Thus, the definition, perception, and focus of risk theories vary due to specific concerns and attention. Therefore, Wilkinson adds that the sociological field that has grown up around the study of risk is primarily concerned with explaining how our perceptions of health risks and technological dangers are produced culturally, and also their role in the formation of a new ethical and political foundation for a society that, based on which expert you believe, has increased the threat of a major environmental catastrophe as a result of accidental side effects of its design. (Wilkinson, 2002: 7)

### **2.1. Social Amplification of Risk Framework (SARF)**

A significant contribution to risk perception studies is the social amplification of risk framework (SARF). This framework focuses primarily on how individuals perceive and evaluate risks concerning content, threat, approximation, and risk warning. According to SARF, risk can be amplified in a society when certain risks and events that specialists deem to be low-risk become a special focus of worry and political activity. Nevertheless, society pays relatively lesser attention to risk attenuation than to other threats that experts deem to be more important. Smoking, car accidents, and naturally occurring radon gas are examples of significant risks that may be subjected to social attenuation of risk perceptions. (Kasperson, Kasperson, Pidgeon, and Slovic, 2003: 13-14)

Media has a significant effect on our risk evaluation and our tendency to amplify certain risks over others. Wilkinson states that our first, and occasionally only, exposure to subjects like the dangers of emerging genetic technology and the potential of an ecological catastrophe is when

we read the news and watch television (Wilkinson, 2002: 115) besides social media in the present.

Concepts of amplified-attenuated risk are also significant difficulties when it comes to parenting. In her research concentrating on the burden of motherhood, Villalobos also explores parental behavior and how it relates to the idea of risk. In her study, she also makes mention of how parents worry about amplified risks, such as a nuclear bombing, and even make life-altering decisions to shield their family from it. She uses the example of a family she interviewed as an example who decide not to move somewhere 3 hours away to NYC due to their concerns about a nuclear bombing assault on NYC (Villalobos, 2014: 35).

## **2.2. The Psychometric Paradigm**

Slovic (1987) proposes a psychometric approach to research risk perception within people. Developing a taxonomy for hazards he aims to comprehend and foresee reactions to the risks assessing perceived risk. He argues that people's intense sensitivity to some dangers, their disinterest in others, and the differences between these emotions and professional views may all be explained by a taxonomy approach and he proposes the use of the psychometric paradigm to ensure a taxonomic scheme.

According to this view, people evaluate the intended amount of regulation for each risk as well as the desired level of riskiness for various hazards using quantitative methods according to the psychometric paradigm. The risk perception of individuals depends on their 'heuristics', frames of perception. These judgments of individuals are then connected to judgments about other characteristics which can be listed as; firstly, the hazard's status concerning characteristics that have been postulated to account for risk attitudes and perceptions (for example, voluntariness, despair, knowledge, and predictability). Secondly, the gains that each hazard provides to society. Additionally, the number of deaths induced by the hazard in an ordinary year, and finally, the number of deaths caused by the hazard in a disastrous year (Slovic, 1987: 281).

Thus, the psychometric paradigm comprises a theoretical framework based on the idea that risk is a concept that is subjectively interpreted by people who may be influenced by a range of psychological, social, institutional, and cultural factors. The paradigm relies on the premise that many of these factors and their connections can be measured and modeled with the right survey instrument design to shed light on how communities and individuals respond to the dangers they encounter (Slovic, 2000, xxiii). The psychometric paradigm is criticized for being more quantitative on risk analysis and having a lighter focus on the broader social, cultural, and historical contexts in which such heuristics are developed and function (Lupton, 2006: 2) compared to the theories in social sciences and risk society term of Beck.

## **2.3. Cultural Theory**

Douglas, in her early works, defined the view on notions of purity and contamination as culturally particular and serves to build and uphold beliefs about self and Others of the society. Thus, things are considered contaminating and polluting and therefore hazardous due to the threat it poses to social order. Her "cultural risk" understanding is also generated depending on her these theoretical findings on purity and contamination (Tulloch, 2008: 142; Lupton, 2006: 2-3). Douglas and Wildavsky have developed a cultural theory where they explain the cultural aspect of risk. Cultural theory developed by Mary Douglas and Aaron Wildavsky is also

known for their functional structuralist assessment of how organizations and societies react culturally to risk using a "group-grid" model. The group refers to the physical barrier that people have constructed to segregate themselves from the external world. Grid refers to all the additional social classifications and power relationships that they utilize to control how individuals relate with one another (Douglas and Wildavsky, 1983: 138). High-group and high-grid firms put their reliance on institutions and are hierarchical in structure, adhering closely to group norms and risk-taking behaviors. Low-group and low-grid organizations, in contrast, value individualism and a self-regulatory approach to risk (Lupton, 2006: 2-3).

Douglas also focuses on social solidarity and risk relationship. Wilkinson adds that Douglas's explanation of the rise in environmental disaster risk in Western societies is not due to an increase in danger but rather to the breakdown of social solidarity among marginalized groups, which encourages them to use ecological catastrophe as a strategy for preserving their preferred way of life (Wilkinson, 2002: 104-107). Even the focus of Cultural Theory on risk has different aspects from risk society theory, their emphasis on the changing characters and dynamics of risk-taking behavior and the impact of social solidarity contributes to theoretical studies of social science on risk defining and analyzing risk behaviors of different parts of society considering group relationship and bonding.

Cultural Theory is a sociological framework that seeks to explain how different cultural beliefs and values shape our understanding and responses to risk. Unlike the psychometric paradigm, which focuses on individual perception of risk, Cultural Theory emphasizes the importance of shared cultural norms and values in shaping our understanding and responses to risk.

In contrast to the Social Amplification of Risk Framework (SARF), which emphasizes the role of media and social networks in amplifying and shaping risk perception, Cultural Theory emphasizes the role of cultural symbols and narratives in shaping our understanding and response to risk. Cultural Theory proposes that different societies and groups hold different cultural biases, which can lead to diverse perceptions and responses to risks.

Finally, Cultural Theory is different from Beck and Fűredi's ideas in that it emphasizes the importance of culture and its role in shaping our responses to risk. While Beck and Fűredi emphasize the responsibility of individuals for managing risk, Cultural Theory suggests that cultural biases and values play a significant role in shaping individual and collective responses to risk.

#### **2.4. Governmentality of Risk**

Michel Foucault's ideas on a new type of governance in modernity are the base of discussions in the literature on governmentality and risk. Governmentality is described by Foucault as an assembly composed of the institutions, practices, assessments and reflections, figures, and strategies that permit the exercise of this very particular yet complicated type of power. (Foucault 1991, 102). Furthermore, risk, based on Foucault's analysis of governmentality and risk, is defined as a capacity to identify hazards and acquire the art of governing relationships of power. (Foucault 1991, 90) Thus, following Foucault's theory of governmentality, risk is the management and control of uncertainties and potential dangers in society. The concept of risk is a key component of Foucault's theory of governmentality because it offers a way to comprehend how contemporary forms of power and government function and how they affect and control the behavior of individuals and populations (Lupton, 2006: 5).



Some authors on governmentality have called attention to the growing emphasis on individual responsibility for preventing and controlling risks in modern neo-liberalism, the political ideology that currently rules Anglophone countries. They have identified a new prudentialism that is currently pervasive in governmental discourses and tactics, which shifts away from traditional ideas of social insurance as a form of risk allocation in favor of an emphasis on individuals minimizing risk (Lupton, 2006: 5). The risk society theory of Beck (1992) also remarks the growing responsibility of individuals on risk instead of institutions. Beck states that as risks of modern life are accepted as human-made and even their accelerating number and variety, individuals are thought to be responsible for their protection and safety.

Furthermore, in five basic categories, Zin classifies risk and governmentality studies. The first group studies how institutions govern risk problems and how governance methods transform. Secondly, general concepts and their effect on problem interpretations and the composition of "at risk" groups, such as youth or children are examined. Furthermore, some scholars inquire about different groups' techniques for reacting to these discursive representations, such as the denial of the label "risky group". Certain scholars view studies on governmentality as a response to the risk society approach's insufficient explanatory power because it primarily emphasizes statistical and insurance risk-calculation methods. As a new meta-narrative that is directly tied to the societal level, the danger is seen by other authors as a final perspective (Zinn, 2004: 12-13).

The concept of governmentality of risk refers to how governments and other forms of power attempt to manage, control, and govern risks. It is concerned with how risk is perceived, assessed, and managed by various actors in society, including the government, the private sector, and individuals. The governmentality of risk is based on the idea that risk is not just a natural phenomenon, but is socially constructed and that different actors may have different interests, values, and beliefs about risk.

On the other hand, the risk society and the various theoretical frameworks we have discussed, including cultural theory, SARF, Beck's and Fűredi's ideas, and the psychometric paradigm, all focus on how risks are perceived and managed by individuals and society as a whole. They are concerned with understanding how people make sense of and respond to risks, and how risk perception and management are shaped by social, cultural, and political factors. In summary, while the governmentality of risk focuses on how risk is managed by those in positions of power, the other theoretical frameworks focus on how individuals and society as a whole perceive and respond to risk.

## **2.5. Risk Society**

Risk society theory has preferred to focus primarily on macro-structural factors that could be affecting what they believe to be the emergence of risk-avoiding in late modern societies.

Thus, Beck and Giddens have contributed an understanding of reflexive modernity containing a critical overview focusing on risk and "risk society". They begin by defining the classical modern worldview as rational and controlling. Beck argues that the demand to make human living conditions controllable by instrumental rationality, manufacturable, available, and (individually and legally) accountable is enforced on industrial society, civil social order, and particularly the welfare state and the insurance state.

However, in risk society, the unanticipated consequences of this need for control lead to a state that was previously thought to be overcoming the realm of uncertainty and ambivalence, or, to say it another way, alienation. So now, this also forms the basis of a society's comprehensive self-criticism (Beck, 1994: 10). Therefore, modernity aimed to calculate and control anything but failed due to increasing uncertainty and changing nature of nature, society, and risk. Beck adds that it may be demonstrated that political decision-making processes are not suited to comprehend or legitimate this return of uncertainty and uncontrollability. This holds not only for organizational forms and measures but also for ethical and legal principles and categories, such as responsibility, guilt, and the polluter-pays principle. Similarly, to this, indeed, social science concepts and techniques fall short if presented with the size and complexity of the facts that must be communicated and comprehended (Beck, 1994: 10).

Therefore, reflexive modernity concept is based on the idea that late modernity is described by a critique of modernity's processes, which are no longer merely seen as producing goods (like wealth and employment) but are rather seen to produce many of the dangers and risks from which we feel threatened both as environmental crises and social challenges as global warming, new viruses and high unemployment and dissolution of family bonding. Thus, while government, industry, and science are emphasized as the primary generators of risk in late modernity (Lupton, 2006: 3-5) the individuals are held responsible for the survival of these risks since the risks are considered human-made, and people live in a more individualistic life.

Beck defines reflexive modernity as the potential for creative self-destruction over the course of a whole era, namely the industrial society. According to this view, not of the revolution or the crisis, instead the success of Western modernism, is the subject of this creative destruction. (Beck, 1994: 2) Giddens's description of risk in the modern world also adds a remarkable contribution to the issue. He starts explaining characteristics of risk firstly as globalization of risk in the context of density: nuclear war, for instance, may threaten human existence. Additionally, now, the spread of dependent events that impact everyone, or at least a significant part of the global population, such as shifts in the international labor market, is known as the globalization of risk. Furthermore, the inflow of human knowledge into the physical environment poses a risk because it has been developed or socialized. Besides, the creation of institutionalized risk environments that influence billions of people's chances of surviving, such as the financial markets. Comprehension of risk as risk is another characteristic of risk in the modern world. Thus, religious or magical knowledge cannot convert dangerous gaps in knowledge into objective truths. Moreover, there is a widespread knowledge of risk and many of the threats we all confront are well-known to large populations. Finally, we are aware of the limitations of expertise since no expert system can be completely informed about the effects of applying expert principles." (Giddens, 1991: 124-125).

Beck also defines a risk society as having a class society with stronger borders where, to that extent, risks seem to strengthen, not abolish, the class society. Poverty attracts an unfortunate abundance of risks. By contrast wealthy (in income, power, or education) can purchase safety and freedom from risk (Beck, 1992: 35) This is a class-specific distribution of risk. However, risks display an equalizing effect within their scope and among those affected by them considering the pollution all around the World and other chemical and biological global dangers (Beck, 1992: 36).



Comparing Fordist work regime and risk regime, Beck concludes that, in contrast to the Fordist regime, which standardized work, the risk regime entails individualizing it. Therefore, the risk regime is distinctive in that it categorically excludes, after a time of adaptation, any eventual return of the old assurances of standardized employment, standardized life histories, an outmoded welfare state, and national economic and labor policies. (Beck, 2000: 70) Family structure also is affected by the risks of the modern world. Economic challenges due to temporary job positions make families vulnerable economically. (Beck: 1992: 142) Furthermore, increasing numbers of divorced families also make marital and family support fragile, besides responsibilities on families as a result of individualization of life and risks. (Beck 1992: 112; Beck, and Beck-Gernsheim, 2004: 30).

To sum up, Beck argues that today's risks result from individual choices. Therefore, they rely on a framework that is both scientific and social (Beck, 1992: 155) Thus, the use of technology nowadays generates and creates risk. We are frightened about global risks that are assumed to be created by individuals. Beck states that dangers of annihilation predicated on human decisions shatter the natural character of civilization (Beck, 2002: 99) Therefore, even risks and issues like diseases or earthquakes, which were once entirely attributed to Divine will or to the structure of the universe, are now regarded to have been caused by humans employing biological weapons or causing devastating natural disasters. In addition, individuals are expected to take personal precautions against risks rather than governments. Thus, we are living in a risk society where, currently, risks come in far more varieties and are increasingly readily dispersed globally.

The concepts related to risk perception, management, and communication have been relevant in the context of the COVID-19 pandemic and vaccination campaigns. Understanding the factors that influence people's decisions to get vaccinated or not, as well as how they perceive the risks associated with the virus and the vaccine, is crucial for effective public health communication.

The ideas of Beck, Füredi, and SARF can help explain why some individuals may have different risk perceptions and behaviors than others. For example, Beck's risk society perspective highlights how modern society has created new risks that were previously unknown or less prominent, such as the risks associated with pandemics or new technologies like vaccines. Füredi's emphasis on individual responsibility can help explain why some individuals may be hesitant to get vaccinated or may engage in behaviors that increase their risk of exposure to the virus. The psychometric paradigm can help us understand how people's beliefs, values, and emotions shape their risk perceptions and behaviors, including their attitudes toward vaccination.

Cultural theory offers a different approach to understanding risk perception, emphasizing the role of cultural values and beliefs in shaping how individuals and groups perceive and respond to risk. This approach can help explain why some cultural groups may be more or less likely to get vaccinated, or why some parents may have different attitudes towards vaccination for their children. Finally, the concept of governmentality of risk highlights how governments and other institutions manage and govern risks, including through policies related to vaccination campaigns. Understanding the role of government and other institutions in managing risk can help us evaluate the effectiveness of vaccination campaigns and other public health interventions.

Overall, all of these concepts and theories can help us understand why some individuals and groups may have different attitudes towards vaccination and risk management, and how effective public health communication can be developed to encourage vaccine uptake and protect public health.

### **3. COVID-19 Vaccine Decision and Parenting**

Based on the culture, region, and significant historical events, parenting has various aspects, obligations, and requirements. In the modern world defined by Ulrich Beck as risk society due to reflexive modernity, hence parental responsibilities and family interactions may also need to be revisited in perspective of these conditions. As previously argued risks have increased and become more widespread as a result of social, technological, and economic changes that have affected nearly every aspect of life, including food, health, energy, social interactions, and communication. Risks are perceived as human-made, and individuals are held accountable for their development and mitigation rather than governmental entities and organizations. Families have been undermined by the high divorce and unemployment rates of modern life, yet they still have a greater obligation to protect their members from these external threats (Beck, 1992: 142). Parents are the adults who must protect both their children and themselves.

Parents feel more vulnerable and frightened than ever as a result of the hazards and risks associated with high complexity and diversity as well as the decreased support from the government and social groups. Before making any decisions about minor or significant issues, they should first recognize and categorize risks as attenuated and amplified, and take precautions against each risk. According to Villalobos (2014), parents are more concerned about amplified risks like nuclear catastrophes than attenuated certain risks, even if we are still in danger from more common, attenuated, and definite dangers like car accidents (Kasperson et al., 2003: 14–15). However, amplified risks such as pandemics, biological war, alien invasion, or nuclear accidents may be perceived as higher priorities due to a variety of factors, including media coverage of these issues and the fact that, even though their likelihood of occurring is low, their damage would be extremely severe. Additionally, some other amplified risks such as global warming, ecological order imbalances, and food and water pollution play a larger role in our daily decisions and concerns. This means that determining and evaluating risks is an intricate and complicated issue.

Furthermore, with the development and spread of COVID-19 and the declaration of the coronavirus as a pandemic by the WHO on March 11, 2020, we may conclude that an amplified danger has become an attenuated risk.<sup>2</sup> Therefore, parents also have various duties, responsibilities, priorities, and concerns specific to the pandemic. Parents need to be aware of, analyze, and comprehend the pandemic conditions, risks, and safety measures. Even though they should be abiding by regulations and laws and taking the data supported by science into consideration, they continue to struggle with understanding the validity of the data. Trust in experts, governments, and other authorities is not taken for granted in risk society. As Giddens points out, people are aware of the experts' knowledge and comprehension gaps about risks, even within their fields of expertise (Giddens, 1991: 130).

Parents should protect themselves, their children, and family from the virus as well as the negative effects of the recently developed and utilized medicine and vaccine against the virus

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<sup>2</sup> <https://www.who.int/europe/emergencies/situations/covid-19>

because it is a widespread disease and a rapidly spreading, contagious virus. Additionally, they must safeguard society by isolating and immunizing (vaccinating) themselves and their children with these new vaccines as well as by avoiding touch and contingency. These may appear to have opposing goals and responsibilities.

Considering that parents are the decision-makers and subscribers of their child's health care, it is important to take into account how one's personal beliefs, values, and lifestyle may affect a person's ability to comprehend and think in the factuality of the information being provided and, subsequently, influence choices concerning childhood vaccines. (Ruggiero, Wong, Sweeney, Avola, Auger, Macaluso, Reidy, 2021: 509).

### **3.1. A General Understanding of Vaccine Decisions of Parents**

Parents make and follow up on decisions regarding vaccines for their kids differently everywhere around the world. According to a systematic review by Galanis, Vraka, Siskou, Konstantakopoulou, Katsiroumpa, and Kaitelidou (2022: 1-3), which includes 44 studies in 18 countries and 317,055 parents, 60.1% of parents desire to vaccinate their children overall, compared to 22.9% of parents who refuse to do so and 25.8% of unsure parents.

Evans, Klas, Mikocka-Walus, German, Rogers, Ling, ... Westrupp (2021: 1) note that parents are quite cautious about their children's safety while making vaccine decisions. Age, career, and the parent's place of residence are general characteristics that influence their decision to vaccinate their children in both positive and negative ways. In addition to parents with lower educational levels, parents with lower incomes and younger parents (Ceannt, Vallieres, Burns, Murphy, and Hyland, 2022: 6196) are more likely to be anti-vaccine (Kitro, Wachiranun, Dilokkhamaruk, Sumitroh, Pasirayut, Wongcharoen, ... Sapbamrer, 2022: 1). Living in a town, a village, or a rural region was linked to a higher prevalence of COVID-19 vaccine refusal of parents (Benites-Zapata, Herrera-Añazco, Benites-Meza, Bonilla-Aguilar, Urrunaga-Pastor, Bendezu-Quispe, ... Hernandez 2022: 6). Parents' choices on vaccinations are also affected by the age of their children and how they interact with their peers and social surroundings since parents are less likely to immunize younger children than older children (Humbel et al., 2022: 7; Dayton, Miller, Strickland, Davey-Rothwell, and Latkin, 2022: 4433). Also, they were more likely to vaccinate their children if they frequently interacted with their peers (Dayton et al., 2022). The decision of parents to vaccinate children is positively impacted by parents' positive attitudes on vaccination and precautions, their cooperation with pandemic measures such as keeping social distance and the use of masks, and all these factors. (Akgün, Kayaalp, Demirkan, Çakmak, Tanatar, Guliyeva, ... Aktay-Ayaz, 2022: 1829; Benites-Zapata et al., 2022: 1, 6).

Even though there aren't many studies on the differences between fathers and mothers as parents when it comes to vaccine choice and pandemic precautions, several earlier studies find that mothers are more aware of hygiene precautions and the Covid-19 virus than fathers are and more unwilling to vaccinate their children than father (Kocamaz and Bilsin-Kocamaz, 2022; Galanis et al., 2022). Kocamaz and Bilsin-Kocamaz argue that the hesitation of Turkish mothers on the vaccine and their higher concern about COVID-19 protection is because moms in Turkey are taking a greater share of the burden and performing a larger role in child care. (Kocamaz and Bilzin-Kocamaz, 2022: 80) Moreover, parents are more likely to accept a COVID-19 vaccination for themselves than for their kids, per the research of Akgün et al. (2022: 1829).

The choice of vaccination is also influenced by ethnicity. According to studies, black parents in the USA are less likely to vaccinate their kids (Dayton et al., 2022: 4433). Moreover, Bell, Clarke, Mounier-Jack, Walker, and Paterson's (2020: 7789) study in England results that individuals who identified as Black, Asian, Chinese, Mixed, or Other ethnicity were more likely to refuse the COVID-19 vaccine for themselves and their children than participants who identified as White British, White Irish, or White Other. Parents' decisions regarding the COVID-19 vaccine may also be influenced by their children's medical histories and their overall attitudes toward all vaccines. During the pandemic, parents of children who had already got the influenza vaccination reported an increased likelihood of future immunization (Ruggiero et al., 2021: 513).

Although there is a dearth of research on this topic in Turkey, compared to overseas, it is important to briefly mention studies conducted in Turkey even if they do not directly pertain to the vaccine decision of parents.

Akgül and Ergün (2023: 64) investigated the relationship between parents' attitudes toward childhood vaccines and their relationship with their attitude toward the COVID-19 vaccine. The research concludes that parents with a negative attitude toward childhood vaccines are also negative towards the COVID-19 vaccine. Besides, general studies on the perception of Turkish people on the COVID-19 vaccine (Yılmaz, Turğut, Çıtlak, Mert, Paralı, Engin, ... Alimoğlu, 2021), the reasons for vaccine rejection in Turkey are studied particularly as in the study of Yıldız, Telatar, Baykal, Aykanat Yurtsever, and Yıldız (2021). Additionally, vaccine rejection of adolescents is another significant topic related to the vaccination of children under parental supervision (Parlak and Ener, 2022). Furthermore, social media and vaccine rejection in Turkey can be analyzed based on various recent studies (Şahin, 2022; Narmanlı, 2022; Etesaminia and Bağcı Derinpınar, 2021). After briefly summarizing the aspects that parents consider while making vaccine decisions, we can examine parental acceptance and rejection separately.

### ***3.1.1. Vaccine Rejection and Hesitation of Parents***

Studies show that parents make decisions about immunizations for their children differently around the world and then follow those decisions up. The main cause of vaccine reluctance and rejection is mistrust in the vaccine's efficacy and safety as a result of the vaccine's rapid development and improvement (Evans et al., 2021:1, Kitro et al., 2022:1, Head, Zimet, Yiannoutsos, Silverman, Sanner, and Menachemi, 2022: 4, Bell et al., 2020:7798).

One of the key documented hurdles to vaccination decision-making is fear of the vaccine's side effects, which is also connected to the vaccine's rapid introduction (Akgün et al., 2022: 1829; AlKetbi, Al Hosani, Al Memari, Al Mazrouei, Al Shehhi, AlShamsi, ... Al Hajeri., 2022: 5567; Ceannt, 2022: 6196; Evans et al., 2021: 1; Kitro et al., 2022: 1; Byrne, Thompson, Filipp, and Ryan, 2022: 6682; Erem and Kışlal, 2022: 254). Another element influencing parents' decision on vaccination is their assessment of the extent of COVID-19's danger to children. According to Byrne et al. (2022: 6682), children's natural immune systems provide adequate protection against COVID-19, and the disease is not severe enough for children to require immunization. Parents' concerns regarding the COVID-19 vaccine also include their children's frequent use of medications for chronic illnesses. These parents worry about a vaccine's potential for an unanticipated interaction with these medications (Akgün et al., 2022: 1829).

Furthermore, the effect of digital resources such as social media is another significant contributor to the decision-making of parents on vaccines. According to Gül Ünlü and Kesgin's (2021) research, digital parenting individuals (those who use digital resources for parenting) who are hesitant about getting vaccinated against COVID-19 are typically highly educated and tend to find trustworthy information about anti-vaccination on digital platforms, even if they are not necessarily against getting vaccinated. Additionally, Ardiç Çobaner, Kılınç Özüölmez, and Alkan (2022: 587) focus on the effect of specific news on “accidental” COVID-19 vaccination of babies and the significant reaction and moral panic of parents on COVID-19 vaccination depending on this news and statement.

Considering all these various factors on vaccines we can also comprehend that, vaccination opposition is not caused by conspiracy theories on vaccines and COVID-19, as the claims of biological war but by side effects of the vaccine and confidence towards institutions as well as living conditions and characteristics of the families are significant factors on decision making on vaccination of children (Ceannt et al., 2022: 6196).

Thus, the basic rejection of vaccination may be analyzed as distrust of science and scientific improvements. Additionally, hesitation and mistrust are further related to global communication tools such as social media. Risk society theory also emphasizes this powerful data flow which both informs individuals on life-changing issues and gives them the burden of decision-making even when they are not experts. The reflexive nature of modernity makes the data accessible for individuals, letting them criticize the data but individuals still do not have the power to correct the wrongdoings of institutions effectively. The scientific process is evaluated by individuals; they know there are further risks than explained by experts. They have to study and analyze all these data and make their own decisions even though they know they are not experts. Individuals acknowledge that governments and scientists may misguide society due to reasons such as political, and economic plans or lack of information. It is possible to hypothesize, justify, reduce, or dramatize the effects on the environment and public health as the experts and institutions wish as indicated by Beck. Furthermore, the basic concern on the rejection of vaccines, and the side effects are also significant tools of the experts that can easily be manipulated. Beck states that side effects on health issues are not declared openly by authorities if they have social, political, and economic challenges and side effects cause collapsing of the market or social unrest (Beck: 1992: 77).

### **3.1.2. Vaccine Support and Acceptance of Parents**

As discussed above, trust and mistrust of authorities on vaccination is a significant issue in vaccine decisions considering risk concepts. The key elements influencing parents' vaccination decisions are their trust in the institutions, the vaccine's accessibility, and their children's and society's protection. Examining the factors affecting parents' acceptance of vaccines, such as faith in institutions, the government, medical professionals, and immunizations, may reveal the most striking concerns.

According to several studies, parents' decisions about vaccination are significantly influenced by their trust in official government and healthcare information sources (AlKetbi et al., 2022: 5567; Schaumleffel, Vickers, and Chertok, 2022: 1; Byrne et al., 2022: 6686). Moreover, depending on vaccinations to stop the epidemic has a favorable impact on parents' vaccination decisions (Akgün et al., 2022: 1829; Byrne et al., 2022: 6686). Furthermore, Schaumleffel et



al.'s (2022: 1) results show that parents' decisions to vaccinate their children were highly influenced by their perception of the healthcare providers' support for the vaccination.

As well as stopping the spread of COVID-19, parents who intended to vaccinate their children stated that their main motivations were to protect their child or family from the disease and to resume regular living (Humbel et al., 2022: 2; Byrne et al., 2022: 6686). Finally, a fifth of parents cited the availability of vaccines in the form of free vaccinations as a significant factor (Byrne et al., 2022: 6686).

Trust in institutions in vaccines can also be analyzed by the risk theory and governmentality considering the need and dependency for support from institutions for individuals. Thus, when parents consider the vaccine studies reliable, sufficient, and effective, they have a positive decision to vaccinate their children against COVID-19. The individuals in risk society have to recognize the risks, evaluate precautions against risk (as a vaccine), analyze the data on risks of COVID-19, besides risks of COVID-19 vaccination, and decide if they can trust the institutions on vaccination and treatment of COVID-19. Therefore, even if the risk is natural and biological, there are always suspicions about human intervention causing the stated risk as Beck refers. (Beck, 1992: 7) In this case, individuals consider the nature and treatment of the disease and evaluate the tremendous amount of scientific data and make the final decision on treatment and vaccine for themselves and their families.

In general, the variety of reasons for vaccine rejection and acceptance also demonstrates that various theories on risk are useful to understand the vaccine decision of parents. Cultural Theory with an emphasis on cultural reasons for risk definition and also focus on solidarity is useful to explain different decisions on vaccination. The governmentality of risk also explains how people are controlled and governed by institutions in deciding on vaccines while individuals still use their agency.

The psychometric paradigm also renders a theoretical understanding to analyze the diversity of vaccine decisions and the reasons for these decisions considering of risk perception of people depending on psychological, social, institutional, and cultural factors. (Slovic, 2000, xxiii).

#### **4. Conclusion**

Parents have a multitude of concerns that influence their decision, per the studies on how parents make vaccine decisions. This implies that parents of pandemics have a significant responsibility. It also demonstrates the importance of risks to parents in risk-averse societies, particularly when those risks include their children. Individuals' perspectives on risk are influenced by their social, cultural, educational, and economic backgrounds besides global communication technology such as social media. In social science, risk behavior and perception are analyzed through a variety of lenses, including Michel Foucault's governmentality of risk theory, Mary Douglas' cultural theory, Slovic's work on heuristic behavior, and Ulrich Beck's and Antony Giddens' concepts for reflexivity and risk society. Thus, the theories on risks in social sciences also enable us to understand various decisions on the vaccination of children considering cultural, individual, and governmental factors and perspectives.

Our research focusing on Beck's concept of the risk society and its effects on parents' obligation over their children concludes that the responsibility of parents on their children's



vaccine decision during the pandemic increased the burden on parents increased responsibility placed on parents. In risk society where hazards are amplified and attenuated, people are accountable for safeguarding both their own and their children's safety. Nonetheless, parents are more in need of institutional support for things like unemployment insurance, maintaining stable family bonds, and social class ties. Also, they face dangers including environmental contamination, the manufacture of bad food, international terrorism, and nuclear catastrophes. People must learn to choose their life decisions correctly in the reflexive modern world. So, the parents of pandemics should analyze and comprehend the new diseases and pandemics with all of their associated symptoms, treatments, required immunizations, and social norms. Thus, the parents should have almost expert-level knowledge of the illness, but they also need to abide by the laws that have been put in place by the government as a consequence of advice from medical professionals.

Therefore, just as they do for themselves, parents must consider the hazards of pandemics in addition to the risks associated with vaccines. During the vaccine decision process, parents act according to various factors. The safety of the children is one of a parent's main worries while deciding whether to vaccinate their offspring. Also, they are in favor of immunizing their kids when a reputable source, such as a healthcare professional or health organization, advises it. While trust in institutions plays a big role in vaccine decisions, it is not always maintained. In addition to the belief in the necessity of vaccination for children, the social interaction rate of children, the dependability, safety, and effectiveness of the vaccine are the other primary considerations influencing parents' vaccine decisions. Additionally, the availability of vaccines in the name of free vaccination is enabling higher vaccination rates. Furthermore, many parents refuse vaccination due to its rapid development and potential negative effects. Other factors influencing parents' vaccine decisions include their characteristics as parents' gender, ethnicity, and age besides the children's age. According to this, parents are less hesitant to immunize their older children than they are to immunize their younger children.

In reflexive modernity, individuals are obliged to be responsible for various human-made or human-intervened risks, and even with their limited power and expertise they feel obliged to decide on countless risks of the modern world and make decisions for themselves and their families and children. In conclusion, many factors influence parents' decision to vaccinate their children, and while trust in institutions is a key enabler of vaccination, it is also one of the most difficult conditions to maintain in the risk society of reflexive modernity.

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