

Identify and Prioritize Social factors and strategies affecting Children's health

Mitra Sadrkhanlou¹, Ali Maher^{2*}, Khalil Ali Mohammadzadeh³, Mehrnoosh Jafari⁴, Mohammad Karim Bahadori⁵

Department of Health Services Management, School of Management and Social Sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran¹

Department of Health Policy, Economics and Management, School of Management and Medical Education, Shahid Beheshti University of Medical Sciences, Tehran, Iran²

Department of Health Care Management, School of Management and Social sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran. Health Economics Policy Research Center, Tehran Medical Sciences, Islamic Azad University, Tehran, Iran³

Department of Healthcare Management, School of Management and Social sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran⁴

Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran⁵

Corresponding author: 2*

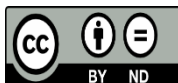


Keywords:

Social determinants of health;
Social factors; Development
of children; Children.

ABSTRACT

Children's development is a complex issue in which social factors and their rising environment influence their behavior and practice changes. The present study aimed to identify and prioritize social factors and strategies affecting children's developmental health. The statistical population consisted of 12 physician's experts and experts related to the discussion of children's development in Tehran for the qualitative section, among which the experts' interview and a questionnaire were distributed, the subjects were selected using the snowball method, and seven of them completed the questionnaire for DEMATEL questionnaire and 5 for TOPSIS questionnaire. The study's main purposes include five criteria of individual factors related to children, family factors, environmental factors, governance factors, and global factors. The research indicators were identified using the Delphi method. Data analysis was performed using the DEMATEL-TOPSIS approach. It was proved that the "family factors" criterion was the priority among the criteria and had the most significant influence and interaction with other criteria, and the criteria of governance factors had the most significant impact among the criteria. The best solution is "improving society's health status and correcting the health behaviors of families." The strategy of "creating and developing academic disciplines or trends in senior, doctoral and specialized medical levels, related to the growth and development of the child" is in the last place. Social factors play an essential role in children's developmental health, and paying attention to them can lead to an improvement in children's developmental health process.



This work is licensed under a Creative Commons Attribution Non-Commercial 4.0 International License.

1. INTRODUCTION

Changing attitudes towards children, childhood, and childhood life is a new subject and has been placed on university institutions, research, and human rights defenders in the last period of human and legal demands. This trend has many historical ups and downs; for example, before the Renaissance, children were the tools of adult hands to meet emotional needs, power, property, culture transfer, hereditary authority, and order preservation. Meanwhile, childhood was a neglected concept and only a specific biological period that had to be rapidly traveled on the path of growing up. Among the various historical, social, economic, and political developments that have influenced childhood attitudes. Therefore, the child's development is done regularly and continuously in a specific context and plan. Growth is visible, evaluation, and measurement reflected in the nervous system through physiological symptoms and behavior.

The effects and symptoms in different behavior aspects include the child's developmental rate index [1], [2]. Due to global health, care, and awareness, more children survive that supporting their health and quality of life is an absolute priority. Scientific research has proved the importance of promoting healthy growth and development in early childhood and showing that paying attention to children's development brings long-term benefits to the individual and society because the early years of life play a decisive role in forming intelligence, personality, and social behavior. These years are the most critical years of each individual's life so that the experiences of this era will form the basis for his future [3]. For many years, the importance of the early years of life has been recognized for achieving maximum comprehensive growth and development in each individual. Since most of the neural pathways needed for learning and balanced performance are constructed and completed in this susceptible period of life, natural and healthy development in these early years of life constitutes the foundation of human life [4]. If we consider growth as an increase in body size or an increase in different parts of it, development should be considered as tantamount to changes in behavior and action that can be influenced by social factors and the child's breeding environment [4] and on the other hand, child development is a dynamic flow, and it is not easy to measure. Children with typical development at an early age may experience developmental or behavioral problems at older ages under the influence of social factors [5]. Developmental health in early life underlying conditions that enable people to lead a flourishing life in various areas such as social, emotional, cognitive and physical well-being. Children's development begins in the embryonic period and is provided with proper care and nutrition during pregnancy, the opportunity for the child's optimal development, which is his natural right. Therefore, the most critical brain development period is the first years of life that has a significant role in children's mental, physical, mental, social, and safety performance [6]. Supporting children's physical and mental health as the future hopes of the country is one of the best ways to invest in the social and economic development of countries, and the health of children's growth and development must be at the top of the programs of policy-making and health practitioners. Therefore, this study aimed to identify and prioritize social factors and strategies affecting children's developmental health.

1.1 Theoretical Foundations

Children's development after birth can be affected by a variety of factors, including social factors. In assessing the child's health, paying attention to physical measurements and comparing them with known indicators is a significant and good indicator for monitoring the child's development. In nutrition and food planning in the community, growth monitoring plays an important role [7]. Children between the age of 2 and 6 spend more time away from home and parents than nubagans and toddlers. Over the past 30 years, the number of children going to kindergarten or kindergarten has increased. This trend is mainly due to a significant increase in women's participation in the workforce. Currently, mothers employ 67% of kindergarten children. Children are among the most vulnerable groups, and childhood is the golden opportunity for them to grow and grow. One of the most critical measures in child care and children's health

assessment is growth monitoring [8]. Developmental health in early life underlying conditions enables people to flourish in various areas such as social, emotional, cognitive, and physical well-being. Children's development begins in the embryonic period and is provided with proper care and nutrition during pregnancy, the opportunity for the child's optimal development, which is his natural right. Therefore, the most critical brain development period is the first years of life that has a significant role in children's mental, physical, mental, social, and safety performance [6]. Poverty is also a significant predictor of poor health conditions in children's development, as children from low-income families are more likely to be deprived of appropriate educational and welfare facilities than others [9].

Also, the effects of undesirable economic conditions on the developmental process in the social system have been accepted so that family health, nutrition, living environment, parental behaviors, parental mental health, and environmental conditions are all affected by the economic situation that is directly related to the health of child development. Another factor affecting the development of fertilizer is unhealthy habits and behaviors in parents. Abnormal health behaviors associated with improper adaptation such as smoking, drug use, tobacco use, alcohol in parents are known as risk factors for children's developmental delay and have a wide range of physical and behavioral problems [10]. Social development is part of the child's all-out development, influenced by other people, the environment, and institutions. There is a particular time for social development, and at this time, the basis of social behaviors must be formed in the child, and then he or she can establish a proper social interaction. Many research types show that environmental conditions, social conditions, emotional and emotional connections, and nutritional status are beneficial in the child's physical, social and mental development [11], [12]. Various factors and conditions are useful in the child's development, divided into hereditary and environmental categories to facilitate better investigation and understanding of the subject. Although each category's factors are quite distinct and independent in terms of nature, their effects on the child's development are closely related. Genetic factors are 100% hereditary, are the basis of individual characteristics and determine how the child's personality is formed, and factors such as child education, various external stimuli and support, type and amount of child nutrition, etc [4]. Therefore, while examining and recognizing the child's development and its stages, the effect of both hereditary and environmental factors should be considered in harmony.

It should be noted that some researchers and experts consider human growth entirely due to the impact of environmental or external factors and consider human beings ready to be affected by the outside environment. Others believe that human growth is entirely due to internal factors' influence, external factors are unsatisfied with human growth, and the third group considers human growth due to a combination of internal and external factors. For the complete growth of human beings, the existence of both factors is necessary [4].

1.2 Evolution of growth in elementary school

The process of growth and development begins during pregnancy. This period's risks can affect the stage of physical or physical development and lead to complications in the infant [13]. Early and early intervention to identify infants and children at risk prevents many of the problems that arise following delays in development and problems in these children. Therefore, identifying women and children at risk and start interventions before the onset or progression of the problem seems to be the most sensible solution [14]. Undesirable maternal conditions such as malnutrition, smoking, improper use of medications, inadequate humiliation, and lack of prenatal care can lead to undesirable growth of the fetus, which is a risk to the individual's future health. Also, early childhood experiences due to biological systems' flexibility are in individuals' future health [14]. Studies have shown that infants' unacceptable and abnormal conditions, maternal marriage status, tobacco use, alcohol during pregnancy, and complications of pregnancy, labor,

delivery time, and post-delivery are the line for developmental delay. Preterm labor and low birth time, especially weighing less than 1500 grams, are significant risk factors [4]. Studies show that parents often prefer kindergarten to kindergarten. Many kindergartens have increased their working hours from part-time to full to meet the needs of working parents. Psychosocial injuries of mothers during and after pregnancy, low social-economic level of the mother, cultural issues, substance abuse by parents, abuse with child, the psychological stress of parents, especially mother, environmental factors, and undesirable behaviors in parents are sufficient on fetal and infant development [15].

1.3 Review of research literature

[16] in their research titled "Medical Assistance in Screening, Diagnosis and Early and Periodic Therapeutic Benefits: An Opportunity to Improve Child Screening for Social Determinants of Health," Government Health Policies and Awareness Screening and Diagnostics and Early and Periodic Therapeutic Benefits of Children, and concluded that people who benefited from periodic screening tests during pregnancy before the child's birth They had healthier children [16]. [17], in his thesis titled "A Hybrid Method for Development and Validation of an Assessment Tool for Measuring Psychosocial Factors Related to Unwillingness to Participate in Child-Centered Initiatives" Priorities and Needs of Society; insight into factors related to the desire for participation, may provide conditions for motivating real participation [17]. The path that social determinants use works over time and generations. Social indicators are deeply influenced by social and political decisions outside the control of parents and pediatricians. Communities can protect children from the effects of social harm. National Pediatric Associations play a leading role in promoting policies that support children [18]. The path that social determinants use works over time and generations. Social indicators are deeply influenced by social and political decisions outside the control of parents and pediatricians. Communities can protect children from the effects of social harm. National Pediatric Associations play a leading role in promoting policies that support children [18]. [19] in their research titled "Siglusis Zoning and its Relationship with Climatic Factors, Case Study: Province between 2011 and 2014" a study noted that education and access to health and water and sewage, climatic factors (temperature, rainfall, and humidity), growth and development environment, nutrition affect children's growth and development [19]. [20], in his research titled "How Do Health Determinants Have a Primary Impact? The study results evaluated low-income families and children's well-being of 3,301 children in low-income families over nine years. They concluded that power imbalance and discrimination among children, psychological care, child physical health, and social climate determinants affect children's health [20]. In their 2017 study titled "The Role of Child Behaviors in Preventing Adult Attachment Anxiety and Avoiding Attachment", [21], in a mixed analysis using multiple regression and hierarchical analysis, concluded that age, parental work status, anxiety affect children's health [21]. [22] in their research titled "Addressing social factors of health inequalities" health policies; child health; per capita medical services; government investment in social services; government investment in social services as factors affecting children's development [22].

2. Methods

This study aimed to identify and prioritize the factors and social strategies affecting the developmental health of children; it can be said that the present study is applied in terms of purpose in the field of research and, on the other hand, the methods of reading books and field methods such as questionnaires are used for data collection. For this purpose, useful components were extracted using the Delphi technique, and the validity of the remaining indicators was evaluated. In this section, 12 experts, as the statistical population, helped to complete the questionnaire and interview. Then, internal relationships between the main criteria were evaluated by the network-DIMETAL analysis process, and sub-criteria were prioritized as social factors affecting the developmental health of children under six years of age. At this stage, seven experts

completed paired comparison questionnaires and Dimtel. Considering the identified strategies for improving children's development, according to experts, considering the weight gained for social factors affecting children's developmental health, these strategies are ranked. At this stage, five experts from among experts completed the TOPSIS questionnaire. Therefore, in this study, Delphi, Dematel, and TOPSIS techniques have been used to determine and prioritize criteria and sub-criteria and ranking solutions. For this purpose, a paired comparison matrix has been used to determine the weight of the criteria.

3. Results

The research indicators were extracted through library studies, and most of the questionnaires were given to experts to perform the Delphi technique. Based on the Delphi technique, experts examined the indicators and assigned points between 1 and 10 for each of them, and the sub-criteria with a score below seven were eliminated. Delphi's technique continued in two rounds and has stalled in the second round by reaching a final agreement. According to experts, six sub-criteria were eliminated due to an average of less than 7, and the remaining sub-criteria were transferred to the next round. Overall, 33 indicators eventually remained. In the following, by default, internal relationships between the main criteria of the research and the DIMATEL technique have been used to re-establish the interaction.

Therefore, according to the calculations, each sub-criteria's final weight has been calculated by the ANP technique. Accordingly, the "International Programs and Policies" sub-criteria with a normalized weight of 0.1166 is the number one priority. The sub-criteria of "climatic factors" with the normalized weight of 0.0831 is the second priority. The "multi-twin" sub-criteria with a normalized weight of 0.009 is the last priority.

3.1 Choosing the best control solution with the TOPSIS technique

In this study, the TOPSIS technique was used to select the best control strategy. The best control strategy is the solution that has the highest distance from negative factors and the least distance from positive factors. At first, the main sub-criteria (criteria) and control strategies have been identified. Research solutions are introduced in Table 2.

Therefore, the scoring matrix of solutions is based on sub-criteria. To score the best solution based on each sub-criteria, the 9-degree liker spectrum has been used. The appropriate score for each solution was presented based on the sub-criteria according to the simple mean of experts' opinions. Then, the installation of the decision matrix has been made with the norm.

Each element of the unmeasured matrix is denoted by N , and each element is denoted by n_{ij} . Each n_{ij} is calculated by dividing the corresponding element in the initial matrix by the square root of the sum of the elements of the corresponding column and is calculated as follows:

$$n_{ij} = \frac{a_{ij}}{\sqrt{\sum_1^m a_{ij}^2}}$$

The dimensionless matrix (N) must then be converted to a balanced scale (V). To obtain a balanced scale matrix, we must have the weights of the sub-criteria. The weight of each sub-criterion was calculated using the Analytic Hierarchy Process (AHP). For this purpose, the unmeasured matrix is multiplied by the square matrix ($W \times n \times n$), whose principal diameter elements are the weights of the sub-criteria, and the other elements are zero. The resulting matrix is called the unbalanced matrix and is denoted by $V.V = N \times W \times n \times n$.

After the balanced scale matrix, a positive ideal (V +) and a negative ideal (V-) are calculated for each sub-criterion.

Positive and negative ideals must now be obtained for each sub-criterion.

- For each positive subscale, the positive ideal is the most considerable value of the corresponding column in the matrix v.

For each positive subscale, the negative ideal is the smallest value of the corresponding column in matrix v.

- For each negative subscale, the positive ideal is the smallest value of the corresponding column in the matrix v.

- For each negative sub-criterion, the negative ideal is the most considerable value of the corresponding column in matrix v.

Therefore, the ideal positive and negative values for this decision situation are as shown in Table 3:

The relative proximity of each option to the ideal solution is calculated. The following formula has been used for this purpose:

$$CL^*i = di- / (di- + di+)$$

The CL value is between zero and one. The closer this value is to one, the closer the solution is to the ideal answer and the better the solution. These values are listed in Table 4:

Therefore, according to the calculated values listed in Table 4, it can be concluded that the best solution is "improving the health status of the community and correcting the health behaviors of families," and the solution is "creating and developing academic disciplines or trends in higher education. The doctorate and medical specialty, related to the growth and development of the child "is in the last place.

4. Discussion

The research indicators include five criteria, each of which includes a number of sub-criteria, the criteria of individual factors related to the child, including 7 sub-criteria of multiple children, multiple births, physical condition at birth, child development status, interactions and participation with peers and environment, child physical health and nutrition; Family factors include 12 sub-criteria of parents 'education and literacy, parents' awareness, parents 'employment status and family income, poverty, family wealth, family problems, parents' mental-physical-mental health, single parenthood, divorce, type of delivery, Family culture and values and level of technology; Criteria of environmental factors include 7 sub-criteria: security, safety and health of the place of residence, impact of educational environment, region and place of residence, quality of housing and living environment, level of access to safe water and sewage, welfare facilities of the place of residence and migration; Criteria of governance factors include 5 sub-criteria of social, health and educational support, performance and quality of education, health and social systems, availability of services and their quality and the impact of media and social networks and criteria of global factors including 2 sub-criteria of programs and International policies and climate factors.

In order to get the best solutions, in an open questionnaire, the experts were asked to suggest the best solutions they have in mind; By integrating the same strategies with different expressions, 12 strategies were achieved, including providing a healthy and informative physical and social environment in order to prevent violence and anxiety against children and increase development (stimulating brain/neurological activities in different dimensions). Children at home, school, play environments and their interaction with peers and peers with group games and group work training, empowering parents with proper parenting training (responsive parents) to parents with young children through the production of packages Educational development that promotes children's development for them and integrating the services of mothers and children, empowering educators by teaching proper coaching to kindergarten teachers and preschool and primary school teachers through the production of educational packages that promote children's development for them. Cultivating the country through policy-making, legislation and national propaganda

at the national level by establishing child-friendly schools with an approach to development and cooperation with the international community in this regard, creating and developing academic disciplines or trends in postgraduate, doctoral And Medical Specialist, m Relating to the growth and development of the child, empowering the community by creating a culture and growing public awareness (for those around the child, the general public and officials) about the importance of addressing the issue of growth and development of children more seriously and fundamentally, as the foundation of individual success and also the foundation of social development of any society, providing livelihood subsidies for vulnerable mothers and children, paying particular attention to the outskirts of the city and preventing racial and ethnic discrimination, promoting natural childbirth, developing delayed screening programs for young children, proper child nutrition and preventing advertising Harmful foods and improving the health status of the community and correcting the health behaviors of families. The TOPSIS technique was used to rank the strategies based on the opinions of 5 experts, and it was concluded that the strategy of "improving the health status of the community and correcting the health behaviors of families" in the first place, and the strategy of "creating and developing disciplines or "Academic orientations in postgraduate, doctoral and medical specialties related to the growth and development of the child" are in the last place. At present, if social factors affecting children's health under six years of age are considered, the country will face a happier and more prosperous future generation. Similarly, if they increase the costs of culture and the health and development of children, the cost The needs for the treatment of this generation will be reduced at older ages and will be spent on the excellence, growth, and development of the country's children. Society is like the beads of a chain that are connected, the right mood of each one will improve the situation of the others, and the collapse of the bead of two menus of each will cause the other beads to overturn. This is especially true for children, as children will be much more affected by their peers than adults. To improve the development of children, the proposed solutions have been proposed by experts and health professionals in the country. Today, having healthy and happy children is so essential that governments spend many resources on planning, attention, and prosperity of this generation to achieve their abilities, and even change their strategy regardless of the enormous costs involved. It has been implemented, and they are changing so that by adopting the best methods, they can solve the physical and mental health problems of the children of this region. [16- 22] were used to calculate the internal relationships in order to be able to use the calculated relationships in calculating the final weight of the sub-criteria.

5. Conclusion

One of the research's main limitations is that because this dissertation's results are specific to the field of mental health of children under six years, its results cannot be easily generalized to other age groups of children. It is recommended that families raise their awareness about the correct ways to communicate with their children and turn the family into a safe environment for them by taking counseling courses before starting to have children. Governments can improve children's health and address health needs, and increase the level of hospital services for children. Child rights advocates align with international programs and policies to achieve goals such as informing, raising awareness, and educating children about families, institutions, and social organizations that are related to children; Take a step. Such programs also help meet children's physical and mental needs by reducing and preventing abuse, harassment, abuse, neglect, exploitation, discrimination, and behavior that harm children's physical and mental health. The category of child developmental health in deprived and border provinces such as Sistan and Baluchestan, Ilam, North Khorasan, and Hormozgan should be studied and compared. Given the country's current state and the corona's existence and the inability to communicate effectively as in the past, the effect of the lack of free social communication between children on children's developmental health should be examined.

6. Acknowledgments

The authors would like to thank the staff of the Department of Health Services Management, School of Management and Social Sciences, North Tehran Branch, Islamic Azad University, Tehran, Iran.

7. References

- [1] Duncan GJ, Magnuson K. The nature and impact of early achievement skills, attention skills, and behavior problems. *Whither Opportunit*. 2011;47-70.
- [2] Nold JL, Georgieff MK. Infants of diabetic mothers. *Ped Clin North America*. 2004;51(3):619-637, viii.
- [3] Amir M, Alireza M, Hamed B, Maryam B, Soheila K, Mohadreza Z. Early childhood care and development. In.: Ministry of Health and Medical Education; 2010.
- [4] Soleimani F, Sajedi F, Akbari S. Developmental delay in children and its related factors. *J Nurs Midwif Faculty*. 2015;24(61-70).
- [5] Khorrami Z, Namdar A. Development status of one-year-old children in patients referred to jahrom urban health centers. In., vol. 5: evaluation based on ages and stages questionnaire. *Social Health*, 2 #M00265; 2019.
- [6] Haji Nabi K, Riahi L, Tavakoli F. Relationship between integrated well child care plan implementation and child indicators at Noor city of health network. *Tolooebehdasht*. 2013;12(2):183-192.
- [7] Mouritsen F, Qvortrup J. *Childhood and children's culture*: University Press South Denmark; 2002.
- [8] Baghernejad-Hesari B, Sharifi G, Golshiri P, Hassanzadeh A. Knowledge and practice of mothers of children under 3 years of age about monitoring the growth and nutritional development stages of the child. *Zahedan J Res Med Scis*. 2011;13(10):
- [9] Conger RD, Conger KJ, Martin MJ. Socioeconomic status, family processes, and individual development. *J Marriage Family*. 2010;72(3):685-704.
- [10] Kosaryan M, Vahidshahi K, Shafaat B, Abaskhanian A, Azizi S, Shahrokh S, Asadi M. Screening of developmental problem, day care centers, Sari, 2006. *J Mazandaran Uni Med Sci*. 2007;17(59):69-75.
- [11] Alatartseva E, Barysheva GA. What is well-being in the modern society: objective view. In: *SHS Web of Conferences Vol 28: Research Paradigms Transformation in Social Sciences (RPTSS 2015)—Les Ulis*, 2016: 2016. EDP Sciences: 1114.
- [12] Abari S, Haj Yousefi A, Haj Babaei H, Rahgozar M. Comparison of social development of children aged 3 to 6 years and deprived of rural services (Case study: Varamin city). *Social Welfare*. 2012;11(41):
- [13] F A, O M, P S. *losing the Gap in a Generation Health Equity Through Action on the Social Determination of Health*. Ministry of Health and Medical Education. 2011;
- [14] Poon JK, Larosa AC, Pai GS. Developmental delay: timely identification and assessment. *Indian*

Pediat. 2010;47(5):415-422.

[15] Perry AG, Potter PA, Ostendorf W. Nursing Interventions & Clinical Skills E-Book: Elsevier Health Sciences; 2019.

[16] Malhotra NA, Nevar A, Yearby R, Kleinman LC, Ronis SD. Medicaid's EPSDT Benefit: An Opportunity to Improve Pediatric Screening for Social Determinants of Health. Med Care Res Rev. 2019;1077558719874211.

[17] Ismail G. A mixed methods approach to the development and validation of an assessment tool to measure psychosocial factors associated with willingness to participate in child-centred initiatives. Unpublished doctoral dissertation University of South Africa, Pretoria, South Africa <http://uir.unisa.ac.za/handle/10500/24541>. 2018;

[18] Spencer N. The social determinants of child health. Paediat Child Health. 2018;28(3):138-143.

[19] Seif A, Pasandi M, Saneie Dehkordi S, Amiri M. Zonation of Shigellosis and its Relationship With Climatic Factors, Case Study: Chaharmahal and Bakhtiari Province Between 2011 and 2014. Int J Epidemiol Res. 2017;4(3):205-210.

[20] Zhang A, Padilla YC, Kim Y. How early do social determinants of health begin to operate? results from the fragile families and child wellbeing study. J Ped Nurs. 2017;37(42-50).

[21] Ata S, Akman B. The role of the child rearing behaviors in prediction of the adult attachment anxiety and attachment avoidance. European J Soc Sci Stud. 2017;

[22] Adler NE, Glymour MM, Fielding J. Addressing social determinants of health and health inequalities. Jama. 2016;316(16):1641-1642.

Table 1. The absolute priority of sub-criteria.

	Sub-Criteria	Subcritical symbol	Normal weight	Rank
Individual	When did he arrive in his family?	S11	0.0106	31
	Multiples	S12	0.009	33
	Physical conditions at birth	S13	0.0204	20
	Child's developmental status	S14	0.0318	11
	Interactions and partnerships with peers and the environment	S15	0.0438	6
	Child's physical health status	S16	0.034	9
	child Nutrition	S17	0.0502	4
Family	Parental Education and Literacy	S21	0.0104	32

	Parental Awareness	S22	0.0215	19
	Parental status and family income	S23	0.0244	18
	Poverty	S24	0.016	25
	The amount of family wealth	S25	0.016	26
	Family problems	S26	0.016	27
	Mental-physical and mental health of parents	S27	0.016	28
	Being a single parent	S28	0.016	29
	Divorce	S29	0.016	30
	Type of delivery	S210	0.016	22
	Family Culture and Values	S211	0.016	23
	Technology level	S212	0.016	24
Environmental	Level of safety and hygiene of your place of residence	S31	0.0303	14
	The Effect of Educational Environment	S32	0.0377	8
	Region & Location	S33	0.0177	21
	Quality of housing and living environment	S34	0.0261	16
	Access to safe water and sewage	S35	0.0311	13
	Living facilities	S36	0.0245	17
	Immigration	S37	0.0329	10
Sovereignty	Social Support	S41	0.0396	7
	Health & Education	S42	0.0317	12
	Performance and quality of educational, health and social systems	S43	0.0485	5
	Availability of services and their quality	S44	0.0519	3
	The Impact of Media and Social Networks	S45	0.0284	15
Global	International Programs and Policies	S51	0.1166	1

	Climatic Factors	S52	0.0831	2
--	------------------	-----	--------	---

Table 2. Research Solutions.

Solution Icon	Approach
R1	Providing a healthy and informative physical and social environment in order to prevent violence and anxiety on children and increase development (stimulating brain/neurological activities in different dimensions) of children at home, school, play environments and their interaction with groups and peers with group games and teamwork training
R2	Empowering parents by teaching proper parenting (responsive parents) to parents with young children by producing educational packages promoting children's development for them and integrating maternal and child services
R3	Empowering educators by teaching them the right coaching to kindergarten teachers and preschool and primary school teachers by producing educational packages to promote children's development
R4	Changes in the country's education system through policy-making, legislative and national advertising at the macro level of the country by establishing child-friendly schools with an evolutionary promotion approach and cooperation with international communities in this regard
R5	Creating and developing academic disciplines or trends in master's, doctoral and specialized medical levels related to child development
R6	Empowering the society with the culture and development of public awareness (for those around the child, the general public and the authorities) about the importance of paying more seriously and fundamentally to the issue of children's growth and development, as the foundation of individual successes as well as the foundation of social development of each community
R7	Providing subsidies for vulnerable mothers and children
R8	Paying particular attention to the city's margins and preventing racial and ethnic discrimination
R9	Promoting natural childbirth
R10	Development of full delay screening programs for young children
R11	Proper nutrition of the child and preventing harmful food advertising
R12	Improving the health status of the community and correcting the health behaviors of families

Table 3. Positive and negative ideals.

Sub-criteria	Sub-criteria icon	V+	V-
When did he arrive in his family?	S11	0.005	0.001

Multiples	S12	0.004	0.001
Physical conditions at birth	S13	0.008	0.002
Child's developmental status	S14	0.013	0.004
Interactions and partnerships with peers and the environment	S15	0.02	0.006
Child's physical health status	S16	0.014	0.004
Child Nutrition	S17	0.021	0.007
Parental Education and Literacy	S21	0.004	0.001
Parental Awareness	S22	0.008	0.002
Parental status and family income	S23	0.01	0.002
Poverty	S24	0.002	0.006
The amount of family wealth	S25	0.007	0.001
Family problems	S26	0.001	0.006
Mental-physical and mental health of parents	S27	0.006	0.001
Being a single parent	S28	0.002	0.007
Divorce	S29	0.002	0.007
Type of delivery	S210	0.011	0.002
Family Culture and Values	S211	0.007	0.001
Technology level	S212	0.006	0.003
Level of safety and hygiene of your place of residence	S31	0.012	0.005
The Effect of Educational Environment	S32	0.013	0.007
Region & Location	S33	0.007	0.002
Quality of housing and living environment	S34	0.013	0.002
Access to safe water and sewage	S35	0.015	0.003
Living facilities	S36	0.012	0.002
Immigration	S37	0.013	0.003
Social Support	S41	0.015	0.006
Health & Education	S42	0.011	0.007
Performance and quality of educational, health and social systems	S43	0.017	0.011
Availability of services and their quality	S44	0.018	0.009

The Impact of Media and Social Networks	S45	0.011	0.005
International Programs and Policies	S51	0.04	0.028
Climatic Factors	S52	0.036	0.012

Table 4. Calculated CL values.

Approach	d+	d-	CL	Final ranking
Provide a healthy and informative physical and social environment to prevent violence and anxiety against children and increase the development (stimulation of brain / neurological activities in various dimensions) of children at home, school, play environments, and their interaction with each other. And peers with group games and teamwork training	0.026	0.029	0.524	5
Empowering parents by teaching proper parenting (responsive parents) to parents with young children by producing educational packages that promote children's development for them and integrating the services of mothers and children	0.029	0.028	0.491	7
Promoting natural childbirth Empowering educators by teaching proper coaching to kindergarten educators and preschool and elementary school teachers by producing educational packages that promote children's development for them	0.037	0.021	0.366	10
Transformation in the country's education system through policy-making, legislation and national propaganda at the national level with the establishment of child-friendly schools with an approach to developmental promotion and cooperation with the international community in this regard	0.029	0.024	0.450	9
Creation and development of academic disciplines or academic orientations in master's, doctoral and specialized medical degrees, related to the growth and development of the child	0.047	0.015	0.239	12

Empowering society by creating a culture and growing public awareness (for those around the child, the general public and officials) about the importance of addressing the issue of children's growth and development more seriously and fundamentally, as the foundation of individual success and the social development of any society	0.030	0.032	0.520	6
Provide livelihood subsidies for vulnerable mothers and children	0.026	0.035	0.575	4
Pay special attention to the outskirts of the city and prevent racial and ethnic discrimination	0.024	0.036	0.604	2
Promote natural childbirth	0.033	0.028	0.458	8
Development of complete delay screening programs for young children	0.038	0.021	0.358	11
Proper nutrition of the child and prevention of advertising of harmful foods	0.023	0.033	0.587	3
Improving the health status of the community and correcting the health behaviors of families	0.018	0.039	0.691	1