42

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CAUSAL RELATIONS

IN THE DEFICIENCIES OF THE ADMINISTRATIVE AND JUDICIAL PROCESS OF NATIONAL ADOPTION IN ECUADOR

RELACIONES CAUSALES EN LAS DEFICIENCIAS DEL PROCESO ADMINISTRATIVO Y JUDICIAL DE LA ADOPCIÓN NACIONAL EN ECUADOR

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ABSTRACT

The objective of this study is to analyze the main administrative and judicial deficiencies of the adoption process in Ecuador to determine the existence of causal relationships that currently lead to a decrease in adoptions in the territory. An interview was developed and applied to seven officers involved in the adoption process for children and adolescents to determine the main deficiencies that, according to their perception as actors of the system, affect its operation. The data collected through the interview were processed using the DEMATEL method in its neutrosophic variant to determine the causal relationships between the deficiencies indicated by the sampled actors. According to the analysis carried out, the elements of greatest prominence in the system corresponded to the great dilation in the time of the adoption process, the little or nonexistent flexibility of some of the requirements posed to the adopters, and the lack of objectivity in some requirements. It was observed that the factor that receives the greatest influence from the rest of the elements of the system is the factor related to the time of the general process, while the rest of the elements have a greater correspondence as causal elements.

Keywords: adoption process, deficiencies, causality, factors.

RESUMEN

El objetivo de este estudio es analizar las principales deficiencias administrativas y judiciales del proceso de adopción en el Ecuador para determinar la existencia de relaciones causales que actualmente llevan a la disminución de las adopciones en el territorio. Se desarrolló una entrevista que se aplicó a siete funcionarios involucrados en el proceso de adopción de niños, niñas y adolescentes para determinar las principales deficiencias que, según su percepción como actores del sistema, afectan su funcionamiento. Los datos recogidos a través de la entrevista fueron procesados mediante el método DEMATEL en su variante neutrosófica para determinar las relaciones causales entre las deficiencias señaladas por los actores de la muestra. De acuerdo con el análisis realizado, los elementos de mayor protagonismo en el sistema correspondieron a la gran dilatación en el tiempo del proceso de adopción, la poca o nula flexibilidad de algunos de los requerimientos planteados a los adoptantes y la falta de objetividad en algunos requerimientos. Se observó que el factor que recibe la mayor influencia del resto de los elementos del sistema es el relacionado con el tiempo del proceso general, mientras que el resto de los elementos tienen una mayor correspondencia como elementos causales.

Palabras clave: proceso de adopción, deficiencias, causalidad, factores.

INTRODUCTION

The situation in which children and adolescents find themselves in distress due to abandonment or orphanhood is a social and legal problem that requires special care on the part of all social and governmental instances interested in guaranteeing the full development of society. Generally, this kind of situation generates in minors a state of vulnerability associated with helplessness on the part of their parents and family group.

According to (Brodzinsky & Schechter, 1990), adoption is that institution by virtue of which civil relations of paternity and filiation are established between external persons similar to those that take place in legitimate filiation. This allows us to infer that filiation is supposed to be an essential reason to complete the adoption process. In the same way, it can be inferred that the filiation resulting from the adoption process constitutes an imitation of a legitimate filiation since the situation of the adopted children is equal to that of the blood children.

On the other hand, adoption has three fundamental points of view that make it a necessary institution. From an ethical point of view, it constitutes the means to solve the situation in which children and adolescents find themselves who, for certain reasons, cannot live with their biological families. From the legal point of view, it is a regulated legal institution, through which the formation of filial bonds is managed for those minors who need it. From a social point of view, it establishes a protection mechanism for minors by integrating them into a new family as their legitimate children.

Preserving the best interests of children is a primary obligation of the public administration and in general of the entire state, as established by the Inter-American Court of Human Rights. In this sense, it is the inescapable task of the state to establish effective, efficient, and timely mechanisms to promote and develop the best interests of children and adolescents (Huamán et al, 2021).

In this sense, the Constitution of the Republic of Ecuador declares in article 44, first paragraph, that society, the State, and the family are in charge of promoting, as a priority, the comprehensive development of children and adolescents and ensuring the full exercise of their rights (Kauffman & Martin, 2014). This way, the Code of Childhood and Adolescence (Leifsen, 2008) establishes the legal mechanisms to carry out such purposes, among them, the mechanisms to guarantee the full development of minors in a situation of abandonment or orphanhood. (von Feigenblatt, 2022)

This document establishes that the purpose of adoption is to guarantee a suitable, permanent, and definitive family to the child or adolescent who is socially and legally fit to be adopted. Likewise, the full nature of adoption is established by virtue of which all the rights, attributes, duties, responsibilities, prohibitions, disabilities, and impediments of the parent-child relationship are established between the adopter(s) and the adoptee. In this way, it is intended to guarantee that the adopted child be assimilated into everything to the consanguineous child.

The principles governing the adoption process are stipulated in the Declaration on Social and Legal Principles Relating to the Protection and Welfare of Children. In article 153 of the Code of Childhood and Adolescence, the preference for family reintegration with respect to adoption is established. Thus prioritizing the maintenance or reestablishment of family relationships that have been harmed, and creating a favorable environment for the return home of the child and/or adolescent.

Likewise, priority is given to national adoption over international adoption, and in cases of adoption of children and adolescents belonging to indigenous and Afro-Ecuadorian peoples and nationalities, adopters of their own culture will be preferred. In this way, it is possible to note that the current legislation refers to the best interests of the child, to maintain his nationality and his culture in all cases in which it is feasible, and to guarantee all her rights in the new family.

Taking into account the abovementioned, the present project is carried out to analyze the main administrative and judicial deficiencies of the adoption process in Ecuador to determine the existence of causal relationships that currently give rise to the decrease in adoptions in the country. To carry out the proposed study, qualitative methods of problem-solving are used (Jiao et al, 2020). In addition, the knowledge of experts in the field is used, as well as the contributions made to the field by neutrosophy. (Grida et al, 2020; Rivieccio, 2008)

Neutrosophy preliminaries

Definition 1 Let X be a space of points (objects) with generic elements in X denoted by x. A neutrosophic single-valued set (SVNS) A in X is characterized by the truth membership function TA(x), the indeterminacy membership function $IA(x)$, and the falsity membership function $FA(x)$. Then an SVNS A can be denoted by $A = \{x, TA(x), IA(x), FA(x)\ x \in X\}$, where $TA(x), IA(x), FA(x) \in [0, 1]$ for each point x in X. Therefore, the sum of $TA(x), IA(x)$ and $FA(x)$ satisfies

the condition $0 \leq TA(x) + IA(x) + FA(x) \leq 3$. (Xu et al, 2020).

Definition 2 (Biswas et al, 2016) $Let\ Ek = (Tk, Ik, Fk)$ be a neutrosophic number defined for the qualification of the k-th decision-maker. Then the weight of the k-th decision-maker can be written as:

$$\psi_k = \frac{1-\sqrt{[(1-T_k(x))^2+(I_k(x))^2+(F(x))^2]/3}}{\sum_{k=1}^{p}\sqrt{[(1-T_k(x))^2+(I_k(x))^2+(F(x))^2]/3}} \quad (1)$$

Also, to achieve a favorable solution, group decision-making is important in any decision-making process. In the group decision-making process, all the evaluations of the individual decision-makers must be added to an aggregate neutrosophic decision matrix. This can be done by employing the single value neutrosophic weighted average (SVNWA) aggregation operator proposed by (Zou et al, 2018).

Definition 3 (Zou et al, 2018) Let $D(k) = (dij(k))mxn$ be the single-valued neutrosophic decision matrix of the k-th decision-maker and $\psi = (\psi_1 \psi_2, \ldots, \psi_p)^T$ the weight vector of the decision-maker such that each $\psi_k \in [0,1], D = (d_{ij})_{mxn}$, where:

$$d_{ij} = \langle 1 - \prod_{k=1}^{p}\left(1 - T_{ij}^{(p)}\right)^{\psi_k}, \prod_{k=1}^{p}\left(I_{ij}^{(p)}\right)^{\psi_k}, \prod_{k=1}^{p}\left(F_{ij}^{(p)}\right)^{\psi_k}\rangle$$

(2)

Definition 4 (Biswas et al, 2016; Pramanik et al, 2018) Deneutrosophication of SVNS Ñ can be defined as a process of mapping Ñ into a single crisp output for x $f: \tilde{N} \rightarrow \psi^{*}$ÎX. If Ñ is a discrete set then the vector of tetrads $\tilde{N} = \{(x \mid T\tilde{N}(x), I\tilde{N}(x), F\tilde{N}(x)) \mid x \in X\}$ reduces to a single scalar quantity ψ*∈X for deneutrosophication. The obtained scalar quantity ψ∗∈X better represents the aggregate distribution of three degrees of membership of the neutrosophic element TÑ (x), IÑ (x), and FÑ (x). Therefore, deneutrosophication can be obtained as follows:

$$\psi^{*} = 1 - \sqrt{[(1 - T_k(x))^2 + (I_k(x))^2 + (F(x))^2]/3}$$

(3)

Decision-making normally involves human language or commonly known as linguistic variables. A linguistic variable simply represents words or terms used in human language. Therefore, this linguistic variable approach is a convenient way for decision-makers to express their evaluations. Criteria ratings can be expressed using linguistic variables such as highly influential (VI), influential (I), slightly influential (SI), no influence (NI), etc. Linguistic variables can be transformed into SVNS, as shown in Table 1.

Table 1: Linguistic variable and single-valued neutrosophic numbers (SVNNs). Source: (Biswas et al, 2016)

Value	Linguistic Variable	SVNNs
0	No influence/Not important	(0.1, 0.8, 0.9)
1	Low influence/significant	(0.35, 0.6, 0.7)
2	Medium influence/significant	(0.5, 0.4, 0.45)
3	High influence/significant	(0.8, 0.2, 0.15)
4	Very high influence/important	(0.9, 0.1, 0.1)

Method

DEMATEL (Decision Making Trial and Evaluation Laboratory) is a technique developed in 1972 by Fontela and Gabus at the Geneva Research Center of the Battelle Memorial Institute (Gan & Luo, 2017). It is used to analyze the interdependence (relationship or influence) between components, variables, or attributes of a complex system, identify those that are critical, and study their cause-effect relationships, using an impact relationship diagram. DEMATEL is mainly used in complex multi-criteria decision-making processes to analyze the internal relationships between decision criteria. (Awang et al, 2018).

Basically, the steps to apply DEMATEL in its neutrosophic variant are listed below using the steps outlined below and can be found in more detail at (Awang et al, 2018; George-Ufot et al, 2017).

- Identify the factors or elements to be analyzed: Through the application of various information collection techniques, a universe of factors or elements of interest can be obtained to be evaluated by the selected method.
- Determine the relative importance of the experts: The group of experts selected for the analysis may have their own importance values according to different circumstances of interest, such as the level of experience and knowledge in the decision problem. In this sense, the weight of each decision-maker may be different from that of other decision-makers. The weight of each decision-maker is considered with linguistic variables and is transmitted in SVNN to later be identified using equation (Brodzinsky & Schechter, 1990).
- Get individual evaluations from experts. The experts are then asked to evaluate the direct influence between the factors through paired comparisons, using the score shown in Table 1.
- Convert the linguistic evaluations given by the experts in SVNN: From the individual sharp integer matrices obtained from the evaluations of the experts,

the individual neutrosophic matrices of the decision-makers are constructed according to what is indicated in Table 1.

- Obtain the initial direct relationship matrix: To obtain the initial direct relationship matrix that is in the form of sharp numbers, the neutrosophic matrices of the individual decision-makers must be added and deneutrosophicated using equations (Kauffman & Martin, 2014) and (Leifsen, 2008) respectively.
- Identify cause-effect relationships between factors using the DEMATEL method: Based on the aggregate direct relationship matrix A obtained in step 4, the total relationship matrix T can be easily calculated using equations (4-6) as shown below:

$$D = A * S \quad (4)$$

Where

$$S = \frac{1}{\max_{1 \le i \le n} \sum_{j=1}^{n} a_{ij}} \quad (5)$$

And

$$T = D * (I * D) - 1 \quad (6)$$

I, is the identity matrix.

The values tij of the matrix T reflect the direct and indirect interdependence exerted by the row element i on the column element j. Indirect interdependence is that which an element i can exert on another j through third elements of the system. These indirect interdependencies emerge when matrix X is raised to successive powers.

Obtain the Causal Prominence-Relationship Diagram. In this step, the vectors R (sum of rows of T) and C (sum of columns of T) are first calculated. Next, on the horizontal axis of the causal diagram, the "Prominence" is defined as the vector $R + C$. This vector indicates the importance or relevance of each element of the system. The higher the value of $R + C$, the greater the prominence of the element. A high value of $R + CR + C$ indicates that an element:

a) influences a lot on other elements,

b) receives a lot of influence from other elements,

c) influences and is influenced in a balanced way, so the sum of both concepts is high.

If $R + C$ is low, the element is of little "prominence" because both types of influence are low. On the vertical axis, the "Ratio" is defined as the RC vector. This vector establishes the net influence of each element. If $RC > 0$ indicates that the element influences more than it is influenced. This element would be the "cause" (influencer/driver) of influence. If $RC < 0$, it indicates that the element receives more influence than it emits, so it is considered an "effect" (influenced/receiver). Taking these values, a relationship map $(R + C, RC)$ can be created. (Vujanović et al, 2012).

METHODOLOGY

A bibliographic review of the literature was carried out to determine the main aspects of interest for the resolution of the proposed study. The bibliographic review process laid the foundations for the elaboration of structured interviews to be applied later in a sample of interest for the study and its objectives. The elaborated interview consists of 6 questions of different formats and investigative levels to analyze the main deficiencies perceived by the actors in the adoption process.

In this way, to carry out the collection of information, 7 officials involved in the process of adopting children and adolescents are selected as a study sample. Of them 2 judges, 2 lawyers, and 3 officials from the Technical Adoption Unit. Likewise, when considering the importance of adoptive parents or couples, interviews were also conducted with 4 couples and 2 people who were immersed in the adoption process. The interviews were carried out during November and December 2021 and in all cases, there was the support of the officials and the work team for their development.

The information compiled from the interviews carried out is cataloged by the specialists integrated into the work team. This information, together with the data compiled through the bibliographic review carried out, lay the fundamental foundations on which the main elements to be evaluated in this study are determined. The multi-criteria method to be applied is carried out with the support of 4 selected experts, who are specialized officials in the adoption process. The experts qualify the degree of association between the factors with integers from 0 to 4 that will represent the degree of influence of one factor towards another factor, according to the criteria shown in Table 1.

Adoption process in Ecuador

According to (Kauffman & Martin, 2014), the adoption process has two fundamental phases. The first is the ***administrative phase***, which begins with the registration of the candidates to adopt. The second phase is the ***phase or judicial procedure***, which begins with the lawsuit filed before the Judge for Family, Women, Children, and Adolescents of the domicile of the child or adolescent and ends with the sentence in which the judge orders the registration of the one adopted in the Civil Registry. Once this phase is completed, the process continues with a post-adoption follow-up for two years.

It is important to clarify that, although there are only two phases according to the law, before the start of the first phase of the adoption process, a document called a declaration of adoptability must be issued by the relevant authority. This document authorizes the boy, girl, and/or adolescent to be subject to adoption. For the declaration of adaptability to be given, children and adolescents must meet certain requirements, such as:

1. Being orphaned by both parents.
2. Not knowing who their parents are.
3. That both parents are deprived of liberty.
4. Parental consent.

In addition, this declaration is given when children or adolescents do not have relatives up to the third degree of consanguinity or they are unable to assume their care.

Adopters must meet a series of requirements outlined in the corresponding law. As in all countries that are using information and communication technologies, the adoption procedure begins with a stage that is not face-to-face and is carried out through the Internet, through the link: https://siimiesalpha.inclusion.gob.ec/siimies-ciudadano/; where the basic information is recorded to obtain an appointment for a virtual initial interview.

Once the ***online*** stage of the procedure is completed, the face-to-face phase of the adoption process is developed, which has several stages. Figure 1 shows a summary of the steps to follow in the administrative phase.

Figure 1: Procedure administrative phase of the adoption process in Ecuador. Source: Own elaboration

For its part, the judicial process consists of formalizing the adoption of the child or adolescent through a court ruling and the corresponding provision for registration in the Civil Registry. Figure 2 shows a summary of the logic of this phase.

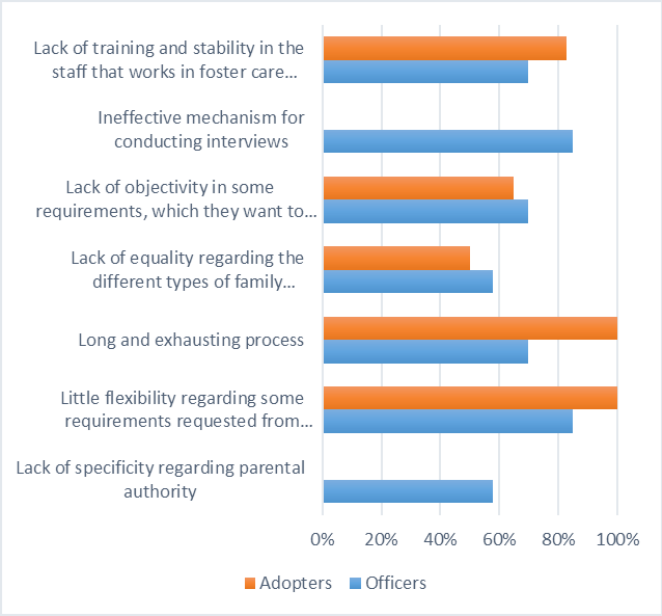

Figure 2: Judicial phase procedure of the adoption process in Ecuador. Source: Own elaboration

It should be clarified at this point those aspiring adopters must meet a series of prerequisites to start the process:

1. Be domiciled in Ecuador or in one of the states with which Ecuador has signed adoption agreements;
2. Be legally capable;
3. Be in full exercise of political rights;
4. Be older than twenty-five years;
5. Have an age difference of not less than fourteen nor more than forty-five years with the adoptee. The minimum difference will be reduced to ten years in the case of adopting the child of the spouse or partner, in cases of de facto union that meets the legal requirements. These age limitations will not apply to kinship adoption cases. In the case of couples, the age limits will apply to the youngest spouse or partner;
6. In the case of an adoptive couple, they must be heterosexual and be united for more than three years, in marriage or in a de facto union that meets the legal requirements;
7. Be in adequate physical and mental health to fulfill parental responsibilities;
8. Have the necessary economic resources to guarantee the adoptee the satisfaction of their basic needs, and,

9. Do not have a criminal record for crimes punishable by imprisonment.

RESULTS

The results obtained from the interviews conducted with the officers and adopters selected for the study were cataloged, summarized, and restructured to present the essence of the information collected. Figure 3 shows the general results of the interviews carried out.

As can be seen, the main deficiencies framed by adopters focus on the length and length of the process in general (100%), as well as the rigidity of some of the requirements set out for adopters (100%). Likewise, the lack of training and stability in the personnel that works in the foster care entities (83%) is stated, since there are references to processes that were extended due to the labor inconsistency of some of these officials.

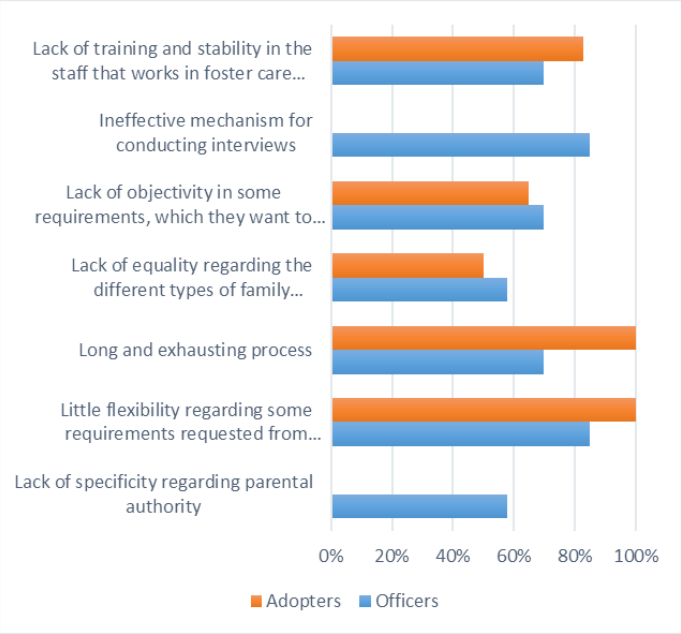

Figure 3: Summary of the deficiencies obtained according to the actors interviewed. Source: own elaboration

On one hand, the officers interviewed focused their efforts on the lack of effectiveness of the interview mechanism (86%), which causes the extension of the process by several weeks and even months. On the other hand, the opinion expressed by adopters regarding the lack of flexibility in some requirements for adoptive parents is shared to a certain extent (86%).

The results obtained were classified and coded for processing using the method selected for the study. Table 2 shows the deficiencies detected by the officers and adopters in the interview applied for such purposes, as well as the symbols used for greater ease when processing the data.

Table 2: Codification of the main deficiencies detected through the surveys carried out. Source: own elaboration

Main shortcomings pointed out by officers	Main deficiencies pointed out by the adopters
F1. There is no flexibility regarding the requirements for adopters to facilitate the process	F1. Little flexibility regarding some requirements requested from adopters
F2. A pre-established duration time is not established for the administrative phase of the adoption F3. Delay of the judicial phase when carrying out summary proceedings F4. Lack of specificities regarding the loss of parental authority, which can speed up the process of declaration of adoptability F5. Lack of equality regarding the different types of family established by the constitution F6. Lack of objectivity in some requirements, which are left to the consideration of the officials of the Technical Adoption Units or the judges F7. Ineffective mechanism for conducting interviews with potential adoptive parents F8. Lack of training for staff working in foster care entities	F9. Very long process with many bureaucratic steps Great consumption of time, energy, and resources for the fulfillment of the requirements, documentation, and the whole process in general F10. Little stability in the staff of the Technical Adoption Units, which delays the process each time a new person is incorporated

The evaluations carried out by the experts are collected in double-entry tables such as those shown in Table 3. The linguistic evaluations correspond to SVNN that are later transformed using equations 2 and 3 to obtain the initial direct interdependence matrix.

Table 3: Evaluation of the analyzed factors carried out by the expert 1. Source: Own elaboration

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
F1	NI	NI	LI	NI	I	VHI	LI	LI	I	NI
F2	LI	NI	NI	I	NI	NI	HI	NI	VHI	LI
F3	NI	NI	NI	I	NI	LI	NI	NI	VHI	NI
F4	LI	I	I	NI	NI	NI	NI	NI	LI	NI
F5	VHI	NI	NI	NI	NI	LI	NI	NI	LI	NI
F6	VHI	I	LI	NI	I	NI	LI	NI	NI	NI
F7	NI	NI	NI	NI	NI	NI	NI	NI	VHI	NI
F8	NI	NI	NI	NI	NI	NI	NI	NI	HI	LI
F9	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
F10	NI	LI	NI	NI	NI	NI	LI	I	VHI	NI

The initial direct interdependence matrix is shown in Figure 4. In this case, it is assumed that all decision-makers have the same level of importance.

$$A = \begin{vmatrix} 0.0000 & 0.2428 & 0.4584 & 0.2428 & 0.5691 & 0.7183 & 0.5278 & 0.3782 & 0.6403 & 0.2933 \\ 0.2933 & 0.0000 & 0.3326 & 0.4584 & 0.2428 & 0.2428 & 0.6403 & 0.2428 & 0.8485 & 0.5055 \\ 0.2428 & 0.2428 & 0.0000 & 0.7770 & 0.2428 & 0.3782 & 0.2428 & 0.2428 & 0.8485 & 0.2428 \\ 0.3782 & 0.5482 & 0.5318 & 0.0000 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.3782 & 0.2428 \\ 0.8485 & 0.2428 & 0.2428 & 0.2428 & 0.0000 & 0.7162 & 0.2428 & 0.3621 & 0.2933 & 0.2428 \\ 0.8485 & 0.5482 & 0.4857 & 0.2428 & 0.4033 & 0.0000 & 0.4857 & 0.2428 & 0.3621 & 0.2428 \\ 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.0000 & 0.2428 & 0.8220 & 0.2428 \\ 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.3326 & 0.2428 & 0.2428 & 0.0000 & 0.8220 & 0.5055 \\ 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.0000 & 0.2428 \\ 0.2428 & 0.4347 & 0.2428 & 0.2428 & 0.2428 & 0.2428 & 0.5988 & 0.7128 & 0.8220 & 0.0000 \end{vmatrix}$$

Figure 4: Direct interdependence matrix starts. Source: own elaboration

Subsequently, the normalized matrix is obtained, through equations 4 and 5, as shown in Figure 5.

$$D = \begin{vmatrix} 0 & 0.0596 & 0.1126 & 0.0596 & 0.1398 & 0.1764 & 0.1296 & 0.0929 & 0.1573 & 0.0721 \\ 0.0721 & 0 & 0.0817 & 0.1126 & 0.0596 & 0.0596 & 0.1573 & 0.0596 & 0.2084 & 0.1242 \\ 0.0596 & 0.0596 & 0 & 0.1909 & 0.0596 & 0.0929 & 0.0596 & 0.0596 & 0.2084 & 0.0596 \\ 0.0929 & 0.1346 & 0.1306 & 0 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0929 & 0.0596 \\ 0.2084 & 0.0596 & 0.0596 & 0.0596 & 0 & 0.1759 & 0.0596 & 0.0889 & 0.0721 & 0.0596 \\ 0.2084 & 0.1346 & 0.1193 & 0.0596 & 0.0991 & 0 & 0.1193 & 0.0596 & 0.0889 & 0.0596 \\ 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0 & 0.0596 & 0.2019 & 0.0596 \\ 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0817 & 0.0596 & 0.0596 & 0 & 0.2019 & 0.1242 \\ 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0 & 0.0596 \\ 0.0596 & 0.1068 & 0.0596 & 0.0596 & 0.0596 & 0.0596 & 0.1471 & 0.1751 & 0.2019 & 0 \end{vmatrix}$$

Figure 5: Matrix of normalized values. Source: own elaboration

Subsequently, using equation 6, the total matrix T of direct and indirect relationships is shown in Fig. 6.

T =

0.45	0.429	0.482	0.421	0.48	0.568	0.541	0.444	0.824	0.411
0.453	0.335	0.416	0.431	0.37	0.416	0.524	0.383	0.808	0.423
0.419	0.37	0.32	0.474	0.347	0.418	0.405	0.352	0.746	0.341
0.42	0.408	0.413	0.291	0.329	0.371	0.389	0.334	0.626	0.326
0.59	0.393	0.405	0.381	0.328	0.535	0.447	0.407	0.684	0.367
0.614	0.482	0.483	0.419	0.442	0.41	0.532	0.409	0.764	0.396
0.345	0.303	0.308	0.299	0.29	0.326	0.282	0.296	0.636	0.287
0.384	0.337	0.34	0.33	0.341	0.362	0.379	0.277	0.699	0.374
0.305	0.267	0.271	0.264	0.256	0.287	0.299	0.261	0.393	0.253
0.436	0.424	0.389	0.379	0.368	0.41	0.509	0.477	0.801	0.314

Figure 6: Total matrix of direct and indirect relationships. Source: own elaboration

From matrix T, the values R, C, R+C, and RC are calculated and shown in Table 4. The causal diagram is shown in Figure 7.

Table 4: Results of the application of the method. Source: own elaboration

	Ri	Ci	Ri+Ci	Ri-Ci
F1	5.05	4,416	9,466	0.634
F2	4,559	3,748	8,307	0.811
F3	4,192	3,827	8,019	0.365
F4	3,907	3,689	7,596	0.218
F5	4,537	3,551	8,088	0.986
F6	4,951	4,103	9,054	0.848
F7	3,372	4,307	7,679	-0.935
F8	3,823	3.64	7,463	0.183
F9	2,856	6,981	9,837	-4,125
F10	4,507	3,492	7,999	1,015

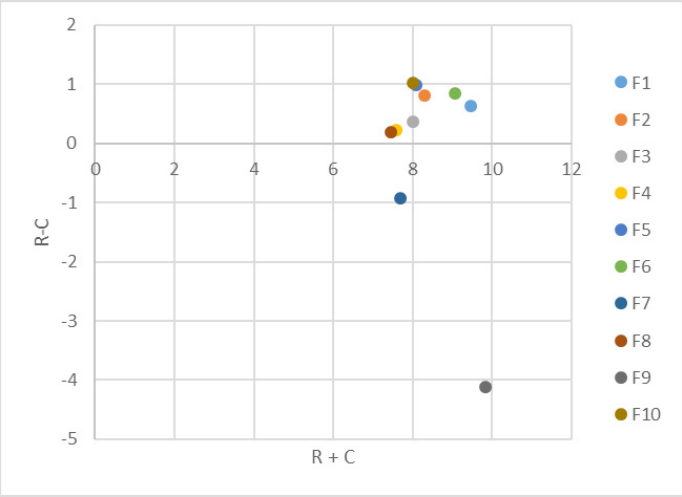

Figure 7: Causal diagram resulting from the applied method. Source: own elaboration

As can be seen, the analysis carried out reveals that the most prominent elements are F9, F1, and F6. These elements correspond to the great dilation in the time of the adoption process, the little or nonexistent flexibility of some of the requirements posed to the adopters, and the high objectivity in some requirements, which are left to the consideration of the officials of the Technical Adoption Units or the judges.

In this sense, it is important to highlight that the great dilation at the time of the adoption process is influenced by dissimilar factors of those mentioned as deficiencies by the actors of the process interviewed, which influences their great prominence in the system. Elements such as the lack of time limits for the administrative phase of adoption, the delay in investigations, the judicial phase when summary proceedings are carried out, the delays in some cases for the delivery of the declaration of adoptability, as well as the ineffectiveness of the mechanisms for carrying out interviews with potential adoptive parents affect the duration of the process, influencing its greater delay.

On the other hand, the lack of flexibility of some of the requirements placed on the adopters influences the feeling of discouragement or exhaustion. On the other hand, the lack of specification regarding some of the requirements gives rise to ambiguities or inaccuracies that can be interpreted in different ways by the officers of the Adoption Units. This, together with labor inconsistency and/or lack of training of officials, can lead to situations in which a process is started that really should not have had a place, or potential adopters are dismissed due to lack of clarity, experience, or simple ignorance.

Finally, when evaluating the relationship axis obtained, it is observed that the factor that receives the greatest influence from the rest of the elements of the system is the factor related to the time of the general process. In this sense, there is a correspondence with the results obtained previously, since this is the element with the greatest sensitivity and which is affected in a greater proportion.

CONCLUSIONS

In Ecuador, the institution of adoption is a process that is of utmost importance to guarantee the full development of children and adolescents. The proposed study allowed the realization of an analysis of the main problems in this process, from the point of view of the main actors that carry it out. A bibliographic review was carried out on the specialized bibliography for the acquisition of the necessary elements to elaborate interviews that serve the objectives of the study. The applied interviews made it possible to determine the main deficiencies of the national adoption process perceived by officials of the process, as well as by adoptive parents in the process.

The DEMATEL multi-criteria decision method was applied, in its neutrosophic variant, to determine the causal relationships between the deficiencies indicated by the sampled actors. According to the analysis carried out, the elements of greatest prominence in the system corresponded to the great dilation in the time of the adoption process, the little or nonexistent flexibility of some of the requirements posed to the adopters, and the high objectivity in some requirements. It was observed that the factor that receives the greatest influence from the rest of the elements of the system is the factor related to the time of the general process, while the rest of the elements have a greater correspondence as causal elements.

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