

Application of Logistic Regression on the Analysis of Chilean Children's Fears*

Aplicación de la regresión logística al análisis de los miedos de los niños chilenos

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ABSTRACT

The research aimed at finding some deciding factors in Chilean children's fears. For carrying out this study, a survey was administered to children between 6 and 11 years old through personal interviews, under their teachers' supervision and parents' permission. The measuring instrument was based on the questionnaire adaptation "Fear Survey for Children; revised, FSSC-R". The sample consisted of 729 children of both genders and from different socioeconomic strata and areas (urban and rural). For its examination, a Factorial Analysis of Main Components was applied, resulting that fears can be grouped into five factors: Daily life, Supernatural facts, Health, Natural disasters and Self-esteem. Thanks to this, a weighted index of fears was built. Through a Logistic Regression Model, some possible deciding factors in children's fears were analysed. For example, it was found that living in the city or in the country is not a significant factor when determining children's fears. On the other hand, the factors that turned out to be significant are: the gender, finding terrifying images on the internet, the socioeconomic level that each child belongs to and, being able to manage on his or her own when the child confronts a frightening event.

Keywords

children's fears; development of fears; psychological vulnerability; negative experiences; logistic regression

RESUMEN

La investigación tuvo como objetivo encontrar algunos factores determinantes del miedo en los niños chilenos. Para realizar el estudio, se administró una encuesta a 729 niños entre los 6 y 11 años de edad. El instrumento de medición se basó en una adaptación del cuestionario "Fear Survey Schedule for Children – Revised, FSSC – R". Luego, para el examen de los datos se realizó un análisis factorial exploratorio que agrupó los miedos en cinco factores los que posteriormente permitieron construir un índice ponderado de miedos. Finalmente, a través de un modelo de regresión logística y usando una categorización del índice ponderado de miedos como variable dependiente, se encontraron algunos factores determinantes de los miedos infantiles. Entre estos están: el género, encontrar imágenes atemorizantes en internet, el nivel socioeconómico y la auto-suficiencia para enfrentar situaciones de miedo.

Palabras claves: miedos infantiles; vulnerabilidad psicológica; regresión logística

Palabras clave

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Introduction

Fear can be defined as a mood disturbance because of a danger perceived as a threat, which can be real or unreal. Children's fears are a normal and necessary part of the psychological development that promotes the environmental adaptation. Fears protect children from possible harm and they let them take precautions to avoid facing a danger that scares them. They also move a child away from high-risk situations, such as playing with fire, jumping in a pool, crossing the street or getting close to a stranger.

Children experience many normal and evolutionary fears in the course of their lives because of the fact that they don't know or partially know what surrounds them, and what is perceived, it is carried out with biased look of their inexperience; that is to say, the word turns out to be a complete mystery and threat to their stillness. As they try to understand their environment, these fears tend to decrease and/or change. So we find fears, such as the fear of a possible divorce, of strange people, of the dark, of the school, of earthquakes, of injuries, of masked faces, of death, etc. To all these frights we can add a powerful ally, fantasy, which in many occasions has an influence on the environmental perception. In fact, if an imaginary character or a certain situation is recreated, it can intimidate them even more than the realities in which they live. Until the age of 6 or 8 years old, and while they don't distinguish what is real or unreal, it is desirable that children are afraid of fantastic beings, such as witches, ghosts, monsters and aliens. Then, with the incorporation of pairs relationship and the new knowledge related to the school period, other kinds of fears are going to appear. In this way, between 9 and 12 years old, the fears that predominate are those with social and self-image character, like social rejection, bullying, failing at school, or getting low marks. With different intensities and forms, these fears will be changing right to the end of adolescence.

It has been proved that in many studies and researches, girls use to have more fears than boys, as in number as in intensity. This has been explained

through two hypotheses. The first has a biological origin, and has a relationship with the male and female roles, depending on their physical features; the second one has a sociocultural origin, which refers to those differences determined by the social role performed by each sex.

In connection with the socioeconomic group, it has been proved that the poorest children tend to feel more fears than the richest ones. Some authors have pointed out that this can occur due to the negative experiences they have had.

Several studies have reinforced some of the factors that induce children to have more or less fears. These are: *Preparation, Biological and Psychological vulnerability, Personal history, Negative experiences, Observation, Transference of information and Advantages of fear.*

Then, the question is what about Chilean children? Do they show the same fear patters than those which have been analysed in other countries and cultures? This study attempts to answer this question through a model of logistical regression, analysing how factors like age, sex, socioeconomic status, living in the country, past events, and the use of internet have an influence on the creation of Chilean children's fears.

State of the art

In the course of time, there have been many people who have studied the emotions. Ekman (1972) and his colleagues found that in the entire world, people were able to recognize six basic emotions according to the different facial expressions: happiness, rage, surprise, upset and fear (Rice, Ortiz, & Reyes, 1997). This is the way how all human beings, depending on the age and the developed social abilities, are able to feel and distinguish at least these six basic emotions.

Fear is not the exception. Even though children are not born with fears (except for the fear of noise or falling down), when they are about one year old they start developing several types of fears that have different origins. Some of them originated after a learning process, it means, they are determined from real experiences. Other fears are caused by

the lively imagination of children. In view of the fact that for children is difficult to separate real facts from fantasy, some fears use to appear for example, "the monster under the bed" (Rice et al., 1997).

Thus, fears have to do with a normal growth process that goes from the slow take-off of parents, to the unknown social world's entry. Due to the fact that they have to do with the growth process, these fears use to disappear spontaneously with the child's development and strengthening (Gatriot-Alphandery, Zazzo, & Echeverría, 1984).

These fears are healthy because they give children the opportunity to learn how to handle difficult and stressful situations. In a similar way, fear is a psychological alarm that avoids running unnecessary risks. Situations that compromise physical integrity or people's welfare produce fear. Then, it has an evolutionary and normal function, which is at the service of life. Feeling fear of strangers explains the fact that most children do not leave cheerfully with the first unknown person who appears before them. Fear is the normal and adaptive reaction when we face encouragements (situations, objects and thoughts) that involve danger or threat (Palou, 2004).

Sometimes these difficulties (typical of a person's growth) turn into problems or symptoms. This happens when the child has difficulties in adapting to certain situations, and or when the response to the environment (from family and the "significant others" is not appropriate to favour this adaptation (Gatriot-Alphandery, Zazzo, & Echeverría, 1984). That is why further investigation is necessary because it allows setting up the rules that let them differentiate between "normal" fears and those clinical fears from childhood (Méndez, Inglés, & Hidalgo, 2003).

Difference Between Genders

Girls give very high marks in test about children's fears, as in quantity as in intensity. In the same way, adult women suffer from more specific phobias than men (Valiente, Sadín, Chorot, & Tabar, 2002).

There is a study made by Méndez, Inglés and Hidalgo (2003) which corroborates that women

fear more than men and the feared stimulus also differ among each other, for example, while girls are more afraid of animals and to their parents' divorce, boys are more afraid of having physical contact or a performance evaluation.

The highest level of female fear does not imply that a girl will be fearful all the time. Specific boys are more afraid than many girls. It means, if we select samples of one thousand boys and one thousand girls at random, girls on average are above boys. According to Méndez et al. (2003), there would be two explanations for this:

- **Biological Hypothesis:** It tells the difference between male and female roles according to their physical features. In mammals, males are stronger and they are more provided for defence and for the female attack, showing a less frightful behaviour.
- **Sociocultural Hypothesis:** the differences are determined by the social role carried out by each sex. The differential education received in a particular and sociocultural environment will make those differences. Girls have higher permissiveness to reveal feelings and emotions than boys, though they feel the same. A frightful girl who cries because of a lizard is protected by her mother, while a boy has to catch it and throw it away, otherwise his father may scold him. This would be logical with the general role of female behaviour (need of protection, fear display of feelings, and so on), faced with the male role (absence of fear, value and defence of the weak sex).

Evolution of Fears Depending on the Age

Some longitudinal studies highlight some evolutionary changes in children and teenagers fears. During the first year, fear of loud noises and strangers are very common. Until the age of six, fears are related to darkness, disasters, animals, supernatural beings (like witches or monsters), and parents' divorce. After seven years onwards, fears related to physical harm, sense of absurd diseases and accidents start to appear. From twelve to eighteen years

old, fears related to interpersonal relationships and the loss of self-esteem predominate (Méndez, Inglés, & Hidalgo, 2002 in Gonzalez, 2005).

Changes in the amount of fears have also been found according to growth. In a literature review, Ferrari (1986) found a significant decrease in the number of fears in relation to age, although between 9 and 10 years old there is a tendency to increase the quantity of fears.

However, the connection between the age and the different types of fears is not simple. Some results register an outbreak of fears between 11 and 13 years, which decrease subsequently from 14 to 15 (Miller, Barret, & Hampe, 1974). Studies like the one by Valiente et al. (2002) prove that from 11 years there is a widespread decline, as in number of excessive fear as in its intensity. This tendency remains constantly until the age of 15 when the intensity of fear of animals and evaluation of school performance increases. It has also been established that some types of fear, like physical harm and death, get a big prevalence apart from the level of growth (Méndez et al., 2003).

Another influential aspect in children and teenagers' psychopathology patterns is related to cultural factors (Elbedour, Shulman, & Kedem, 1997). Specifically, those beliefs that are culturally influenced, values and traditions connected with sociability experiences have an important role in different types of issues, which are perceived by parents and teachers in children and their fears.

Even though there are studies that compare the types of fears and their intensity in different races and cultures, there is nothing conclusive. It has only been demonstrated that children are more frightened than teenagers and at the same time, girls are more frightened than boys. Fear seems to be a universal experience in childhood, which decreases in accordance with the age. This may be because of the intelligence development and the cognitive skills. Studies prove that a boy with mental retardation between 12 and 13 has the same fears than a boy without cognitive problems whose age is between 6 and 7 years.

Therefore, reactions to fear are common in children, and tend to follow a sequence of growth.

Younger children are more likely to be afraid of fantastic creatures, while older children and adolescents feel more fear due to certain social situations. On the other hand, girls are more prone to show their fear than boys, even though it is not clear if it is a real difference of roles and expectations assigned to each gender (Beidel & Turner, 2005).

Méndez (1999) mentions that the factors that explain the origin and persistence of children's fears are:

1st Preparatory: due to the evolution of humans, children are prepared to feel fear of certain objects easily, like harmless snakes and other things like electrical plugs, even though at present, they are supposed to be riskier.

2nd Biological Vulnerability: children whose psychological reactions of defence become quickly evident (getting stronger intensities and taking a long time) are prone to feel fear. It also has an influence on the body condition. For example, when a child is sick, tired or with a physical ailment, he/she resists less the impressions. In adverse conditions, little frights have a great impact.

3rd Psychological Vulnerability: less means a child has to face up stressful and threatening situations, then the probability to react with fear is higher.

4th Personal History: fear depends on how events have happened in the past when the child has faced the same situation. For example, it is likely that a student who has had a poor performance in school, feels more fear of school than a brilliant student who enjoys studying.

5th Negative Experiences: an essential mechanism for the acquisition of fears is to suffer from an intense negative experience, like a traumatic divorce, or several negative experiences (less strong), like repeated failures in exams.

6th Observation: another way that leads to fear is witnessing, in reality or in a film, other people experiencing dangerous events or being afraid to certain situations.

7th Information Transference: Messages or stories (oral or written), with threatening contents also unleash responses to fear.

8th Advantages of fear: the benefit of positive or negative reactions to fear, contributes to keep fear,

so it is more difficult to eliminate it. More attention from parents, release of responsibilities, and so on.

According to Méndez (1999), there are investigations that reinforce some of the factors pointed out by the author. For example, Medina et al. (2010) argued that fears are the result of changes, sometimes abrupt, some others delicate when they organize the world experience and in the way to face reality.

Concerning the negative experiences, there are authors like Caballo et al. (2006) who argues that this can be the reason why fears are more frequent in poorer children than in richer ones, as the latter are less exposed.

In connection with the transference of information, there are authors that indicate that the impact of media on children has increased in recent years, and while there is more evidence about fears, it is more pervasive and disturbing for children (Cantor, 1998). An example of this can be Internet. With this tool, children are being exposed to war, disasters and terrorist images, or even danger and death images (Campbell & Gilmore, 2006).

Methodology

Data Sources

The information of this research has been collected from a primary source, which has been compiled through a survey. Due to the age of the respondents is difficult to identify their perceptions, demanding the creation of a simple and intuitive measurement instrument. Data collection was carried out by means of a questionnaire of personal data appli-

cation (Hernández & Fernandez, 1991), which let us collect in a better way the perceptions and opinions of children. This survey was administered to students of different private, semi-private and public schools from Metropolitan Region and Maule Region.

For the construction of indicators that are part of the measurement scale, we used a reduced and adapted version of "The Fear Survey for Children" (Ollendik, 1983). The scale was finally made up of 41 indicators that represent a list of fears, as it is shown in Table 2.

Besides sociodemographic variables like sex, age and socioeconomic strata; some questions were added as it is shown in Table 1.

The exploratory factorial analysis was applied through the method of the Essential Element and Varimax rotation. Five factors with explained variance were found in the analysis (projected to 100%) and Cronbach's alpha coefficient as it is explained in the following table:

From these results we constructed an indicator of fear, which has been subsequently classified and used as a dependant factor of the logistic regression model.

Boys and girls between 7 and 11 years old formed the considered universe. The sampling procedure corresponds to a non-probabilistic and convenience sampling. The survey was administered in May 2010 in classrooms and schools that allowed the administration under the teacher's supervision and written consent of children's parents. The sample size was 729 respondents.

TABLE 1
Additional Questions

Additional questions	
V.5.1	What other objects, characters, situations or animals do you fear most?
V.5.2	What do you do when you are afraid of something?
V.5.3	Who do you tell about your fears?
V.5.4	Have you found something frightening on the internet?
V.5.5	Do you remember situations when you were really afraid?

Source: own work

TABLE 2
Inventory of Children´s Fears

	At school, what do you fear most?	Don't fear	Fear a little	Fear a lot
V.1.1	Having no friends (A)			
V.1.2	Having a quarrel with somebody (A)			
V.1.3	If People make fun of you (A)			
V.1.4	Getting low marks (A)			
V.1.5	Being punished by your parents or teachers (A)			
V.1.6	If there is an earthquake (D)			
V.1.7	Falling down or hurting yourself (S)			
V.1.8	Getting sick (S)			
V.1.9	Being alone after a class (V)			
	At home, what do you fear most?	Don't fear	Fear a little	Fear a lot
V.2.1	Having an argue with your parents (A)			
V.2.2	A quarrel between your parents (A)			
V.2.3	If there is a fire (D)			
V.2.4	Being alone (N)			
V.2.5	If you see ghosts (N)			
V.2.6	If you see a video game character (N)			
V.2.7	When is dark (N)			
V.2.8	Getting locked (N)			
V.2.9	Watching a mystery film on TV (N)			
V.2.10	Having nightmares (N)			
V.2.11	If a relative is sick (S)			
V.2.12	If a relative died (S)			
V.2.13	A burglary(V)			
	When you are with friends, what do you fear most?	Don't fear	Fear a little	Fear a lot
V.3.1	If they laugh at you (A)			
V.3.2	Having a quarrel with them (A)			
V.3.3	Being hit by a friend (A)			
V.3.4	If a friend died (S)			
V.3.5	If a friend got sick (S)			
	In the street, what do you fear most?	Don't fear	Fear a little	Fear a lot
V.4.1	If someone laughs at you (A)			
V.4.2	If there is an earthquake (D)			
V.4.3	Storms (D)			
V.4.4	Monsters (N)			
V.4.5	Aliens (N)			
V.4.6	Being lost (N)			
V.4.7	If you die(S)			
V.4.8	Being knocked down (V)			
V.4.9	Some animals, which...? (V)			
V.4.10	Strangers (V)			
V.4.11	If someone kidnaps you(V)			
V.4.12	If a stranger touches you (V)			
V.4.13	Being in a car or bus crash (V)			
V.4.14	If you are robbed (V)			

A: Self-esteem, S: Health, D: Natural Disasters, V: Daily Life, N: Supernatural Facts
Source: own work

TABLE 3
Factorial Analysis

Factor	Explained variance	Cronbach's alpha coefficient
F1: Daily Life	0.63	0.83
F2: Supernatural Facts	0.13	0.75
F3: Health	0.1	0.79
F4: Natural Disasters	0.07	0.77
F5: Self-esteem	0.07	0.83

Source: own work

TABLE 4
Information of Model's Fit

Model	Model's Fit		Contrasts of likelihood ratio	
	-2 log	χ^2	freedom grade	Sig.
Only intersection	641.955			
Final	467.649	174.306	9	0.000

Source: own work

Table 5
Pseudo R-square

Cox y Snell	0.229
Nagelkerke	0.306
McFadden	0.188

Source: own work

Table 6
Goodness of Fit

	χ^2	fg.	Sig.
Pearson	277.001	289	0.684
Standar deviation	319.803	289	0.103

Source: own work

Sample Characteristics

The total size of the sample was made of 729 children, of which 51% are boys and 49% are girls. 85% live in the city and 15% live in the country. In accordance with the socioeconomic strata: 29.6% of each ABC1 segment, 40.1% of the C2C3 segment, and 30.3% of the DE segment. Finally according to the age: 12.8% of 7 years and 19.6% of 8 years, 26.2% of 8 years, 15.2% of 10 years, 19.5% of 11 years and 6.7% of 12 years old.

Analysis Technique

In order to analyze the factors that determine the fears of children, we made a logistic and binomial analysis, which considers the following variables:

Endogenous Variable:

Y: Categorized scale of fears (1= I am afraid, 0= I am not afraid)

Exogenous Variables:

X1: Age (in years, continuous variable)

X2: Sex (1=Female, 0=Male)

TABLE 7
Table of Classification

Observed	Predicted		
	Fear	Don't fear	Overall percentage
Fear	210	97	68.4%
Don't fear	89	275	75.5%
Overall percentage	44.6%	55.4%	72.3%

Source: own work

TABLE 8
Estimation of Parameters

Fears categorized scale	B	Error tip.	Wald	fd	Sig.	Advantage P	Probability	Marginal Value
						Exp(B) = P/1-P	(P)	$\Delta = BP(1-P)$
Intersection	-2.446	0.788	9.627	1	0.002			
X1	-0.111	0.066	2.843	1	0.092	0.895	0.472	-0.028
[X2=1]	1.134	0.181	39.16	1	0	3.107	0.756	0.209
[X31=1]	1.059	0.291	13.245	1	0	2.884	0.743	0.202
[X32=1]	0.279	0.217	1.658	1	0.198	1.322	0.569	0.068
[X4=1]	0.363	0.331	1.203	1	0.273	1.437	0.59	0.088
[X5=1]	0.922	0.196	22.142	1	0	2.513	0.715	0.188
[X6=1]	0.828	0.299	7.671	1	0.006	2.289	0.696	0.175
[X7=1]	1.076	0.199	29.321	1	0	2.933	0.746	0.204
[X8=1]	0.612	0.187	10.728	1	0.001	1.845	0.648	0.14

a. Reference category: Don't fear.

b. To qualitative variable has been established to zero as reference category.

Source: own work

X3: Socioeconomic strata (X31=1=DE, X32=1=C2C3, X33=ABC|category of reference)

X4: Area (1=Urban, 0=Rural)

X5: What do you do when you are afraid? (1=He /she turns to a relative 0= He /she manages on his her own)

X6: Who do you talk to when you are afraid? (1=A relatives or friends, 0=A nobody)

X7: Have you found something on the internet that provokes you fears? (1=Yes, 0=No)

X8: Do you remember a particular scaring situation? (1=Yes, 0=No)

The model estimation was made with the statistical software SPSS 15.0, getting the following results:

Goodness of Fit

The model has a good adjustment in accordance with the Chow-type ratio test (p-value=0.000<0.05), the classification table shows an accuracy ratio of 72.3%. The estimated parameters are highly significant; the lowest corresponds to the variable X4 which presents a significance level of 73%.

Results

from the model estimation, the probability of having fear decreases with the age (X1: parameter with negative sign), though the parameter

is not significant at the 95% (p -value=0.092). The probability that a girl has fear is higher than a boy (X2: higher parameter than 0 and p -value=0.000). Children from DE socioeconomic level are more likely to have fear than those from socioeconomic stratus (ABC1) (X31=1: higher parameter than 0, p -value=0.000). Children from C2C3 are more likely to have fear than those from a higher socioeconomic stratus (ABC1) (X32=1: parameters with positive signs), though with a level of significance of only 80% (p -value=1.198). Children who live in urban areas are more likely to have fear than those who live in rural areas (X4: parameter with positive sign), however this result has a level of significance of 73% (p -value=0.273). Children who live frightening situations, but manage on their own (X5: parameter with positive sign and p -value=0.000) or do not tell anybody (X6: parameter with positive sign and p -value=0.006) are more likely to not to have fear than those who turn to somebody. Children that remember a particular situation that made them have fear, have a higher probability of feeling fear than those who do not have memories about bad situations (X7: parameter with positive sign and p -value=0.000). Children who have found something frightening on the internet are more likely to have fear than those who have not found anything (X8: parameter with positive sign and p -value=0.001).

The most influential factors in the increase of probability of having fear are:

- Sex: in case of being woman, the probability of having fear increases a 21%
- To have found something in internet: if something is found in internet the probability of having fear increases in a 20%
- Socioeconomic strata: being part of the lowest socioeconomic strata (DE) increases the probability of having fear in a 20% compared with being part of the highest socioeconomic stratus (ABC1)
- In case of the age, being older in one year decreases the probability of having fear in a 3%.

Discussion

this study concludes that the probability of having fear decreases with the age (though the parameter of 95% is not significant (p -value=0.092), which corroborates what Gratiot-Alphandéry, Zazzo and Echeverría (1984) and Ferrari (1986) pointed out. That is to say, fears have to do with the process of a child's normal growth, and therefore tend to disappear spontaneously with the child's strengthening, what shows a conscious decrease in the number of fears. However, it is important to consider that different authors argue that this relationship is more complex, and therefore children in the course of their lives, experience evolutionary changes among the different types of fears (Méndez, Inglés, & Hidalgo, 2002 in Gonzalez, 2005) and there are also some specific periods when the amount of fears increase (Miller, Barret, & Hampe, 1974, Valiente et al., 2002; Mendez et al., 2003).

Concerning the difference between girls and boys we can say this: the probability that a girl be afraid is higher than in a boy. This has been already argued by authors like Valiente, Chorot and Tabar (2002), or Méndez, Inglés and Hidalgo (2003). According to Méndez et al. (2003), there would be two explanations for this: one with a biological character and another with a cultural character; both of them are described in the state of the art.

The study also notes that children from a high socioeconomic strata (ABC1), compared to those from lower stratus (DE) and middle class (C2C3), are the ones who have less probability to feel fear (though with a level of significance of only 80%). Authors like Caballo et al. (2006) corroborate the existence of evidence, which indicates that children's fears are more frequent in children from low socioeconomic strata than those from high strata. The same author points out that the factor based on negative experiences can be the reason for this frequency.

Regarding the children who live in rural areas, results show that they are less likely to have fear than those who live in urban areas (though with a level of significance of 73%). While there are no studies about this, there are some precedents on

Sledden (1986) who concludes that although rural children expressed a major quantity of concrete and abstract fears, the ones from the city voiced a major intensity on their reactions to fears. This is because in dangerous situations children from rural areas control themselves, reducing the intensity of fear. The study concludes that urban children are more sensitive to fears and anxiety than those from rural areas due to the hard environmental conditions that promote less but more serious possibilities of getting traumas.

Another conclusion is that children who manage frightening situations on their own or do not tell anybody have less possibilities of feeling fear. This result would corroborate psychological vulnerability described by Méndez (1999), accepting that children who manage on their own frightening situations have more psychological resources to face stressful situation than those who turn to somebody.

Moreover, the research makes it possible to determine that the personal history of each children is also an important factor in the creation of fears, since those who remember a particular situation that caused them fear, have a major probability of being afraid. That is to say, the way the way events have occurred in the past, describe the current behaviour of a child when he/she is affected by a threatening and similar experience Méndez (1999) and Medina et al. (2010).

Finally the study concludes that children who have watched something frightening on the Internet have higher probabilities of having fear than those who have not found something like that. This could be explained through the observation factor of Méndez (1999): to witness threatening situations (real or unreal) in films or in stories (oral or written) with intimidating contents, the latter has been corroborated by authors like Cantor (1998), Campbell and Gilmore (2006) who point out that the evidence in media is more disturbing for children.

Conclusions

This study unlike others, does not investigate about the amount or intensity of children's fears, but dis-

plays the probability that children have fear and the different factors which determine this through a causal model.

Because of the fact that there are not recent studies about Chilean children's fears, this research demonstrates that they show the same patterns of fear than those from other countries, the probability of having fear tends to decrease with the age, and kids from low socioeconomic strata are more likely to have fear. In addition, this research also reinforces the fact that personal stories of each child are another significant factor, as well as the transmission of messages with frightening contents, and the observation of others living frightful situations through Internet. Moreover, it strengthens the idea that kids with psychological vulnerability tend to feel more fear than those who have more means to face stressful or scaring situations.

On the other hand, the reason why children from rural areas feel less fear than those who live in the urban areas are not clear, and practically there are not studies to explain this, what allows us formulate the following hypothesis: rural children are less likely to have fear because they grow up in smaller communities, so they feel more self-confident and more prepared to express their own fears, and also because they are less exposed to the mass media, such as Internet, television and others. On the contrary, urban children are more likely to have fear because their perceptions are influenced by the media, which describes the city as a place essentially dangerous, where the passers-by, the motorists, the neighbours and all the "others" do not offer any guarantee and then, the only safe place is the one that has to do with the known areas and as a consequence of this, they are less prepared to express they fears.

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