

Review

The myth of children without parents: Best or worst students?

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It is surprising to hear about children without parents who are the best students in the classroom (Myth 1). On other occasions it is easy to hear about children without parents, who suffer integration problems that do not allow them to be more successful in academic performance (Myth 2). We have considered as causes of such parental absence: divorce, emigration, death, chronic diseases (including terminals), prison and family neglect, in 21 between State and private schools. In this study we show empiric evidence to confirm a normal curve in the academic performance of children who live in Milagro City, Ecuador. So, -using hypothesis tests- we found, closely proportional, there are good students and bad students in the groups of children with their fathers and mothers at their homes, and children without their fathers and mothers at their homes, permanently. So, the myths are broken.

Keywords: Academic performance, absent parents.

INTRODUCTION

(This article contains our results of a research founded by Universidad Estatal de Milagro and this publication is now authorized by its academic authorities. Fabricio Zanzzi and Liliana Arias gratefully acknowledge the translation of Daniela Torres from Escuela Superior Politécnica del Litoral. The authors also want to thank their universities for its support) We often hear cases of standard bearers or escorts (So each school's authority can call and designate those who have obtained the highest grades throughout their entire school life, among his group of classmates), in public and private schools, religious or non-religious schools secular, military or civilian, national or international schools, who did not enjoy the constant

presence (The absence will be understood as permanent when the distance situation of at least one of the parents has been or is seen for a long term. Here we use the concept as it is at the Royal Academy of the Spanish Language (2007)) of their parents, but lost them in the course of their short lives. We also have heard of cases about students with the same problem who have become real threats to the welfare of society. So the question arises: Will the schooled without parents be among the best of society, or among the worst? The authors believe that it is not a good idea to discriminate them or to think of them as more prepared children for real life than other infants their age, since both cases would be back sliding on their negative involvement. Here is a simple statistical analysis that highlights the lack of empirical evidence to support either of the two statements.

This type of reasoning is derived from the logic that suggests that while it is true that the parent is more

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interested in the care, protection and welfare of the child, then if the parent would be absent his son would be unprotected and, therefore could become a victim of child sexual abuse, labor exploitation, malnutrition, feelings related to low self-esteem, low student achievement (Regarding to this topic, see a major study on the reality of Bolivia, a developing country such as Ecuador, so it could be a number of similarities in Mizala, Romaguera, and Reinaga (page 24)), among other situations such as physical and psychological violence, which makes an adult keep some sort of resentment and rebel against the established social system and, perhaps, try to attack the social system. The authors of this study believe that this could happen only in the short term, because when an individual has reached maturity and becomes aware of the difference between doing wrong or right, he could discern and make the decision not to attack the social system instituted, but inserted in it, and if he continues to receive aggressions, he could decide to go to the state justice system.

Remember that even if it were possible to maintain constant all important variables that affect the child's academic performance, and only did vary the permanent presence of their parents (Another social science, economics, to study social processes it is used this economic assumption called *ceteris paribus* with very encouraging results. Here we try to use this investigative tool), it may well be any of the following situations:

1. Student with permanent presence of parents and high academic performance.
2. Student with permanent presence of parents and standard academic performance.
3. Student with permanent presence of parents and low academic performance.
4. Student with no permanent presence of parents and high academic performance.
5. Student with no permanent presence of parents and standard academic performance.
6. Student with no permanent presence of parents and low academic performance.

There will (In an interesting review of the literature on academic performance factors Nacher (pages 2 and 7) visualizes the results (some how contradictory) of different investigations of other authors.

It is not possible to find all the variables in social studies, as seen in another valuable study recommended in Vélez and Roa (2005: 31)) always be the suspicion that something is happening, may be not because of the important variables, but because of the endless amount of details (It is not possible to find all the variables in social studies, as seen in another valuable study recommended in Vélez and Roa (2005: 31)) that turns the study of this problem into a complex phenomenon (Caldwell argues that "a fundamental characteristic of

fields that study complex phenomena is that, typically, only 'explanations of the principle' or 'pattern predictions' are possible in them". The dynamics of complex phenomena is explained clearly and concisely, both Caldwell (2004: 301-306), as Hayek (1952)) impossible to be fully explained by an external observer and analyst or researcher field whose key feature is that it will never be possible to make quantitative predictions about him, but his detailed study helps advance this understanding.

Some people even think the students without parents work harder because they don't get immediate help from them, so they assimilate real life faster than their classmates and therefore they could find solutions to problems that others do not even have imagined before ("Some people acknowledged more autonomy in their children "because of the absence of parents, according to Mejia, W. (2008: 10)). This "advantage" would be enhanced with the proper guidance of a teacher.

In contrast, other authors mention that without an adult to guide, these children without parents would become a problem for society as they make mistakes in their lives that brings collective consequences, by which even the educational system marginalize them and society stigmatizes them as if they were "bad apples" (This concern, in the Chilean reality, can be noted in the scientific paper written by Saavedra, Erika (page 7)), which then have to be corrected through public investment in the state.

Already in the field of teaching, not just few teachers feel difficulties when they know that in their classroom will be some students who do not have the permanent presence of their parents in their homes, so the teachers assume they will have no appropriate behavior with peers and teachers, which is but a small lack of educational knowledge about the recovery process of the students who pass such trauma (Several countries are developing recovery educational programs for different affected groups; this concern is reflected to the Peruvian reality in Miranda, L. (2008: 21)).

The main causes of the continued absence of the parents are: divorce, migration, death, chronic or terminal diseases, prison, and the abandonment of the parent; each with peculiarities that teachers should try to mitigate through their orientation.

Brief explanation of the methodological treatment

As you can imagine, the permanent absence of the parents is not the only reason to be considered for the projection even only qualitatively of the academic performance of the minor or to explain its past performance. However and therefore, in this case was considered necessary statistical verification of results using the Hypothesis Testing Method of Difference

Table 1. Did the best academic performance student not enjoy the presence of his parents?

School	The student lost at least one parent when he was in grade...	
	Highest academic performance	Lowest academic performance
17 of Septiembre	None	Before School
Abdón Calderón	Before School	1st
Alborada	6th (It is recommended not to use this data or this school for any calculation since the 6th grade academic involvement is not distinguishable in relation to the rest of the school system because they are only 7 degrees)	None
Antonio José de Sucre	None	None
Carlos Moreno Arias	2nd	None
Divina Luz	None	None
Ebenezer	None	None
Eduardo Kingman	None	None
Eloy Velásquez	1st	None
Eugenio Espejo	Before School	3rd
León de Febrés Cordero	None	None
Albert Einstein	None	2nd
Liceo Cristiano	None	None
Miguel Valverde	Before School	None
Moderna	None	None
Paulino Milan	3rd	None
Antonio Viteri Gamboa	None	Before School
San Antonio	None	Before School
San José	None	None
Simón Bolívar	None	None
Victoria Concha de Valdez	None	Before School

Source and elaboration: Zanzz1, Fabricio / Arias, Liliana.

Between Two Population Proportions (Mendenhall, 1990) to determine whether the difference between the proportion of school children without parents and the proportion of the standard bearers without parents were statistically significant or not. We also use some simple statistical treatments that perhaps offer an enjoyable reading.

Do the students without parents have more possibilities than the students with parents to be among the best students? Here is some evidence

To verify that *the myth of the standard bearers* (under which many people believe that this designation usually get many students without parents) is happening in a particular city, it would be a good idea to confirm that the proportion of standard bearers with absent parents is bigger than the proportion of students that joy their parents presence. Stated another way, if X% of the students do not have the permanent presence of their parents then it would be normal to expect that the same X% of standard bearers' students belonged to students without parents. If the data is bigger for the standard

bearers, then it might become evident that hope is higher for parentless students than for the students with their parents' presence.

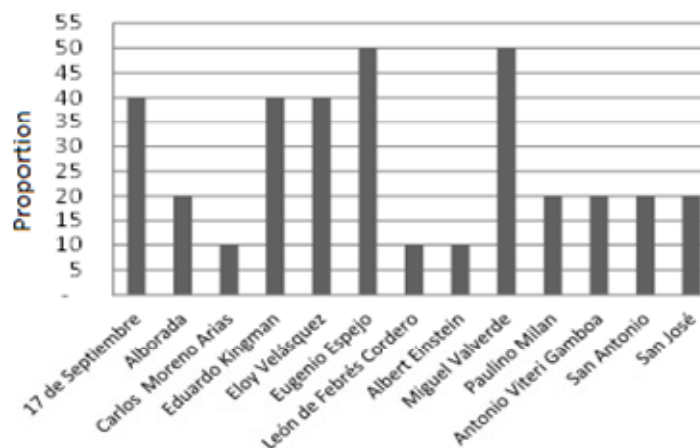
For this study we used the data from Milagro (The Data was obtained from a research program about the school's academic recovery whose parents were absent permanently funded by Milagro State University), Ecuador, according to which 35% of school children suffer from the permanent absence of at least one parent. To obtain the amount of best students from each school, we proceeded to execute the following calculation, and the table below was obtained as result:

According to this table obtained, in 6 of these 20 cases the best student's in their school suffer from the permanent absence of at least one parent, reaching a ratio of 0.3 or 30%, it means in 3 out of 10 cases the student with the highest academic average goes through this problem.

Then, it was considered necessary statistical verification of the results using (Here is what is methodologically suggested in Fassio, A., Pascual, L., and Suarez, F. (2002: Chapter IV)) Hypothesis Testing Method of Difference Between Two Population Proportions (Mendenhall, 1990) to determine whether the

Table 2. We use a hypothesis testing procedure on the best grade students.

Number of students	Category	Permanent parent's absence
1210	Total of Students	35,12% p^{\wedge}_{tot}
20	Students from chosen schools	30,00% p^{\wedge}_{High}
	Observ_{Tot} =	425,00
	Observ_{High} =	6,00
	Z_{test statistic} $\alpha=0,1$	$\pm 1,645$
	Z_{obtained} =	0,476381111
	Decision:	We do not reject the null hypothesis, therefore the difference was not significant.



Graphic 1. Percentage of students in permanent absence of parents who are on the 10 highest scores list from each school.

Note: must have at least 20 students, to consider the school in this statistic.

Source: raised primary data for this research.

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difference between the share of students without parents and the proportion of the standard bearers without parents were statistically significant or not (Remember that in this test the null hypothesis (H_0) states that there is NO difference between two population proportions at a certain percentage level of significance. It is represented as follows: $H_0: (p_1 - p_2) = 0$, or $H_0: p_1 = p_2$. The alternative hypothesis (H_A) relates that there is difference between two population proportions, in this case p_1 and p_2 , to a certain percentage level of significance. It is represented as follows: $H_A: p_1 \neq p_2$).

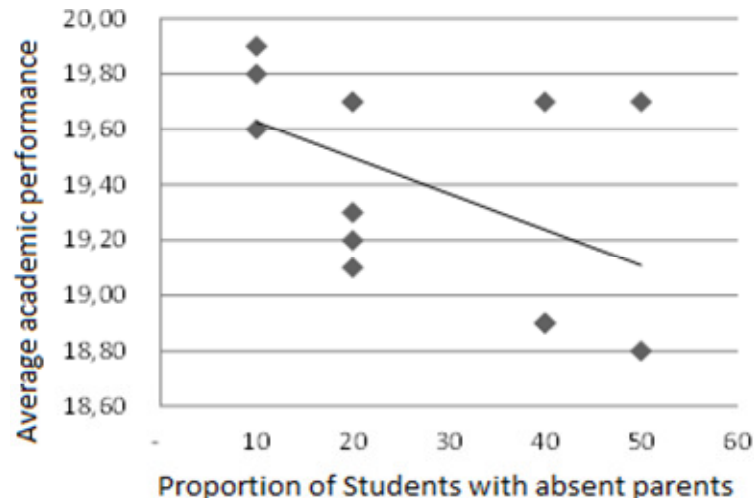
The following results (It shows the analysis of the results obtained when $\alpha = 0.10$ and therefore a two-tailed test $Z = \pm 1.645$, and the confidence level that was 0.9 (hence $p_1 = p_2 = 0.45$)) were obtained.

As you can see, the difference was not relevant, so

there is no statistical evidence that the students without parents might be more likely than those students with parents, to be among the best.

That is confirmed by the following chart, where it is clear that from the top 10 students (For this comparative analysis 10 of best students were elected because the number of acknowledgments is near to this, 9 (3 standard bearers, three former escorts and three second escorts)) from each school, the proportion of students without parents has a very divergent distribution ranging from 10% to 50%.

Finally, finding a relation between the variables *proportion of students with absent parents and the average of 10 students with the highest scores*, so that the result agrees with *the myth of the standard bearer*, a positive qualitative relation should be obtained; that



Graphic 2. Relation between the proportion of students in the absence of parents and the average of the 10 students with the highest grades.

Note: must have at least 20 students, to consider the school in this statistic.

Source: raised primary data for this research.

Prepared by: Zanzz1, Fabrizio; Arias, Liliana.

means the higher the ratio, the greater the average. However, as seen in the chart below, after running the respective regression, it confirms that although the linear function is far from observations implying a very weak relation, it is also true that it was not fulfilled in the qualitative aspect; it was obtained as a function with a negative slope. Hence, it may finally be interpreted; that the greater the proportion of students without parents among the top 10 best students, the lower the average of the spoken group.

This will be followed by the theory verification for this case with regard to students with lower averages.

Do students without parents have higher probabilities than students with parents to be among the worst students? Some evidence below:

Now we have to confirm whether the proportion of students with absent parents and low grades is greater than the proportion of all students with absent parents. Ergo, if X% of the students do not have the permanent presence of their parents, then it would be normal to expect that the same X% of the worst students belonged to students without parents. If the data is greater for the latter, then it may become evident that expectation is greater for parentless students than students with their parent's presence.

For this, again resorted to data of Milagro City, Ecuador, according to which 35% of students suffer from the permanent absence of at least one parent. On the other hand, according to Table 1, we obtained in 7 of those 21 cases, students with the lowest average of their

schools suffer the permanent absence of at least one parent, reaching a rate of 0.3333 or 33.33%, i.e. 3.33 out of 10 cases, or 10 out of 30 cases the student with the lowest GPA goes through this problem.

Then the study turned again to the statistical verification of the results using the method of hypothesis testing difference between two population proportions to determine whether the difference between the proportion of school children without parents and the proportion of worst students without parents were statistically significant (The assumptions and statistical information is the same as was used before).

The following results were obtained:

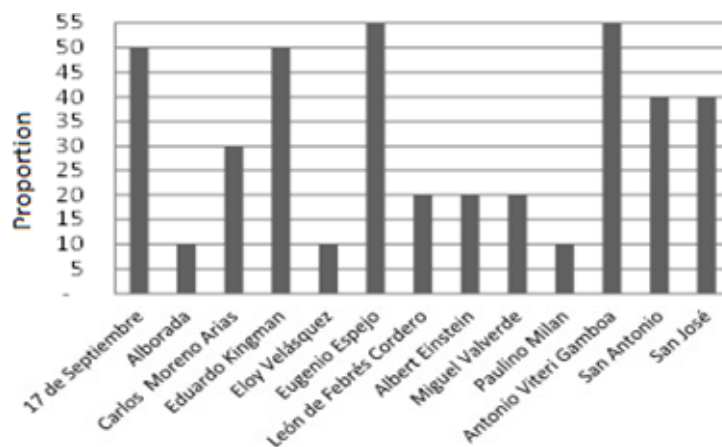
As seen, this time the difference was not significant either, so there is no statistical evidence that the students without parents might be more likely than students with their parents' presence, to be among the worst.

That is confirmed also by the following graphic, where you can notice that from 10 worst students (For this comparative analysis 10 of best students were elected because the number of acknowledgments is near to vicinity, 9 (3 champions, three former escorts and three second escorts)) at each school, the proportion of students without parents has a very divergent ranging that goes from 10% to 55%.

Finally, we sought to relate the variables *proportion of students with absent parents* and the *grade point average of 10 students with the lowest scores*, from what a positive qualitative relation should be obtained, which means that the higher the ratio the greater the average. However, once again, it can be seen in the graphic below that the linear function is far from the observations, which

Table 3. We use a hypothesis testing procedure on the worst students.

Number of students	Category	Permanent parent's absence
1210	Total of Students	35,12% p^{tot}
21	Students from chosen schools	33,33% p^{High}
	Observ _{Tot} =	425,00
	Observ _{High} =	7,00
	Z _{test statistic} $\alpha=0,1$	$\pm 1,645$
	Z _{obtained} =	0,170460135
	Decision:	We do not reject the null hypothesis, therefore the difference was not significant.

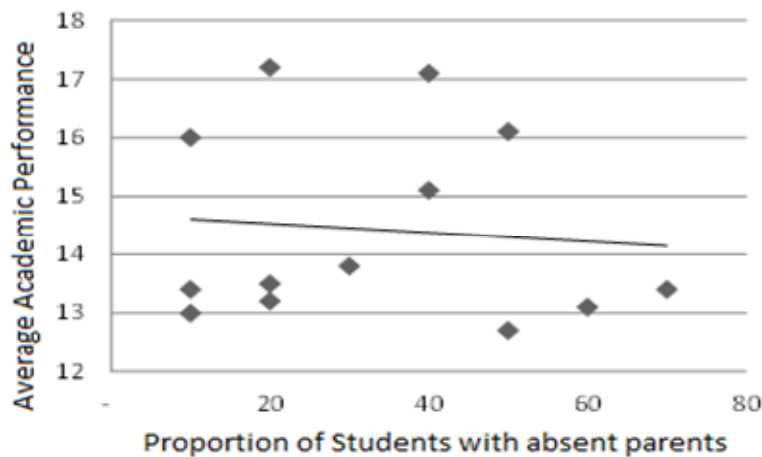


Graphic 3. Percentage of students with permanent absentee parents who are on the list of the 10 lowest scores from each school.

Note: must have at least 20 students, to consider the school in this statistic.

Source: raised primary data for this research.

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Graphic 4. Relation between the proportion of students in the absence of parents and the average of the 10 students with the lowest grades.

Note: must have at least 20 students, to consider the school in this statistic.

Source: raised primary data for this research.

Prepared by: Zanzzi, Fabrizio; Arias, Liliana

means it is really weak and not fulfilled in the qualitative aspect by having negative slope. From there you can interpret: the greater the proportion of children without parents among the 10 worst students, lower the average of the student group but yet again, the relation is weak.

CONCLUSION

So do things and the results obtained, it would be worth mentioning that a teacher should not expect that a student without parents could succeed alone and have acceptable academic performance or was predestined to be the best or the worst student (Remember that the statements for this conclusion were sustainable for Milagro City), but should try to improve their situation whether the need is known or not. Why? Because low academic performance (grades) is only one of many indicators that say that the child is going through a traumatic time in his life.

Similarly, to those students who do have parents at home, there's no statistics that shows that they are predestined to be in a better academic situation than their academic partners who suffer the absence of their parents. Why? Because there are also neglected parents and unmotivated children, and in both cases may or may not be that the student's academic performance is not the best, because there is not one factor, but many who depend on each case.

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