

**Analysis of Dropout in the Soná Extension of the University of Panama,
Based on the Questionnaire of Díaz and Tejedor, (2017)**

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The purpose of this research is to analyze the causes of student dropout in a university extension of the University of Panama. It suggests a non-experimental design based on a quantitative approach. It is non-participatory, analytical and descriptive. The population includes students who dropped out during the years 2017 to 2020, (n=142). The sample is purposive. However, only 45 persons completed the questionnaire. The questionnaire of Díaz and Tejedor, (2017) called CADESUN was applied. The questionnaire has been validated both nationally and internationally. The technique of expert judges was applied with a rating of 0.99 (content validation) and piloting that reached a Cronbach's Alpha of 0.99, so it was relevant to analyze the phenomenon in a new context. It was possible to verify that the separate analysis of the relevant variables yields valuable results. For the analysis as a whole, the extension emphasizes an Organizational or Institutional Model followed by the Economic Model, causing student dropout.

Keywords: dropout, higher education, questionnaire, variables

INTRODUCTION

Student dropouts in Higher Educational Institutions (HEI) are the main consequence of students' failure at this level of education (Álvarez et al., 2017). And it has been the main focus for many experts in the educational field, especially following the high dropout rate in the last decade (González & Arismendi, 2018). University student dropout is a complex phenomenon with multiple negative impacts for the student and the school itself, affecting the region, society, and the entire country (Rojas, 2009). That is why Higher Educational Institutions must pay attention to the individual characteristics of the students (Aldás, 2017).

A large number of investigations raise the problem of dropouts from different perspectives, and defining this concept is complex because there are no clear theoretical parameters that define it (Rochin, 2021); however, Himmel (2002) argues that dropout is the (...) *premature abandonment of a study program before reaching the degree, and considers a long enough time to rule out the possibility of the student rejoining.* (p. 94)

Muñoz *et al.*, (2005) affirms that dropouts have been approached from different angles and perspectives; however, dropouts and subjects failure are the problems traditionally identified when making diagnoses of the educational system. That is why various investigations have been carried out to clarify the nature, the scope, and the causes of the problem.

In another order of ideas, De Los Ríos, (2000) points out that the dropout does not necessarily depend on the quality and efficiency of the higher educational institutions, the indicators of retention rate, approval rate, and 'subject behind' rate are affected by many variables including those determined by the characteristics of the students and cannot be fully controlled by the institutions.

It is a reality that affects the education system as a whole. As an educational and social phenomenon, it has multiple boundaries, which must be considered when trying to address it and look for reasons that make it explicit. In that sense, authors classify it into different types; for example, Tinto, (1983 *apud* Boado, 2011) distinguishes two types of dropout, academic dropout, and voluntary dropout. The first refers to low performance and the second to a group of factors and reasons that are present since enrolling to the university. In the case of academic dropout, others (Rodríguez, 1974 *apud* Vélez & López, 2004) subdivide it into absolute and relative; so they are defined as follows: absolute is the number of students who do not pass from one previous academic period to the next; that is, the students do not get to enroll because they withdrew from the educational institution or they failed subjects and therefore do not manage to accumulate the minimum required to advance to the next period or educational level. On the other hand, the relative one is the number of students who do not attend the next academic semester, concerning the total of enrolled people in any academic semester. However, for Vasquez & Rodríguez, (2007) relative dropout occurs when a student is expelled from a career for poor academic performance but is allowed to enroll in another of his choice.

Carvajal Olaya *et al.*, (2006) consider dropout in its entirety and defines it as the temporary or definitive students dropout, of the academic programs for which they enrolled. Cu Balán, (2005) supports a type

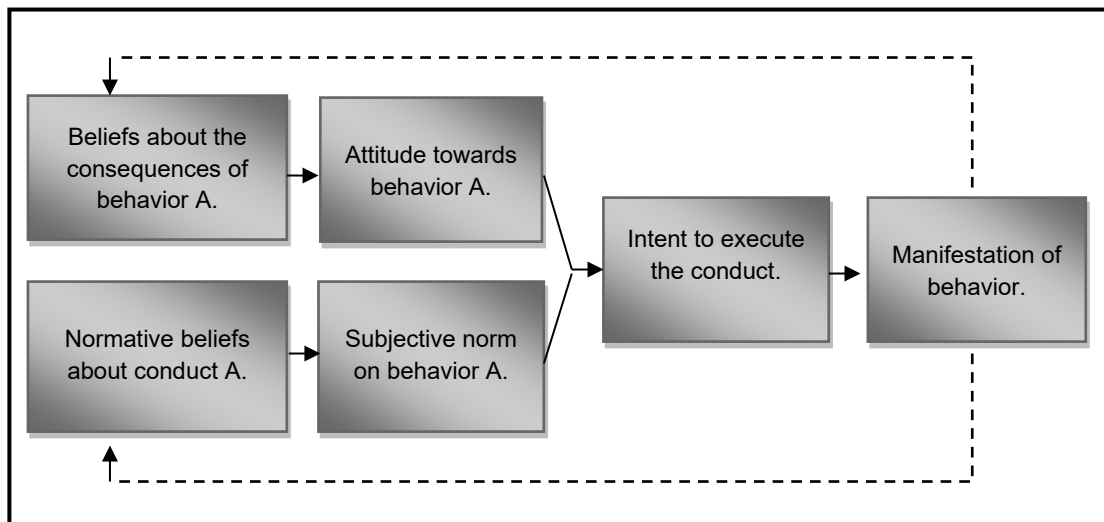
called, first semesters dropout, referring to an inadequate adaptation to university life, so in his study, he reflects as possible causes of dropout; reprobation and low students performance, lack of vocational guidance, lack of motivation in some areas, disinterest and others.

Discrimination is another type of dropout where Páramo & Correa, (1999) present a series of variables associated with dropout: educational and family environment, educational trajectory and accompaniment to the student in his/her training, social adaptation of the student with his peers or classmates, high levels of understanding, disinterest and apathy, pedagogical models different from those of High School, rigid curricular programs with high thematic intensity and reduced times, strenuous and overwhelming evaluations, courses not associated or applicable to professional development, economic factors, professional and vocational orientation.

The accumulated dropout according to Boado, (2011), is the sum of dropouts in an institution, but he also adds other relevant actors such as parents, former study partners, professors, directors, and academic administrators To determine the accumulated dropout rate at the different levels Guillén & Chinchilla, (2005) refer to establishing a cohort to be able to calculate it.

The research has considered a series of variables that in different contexts have been determined as models of student dropout causes. In this order of ideas, the Psychological variable inserts the Model of Fishbein & Ajzen, (1975 *apud* Díaz, 2008); (Himmel, 2002); (Reyes, 2007) known as the Theory of Reasoned Action that analyzes behavior as attitudes in response to specific objects and considers the subjective norms that guide action and perceived control over it.

FIGURE 1
PSYCHOLOGICAL MODEL HIERARCHY OF THE REASONED ACTION THEORY OF FISHBEIN & AJZEN (1975)



Source: Schematization extracted from Himmel's research, (2002)

The Psychological variable also includes Ethington's model, (1990 *apud* (Donoso & Schiefelbein, 2007); (Mateus *et al*, 2011) which introduces a general theory on achievement-based behaviors, where previous academic performance affects future performance; since it acts on the self-concept of the student, their perception of the study difficulties, their goals, values, and expectations of success.

For the Sociological variable, authors such as Donoso *et al*, (2010); Rodríguez & Londoño-Londoño, (2011) rely on Spady's model, also based on Durkheim's Theory of Suicide, which argues that the act is the result of the individual's break with the social system, evidenced in the impossibility of integrating into society. This model determines a series of predictors for student dropouts: academic integration; social integration; socio-economic status; gender; career quality and average grades in each semester.

Undoubtedly the economic variable is supported by Tinto's model (1989 *apud* Lopera, (2008) addressing that a student who leaves higher educational institutions creates a vacancy that could be offered to another student, who will probably persist in his/her studies. Similarly, the model contemplates the dropout rate that occurs when a student faces higher university costs, and the most vulnerable are those who are linked to the labor market.

The model that supports the organizational variable approaches the dropout from the characteristics of the university institution, considering the services they offer to their students (Donoso & Schiefelbein, 2007); (Díaz, 2008) both the variables of classes quality, as well as the previous experiences of the students have a crucial role in the dropout. The benefits provided by the educational organization to students in health, sports, culture, extra academic aid, and also benefits for teachers are added in terms of greater availability of bibliographic resources, laboratories, and an adequate number of students per teacher.

For the adaptational variable, the university has a central role in terms of adapting students to their new student life. Merlino *et al.*, (2011) emphasize the effect of the integration of the student to the institution, feeling comfortable in the environment and living experiences concerning the teaching qualities as well as to the learning process in the classroom, about the contact with the teachers during the period of duration of the career.

All universities carry out great efforts and systematic processes of improvement in search of models, actions, and strategies that allow the quality improvement of professionals and capacity of graduates (Aguilar *et al.*, 2020); however, one of the difficulties in implementing dropout studies in higher education in Latin American countries is the absence of studies and data (González, 2007). Given this situation, we have used estimation models and indicators that give approximate results. These indicators at least give an overview and their results are not counterintuitive.

The cited author reveals that Latin American universities that have the highest percentages of the population over 25 years old with incomplete university studies are the Dominican Republic with 18.3%, Bolivia with 15.5%, followed by Chile with 10.7%.

Considering just preliminary observations, and in the specific case of Panama's public HEIs, these have a significant percentage of dropouts that warrant a scientific analysis to determine the reasons why young people abandon their studies in the first years of university life. This is considered as a dilemma, this makes it necessary for Higher Educational Institutions to have an instrument that will allow them to analyze the dropout and help them inquire about the issue, knowing the causes, will let them take corrective measures in this regard (Díaz and Tejedor, 2017).

Higher education in Panama is subsidized by both the public sector (Bernal, 2001) and the private sector. However, Escobar, (2006) affirms that the State's contributions for the financing of official universities do not grow at the same rate as the increase in enrollment and the needs of Higher Education (HE), although that does not prevent its coverage to the population that can attend it without distinction of race, creed, political and social situation.

Dropouts are a historical problem in different education systems. So figures show that a large number of students abandon their careers, and the reasons that affect those involved are not considered (Díaz and Tejedor, 2017).

In this sense, this research aims to implement the Questionnaire of Díaz and Tejedor, (2017) that allows determining which, among five factors or variables, are the causes that lead young university students to abandon their careers, and that the managers of the HEI can take measures to mitigate or eradicate this anomalous situation.

The Questionnaire of Díaz and Tejedor, (2017) called Questionnaire for the Analysis of University Student Dropout (CADESUN, Spanish Acronym) is an instrument designed and validated by the authors of the current research, which allows knowing the causes of the student dropout in the Academic Units and the specific case, of the University of Panama. It takes as a point of reference the approach of Braxton *et al.*, (2000) and supported by Himmel, (2002), Ferro *et al.*, (2019), Díaz, (2008) that consider specific variables, their definition, and the determining subfactors for the elaboration of the different items, as shown in the table below.

TABLE 1
CONCEPTUAL DEFINITIONS OF THE MAIN VARIABLES CONSIDERED IN THE QUESTIONNAIRE TO ANALYZE THE UNIVERSITY DROPOUT CADESUN

Variable	Conceptual definition	Subfactors
Psychological	Personality traits are what differentiate students.	Personality, belief, behavior, family support, attitudes, attributes and norms, values and interests.
Sociological	Social integration has a major impact on the satisfaction of the student in their insertion into the educational organization.	Family atmosphere; relationship and social media, peer support and expectations.
Economic	It takes a cost/benefit approach that includes both the lack of resources at home as well as the need to work or seek employment.	Cost of tuition, subsidies, family income.
Organizational	It approaches the dropout from the characteristics of the university institution (the services that they offer).	Teacher didactics, vocational guidance, consultations, quality of education, and extracurricular activities.
Integration & adaptation	The university has a central role in adapting students to their new student life.	Adaptation, commitments, satisfaction, effort, reward, interaction, emotional state, academic performance, access, schedule, priorities, and future aspirations.

Source: Extracted from Diaz and Tejedor, (2016).

When assessing the statistical data in the transparency section, of the public universities of Panama there is a significant percentage of student dropouts, which warrants an analysis by the educational community and unified decision-making (Díaz and Tejedor, 2017), (Díaz *et al*, 2021) these are shown in Table 2.

TABLE 2
PERCENTAGE OF STUDENTS FROM PUBLIC HIGHER EDUCATIONAL INSTITUTIONS (HEI), WHO DID NOT ENROLL IN THE SECOND SEMESTER IN THE INITIALLY SELECTED CAREER

HEI	year					% average per University
	2015	2016	2017	2018	2019	
University of Panama Technological	12.6%	12.1%	13.8%	11.9%	12.1%	12.5%
University of Panama Autonomous	9.6%	8.8%	9.4%	9.1%	8.2%	9.02%
University of Chiriqui	6%	5.3	5.3	6.1%	8%	6.14%
International Maritime University of Panama	5.8%	4.4%	6%	3.2%	5.6%	5%

Specialized University of the Americas*	0.5%	16.5%	14.4%	---	---	10.5%
EXUS- UP**	--	--	15.7%	9.8%	5.8%	13.2%
% cumulative per year	34.6%	39%	56.5%	82.9%	39.7%	

Sources: Statistical data of the transparency section of each University.

(*) The University did not present data at the time of the information search.

(**) University Soná Extension, University of Panama.

In the previous table you can see that the University of Panama has the highest average percentage with 12.5% followed by the Technological University of Panama with 9.2%. It is important to note that the University of Panama is the one that enrolls the largest number of university students in the country. In the case of Soná University Extension (EXUS) of the University of Panama, the proportions are representative and although it is a new and small extension, the percentages are high compared to enrollment. It is necessary to mention that, in 2020 the percentage of dropout was relatively significant with 8.2% and although the health and economic situation was not the best, the exemption from tuition payments provided benefits of permanence in the annexed programs and extensions of the Higher Education Institution (University of Panama, 2020).

METHODOLOGY

The research suggests a non-experimental design based on the quantitative approach with a single application. The study is non-participatory, analytical, and descriptive. The population considered are the students who drop out of the different careers of the University Extension of the Municipality of Soná, of the University of Panama who transferred to another career, another Higher Education Institution or who simply abandoned their studies voluntarily in the years 2017 to 2020, with a total of (n=142). The identification of the sample unit was carried out in an intentional manner, however, only 45 deserters answered the questionnaire. The questionnaire was generated in Google Form. This form was sent using the social networks Whatsapp, Twitter, Instagram, Facebook, Outlook, Gmail, Yahoo, LinkedIn.

The research analyzed the psychological, sociological, economic, organizational, and adaptational variables as probable causes of dropout in University Education (Díaz and Tejedor, 2017). To analyze the data of the selected questionnaire, it was first performed descriptively: the personal and inferential data with the use of ANOVA (Analysis of Variance to a single factor) in the assertions or the items selected for each variable described. CADESUN has been validated both nationally and internationally; however, in the present research the technique of expert judges was performed with 0.99 (content validation) and pilot test that reaches a Cronbach's Alpha of 0.99, so it was also relevant to analyze the phenomenon in a new context. Table 2 summarizes the categorizations or variables of the Questionnaire of Díaz and Tejedor, (2016) used in the research.

TABLE 3
CATEGORIZATION OF THE VARIABLES ACCORDING TO NUMBERS AND THE QUANTITY ANALYZED FROM THE QUESTIONNAIRE OF DÍAZ AND TEJEDOR, (2016) FOR THE PROPOSED RESEARCH

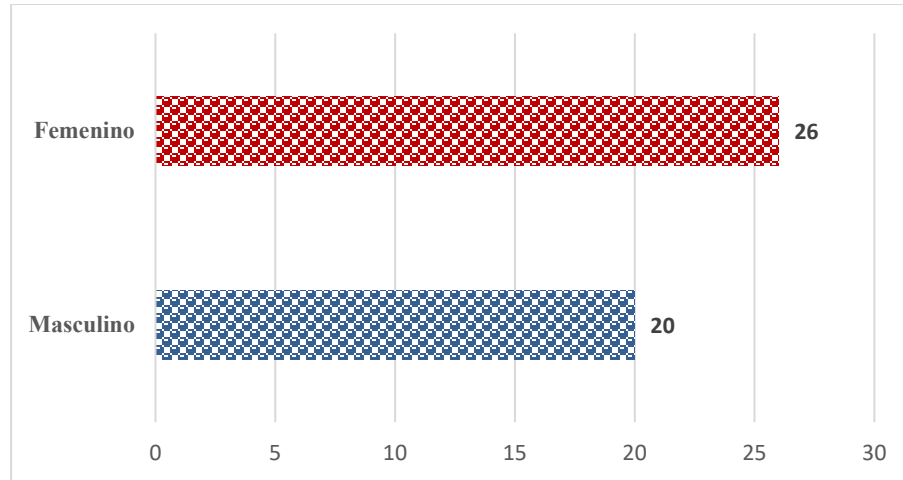
Variables	Number of items	Number of items	Cronbach's alpha
Psychological	3-4-6-7-11-13-14-19-34-40.	10	1.00
Sociological	2-9-15-16-17.	5	0.99
Economic	8-22-23-24-25-27.	6	1.00
organizational	18-21-28-29-30-31-32-33.	8	0.99
Adaptational	1-5-10-12-20-26-35-36-37-38-39.	11	0.98
Total		40	0.99

Source: Cronbach's alpha in each study variable, 2021.

RESULTS

This section presents a detailed analysis of the characteristics causing student dropout around five variables and their subfactors established in the requested questionnaire of Díaz and Tejedor, (2016) in the University Extension of Soná. At first, the gender data of the student dropouts who answered the questionnaire are presented, as shown in Figure 2.

FIGURE 2
GENDER OF DROPOUT STUDENTS WHO ANSWERED THE SELF-INSTRUCTION QUESTIONNAIRE



Source: Prepared by the authors.

The data in Figure 2 show that the student dropouts who answered the questionnaire, 56.5% are female and 43.5% are male.

Díaz and Tejedor, (2016) state that to know if one factor influences more than others, the calculated f must be greater than the theoretical f , then the highest average in the variables or subfactors is checked to determine the influential characters in the student dropout. To determine the extent to which the subfactors of the Psychological variable influence or not, the dropout rate of the student population is used to analyze the analysis of variance of a single factor for simultaneous sub-factors (Fisher's f), whose statistical results are presented in Table 4.

TABLE 4
FISHER'S F -TEST (ANOVA) FOR SUB-FACTORS ASSOCIATED WITH THE PSYCHOLOGICAL VARIABLE AND ITS INCIDENCE IN UNIVERSITY STUDENT DROPOUTS

Sub factor	Average	Variance
3. I usually believe what I'm told	2.4	1.4
4. I manifest anxiety in different situations	2.1	0.8
6. I care more about the decisions of others	1.5	0.3
7. I act aggressively in the face of problematic situations	1.7	0.9
11. I consider myself a person with few attributes	2.4	2
13. Attending university did not increase my confidence	1.6	0.4
14. Family support was not fundamental	2	0.9
19. Education laws and regulations do not follow reality	3	0.9

34. It's easy to weaken my confidence	2.9	2.9
40. I consider myself a non-persistent person	1.9	0.7

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	105.62	9		
Within the sub-factors.	490.80	440	10.52	1.90
Total.	596.42	449		

Source: Prepared by the authors

Table 4 shows that in the Psychological variable, the calculated $f(10.52)$ is greater than the theoretical $f(1.90)$, which indicates that there is a subfactor that influences students' dropouts more than others. When checking the average values to the responses of the subfactors, and ordered from highest to lowest, it is observed that the students argue that "*it's easy for their self-confidence to be weakened*" (34) so they decide to withdraw from the University Extension.

TABLE 5
FISHER'S F-TEST (ANOVA) FOR SUB-FACTORS ASSOCIATED WITH THE SOCIOLOGICAL VARIABLE AND ITS INCIDENCE IN STUDENT DROPOUT

Sub factors	average	Variance
2. I have little interest in knowing that I have not achieved goals	2.2	1.4
9. The induction program did not meet my expectations	2.1	0.7
15. My contributions are not taken into account by the group	2.8	1.9
16. I can't achieve better results without any support	2	1.3
17. It's hard for me to get along with others in the group	2.8	2.5

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	30.3	4		
Within the sub-factors.	337.7	220	4.92	2.41
total.	368.0	224		

Source: Prepared by the authors.

Table 5 shows that, for the Sociological variable, the calculated $f(4.92)$ is greater than the theoretical $f(2.41)$, and considering the averages, the dropout students maintain that "*their contributions are rarely taken as important within the group in which they are: work, study team*", (15) as well as "*it is difficult for them to get along with others in the group*" (17) and when they do not perceive support they decide to leave the Institution.

TABLE 6
FISHER'S F-TEST (ANOVA) FOR SUB-FACTORS ASSOCIATED WITH THE ECONOMIC VARIABLE AND ITS INCIDENCE IN STUDENT DROPOUT

Sub factors	Average	Variance
8. The work became more important than the study	2.2	0.8
22. A low income does not strengthen being at the Univ.	2.8	1.3
23. The cost of tuition affects being at Univ.	2.6	1.7
24. The benefits provided by some institutions did not favor my expectations	2.3	0.7
25. Student benefits do not strengthen my continuity	2.3	0.7
27. The economic situation forces me to work	3.3	1.1

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	36.5	5		
Within the sub-factors.	278.4	264	6.93	2.24
total.	314.9	269		

Source: Prepared by the authors

As for the economic variable, Table 6 shows that the calculated $f(6.93)$ is higher than the theoretical $f(2.24)$, so the dropout students consider that “*the economic situation forced them to work to cover basic expenses and university studies*” (27).

TABLE 7
FISHER'S F-TEST (ANOVA) FOR SUB-FACTORS ASSOCIATED WITH THE ORGANIZATIONAL VARIABLE AND ITS INCIDENCE IN STUDENT DROPOUT

Sub factor	Average	Variance
18. The decisions of others influence mine	3	2.9
21. Labour market guidance did not help	2.8	1.8
28. Didactics of teachers do not favor my learning.	2.3	1
29. I do not usually consult to make decisions	2.6	1
30. Academic life was very heavy for me	2.9	1.3
31. The advice and guidance were very scarce	2.7	0.9
32. Precarious support services in the institution	3	1.5
33. The career I selected did not seem interesting to me	3.2	2.6

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	28.1	7		
Within the sub-factors.	569.1	352	2.49	2.03
total.	597.2	359		

Source: Author's elaboration based on the data of the questionnaire applied.

Following what has been discussed so far, Table 7 shows that for the Organizational variable, the calculated $f(2.49)$ is greater than the theoretical $f(2.03)$, and based on the analysis, the students consider that “*the selected career in the University Extension, in terms of quality and opportunities in the labor field, did not meet their expectations*” (33) and decided to abandon it. Paz & Torchiani, (2020) argue that organizations seeking to hire trained personnel would not have had to think about implementing their own

training processes, if universities listened to the requirements of the market, without locking themselves into the idea of being the creators and owners of knowledge.

TABLE 8
FISHER’S F-TEST (ANOVA) FOR SUB-FACTORS ASSOCIATED WITH THE ADAPTATIONAL VARIABLE AND ITS INCIDENCE IN STUDENT DROPOUT

Sub factor	Average	Variance
1. It’s hard for me to adapt to different situations	2.2	1.1
5. I do not consider myself fit to enter a higher education system	2.3	2.1
10. My pre-university preparation served me little	2.3	1.2
12. When I feel tense...	2	0.6
20. It’s hard for me to get along with other people	2.2	1.1
26. At the end of a career does not guarantee me a privileged place in society	3	1.7
35. I put little effort into what I do	2.7	2.2
36. I am not used to prioritizing my activities	2.8	2.1
37. Interaction with others does not strengthen my self-esteem	2.1	1.1
38. The schedule did not allow me to select the desired career	2.9	1.1
39. It was difficult for me to move to university	2.7	1.9

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	56.2	10		
Within the sub-factors.	716.3	484	3.80	1.85
total.	772.5	494		

Source: Author’s elaboration based on the data of the questionnaire applied.

Table 8 shows that for the Adaptational variable, the calculated $f(3.80)$ is greater than the theoretical $f(1.85)$ so that the dropout students consider that “*completing a university career does not guarantee them a higher place in society*” (26).

TABLE 9
FISHER’S F-TEST (ANOVA) TO ANALYZE THE FIVE VARIABLES OR FACTORS THAT AFFECT STUDENT DROPOUT, ACCORDING TO THE QUESTIONNAIRE OF DÍAZ AND TEJEDOR, (2016)

Variables	Average	Variance
Psychological	2.2	1.3
Sociological	2.4	1.6
Economic	2.6	1.2
organizational	2.8	1.7
Adaptational	2.5	1.6

Origin of variations	Sum of squares	Degrees of freedom	$f_{\text{calculated}}$	$f_{\text{theoretical}}$
Among the sub-factors.	94.6	4		
Within the sub-factors.	2649.2	1795	16.03	2.38
Total.	2743.8	1799		

Source: Prepared by the authors.

When performing the analysis with the accumulated data of the subfactors, within the variables we also analyzed variance of a single factor for simultaneous sub-factors (Fisher's f), in which it is observed that the calculated $f(16.03)$ is greater than the theoretical $f(2.38)$ and observing the averages we have that the "organizational variable" or Institutional with (2.8) is the one that has most influenced the dropout of the students of the University Extension of Soná, followed by the economic variable.

DISCUSSION

The following section highlights a series of aspects related to the opinions of the student dropouts of the University Extension of Soná, Veraguas, Panama. Among the dropout students who filled out the self-instruction questionnaire, the highest percentage was female, and according to the Department of Statistics of the University of Panama correspond to the percentage of enrollment. By identifying whether there is a subfactor within each variable indicated in the questionnaire of Díaz and Tejedor, (2016), which influences student dropouts more than others, a separate analysis was performed. In the case of the Psychological variable, the subfactors that have the most impact are the values and interests that are related to the item (34). For the sociological variables, the subfactors social relationship and social environment are the most influential (15, 17). As for the economic variable; the family income was what most affected being in the selected institution, so the subfactor is related to the item (27). The organizational variable or the contribution provided by the institution is fundamental for the permanence of the student; however, the quality subfactor of education is considered the most influential over others (33). And for the adaptational variable, students do not receive rewards for the efforts made during their stay and accomplishment of commitments; they are related to the item (26).

To know the variable that most influences the student dropout in the University Extension of Soná, Veraguas analyzed the data in its entirety and by applying the ANOVA statistic it was obtained that the organization or institution variable that encompasses the subfactors (didactics of the teacher, vocational guidance, consultations, quality of education and extracurricular activities) is the one that most influences the abandonment of a significant group of students of the Higher Educational Institution.

CONCLUSIONS

It is necessary to know scientifically the reasons why young university students abandon their studies, during the first years of their career, to allow HEI to evaluate their social relevance; analyze to what extent the academic offer responds to the requirements of their students and take the appropriate measures.

There is a significant percentage of students who have dropped out of the Soná University Extension and to the extent of their needs, the causes have been drafted and placed in advance in each variable.

It is clearly observed that the main cause for students to drop out from a career or the university is typified in the organizational variable followed by the economic variable.

The questionnaire of Díaz and Tejedor, (2017) called CADESUN allows knowing the opinion as a whole, by which the students withdraw from the Higher Educational Institutions (HEI) and opens a window to knowledge, search for solutions for the improvement of education in the third level of education.

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