A THEORETICAL APPROACH TO THE COLLEGE STUDENT DROP OUT

UNA APROXIMACIÓN TEÓRICA A LA DESERCIÓN ESTUDIANTIL UNIVERSITARIA

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Received: 20/09/14  Accepted: 05/11/14

ABSTRACT

College student dropout is one of the greatest problems faced by the higher education system. University authorities have been showing great concern because, in spite of the increase in demand for higher education, the number of students that complete their education is not as expected, demonstrating that a large number of students abandons school, mainly during the initial semesters. This generates financial problems to the universities. This paper aims to show, after a comprehensive literature review, existing models in connection with college student dropout and answer the questions to this regard.

Keywords: desertion, student dropout, student retention

RESUMEN

La deserción estudiantil universitaria es uno de los mayores problemas con el que se enfrenta el sistema de educación superior. Las autoridades de las universidades han venido presentando gran preocupación debido a que ante el aumento en la demanda de la educación superior, el número de alumnos que logra culminar sus estudios superiores no es el esperado, evidenciándose el abandono de un gran número de estudiantes en los primeros semestres. Esto genera problemas financieros en las universidades. La finalidad de este artículo es mostrar, luego de una exhaustiva revisión bibliográfica, los modelos existentes en relación con la deserción estudiantil en la universidad y responder las cuestiones que giran en torno a este tema.

Palabras clave: deserción, deserción estudiantil, permanencia, retención

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[RIDU]: Revista Digital de Investigación en Docencia Universitaria
December 2014 – Volume 8 – Issue 1 | LIMA (PERU)  ISSN: 2223 - 2516
What is the reason for college dropout?

Why is it that during the first semester the academic performance of the majority of new students is lower than in school despite having been good students? Why do new college students abandon it? Is it the university’s responsibility? What can we do from college to reverse this situation? If we articulate the activities of the various units that receive new students, will we be able to reduce dropout rates? Do university authorities believe in college insertion programs?

Those of us who move within the world of university teaching know that the academic results of new college students are not the most desirable. There is an academic gap between what is taught in schools and what is required in universities. This is not a new or unique problem exclusive to Peru. It is rather an old problem that has many variables and, moreover, occurs worldwide. The percentage of students who fail one or more subjects in the first semester is high, which causes them to enroll again in the same classes. Despite this, many fail again and end up leaving college, bringing the number of students with incomplete higher education in the country higher (something that harms the students themselves and their families); the budget of the universities is also affected.

According to Gonzalez and Girón (2005), student dropout has social, emotional and economic consequences, not only for the student him/herself but in his/her immediate environment. Additionally, those who do not complete their studies are underemployed and not obtaining the desired income (Diaz, 2008).

This old dropout problem has many variables, and can be divided into those that belong to the educational field and those who belong to a non-educational field (Tejedor, & García-Valcárcel, 2007), such as academic, psychological, socio-family and identification variables, which influence the academic performance of new college students. Considering these two types of variables (educational and non-educational), each university has designed its own programs to facilitate adaptation of new students to university life, but, in most cases, these programs belong to different academic departments or areas, with different organizational structures; whereby the freshman student orientation is done from different conceptions. This, instead of helping the student ends up confusing him/her more and does not meet the objective of facilitating their entry into college life.

The study of college dropout, aimed at its subsequent control, is very important because the dropout rate is beginning to be seen as an indicator of the quality of university management: in fact, the dropout rate appears as a quality indicator in numerous assessment models of the university institution (MEC: Catalogue of indicators of the Spanish public university system), and as an indicator in the university rankings (Yorke, 1998, as cited in Cabrera, Bethencourt, Álvarez Pérez, & González, 2006). Currently, college dropout is taken as an indicator for Peruvian universities to get accreditation (Coneau, 2010).

According to Cabrera et al. (2006), dropout rates are an indicator of poor quality, because it is understood that the university did not make everything required to ensure that the students finished their career.

How do we define college dropout?

There is no single definition for the concept of college dropout. According to the Encyclopedic Dictionary of Educational Sciences (Picardo, O., Escobar, J., & Balmore, R., 2004), dropout is the deliberate or forced act
by which the student abandons the classroom or educational institution.

On the other hand, Tinto (1975) states that there are a variety of behaviors called dropout (desertion), but further notes that this concept should not cover all study dropouts and not necessarily all student dropouts deserve the intervention of the institution.

In the Metropolitan Autonomous University, Mexico, dropout is defined as the act by which a student, voluntarily or involuntarily, interrupts his/her studies forever without having fully covered the curriculum of the corresponding professional program. In order to operationalize this definition, they identify three modes of dropouts (Durán & Díaz, 1990):

1. Voluntary dropout, when the student follows the procedure established by the school administration called Definitive Disenrollment to voluntarily disenroll.
2. Incurred dropout, when the student breaches the regulations of the institution.
3. Potential dropouts, when the student has not performed any academic or administrative processing for seven or more consecutive semesters and has less than 35 academic credits for the degrees taught by the Azcapotzalco and Iztapalapa Units or less than 10 for the Xochimilco Unit, provided that the number of the UEA indicated corresponds to a percentage lower than 80% of those included in the curricula.

Additionally, Tinto (1982) defines desertion as a situation in which a student faces when their educational projects fail to materialize. Then Tinto (1982) concludes that we can consider as a dropout as any student who has no academic activity for three consecutive semesters. In some research, this behavior is called ‘first defection’ (first dropout) because you cannot determine whether, after this period of time, or not the individual resume their studies or if you decide to start another academic program (Tinto, 1989).

On the other hand, Tinto (1989) states that no definition of dropout fully captures this phenomenon and leaves it to the researchers to choose the definition that best fits the research being carried out.

According to Castaño, Gallón, Gómez, and Vásquez (2004), two dropout types can be identified in college students regarding time and space.

Regarding time, they classify it as:
1. Premature Dropout, when the student, after having been accepted to the university, does not enroll.
2. Early Dropout, when the student leaves school during the first four semesters of the professional program.
3. Late Dropout, when the student leaves school during the last six semesters, i.e. from the fifth semester onwards.

Dropout regarding space is divided into:
1. Internal or academic program dropout, referring to the student who decides to change his/her academic curriculum for another offered by the same university.
2. Institutional dropout, is the case in which the student abandons the university to enroll in another one, and
3. Total dropout of the education system.

Simpson (2004), following the line of Tinto (1989), states that the study of college student dropout is extremely complex and that no definition of dropout is able to fully capture the complexity of the problem.

Furthermore, according to the indicators of Contract Program signed between the
Autonomous University of Barcelona and the Generalitat of Catalonia, dropout is defined as students enrolled in any professional program who for two consecutive years do not enroll (Vivas, 2005).

For Cabrera et al. (2006), student dropout or desertion are the terms adopted by Spanish speakers to refer to a variety of situations identified in the educational process of students with a common denominator, interruption or stopping of studies before concluding them. This category, according to Cabrera et al. (2006) includes:

- Involuntary dropout (due to administrative non-compliance or breach of regulations);
- Leaving the program to start another program at the same institution;
- Leaving the program to start another program at another institution;
- Leaving the university and completing studies at another institution;
- Giving up university education to start training programs outside of college or join the workforce;
- Interrupting studies with the intention to return in the future; and
- Other possibilities.

University statistics usually identify as dropout cases when the student has started studying and before completing the program, does not enroll for two consecutive semesters. Within this broad category, we find situations that cannot be categorized as dropout from a program and, much less, abandonment of university education, as are the students who complete their training at another institution (Cabrera et al., 2006).

According to Díaz (2008), dropout is the fact that a student does not enroll again in an institution after three academic semesters. On the other hand, Himmel (2002) defines dropout as voluntary (when the student quits his/he professional studies or does not inform the institution when leaving the university) and as involuntary (as a consequence of an institutional decision based on their existing regulations).

Díaz (2008) notes that although the definition of dropout is at issue, there is consensus in defining it as voluntary quitting that can be explained by different categories of variables: socioeconomic, individual, institutional and academic.

**On what stage of college does the highest percentage of dropouts occur?**

Corominas (2001), in a study conducted at the University of Girona, concludes “that the dropout cases occur mostly during the first semester, due to inadequate career choice, underachievement, not passing the minimum credits, unmotivating subject courses, and little effort and commitment towards studying”. (p. 130).

On the other hand, in a paper presented at the International Conference on Higher Education Student Dropout in Bogotá, Colombia, J. Vivas (2005) notes that at the Autonomous University of Barcelona, about 60% of dropouts occur during the first semester.

Overall, the statistics speak for an average of 26% of dropouts in the first year. Some specific studies conducted in Spanish universities, put figures between 15 and 20% (De Miguel & Arias, 1999). The various statistics included in the reports issued under the National Assessment Plans in Spain, place mean percentages of 16% among students of the first year (Cabrera et al., 2006).
In a research by UNESCO (Rivera, E., Rock, H., Echart, B., Alfaro, E., López, A., Farfán, S., Barrera, B.) in the year 2005 in coordination with the IESALC, conducted at the University Juan Misael Saracho of Bolivia, it has been concluded as relevant that the higher frequency of dropouts (quitting) occurs after the second year of study.

**Theoretical approach**

From the contributions of Braxton, Shaw-Sullivan and Johnson (1997), five major theoretical models are proposed to classify the approaches about dropout and retention, according to the emphasis assigned to the three key explanatory variables, namely: personal, family or institutional. From this, the psychological, sociological, economic, organizational and interactionist categories are identified.

Bethencourt, Cabrera, Hernandez, Álvarez, and González (2008) point out that if the variables analyzed are sorted according to the degree of association seen in the university dropout, the order should be as follows: (a) psychological characteristics; (b) strategies and study activities; (c) characteristics of faculty; (d) characteristics of the professional degree.

Investigations of Bethencourt et al. (2008) have demonstrated the importance of certain psychological characteristics of university students on completion of their studies. It seems that the persistence to finish the degree despite the obstacles, the motivation towards the degree studied, the capacity for effort for future achievements, the adjustment between the capabilities of the students and the requirements of the professional degree, and the satisfaction with the professional degree studied are guarantees of academic success.

Much of the literature on retention of students in college is developed based on two main sociological theories: the Student Integration Model from Spady (1971) and Tinto (1975), and Student Attrition Model from Bean and Metzner (1985). The first model explains that, given all other variables constant, a higher degree of integration of the student in the academic and social environment contributes to a greater degree of institutional commitment and this directly affects the student’s decision to stay or quit. The second model places greater relative importance to factors that are external to the institution. Cabrera, Bethencourt, Álvarez, and González (2006) consider that while these models seem to be opposite, actually they supplement each other and at the same time they overlap in some respects. Thus they propose an integrated model that emphasizes the sociological and psychological processes of the students’ behavior of staying in college (Giovagnoli, Paula, 2002).

Here are some theories on dropout that allow us to focus on the problem from different perspectives.

When assessing the academic dropout in higher education, different models and explanatory theories have been proposed, the same that Cabrera et al. (2006) group into five broad approaches (which we call categories): psycho-pedagogical, adaptation, structural, economicist and interactionist.

**Category 1.- Psychological Approach.** The main feature relates to the personality traits that differentiate students who complete their studies from those who do not. Fishbein and Ajzen’s (1975) proposal is one of the first models to appear in the literature on the subject. They propose the Theory of Reasoned Action and show that behavior is significantly influenced by beliefs and attitudes. Thus, the decision to
quit or continue in an academic program is influenced by:

- Previous behavior,
- Attitudes about dropout and persistence, and
- Subjective rules about these actions, generating “a behavioral intention”, which is a defined behavior.

This model assumes dropout as the weakening of initial intentions and retention as the strengthening of them.

“... in the perceptions of university students, student variables are seen as more relevant than the variables in the context of abandoning their university studies” (Bethencourt et al, 2008, p. 610).

Below, Diagram 1 shows Fishbein and Ajzen’s model (1975).

Attinasi (1986) extends the model exposed with the idea that persistence or quitting are influenced by the analysis made by college students regarding college life. Thus, they perform an evaluation of the result of said analysis for further permanence or quitting.


Ethington (1990) found that the level of aspirations had a direct effect on values. In addition, he observed that expectations of success were explained by academic self-concept and perceived difficulties of studies. Both the values and expectations of success influence on persistence in college.

Below, Diagram 2 shows Ethington’s model (1990).

To conclude, the psychological models incorporate mostly individual variables, i.e., characteristics and attributes of the student, accounting, with varying degrees of adjustment, for quitting or persistence.

Category 2. Sociological Approach. Donoso and Schiefelbein (2007) note that in parallel with the psychological approach, the first modellings occur from a sociological perspective. These emphasize the influence of factors external to the individual in the retention, which add up to the psychological. Among these models is Spady’s (1971) proposal on college dropout, who developed his model based on Durkheim’s theory of suicide. The latter argues that suicide is the result of rupture of the individual with the social system due to his/her inability to integrate into society. The likelihood of suicide increases when there is a low moral conscience (low regulatory coherence) and insufficient social affiliation. That is, low support from social relations.

Spady (1971) argues that these same types of integration directly affect retention of students in college. He suggests that dropout is the result of a lack of integration of students in the higher education environment. This author also notes that the family environment is one of the main sources that expose students to influences, expectations and demands, affecting their level of social integration in college.

In diagram 3, Spady’s model (1971) establishes that relationship between the family environment and the academic potential and regulatory coherence.

Spady (1971) argues that there is a high probability of dropout when the various sources of influence are in the negative, resulting in unsatisfactory academic performance, low social integration and, therefore, dissatisfaction and los institutional commitment. Conversely, if the effects are positive and are consistent with the initial situation, the student achieves
Diagram 1. Fishbein and Ajzen's Model (1975)

Diagram 2. Ethington's model (1990)
financial aid available to the students (Ishitani & Desjardins, 2003).

Category 4. Organizational Approach. Donoso (2007) notes that in this case, he focuses on dropout from the characteristics of the university institution, based on the services offered to students. In these models, the variables of “quality teaching” and “experiences of students in the classroom” have a crucial role. In opportunities, the benefits provided to the students by the organization in health, sports, culture and academic and teaching support (library resources, laboratories and number of students per teacher) are added to these variables. These variables belong to the operational level of universities, their intervention being completely feasible.

This model of analysis argues that dropout depends on the qualities of the organization in terms of social integration, and more particularly in the abandonment of newly registered students (Berger, & Milem, 2000; Berger, 2002; Kuh, 2002, as cited in Donoso & Schielbein, 2007). In this approach, the quality of teaching and of the active learning experience by the students in the classrooms is highly relevant, which positively affect the social integration of the student (Braxton et al., 1997).

“…as major players within those systems, public and private universities have entered a period of turbulence for which no ending is foreseen. The current crossroad stems from one simple fact: the demands placed on universities exceed their responsiveness” (Clark, 1998, p. 129, as cited in Rojas, 2009).

Category 5 - Interactionist approach. In sociology, there is a long theoretical and empirical tradition that has explored organizational issues that impact student retention (Tinto, 1975; Bean

![Diagram 3. Spady's Model (1971)](image-url)
1982, as cited in Donoso & Schiefelbein, 2007; Astin, 1984; Pascarella & Terenzini 1991). Tinto is one of the most recognized authors in this area, suggesting, among other things, the positive effects of the interaction between teachers and students.

Tinto (1987, as cited in Channels and De los Ríos, 2009) suggests that the greater interaction between students and teachers, the more likely will students complete their studies.

Focusing on the social and institutional context is critical to understanding retention, since this allow understanding this phenomenon as the result of interaction between a student and the environment surrounding him/her (Thomas, 2002, Tierney, 200, as cited in Canales & De los Ríos, 2009).

Tinto (1975) explains the process of permanence in higher education as a function of the degree of adjustment between the student and the institution, obtained from academic and social experiences (integration) (Díaz, 2008). Tinto’s model has the most influence on the study of retention.

“Recognizing the role of institutions in the generation of results, Tinto develops a refined model to explain students’ decisions to stay or change higher education institutions (Tinto develops his model in the United States). This goes through the social and intellectual integration of students, those who reach this condition are more likely to remain in the institution” (Peterson, 1993, p. 660, as cited in Canales & De los Ríos, 2009).

Tinto incorporates Nye’s exchange theory (1979, as cited in Donoso, 2007) into Spady’s model, Nye’s theory assumes the principle that people tend to avoid conducts involving a cost of some kind to them and therefore seek rewards in relationships, interactions and emotional states.

According to Tinto (1975), students use the “exchange theory” to build their social and academic integration. Thus, if the benefits of staying in the institution are perceived by students as greater than the personal costs (effort and dedication, etc.), then they will remain in the institution. Alternatively, if other activities are recognized as a source of greater rewards, the student will tend to quit or dropout.

Also, Tinto recognizes broadly, that the trajectory of interactions of the person with the university’s academic and social systems may lead to his departure from the institution.

In short, the more the student's commitment to obtaining their degree or diploma and to the institution, and the better his/her academic performance and social integration, the less likely will the student drop out.

Despite all of the above, studies with Tinto's model do not show stable results in terms of the weight and meaning of the factors presented according to the different institutional types or modes. Some research confirms the direct predictive ability of social integration on dropout in the more traditional education institutions (Pascarella & Terenzini, 1980).

Bean and Metzner (1985) assume that factors external to the institution may be important, as they impact both attitudes and decisions of the student during his/her stay in the institution. More recent research (Bean & Vesper, 1990) points out that non-cognitive factors, namely, personal (attitudes, aspirations, motivations, interests), environmental and organizational
characteristics have a significant bearing on dropout, particularly where it is voluntary.

Díaz Peralta (2008) found six predictors of student dropout in American colleges: academic integration, social integration, socioeconomic status, gender, quality of the professional program and GPA on each semester. Another theory integrated into this adaptive model is the theory of Student Attrition by Bean and Metzner (1985).

All models recognize that at the beginning of the student’s studies, motivational and vocational dimensions occupy a precise spot, as do the institutional effects due to mass conditions of teaching and equipment. Next, they understand that personal and infrastructure factors progressively lose incidence and external social or as we call ‘extra-academic’ factors become important (Boado, 2003).

Pascarella (1985) suggests a general causal model with explicit considerations of institutional and environmental characteristics. The author argues that the development and exchange of students is a function of five sets of variables, two of which are related to background and personal characteristics: skills, performance, personality, aspirations and ethnicity. The second group consists of structural and organizational characteristics of the institution, admissions, students, selectivity, percentage of residents. This group is related to the third set of variables: institutional environment. These three groups of features include, in turns, the fourth group that considers all variables associated with the frequency and contents of interactions with faculty and peers. The fifth group refers to the quality of the effort made by the student in learning (Pascarella & Terenzini, 1991).

Nora’s model (1990), in Donoso and Schiefelbein (2007), relates the student’s academic skills when entering college, the for needs financial support, the student benefits offered by the institution and the academic performance of students, as determinants of dropout.

Cabrera, Castañeda, Nora and Hegnstler (1992), in Donoso & Schiefelbein (2007), suggest that persistence in higher education is modeled by a process that involves three stages.

A first stage where the academic foundation prior to college and the socioeconomic factors affect the student to continue his/her college studies.

The second stage in which the student “calculates” the costs and benefits associated to his/her studying at an institution, which means that when entering he/she does it with a certain initial commitment to the institution, which is revised as time goes by.

In the third stage, while in college, other factors such as academic and social experiences that the student will be exposed to and his/her academic performance start gaining floor. This way, positive social and academic experiences and adequate academic performance would strengthen perceptions regarding the economic and other benefits, arising as a result of the completion of studies. Moreover, financial support and adequate academic integration will positively influence the decision to stay in the institution, thus keeping the balance between the cost of pursuing a postsecondary degree and the benefit of obtaining an academic diploma or degree. In contrast, negative experiences, such as increases in the cost of tuition or unsatisfactory academic experiences, produce an imbalance between cost and benefit, increasing the probability of dropout.
A THEORETICAL APPROACH TO COLLEGE STUDENT DROPOUT


**History of institutions efforts to prevent desertion**

Cabrera et al. (2006) note that due to delays and dropouts, zero courses (also known as remedial courses) were implemented by some universities.

Grosset (1991) states that dropout should be considered a factor of institutional efficiency and, as such, the strategies to address it should cover both the educational processes and the characteristics of students that encourage the dropout, since this is more a function of what happens after entering college, not before.

In these processes, the strong difference between the conception and design, and implementation of a retention program in the often rigid maze of institutional structures is assumed. Some considerations in this regard are that successful retention programs are more often of a longitudinal nature (like the programs that the Academic Research Directorate of the Peruvian University of Applied Sciences [UPC] designed to approve applicants); which are integrated in parallel with the processes of admission and, finally, that its application usually involves a broad spectrum of institutional actors (Tinto, 1982).

The university responds institutionally to the phenomenon of dropout, but in an uncoordinated way since there is not a problematic construction of the subject that allows the implementation of policies and actions faced systematically by dropouts (Rojas, 2009).

**CONCLUSIONS**

We know that there is an academic gap between what is taught in schools and what is required in universities. This is not a new or unique problem exclusive to the academic area or Peru. It is rather an old problem that has many
variables and, moreover, occurs worldwide. This academic gap contributes, among other variables, to college dropout.

A student who does not complete his/her university studies is likely to be underemployed earning an income well below the expected. This creates frustration not only in him/herself but in his/her immediate environment.

Some university authorities have embraced the dropout problem as their own, and several universities have succeeded in reducing the academic gap by creating programs.

or courses which serve to level the new students. Even method or learning strategies courses are given so as to facilitate their integration into university life. Additionally, some universities have a teaching team assigned in order to take care of potential dropout cases.

University authorities should "take the bull by the horns", because student dropout is everybody’s problem.

REFERENCIAS


