E. RIVERA, M. ROSA, A. SANTIAGO, N. TORRES, and M. BRAVO University of Puerto Rico, Rio Piedras mlbravo@caribe.net

Abstract

This article describes a study about the experiences of a group of students during the transition from high school to college. The students are future teachers who evidenced a high level of academic achievement in high school and received merit scholarships from the Puerto Rico Collaborative for Excellence in Teacher Preparation (PR-CETP). Two groups of students were compared: those who sustained a high GPA during their freshman year, and those who did not and, therefore, no longer qualified for the scholarship. The study was carried out through focused interviews with eight students, from three universities, four of whom maintained the scholarship and four who did not. Findings indicate that the main problems encountered were academic and social, and that the students received support from their families during the entire process. Regarding formal support, they pointed out that they felt highly satisfied with the services provided by PR-CETP and the universities, but they also pointed out (particularly those who lost the scholarship) that they needed additional services from the universities. They suggested, for example, better tutoring, and social activities among the scholars. The interviewed students, in general, consider that they faced the transition successfully since most of them described their academic, emotional, and social status as satisfactory at the time of the interviews.

Introduction

Many studies have been carried out to better understand a crucial period during the life of college students—their freshman year. Grayson describes "the swiftness and magnitude of change" and states that this year is one of major adjustments, in which so many changes occur that the initial experience of the undergraduate is a major transition for virtually all students [1]. Although this period is usually difficult for students, for some it is more so. Bushnell indicates that most students drop out voluntarily during this transition for reasons that are not academically related, and only about one-fourth of them do it for academic reasons [2]. Understanding the difficulties that these students face and how they manage them can give us an idea about how to help them, and how to offer support for their academic endeavors, psychological well being, and overall personal development.

The major goal of this research was to study the transition to college process of a group of students, specifically students who are future teachers of science and mathematics. These students (called teaching scholars) are members of a group who evidenced high academic performance during their high school studies and received a merit scholarship awarded by the

The Journal of Mathematics and Science: Collaborative Explorations Volume 4 No 2 (2001) 7-24

Puerto Rico Collaborative for Excellence in Teacher Preparation (PR-CETP), funded by the National Science Foundation. To study this process, two groups of students were compared: those who sustained a high GPA. during their freshman year, and those who did not maintain a GPA high enough to keep their scholarships. In comparing the groups, we seek to identify elements that may contribute to a more successful transition to college among future teachers.

The topics and specific questions that the study focused on were:

- Pre-college experiences: What were the pre-college experiences of these students like, including their career selection?
- Entry situations: What situations did the students face upon entering college, how did they manage them and what feelings did these evoke?
- Informal support: What support did these students receive from informal resources (family, friends, and peers)?
- Formal support: What support and other institutional resources did they receive from the universities they were enrolled in and from the PR-CETP Program?
- Outcome of the transition: How well did these students consider themselves to be doing in academic, personal, and social terms during their sophomore college year?
- Recommendations: What recommendations did they offer to the institutions, and to PR-CETP to facilitate the transition to college?

Method

Based on a qualitative perspective, a focused interview was used as the primary strategy to examine the problem.

Participants

The population of this study included 22 students who received PR-CETP scholarships in 1999 and at the time of the interviews were in their sophomore year in college. They were divided into two groups for the study: students who kept the scholarship and those who lost it after completing their freshmen year (because they failed to obtain a GPA \geq 3.0). In the first group, there were ten females, whereas in the second group there were eight females and four males. Within each of these two categories, four students were selected for a total of eight participants. A description of the study's participants is provided in Table 1.

Gender		Age	
Female	7	19 years 6	
Male	1	20 years 2	
Total	8	Total 8	
University ¹		Program of Studies	
JPR-RP	4	Science Education	6
PUCPR-Pon	ce 2	Mathematics Education	1
UPR-Cayey	2	Elementary Education	1
Total	8	Total	8

Table 1. Description of the sample of participants in the study.

¹ UPR-RP: University of Puerto Rico, Río Piedras; PUCPR: Pontifical Catholic University of Puerto Rico; UPR, Cayey: University of Puerto Rico, Cayey.

A larger number of females than males were interviewed since the first group only contained females; and, only one male from the second group was available for the interview, since two others refused to be interviewed. Half of the participants came from one (out of seven) of the PR-CETP participant institutions. We did not attempt to include students from all universities since accessibility was a factor in the selection of participants.

Collection and Analysis of Data

The interviews were carried out through the use of a protocol that included four parts: (1) demographic data; (2) background of the situation (i.e., prior experience as a student, preparation for entering college, and career selection); (3) college life (e.g., situations faced, ways of handling them, and institutional context) and, moment of the interview (i.e., academic performance, emotional state, family, friends and peer relations); (4) reflection about the discussed topics, particularly the significance granted to college life and recommendations they would offer to the institutions and PR-CETP to promote a successful transition to college. Participants were contacted by telephone to schedule the interview. The interviews were conducted at the institution or the residence of the interviewee. The interviews were recorded and transcribed *ad verbatim*. Four doctoral students in education conducted the interviews.

The first phase of data analysis consisted of creating *a priori* categories, codes, and preliminary definitions based on a review of the literature and research questions. Once the

E. RIVERA, M. ROSE, A. SANTIAGO, N. TORRES, AND M. BRAVO

information from the interviews was examined, the research team added inductive codes and categories. A search for similar patterns, themes, observations, and opinions was carried out. The research team met several times to review and define the codes and to reach a consensus. This process helped to strengthen the results of the analysis. The interviews were analyzed using the *Ethnograph* software, version 5.0.

Results: Prior School Experience and Career Selection

The academic preparation students receive prior to entering college is a critically important factor for their success [2]. The first research question for this study sought to examine this important factor. Students interviewed narrated mostly positive experiences that represented achievements in their precollege stage. They indicated they were good students in the elementary as well as secondary schools. They pointed out that they had been actively involved in extracurricular activities, such as the Science Fair and athletic competitions, in addition to belonging to several school clubs. These positive experiences were conveyed in expressions such as the following: "...in elementary school I was the most outstanding athlete"; "...I was President of the graduating class, I wrote stories, and participated in the Math Olympiads"; "...I participated in the Science Fair." They also spoke about personal or academic difficulties they faced during this stage. For example, some students said: "...my father became ill"; "...eighth grade was a difficult period..."; "...my grade point average dropped in my junior year because I had problems with English."¹

Both groups, those who had a higher academic performance and those who had academic problems during their freshman year, generally narrated similar experiences related to their life in school before entering college. On the other hand, some differences regarding how prepared they felt to enter college were observed. Those students who had academic adjustment problems indicated that they did not feel prepared, as expressed in the following: "...during the senior year I didn't take mathematics"; "...I had problems with English"; "...I was never good in mathematics." Those who were most successful stated that they felt prepared, through answers such as, "...I was in the advanced group, I was prepared."

Humans interact with their environment developing new behaviors in the process. Personal characteristics influence the outcome of these interactions. Brown [3] identified five basic elements related to the college student's development, one of which is the personal

¹ In Puerto Rico, Spanish is generally the language of instruction; English is taught as a second language.

characteristics and traits of the student upon entering college. The expectations that a student has regarding college life are an important characteristic [4]. Related to this aspect, the students interviewed said: "...I felt prepared because I knew it would be difficult"; "...I knew that it was more complicated and that it took more effort"; "...I knew that I had to study every day and stay up all night."

Other characteristics that may have great impact on the successful transition to college are the student's study habits and social skills [5]. Upon asking students which skills of this type they possessed, they pointed out that, "...ever since I was small I liked to review my classes every day"; "...I've always had good study habits"; "... I'm very sociable, dynamic and if I have questions, I dare to ask." These expressions were offered mainly by those students who were more successful in their academic performance in college.

The selection of a career is the peak moment in the occupational development of a person [6]. Many times, students base their decisions on models they have in their lives during their early years. Most of the students mentioned that they had close family members (mother, father, uncle), or teachers, who were their models. Some of their comments on this aspect were: "...my uncle is a science teacher and I used to help him correct tests"; "...my chemistry teacher was an example for me"; "...my mother is a teacher and when I was small I wanted to be a teacher."

An adequate academic counseling and guidance process can contribute greatly to a smooth transition to college [2]. In high school, guidance for the transition should include support for students as they select the course of studies they wish to pursue at the college level. Guidance for the transition is initiated in high school, but should continue in college. Therefore, it should be adequately provided on both levels, and requires good communication between guidance professionals from both academic levels [2].

The interviewed students mentioned that they could discuss their doubts about a teaching career with their teachers and some indicated that they were counseled by people sent by the universities or by the school counselor. In relation to this, they said: "...they came from the university to offer guidance"; "...they asked me what I wanted to study"; "...the teachers helped me"; "...my biology teacher helped me." Although they received counseling, some students wished that they had received more detailed information about the professions and the universities they could select. Therefore, it can be established that the high schools these students

came from did not always fulfill their function of providing students with adequate academic and occupational guidance.

Upon asking about the positive elements they perceived in the teaching career, most of the students mentioned that facilitating learning was the most important aspect of that career. About this, they said they were able to: "...transmit knowledge and socialize"; "...direct what happens in the classroom"; and, they stated, "the teacher accompanies students in the learning process." Negative elements mentioned regarding the teaching career focused on concerns about relationships with students and their parents. For example, some of the concerns they mentioned were: "... that students do not respect you"; "...sometimes parents complain; sometimes students can be very difficult, one has to have control"; "...that parents could be aggressive." They also mentioned the profession's "...lack of prestige." It can thus be stated that the negative elements of the teaching career that worry future teachers the most are the management of relations with students and parents, and the lack of prestige of the profession.

Results: Entry to College

Grayson describes the changes that are present during college life as a "mini life cycle."[1] He describes the freshman year as one of major adjustments. It is during this moment that:

...students separate from their parents and other family members, their home, their friends, and their community. ... It is a time of adjusting to new friendships, and they become exposed to people from diverse backgrounds ...the academic load increases usually at the same time as academic competition increases...it is a major transition for virtually all. (p.99)

Some students mentioned having faced difficulties in the area of social relations:

Um..I was with different people in all of my classes. Almost always one has a group during the freshman year...my sister had a group, not me, the world was different. I was alone, it was hard for me to meet people and that really affected me. I found it a little difficult because I am shy to relate to other people, I didn't dare too much with my fellow students.

And, "...social life, well, I didn't know anyone and the social part affected me quite a bit."

Nevertheless, the major difficulties confronted by the interviewed students were apparently of an academic nature. Several stated that their major problem had been their mathematics courses, especially for one of the students belonging to the group who lost the scholarship and who indicated that the course was in English. They described these difficulties as:

Teachers who speak in English, it was hard. You have to adapt your ears to English, it helps. ... The science, mathematics, and calculus teachers teach in English.

The mathematics class was much more advanced than what I had taken in high school. What really helped me was the intermediate school level mathematics class. The [name of the high school] really does not prepare us for college, they do not offer chemistry.

In relation to their emotional state upon entering college, three students (two who lost the scholarship and one who still had it) mentioned that they experienced feelings of loneliness and sadness: "[Feeling] homesickness, sadness, nervousness, the most difficult was that I was alone. Everything, yes, but it is a phase of growing"; "...a little nervous, that's all."

The five remaining participants indicated they felt fine during their freshman year. Some of their comments were:

I felt happy, because I said, "Wow, I'm big already. One can become independent."

At the beginning, I was happy for having entered and as I found difficulties in the classes I became frustrated but later. Now I have recovered my enthusiasm. Well, they were all good. I made many friends as soon as I entered. We formed study groups. The experience was always positive.

Upon asking them how they had handled the new and/or difficult situations during that year, they indicated that they could handle them because they sought support or help from a family member, a counselor, and dealt directly with their emotional states. This could be seen in comments such as:

I consulted with my mother all about feelings and with the counselor about the academic aspect. I had good results.

Keeping myself positive. Each time I had an obstacle, thinking that I could overcome it helped me stay on track.

Trying to control my nervousness, loneliness, when I went to appointments, talking with persons who agreed with me, and then I would talk with my parents and they advised me. Seeing things from a positive point of view.

When asked if they had used substances such as, tobacco, alcohol, drugs, or pills, all the interviewees indicated that they had no need to. Only one student answered, "...yes, coffee, sometimes I have had to drink coffee because I fall asleep with my face buried in my books."

The interviewed students, in general, thus indicated that they confronted only minor difficulties during their transition to college, contrary to what is stated in the literature. Several reasons can explain this finding. First, all were high achievers in their high schools. Moreover, most of them lived at home, only one of them boarded, and all of them indicated having the support of their families.

Results: Support from Informal Resources

The literature about adjustment to college underscores the importance of using sources of support during the transition process. In a study by Hurtado, Carter, and Spuler [7], it was found that the persons who usually provided support to the students were: peers, family members, friends, administrative personnel, faculty, and high school teachers and counselors.

In our findings, both groups of students mentioned family as the main source for emotional support, for help in studying, and for providing transportation. For example, some students said:

I consult with my mother everything related to my feelings.

My father helps me study. He explains things to me.

S

Everyone [in my family] uses the same transportation. We coordinate our schedules. Everyone is picked up. Besides, we live at home.

Some people also recognize the support provided by their friends indicating that, "my friends have always supported me, they are always checking up on me. My friends and I tell each other everything that happens to us, we support each other. We get along well."

This support also was evident among students when they met to study in groups: "We form study groups. We help each other clarify doubts and we go to the library."

Two interviewed students (one with the scholarship and one without it) mentioned their companion and spouse as sources of support. For example:

I travel with my boyfriend and we agree on the same class schedule.

My boyfriend takes me and brings me to activities. He supports me in gaining knowledge.

Results: Institutional Context and Formal Support Resources

The college environment affects all transition experiences and the adjustment to college life [7]. The post-secondary education system should promote the development of an environment that allows people to reach their educational and professional goals. Hence, higher education institutions should become aware of the effect of the environment on students, in order to create high quality education.

According to the interviewed students, they received support in the transition to college from the PR-CETP staff, from professors, tutors, and guidance counselors. Guidance for transition to college begins in high school and continues in college. In college, guidance should support students so that their transition is successful. The process of exploring interests continues, since most students arrive at college without having made a firm decision, or without knowing their options. In addition, the adequate selection of courses is important since it can cause delays or failures when finally choosing the program they will major in. The interviewed students mentioned that some counselors were concerned about them and offered them academic counseling in addition to providing them information and options to enroll in courses: "They have

E. RIVERA, M. ROSE, A. SANTIAGO, N. TORRES, AND M. BRAVO

been good because they have helped me to get my classes. They tell me, for example, which classes I need to take and which are requirements for other courses."

Personal and social guidance and counseling assumes critical importance because college environment is less structured and family support weakens, which usually happens at the stage when they enter college. In this aspect, the collaboration among professors and counselors is also necessary. Yet, students mentioned that counselors concentrated in offering academic counseling only.

The interviewed students mentioned repeatedly that they received support from the PR-CETP staff and that they participated in several enriching activities. They mentioned that the liaison staff at the PR-CETP central level maintained continuous and stimulating communications with them "...[the liaison officer of PR-CETP] was always with me, we had continuous communication and I needed it. It stimulates me." Also, they indicated that the program offered workshops, tutoring, mentoring, and extracurricular activities that helped them in the academic area. These services were evidenced through the following comments:

...they gave us science, mathematics, and communication workshops. Also, study habits and how to make a portfolio.

...I learned a lot at the trip to the Las Cabezas Lighthouse.

...they looked for tutors and mentors to help us in our classes. [The mentors] were graduate students and professors who got us tutoring and helped us.

The interviewed students mentioned that receiving the PR-CETP scholarship was beneficial for them. One of the interviewees stated that: "...it helped me a lot and I was able, among other things, to buy a computer, pay for my board, and buy other materials and books." Another interviewee said: "it was a help that I could not describe."

Some less successful students, however, pointed out deficiencies in the tutoring system. For example, they indicated that they did not have English tutoring, that the tutors arrived toward the end of the semester, and that they did not dedicate enough time. The interviewees mentioned that:

... The tutor assisted more than three persons, and I need them to be with me.

In my mathematics class, I looked for help from the institution's tutors, but they didn't know that much.

The tutors arrived when the semester was almost over.

They offered tutorials, but they were not that good. I prefer the ones offered by Natural Sciences, above all the ones in mathematics.

Two of the students who lost the scholarship were not satisfied with the services they received from the PR-CETP at the institutions. They indicated that:

They didn't meet with us, they didn't really help us. ..When they had meetings in San Juan, then they met with us, not even with the other students in CEPT, they didn't meet with us.

When they asked us in San Juan, we never knew what they were talking about because they weren't giving us the guidance they were supposed to. When they asked us over here, then the Science and Education directors met.

Another difficulty faced by some students was that they received the mail about PR-CETP activities too late, and could not attend the meetings. For example, one of the students commented about the support that wasn't helpful:

...About the institution, the mail arrives late, I don't know if it is late reaching the Program, and I couldn't fill out an application to attend a laboratory in the United States.

There are many opportunities within the college context to impact the development of students. According to Brown, one of the important environmental factors that affect developmental patterns is the relationship with professors [3]. The students participating in the study mentioned that some of the professors at the institutions offered help or support. Some of the examples of the help they received is evidenced in the following comments: "...The

E. RIVERA, M. ROSE, A. SANTIAGO, N. TORRES, AND M. BRAVO

mathematics professor helped us during office hours"; "...the English and science teachers have helped me a lot"; "...the mathematics professor always wanted to help so that I could make it."

However, they mentioned limitations in the support or help they received from the professors. They pointed out, for example, that the help was offered only for their class, that the time they were available was too limited, or simply that they did not help them. "...The professor tried to help me, but sometimes she didn't have time because she was working on other things, as coordinator or something like that..."; "...My Spanish professor sat down with me to explain how to prepare an oral report. But not all of them are that way."

Classroom experiences also have an impact on the students' development [3]. Blocher [8] identified several elements that should be considered in any learning environment to facilitate the cognitive, academic, and personal development of the student. These are: engaging, challenging, and supporting them, as well as providing structure, feedback, and integration. The curricular innovations that promote this type of environment are, therefore, important for the successful transition toward college life.

The interviewed students gave diverse answers when they were asked about the innovative courses offered at the institutions in the disciplines of science, mathematics, and education. About the science courses, the students who maintained a high GPA, as well as those who didn't, expressed diverse positions. This is evidenced in the following comments: "...In the chemistry class, no. The laboratories included all the steps, it's traditional"; "...In physics, yes. The student is given some information and has to look for additional information. The professor gives examples from everyday life"; "...In biology, there was a lot of interaction."

Upon formulating the same question in relation to the mathematics courses, most of the students, the successful ones as well as the less successful ones, mentioned that innovations were not used. Some of the interviewees pointed out that: "...There is no interaction between the teacher and students. There is no participation, we hardly talk"; "..In mathematics, the class is traditional." However, one successful student, as well as one who was not as successful, mentioned innovations in the mathematics class:

...I am actually taking a course in *Calculus II* that is based more on technology. They use a lot of transparencies and cooperative learning groups.

....The *Precalculus II* class, he [the professor] does not write on the blackboard. It is all by computer. We have a computer and what he [the professor] writes appears on ours.

About the use of innovative strategies in the education courses, the interviewees, regardless of whether they were successful or less successful, indicated that, these courses were different and that the professors always integrated innovations in the courses. They made comments such as the following:

They have a lot of variety in the class, you participate, and there is a lot of conversation between the students and teacher.

In education they do [integrate innovations], in *Language Skills*, *The Exceptional Child*, and *Psychology*. I love it. It is a way of expressing what you know in a different way. It is not what they [professors] say, but what you know how to do or say.

The successful as well as the less successful students agree that they obtain better results in the courses that incorporate innovations:

...They are excellent. They have very good results. I expected to get a "C" or a "D" because the class [*Calculus II*] was difficult, but I got a "B."

...They're great because that way we don't waste time writing on the board, because the professor brings everything from home and just installs it in the computer, and we see it and can go faster.

....I think that I was able to do better in the innovative courses, in my grades as well as in my learning.

The universities should acquire greater responsibility for using strategies and techniques that promote changes in students' thought, behavior, and knowledge. Bushnell indicates that cooperative learning is one of the useful strategies to improve academic performance and social interaction, and promotes student retention [2]. This strategy is being used to some extent in the classes taken by the interviewed students: "they do a lot of cooperative groups"; "...but they are different. In education, the work is cooperative and you talk about your experiences."

In general, both groups of students recognized the importance of the support received by the institution, and particularly, from PR-CETP. The help offered by professors, guidance counselors, and the PR-CETP staff were determining factors for the group of successful students. Whereas for the group of students who were not as successful, the support offered by the institution was not enough to help them achieve their academic goals.

Results: After the Transition Year

Most of the students described their situation at the time of the interview as positive in academic as well as personal terms. Six of the eight participants indicated that they are fulfilling their expectations in academic terms. They described their current situation with phrases such as, "it's going well," "very well," and "super well."

On the other hand, two students maintained that they were still encountering difficulties in some courses; one of them still has the CEPT scholarship, and the other one lost it. They indicated: "...this semester is difficult because I dropped out of a class last semester, and I have to compensate this semester"; "...I didn't do well in mathematics, I got a "C-"."

All the interviewed students indicated having good relations with their parents and that they received a lot of help from them. They described their current relationships with their families: "My parents talk to me, they always ask, what's going on? You're not that way, let's talk...My father, in mathematics and chemistry, sat down to analyze the exercises until we found the right answer, my little brother, too."

Both groups of students also indicated receiving help from their friends and their companions. For example, "My boyfriend brings me and takes me to activities." One of the students said she was married and she received a lot of help from her spouse since they were both studying. The student told us, "...he helps me a lot because we have a child. That way, when I have a test, he stays with the baby, and when he has a test, I take care of the baby." Another student mentioned the fact that although he does not see his friends often, he maintains positive relationships with them. The rest also agreed that they maintain a good relationship with their friends. These results suggest that students overcame difficulties of a social nature during their second year.

The participants described their college experiences in very diverse ways. However, they agreed that these had been very positive and also indicated feeling motivated to continue their college studies, regardless of whether they continued to have the scholarship. Some students who lost their scholarship, indicated: "...I lowered my GPA, but I like it"; "...I am very motivated and very proud of having entered college." Those students who kept their scholarship indicated that: "...I feel well emotionally"; "... I keep a very high self-esteem and I feel good about myself"; "...the college experiences have been very positive."

As can be seen from the above, the interviewed students consider, in general, to have made a successful transition to college since they describe their current status at the moment of the interview in mainly positive terms. They expressed that they felt motivated to continue their college studies.

Results: Recommendations for Universities and PR-CETP

In this study, it was important to know what recommendations students who had already made a successful transition to college could offer their institutions and to PR-CETP to facilitate the transition for others.

The PR-CETP has included many areas to help promote the development of future teachers. The interviewed students recommended that the program broaden and continue offering workshops, extracurricular activities, tutoring, and mentoring during the semester, which were beneficial according to the students:

Their help is, I don't even know how to describe it, because they are always looking after us, they help us so that we can develop well. They give us many workshops that are excellent. It has been very good, a very good help.

They also recommended that the PR-CETP and the college institutions broaden the activities at the high school level to motivate future teachers and help to recruit participants. Particularly, one student indicated:

I believe that universities must organize to go more often to high schools, to start orienting students. So that when they arrive at college they do not feel intimidated by everything they are told. ...so they can help the students to work things out...I think that this program should start a year before students enter college.

On the other hand, some students believe that the program should promote social interaction among students. Besides the workshops, students wish to share with all the program participants, in local meetings at the institutions, as well as at the Island-wide level. They requested to meet at least once a month in the institution: "They should carry out activities at the institution, those who are at the same institution don't even see each other unless they take classes together. To meet, offer workshops and activities within the institution."

Also, they recognized that to be successful, it is important to strengthen the support of the institutions. For example, they recommended, "that the institution provide us more support because sometimes they don't give it." One of the participants recommended that the institution expand the curricular offerings so that students could make adequate use of their free time in the activities. That is:

Well, like motivating them and having many programs at college, educational, to develop skills so that students are always occupied doing something. So that during their free time they are motivated to do something.

The students recommended that tutors should be assigned time at the beginning of the academic session, and students should have a fixed schedule to receive those services in a more organized way. One specific comment by a student who lost the scholarship was: "...the tutors arrived when the semester was almost over."

Conclusions

In light of the findings of this study, we can reach the following general conclusions:

- Most of the interviewed students felt prepared to face college life;
- However, they pointed out that the guidance they received in the process of selecting their careers during high school was not totally adequate;
- Upon arriving at college, the main problems faced were of a social and academic nature; the level of difficulty of some courses, especially mathematics and English, was the main academic obstacle confronted;

- The emotional reactions that some experienced during the transition to college were feelings of loneliness, shyness, and nervousness;
- The family was the main source of support that students had at this stage; friendships and partners were also important sources of support;
- The support services provided by PR-CETP were crucial for their academic achievements;
- The students, especially those who did not maintain a high level of achievement, pointed out that the support received from the institutions in which they studied was not adequate or sufficient enough for them to achieve their academic goals;
- The students interviewed feel that they have successfully overcome the difficulties of the transition to college life.

Limitations to the Study

One limitation that should be mentioned is the difficulty in selecting the students to be interviewed. One did not keep the appointment, and another decided not to participate. The result was that most of the students interviewed were female. Also, not all of the institutions that are part of the PR-CETP alliance were included in the sample and that limits the generalization of the findings. Moreover, given that the study focused on a group of high performing students in high school, who received special treatment for being members of the group of scholars, the findings cannot be generalized to the entire student population that enters college in Puerto Rico. Nevertheless, if these privileged students faced the academic and social difficulties they described, how much more difficult is it for students who do not enter college under such favorable conditions? This study, even though it did not consider them directly, gives us a glimpse of their situation.

Bios

Emilda Rivera, Mari Rosa, Alfredo Santiago, and Noel Torres are doctoral students and Milagros Bravo is Professor in the Department of Graduate Studies in Education, University of Puerto Rico, Río Piedras Campus. The latter is also Coordinator of the Evaluation Component of Puerto Rico Collaborative for Excellence in Teacher Preparation (PR-CETP).

References

- P. A. Grayson, "College Time: Implications for Student Mental Health Services," Journal of American College Health, 33 (1985) 198-204.
- [2] J. Bushnell, Retention at the Community College Level, ERIC ED 331571(April, 1991).
- [3] R.D. Brown, "Key Student Development Concepts," College Student Personnel Administration, Charles C. Thomas, Springfield, IL, 1982.
- [4] F. Pérez Rentas. "Elementos del ambiente universitario y el éxito en los estudios: Implicaciones para el consejero como investigador," Asociación Puertorriqueña de Profesionales de Orientación, 13(2) (1998) 2-9.
- [5] L. Kalsner, "Issues in college student retention," *Journal Citation-Higher Education Extension Service Review*, 3(1) (1991) 3-9.
- [6] I. Alvarado and H. Acevedo, Desarrollo y Consejería Ocupacional, Prime Printing, San Juan, PR, 1999.
- [7] S. Hurtado, D.F. Carter, and A. Spuler, "Latino student transition to college: Assessing difficulties and factors in successful college adjustment," *Research in Higher Education*, **37**(2) (1996) 135–159.
- [8] D.H. Blocher, "Campus learning environments and ecology development," Campus Ecology: A Perspective for Student Affairs, National Student Personnel Association, Cincinnati, OH, 1978.