An Evaluation of Student Interpersonal Support in a Spanish-English Nursing Program

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Abstract

Spanish speaking nurses are in great demand. For bilingual Hispanic undergraduate nursing students who might someday fill this need, interpersonal support can be a deciding factor in whether students successfully complete their program of study. This paper presents the results of an evaluative study of supportive relationships within a Spanish-English Nursing Education (SENE) program. A written survey was followed by individual and group interviews to reveal important sources of interpersonal support. The study showed that family members, especially spouses, played a critical role in personally supporting SENE students. Academic and motivational support, however, came from study groups and the cohort of Hispanic classmates. SENE administrators established cohorts of same year students, and encouraged the formation of study groups. Science-related college programs directed at Hispanic students could benefit from fostering and supporting program components that act to enhance interpersonal relationships.

Keywords: Hispanic, Bilingual Nursing, Interpersonal Support, Student Cohorts, Evaluative Study
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Una Evaluación de Apoyo Interpersonal de Estudiantes en un Programa de Enfermería Español-Inglés

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Resumen

Hay una gran demanda de enfermeras que hablan español. Para los estudiantes Hispanos bilingües del Grado de Enfermería quizás algún día pueden tener esta necesidad, el apoyo interpersonal puede ser un factor decisivo para que completen su programa de estudios. Este trabajo presenta los resultados de un estudio de evaluación de las relaciones de apoyo en un programa de Formación de Enfermeras en Español-Inglés (SENE). El estudio presentado estuvo compuesto por entrevistas individuales y grupales que revelan como fundamental la importancia del apoyo interpersonal. El estudio mostró que los miembros de la familia, especialmente los cónyuges, juegan un papel clave en el apoyo personal a los estudiantes de SENE. El apoyo académico y motivacional, principalmente, provino del grupo de estudio y de los compañeros Hispanos. Los dirigentes de SENE establecieron grupos de estudiantes del mismo año, y fomentaron la formación de grupos de estudio. Los programas universitarios relacionados con las ciencias dirigidos a los estudiantes Hispanos pueden beneficiarse de los programas de fomento y apoyo que actúan para mejorar las relaciones interpersonales.

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The need for bilingual nurses in the United States is becoming more acute each year, fueled in part by the paucity of Hispanic students completing college nursing programs and the rapid increase in the Spanish speaking patient population (Buchbinder, 2007; Degazon & Mancha, 2012; Moore, 2005; Rivera-Goba & Wallen, 2008; Torres, Parra-Medina, & Johnson, 2008; Vogt & Taningco, 2008). Relatively few Hispanic college students enroll and successfully complete college level science and mathematics degrees, including those in nursing (Chang, Eagan, Lin, & Hurtado, 2011; Fry, 2002; Laden, 1999; Padrón, Waxman & Rivera, 2002). Studies of gateway science classes attended by Hispanic students have emphasized the importance of proactively establishing supportive relationships (Degazon & Mancha, 2012; Drane, Smith, Light, Pinto, & Swarat, 2005), "improving student confidence by providing networks with peers, faculty, and staff" (National Symposium, 2002, p. 14). Examples of networks providing social and academic interpersonal support include mentoring relationships between students and program advisors, administrators, tutors, faculty members, or working professionals; supportive relationships between members of a student cohort; and support of students from family members or friends (Blankenship, 2010; Gasbarra & Johnson, 2008; Hassinger & Plourde, 2005; Rivera-Goba & Nieto, 2007; Rudel, 2006; Seymour & Hewitt, 1997).

The Spanish-English Nurse Education Program (SENE) was created in Phoenix, Arizona by faculty members and administrators representing two community colleges and a local hospital system to help meet the regional need for bilingual nurses, part of a concerted national effort to recruit bilingual students into licensure programs for nurses (Barton & Swider, 2009; Lujan & Little, 2010; Vogt & Taningco, 2008).Students in SENE take general education and nursing classes that allow them to earn an Associate Degree in Nursing (ADN) from the community colleges involved in the program, as well as gaining certification as Nursing Assistants (CNA)and licensure as Licensed Practical Nurses (LPN) or Registered Nurses (RN), all within three years of starting the program.

SENE purposefully incorporated some of the elements shown to help bilingual students succeed, such as establishing cohorts of students who work through the program together, encouraging study groups, employing a bilingual program advisor, monitoring student progress, and implementing a mandatory tutoring program. While SENE's incorporation of these

elements was hypothesized to increase the success of bilingual students in the program, limited data existed on the exact effect these features might have on student retention and overall success (Colorado Commission on Higher Education, 2007; Garcia, 2010; McCarey, Barr, & Rattray, 2007). The purpose of this study of SENE was to determine which program features promoted student success, so that proper funding and emphasis could be placed on those components, both for the SENE program and other college level bilingual nursing programs that might help alleviate the bilingual nursing shortage.

Methods

Research Design

In order to best review SENE program features, this research employed a utilization-focused, mixed-method evaluation, a type of evaluative study described by Patton (2008, p.37) as beginning "with the premise that evaluations should be judged by their utility and actual use", and ending with a holistic and relevant view of the effectiveness of program activities (Fitzpatrick, Sanders, & Worthen, 2004; Portney & Watkins, 2000). In order to make this research useful to the SENE program and to best evaluate the program's effectiveness, we began the study by discussing program features with those most closely connected to the program. These major stakeholders included the SENE program director and advisor, current SENE students, and the SENE advisory committee (including administrators, instructors, counselors, and a nursing liaison from a local hospital). The views of these stakeholders were sought and considered throughout all stages of the study, and their feedback improved the usefulness of the study to these stakeholders. This interaction with SENE stakeholders also improved the study's validity by identifying erroneous assumptions, other likely interpretations, and other possible errors (Creswell & Clark, 2007; Gay, Mills, & Airasian, 2006; Patton, 1997). The mixed methods employed for this paper were primarily qualitative, and included a survey, seven individual interviews, and two group interviews, one with three students and one with four students. Quantitative data related to student persistence in the SENE program was also collected but has been published previously (Bosch, Doshier, & Gess-Newsome, 2012).

Participants

The focus of our evaluative study was to document as directly as possible the experiences of the SENE students themselves without filtering information through others. The participants, therefore, included current SENE students who took a survey and current SENE students who were interviewed about the program. One hundred two surveys were distributed to SENE students within their classrooms and by mail for students doing their clinical rotations. The surveys were anonymous to protect privacy and encourage forthright answers from participants. The questions asked the students about sources of personal and academic support, the presence or helpfulness of mentors, and the role of the student cohort and faculty members in the students' success. Institutional Review Board approval for this entire study was granted from the SENE community college district and from the university where the authors were working.

To recruit students for interviews, all students participating in the three year SENE program were invited by email to be interviewed and those who volunteered to take part received a token gift card. The study included 45-90 minute interviews of 14 current SENE students (twelve females and two males), reflecting the preponderance of females in the program. Each year of the program was represented by about the same number of students (either four or five). Students identified as first year students were taking Certified Nursing Assistant courses, as well as various prerequisite courses such as Human Anatomy and Physiology and Microbiology. Students identified as second year were taking Practical Nursing classes, and those identified as third year were taking Registered Nursing classes. Student interviewees also varied in age, temperament, academic level, and economic situation, allowing a variety of voices to be heard. The interviews questioned students about interpersonal relationships, especially the personal and academic support they were receiving while in the SENE program. Five students contacted the principal investigator after the interview with further information they wanted to share.

Before each interview, the interviewee read and signed an Informed Consent Document (ICD), the content of which was also explained by the interviewer. Interviewees also had time to ask questions about the ICD before the interview began. Confidentiality for this study was maintained by conducting interviews in a private room, making surveys anonymous,

keeping all recordings and transcripts in a locked location, and removing names and other identifiers from interview results.

Survey and Interview Analyses

The anonymous surveys about interpersonal relationships and student support provided both descriptive and quantitative information from current SENE students. The survey asked students for their most important sources of interpersonal support (non-financial) and asked them to describe other important sources of interpersonal support. Students were also asked who or what helped keep them on track in the SENE program. Students supplied all answers to keep their responses open ended. For one or more of these three questions, some students wrote more than one answer; all answers were included for analysis. Information gained from these surveys was also valuable for directing the interview process that followed. Interview questions were used to expand on the survey responses, allowing the interviews to clarify points and further explore thoughts and feelings presented by the surveys.

Interviews were recorded and later transcribed using voice transcription software. Interview responses were then grouped according to the type of interpersonal support being described. The interviews with individual students and with the small groups of SENE students were a rich source of evaluative data and permitted face to face contact with these key program stakeholders (Dilley, 2004). The interviews allowed for the direct clarification of questions about the SENE program with follow up to responses as needed. The group interviews allowed for interactions among students as they answered questions, revealing differences in thoughts and opinions, and allowed for discussion and elaboration of shared experiences.

Results

Survey Responses Regarding Interpersonal Support

Surveys were completed and turned in by 49 SENE students (of the 102 who received them). Table 1 presents the most common sources of interpersonal support for the SENE students, as expressed on the 49 surveys

submitted. In this table, individual responses were combined into categories so that results could be discussed in terms of categorical responses.

Table 1
Sources of interpersonal support of SENE student: condensed categories.

Factors	Most Important Source of Interpersonal Support	Other Source of Interpersonal Support	Factor Keeping Student on Track in Program	Total Responses for Each Factor
Family: Spouse, Parents, Children, Siblings, Relatives	43*	36*	12	91*
Peers: Cohort, Classmates, Friends, Significant Others	17**	28**	17**	62**
Self	2	6	19*	27
Institution: Faculty/SENE Library/Counselors/Tutors	2	4	9	15
Community: Employer/ Co-workers/Church members	1	2	1	4
Total Responses for Each Category	65	76	58	199

Note: Total responses for each category differ because of multiple responses per question. N=49
* most common response for category
** second most common response for category

Support from Family Members

Table 1 illustrates the importance of family support for the SENE students, with 66% of the responses (43/65) listing family or a family member as the

most important source of interpersonal support. Within this category, spouses were the most commonly chosen single source of interpersonal support (40% or 17/43), especially significant because somewhat less than half of the respondents were married. Peers were also named as important sources of support in all three categories of support, making up 31% of the total responses (62/199). When asked about key influences for keeping themselves on track, 33% of students (19/58) said that they were personally responsible, the most common single response. Family and friends played key roles in supporting student success in the program while institutional features such as the SENE advisor, faculty members, and any mentoring by SENE staff played a lesser role.

   Interviews with the 14 SENE students from the three different years of the program allowed for elaboration on personal and emotional sources of support, and provided more information on what kept students on track in the program. Some interview results supported information provided by the survey, as when many of the interviewees noted that their family, whether it was spouse, children, parents, or siblings, acted as "prime modes of motivation and encouragement," a description given by a second-year student. Many students felt like family members encouraged success in the program, as when a first-year student said that her husband was always asking her: "do you have studying to do?" and encouraging her to study often. A third-year student said that even though her extended family lived in Colorado, "they encourage me over the phone."

   Family members also lent their support by taking over certain family duties from the SENE students, who were facing intense class, clinical, and study schedules that often interrupted family life. A second-year student described the situation as follows: "Going back to school put my family schedule upside down ... so my husband became mommy and daddy, [with] a lot more tasks ... its hard; studying nursing doesn't really stop when I reach home." Students noted that needed support goes beyond the nuclear family, with mothers, brothers, sisters, and various in-laws taking on roles to help students focus on their nursing studies. A first-year student explained that she needed more help than her husband alone could supply: "My dad and my husband's side of the family have also been supportive ... my family lives nearby [and] they're willing to help with chores and things like that."

A first year student was crying as she described the support she was receiving from her family,

> It's taken my family awhile to adjust to the fact that I'm in school again. My son is five so he doesn't really understand the whole idea of homework. He will see me home ... and say, are you doing homework again? It's hard. It's an adjustment for everybody. Not just me, but everyone that's surrounding me. [My son] goes to preschool in the morning and then my mom watches him; if I have to do things in the afternoon or evening or in the weekend, then it is my husband who watches him. My mom is my hero ... if she could not watch him I don't know what I would do.

Support from a sibling was noted by a second-year student who said: "my sister is doing very well... so she helps me take care of my children when I'm working or I come to school or something. So I have time to study." Another student noted: "I have a brother in the program ... a year ahead ... If I have questions, I just call him and ask him. He's kind of my mentor for the program." A first-year single mother noted: "My family is very proud of me. My sister, she helps me. My brother-in-law, he helps me."

Even though most students found it helpful for family members to take over family duties, a number of students mentioned that they were not totally happy with the situation. A first-year student stated "I miss quality time with my kids" and a second-year student said sadly: "At home my family supports me by sacrificing time with me." Another second year student was upset about the lack of support she received from her husband, stating that "for anyone who has a relationship - either husband or boyfriend – [this] program is either going to make you or break you." The program had led to marital problems because she did not have time to fulfill what she described as the traditional role of a Hispanic wife, such as cooking, cleaning, and caring for her daughter. She drew strength, however, from her desire to show her daughter that she could make it, and thought her daughter made straight A's in school because of seeing her mom work so hard. She also drew heavily on her own inner strength. She said she had to tell her husband "I am going to do this with you or without you!"

In fact, despite the key role of families in supporting the SENE students, this student's ultimate dependence on her own strength and motivation to get through the program was mentioned by about half of the students interviewed. This result also reflected in the large number of survey participants who chose "self" as the one who kept them on track in the program. When asked who supports her most in the program, another second-year student noted: "I think it's me; I'm thirsty for this" and a first-year student noted "It's me who has to get out of bed in the morning and get going."

Support from Cohort and Classmates

Peers were named by survey respondents as the second most important source of interpersonal support (Table 1). In addition, the survey showed that peers were the second most commonly named factor keeping students on track within the program. The exact source and nature of this support was made clearer by subsequent interviews. When students discussed how they stayed on track in the program and did what was needed for each class, they most often talked about support from their entire cohort, all the SENE students that started at the same time and went through the program together. But when asked for specific instances of support, they usually named a smaller group of friends or study partners, who helped them day by day with classes.

While interviews helped to clarify the idea that family support from home was more general and emotional, even the most supportive spouse or family member could not usually help with classroom assignments and studying. Help at school, in contrast, was described by a second-year student as coming from "the ones that sit next to you in class ... we help each other out in understanding the material and studying." Several students mentioned that they received help from others but also learned the material better as they talked about ideas and explained or taught concepts to each other within the study group, as demonstrated by this quote from a third year student: "For me, my third way of learning is by teaching."

The SENE program director helped set up small study groups within each year's cohort from the first time that the students met, and emphasized the importance of meeting on a regular basis. Based on interviews with students, this advice was followed. First-year students often used their study

groups starting on the first day of class: "You find a group of people - you become team players - they are your team - they help you a lot ... you go into the library [and] function as a group." These groups remained important through the end of the program, as expressed by this third year student: "We put everything together and we learn from each other ... what he has studied and what she has studied and decide what we should study." A first year student noted, "If we know someone is absent, we take good notes and we ask for a copy of the assignment to give to them." Many students say they would not have made it without the help and support from their study group.

The study groups themselves were usually made up of students of similar backgrounds and family situations (e.g., single females, those married with children, older adults, those born in Mexico, etc.), as noted by this third-year student,

> Everyone has different things in their life. We are not able to study at the same time they can. Or they say they can't do it - they have kids at home ... where for us we can do it. We say: "Let's meet at this time and this place" and we are able to do it.

A second-year student said her group was made up of adult learners with families, often starting a second career in nursing,

> We have other responsibilities, [so] we share strategies; I just think it's a personality thing in each group. I think we're a great support, and also you have a little bit of peer pressure ... you hear "what's going on in this class - I missed it." And you need to know how to answer ... otherwise it looks like you don't know what you are talking about.

Despite the frequent division of the cohort into like-groups, one student noted that an older cohort member was like a mother or mentor to her, helping her and keeping her on track.

SENE students felt that friends within the cohort and study groups were very empathetic and understanding, as reflected by this second-year student, "We understand the stress we are going through, where some [outside] friends will say 'Come to happy hour, just one hour,' [but] classmates say: 'A happy hour sounds good, but we have two tests

tomorrow.'" The study groups often met in the learning center study rooms, in the cafeteria, or in the college library. A third-year student said his group met "anywhere away from my nephews and brothers and sisters ... they don't allow me to concentrate and read." The study groups were cohesive and students helped each other with both practical and emotional needs, everything from time management, to motivation, to getting out of a depressed mood, as explained by a first-year student,

> Just the other day, one of the girls called me in. She was not doing too well. She was crying because she thought she couldn't do it anymore. I helped her - I encouraged her - we encourage each other actually, and she said: "You know what, it really helped me to talk to you about this - I feel much better." So we are all giving each other a hand. So one is leaning and the others [are] probably pulling from behind but we are all helping each other to stay in the program ... if we slack off, we say: "Hey, you're slacking off - how come you haven't been coming to class?"

This sentiment was echoed by another first-year student, who said, "We hold each other accountable. We always function like that." Another first-year student noted: "Our group has begun in such a short period of time to bond together. This encourages me to keep going on, knowing that my peers are here to support me." A third-year student commented: "the other students ... going through the same thing ... keep giving you motivation." Another third-year student emphasized this point as follows, "We have times when we really feel that we're not going to make it. So we try to support each other and say, 'Okay, we can do it,' and try to focus on what we want. We are in it together."

One third year student who did not work regularly with a study group described a bad initial experience with her group: "[There were] a lot of distractions ... and a lot of personal talking and not focusing on the material… it was taking from my time when I could have been studying and focusing." But this student said that despite these initial problems, she did end up meeting with her study group before exams, which helped her stay focused on the material. A first year student could only meet with her study group briefly on campus because of family obligations, but said, "While we're here we try to help each other out as much as we can - over

the phone we will call each other and say, 'what do you think about this?'" A third-year student made the point, "It doesn't work if there are too many people - we may have different learning styles. We try to keep [the groups] condensed."

Faculty and Staff Support and Resources

Only two of the 49 surveys mentioned a faculty or staff member as a possible mentor, and these comments were qualified with "acts like a mentor," rather than saying that the faculty members were their mentor. The survey also revealed that students were helped by faculty who "answered questions" (5 responses) and motivated, advised, or mentored them (4 responses). The subsequent interviews helped to further clarify the students' thoughts about the role of faculty and staff members. For example, none of the 14 interviewees felt that a faculty or staff member acted in the role of a mentor, or was personally very supportive to them. When asked directly about the effect of instructors, students did express positive experiences with those faculty members open to questions and fully supportive of the educational needs of students. Several students said, "Faculty members want you to succeed." Students were glad that their instructors were knowledgeable about SENE, were willing to fill out the SENE grade and performance tracking sheets, and shared their experiences related to nursing whenever possible. The students also found instructors to be culturally sensitive, explaining for example, what "tic tac toe" meant to a foreign born student and how it related to the regions of the abdomen. Students praised instructors that seemed to understand the students and "did not make us feel dumb." A second-year student said, "I have to do good - just out of respect because [the instructor] is awesome [and] teaches us so hard. He just wants us to be successful and to learn."

Professors deemed supportive were described by a second-year student as "approachable ... open to any question ... if I don't understand, he might draw something." Another student made the comment that even when she hears an instructor sigh she is glad that she can get an answer and learn. Supportive professors "had their doors open and answered questions sent by email." A third-year student felt supported by an "open" professor who "helped me understand my objectives and how I should apply them to my studies." The small college feel of the community college was reflected in

the caring faculty members who were described as "compassionate, understanding people" by a first-year student who had recently had a family tragedy. Less favorable interview comments about faculty members were directed at those who seemed uncaring, could not explain or apply their subject well, used PowerPoint lectures without explanations, or were unwilling to answer questions or work through challenging material.

The interviewed students did not feel that they received strong support for their success outside of family and friends. The SENE director and advisor were not viewed as mentors or personally supportive. This may have been in part because students felt it was difficult to approach the program advisor or director or to schedule a time to talk. One student, however, said the director saw him on campus and said that he could come to his office if he needed anything. The student commented, "it's good to know there is an open door, you can go to them." The SENE advisor registered students for classes, monitored grade tracking sheets, and organized monthly "retention meetings," with various topics deemed helpful to students, but the advisor was not viewed as emotionally supportive. Virtually all students found the retention meetings to be a source of stress rather than support, disruptive to work and study time.

A monthly tracking sheet was used by the SENE advisor to detect academic problems. A second-year student thought tracking sheets probably "promoted motivation and accountability," but said she was not contacted when she earned a "C". A third-year student said that when she got a "C" on the tracking sheet, she was asked to go to a nursing tutor, but that the tutor was not available. Several students said they did not feel supported by the program advisor and felt like the program needed more personnel to perform the job effectively. One first-year student said, "They need a bigger staff ... there's been a bunch of mistakes and misunderstandings, 'Oh, I forgot to register you for this' or 'Oh, I forgot to do this for you'." Others felt that it was difficult to get correct information from the SENE staff and worried about missing information.

The most positive comments about institutional support were made in regard to the Student Learning Center at the college, where students received tutoring and used resources such as nursing texts, study helps, CDs, DVDs, and laboratory models. A third-year student said: "I think one of my greatest experiences was with the Learning Center. The person there is great – she has done a lot of research for us ... We use the materials that

she got [for us]." A second-year student agreed: "The Learning Center has a book with practice questions that allows us to practice for the HESI [a standardized nursing test].She has the care plan books also."

Discussion

This study attempted to identify factors that helped Hispanic bilingual students to be successful in a college level nursing program. Through the use of a survey and structured interviews, we found that family members, especially spouses, and cohort and study group members played the most significant roles in personally and academically supporting these students. Spouses and significant others were also the primary form of support found by Rudel (2006) when he interviewed and observed Hispanic college students. Similarly, both Seymour and Hewitt (1997) and Tinto (1999) noted the key role played by family and friends in keeping minority college students from dropping out of science-intensive programs.

In addition to the importance of family support, the SENE cohort members felt that they were part of a supportive group that provided key academic and emotional help during times of stress and academic crisis. They also felt comfortable and safe within the group, and enjoyed the fun, friendship, and social activities generated by these close-knit groups of students. Laden (1999) and Padron, Waxman & Rivera (2002)pointed out that Hispanic students often feel more comfortable working as part of a social unit than as individual competitors. Chang et al. (2011) found that minority students within peer networks were more likely to persist as biology majors through their undergraduate programs. Gasbarra & Johnson (2008) listed study groups as an important part of a successful Latino student's college experience. Tinto (1999) found that academic and social support was a key condition needed for student retention in college, and based on our findings this support was found within the SENE program. Micari, Streitwieser, & Light (2006) described important social and academic networks that were cohort based, networks that aided student success in many ways. The study groups and cohorts of the SENE program functioned in a similar way, supporting the participating students both emotionally and academically. Drane et al. (2005) purposely set up networks of students to improve performance in introductory mathematics classes. The SENE program was also proactive in setting up study groups

early in the program, an important component of student success according to the respondents.

Interestingly, current SENE students also expressed the feeling that they were responsible for keeping themselves on track, a finding not commonly explored in the literature. Bliss and Sandiford (2004) explored traits of students that aided their success in community colleges, such as feelings of self-efficacy and the ability to manage time, feelings, and skills, all important skills for SENE students as well. Students recognized the importance of their own motivation and determination in keeping them on the right path toward completion of their nursing education, and that ultimately they were in charge of their own success.

Although faculty members often played a significant positive role in the education of SENE students, they were not thought of as sources of personal support, and only two survey responses mentioned a professor as a possible mentor. Instructors who had good relationships with students and were open to answering student questions were respected and thought of as essential for successfully learning content. Although Bensimon (2007), Cejda and Rhodes (2004), and Velez-McEvoy (2010) noted the important role faculty played in supporting student progress through college, Bensimon found that faculty members were not part of that inner circle of personal and emotional support for students, a situation also observed among students of the SENE program.

SENE staff did not set up mentorships or provide much interpersonal support, unlike a number of Hispanic science programs that focused on mentorships with community members, faculty, or program staff (Laden, 1999; Rivera-Goba & Wallen, 2008; Thacker, 2005). Many SENE students felt that although program staff helped them with the logistics of staying on their educational pathway, the program could be improved with greater support from SENE staff. Students did feel well supported throughout the program by the campus student learning center, an easily accessible area for general student support, resources, and tutoring. This type of local academic help was shown to significantly improve student success at state universities in Georgia and California (Blankenship, 2010; Buchbinder, 2007).

Some limitations of this study should be acknowledged. This part of our study of SENE was primarily qualitative, using the voices of those interviewed and the writings of those who filled out the survey. We did not

interview all of the students, and the responses obtained were not suitable for statistical analyses. However, in spite of these limitations, the use of qualitative methods of data collection provided valuable insight that quantitative methods did not provide. In particular, it is clear that the SENE program was successful in promoting two program components that played key roles in the success of students in the program. Specifically, the program administrators intentionally formed cohorts of students who went through the program together, taking the same classes and facing new challenges as a cohesive group. Secondly, SENE promoted the early formation of smaller study groups within the cohort that focused more specifically on academic challenges and provided more intimate emotional support during times of seeming crisis. The importance of a supportive family environment, another key element of success as expressed by our student participants, was not a specific component of SENE.

Conclusion

This study provides important and significant information for those working to help Hispanic students be successful in science related college programs, especially in nursing. Although much has been written about the challenges faced by Hispanic students in undergraduate Science, Technology, Engineering and Mathematics (STEM) settings, the voices and writings of students in nursing programs have rarely been heard. The results of this study support the idea that for Hispanic college students, family and classmate support played an important role. For this cultural group in particular, therefore, peer networks should be promoted and proactively developed as an integral part of developing a health science curriculum. While the creation of a supportive family environment was not a specific component of the SENE program, finding specific ways to encourage family involvement and commitment, such an orientation session on the valuable support role of student spouses and family, may have positive effects on student success for future programs.

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