Internal Research Awards Program Application

Date:

To: Faculty Development Review Committee

From:

Rank:

Affiliation:

Purpose of Leave: Research/Creative Activity

Requested Percentage: Release from all ordinary faculty responsibilities for one semester of 2009-2010 academic year, with Full Pay.

Previous Leaves:

Year of Appointment at Loyola:

Non-technical summary of proposed activity:

School drop-out affects youths of all ethnic groups, but it is particularly problematic for Latinos. A 2004 analysis of census data conducted by Hull House and Loyola University Chicago's Center for Urban Research and Learning concluded that Latino youths in the state of Illinois have the lowest graduation rates of any ethnic group. In metropolitan Chicago, 37% of Latinos 25 years of age and older do not have a high school education. While most studies of Latino dropout have primarily utilized samples from under-resourced, inner city schools, less is known about what factors may influence dropout and persistence in Latinos who attend more affluent, suburban schools. Yet, it is the underperformance of many Latinos and other ethnic minorities that has caused many traditionally "high-achieving schools" to earn probationary status vis-à-vis No Child Left Behind criteria. Identifying factors that may prevent Latino dropout in a variety of school settings is vital to developing strategies to combat the problem. The proposed project consists of two phases. First, it is critical to identify the reasons students stay in school when they may be statistically "at risk" for dropping out. Some of these reasons may be psychological while others may be familial or school-related. Survey research with students early in their high school experience, before dropout is at its peak, will illuminate these reasons. The second part of the project is the development of interventions aimed at keeping Latino youths in school. From the data collected, it will be possible to design programs for students, their families, and/or school personnel that promote factors associated with school persistence. The overall goal of this project is to assist Chicagoland schools to increase the numbers of Latino students who graduate from high school.

Technical description of project:

Educating our nation's youth is a priority of politicians, policy makers, and parents in every community. Yet, despite widespread agreement on the importance of education, school districts nationwide struggle with chronic disparities in educational outcomes. For this reason, education and psychology professionals have paid a significant amount of attention to the problem of school dropout. This issue demands attention not only because of the limited vocational opportunities associated with school dropout (De la Rosa & Maw, 1990), but also because of its societal impact. Research has established relationships between dropout, criminal activity (Harlow, 2003), and teenage pregnancy (Coley & Chase-Lansdale, 1998). Thus, preventing school dropout will impact the quality of life experienced by families and it will benefit society as a whole by lowering the costs associated with widespread dropout.

While school dropout affects youths of all ethnic and racial groups, it is particularly problematic for Latinos. A 2004 analysis of the most recent census data conducted by Hull House and Loyola University Chicago's Center for Urban Research and Learning (see www.hullhouse.org/gap) concluded that Latino youths in the state of Illinois have the lowest graduation rates of any ethnic group. Thirty-seven percent of Latinos 25 years of age and older in metropolitan Chicago do not have a high school education. In Chicago's inner city schools, it is not uncommon to see graduation rates of 40% for Latino boys and 60% for Latina girls (Harvard Civil Rights Project, 2004). Since Latinos represent 15% of the U.S. population and have an increasing presence in not only inner city schools, but also rural and suburban districts, creating a database that will allow school professionals to increase the number of Latinos who graduate high school is a timely endeavor.

Summary of the Literature

Scholarship on the phenomenon of school dropout has been fairly robust over the past 25 years. The majority of this research has identified a large number of correlates of dropout. For example, studies that examined "risk factors" of school drop-out have documented its relationships and the following variables: poverty, low parental educational level, low parental involvement in their children's education, poor sense of school belonging, failed grade promotions, lack of participation in extracurricular activities, and sibling drop-out (see Trusty & Dooley-Dickey, 1993). As research in this area has progressed, studies have attempted to quantify which risk factors might be the strongest predictors. One more recent, large-scale investigation of dropout (Battin-Pearson, Newcomb, Abbott, Hill, Catalano, & Hawkins, 2000) found that academic failure accounted for the greatest amount of variance in school drop-out, suggesting that once children begin to show signs of academic struggle, their likelihood of staying in school and eventually graduating drops significantly.

Most recently, studies such as that of Suh and Suh (2007) have begun to use newer statistical techniques to examine the impact of exposure to one or more risk factors. Data from this study revealed that as students accumulate risk factors, they become more likely to drop out, and the utility of potential intervention efforts becomes more limited. For example, the authors calculated that the dropout rate for students with exposure to one risk factor is 17.1%, whereas the rate for students exposed to two risks is 32.5% (a 90.1% increase). The dropout rate for students exposed to three or more risks is 47.7% (a 178.9% increase). Considering that

many Latino students who drop out of school are often exposed to multiple risk factors, early prevention and intervention efforts are highly recommended by these authors.

For as important as it is to understand the relationship between risk factor exposure and dropout, a consideration of the impact of protective factors, or factors which might protect youth from the impact of risk exposure, is equally if not more important. Research on resiliency (Werner & Smith, 1982), has established that some individuals are capable of not only overcoming exposure to risk factors which might impede their development, but in fact thrive despite this exposure. In their landmark study of "at risk" youth in Hawaii, Werner and Smith found that despite exposure to risk factors such as poverty, single-parent families, abuse, and neglect, there was a significant percentage of children who grew up to be asymptomatic, successful adults. This group of children, however, reported the presence of specific protective factors in their lives, most notably the presence of at least one caring adult, which seemed to buffer or moderate the impact of risk factors in their environment.

In the school dropout literature, far fewer studies have sought to identify specific protective factors that might predict school persistence in the face of risk exposure. Even fewer studies have examined these issues in Latino samples. Those studies that have included Latino student samples have appeared in the literature within the past decade. For example, Chin and Kameoka, (2002) found that Latino students' sense of academic self-efficacy, or confidence in one's ability to be successful academically, was highly related to both academic motivation (i.e., a desire to excel academically) and school retention. A related study found that academic self-efficacy can be greatly influenced by the presence of a supportive role model and family

support (Guttman & Midgley, 2000). School belonging, or a sense of membership in one's school, has also been found to be related to staying in school among Latinos (Davidson Aviles, Guerrero, Howarth & Thomas, 1999). While these studies have documented the relationship between specific protective factors and school persistence, there is still a need for researchers to examine the potential of protective factors to moderate the relationship between risk factors and school dropout in Latinos.

The proposed study will focus on whether the presence of protective factors, individually and in combination, will moderate the relationship between well- established risk factors and school dropout in a sample of Latino youths. The obvious advantage of identifying such factors is that it facilitates the development of school-based interventions that might increase the presence of these variables in the lives of "at-risk" Latino youths. The field's ability to develop such interventions is one of a number of strategies that are key to increasing the graduation rates of this population. In addition, social scientists and educational researchers should be equally concerned about the amelioration of risk factors. However, eliminating risk factors such as poverty or parental under-involvement are more challenging tasks for practitioners who work with Latino youths in school settings. Often it is larger systemic factors that result in the maintenance of such risk factors and as such, advocacy with legislators is necessary to bring about long-term change. Nonetheless, identifying protective factors and developing more immediate interventions that prevent Latino dropout is vital to combating this important social problem.

Research Questions

The purpose of the current project is twofold: (1) to identify specific factors that may lead to greater educational persistence in Latino youths who may be considered "at-risk" due to their exposure to risk factors associated with dropout; and (2) to design and implement interventions in participating schools based on those data. The primary research question of this project is to test whether the relationship between risk factors and the likelihood of dropout can be moderated by the presence of protective factors. Specifically, (1) the availability of role models and social support networks, (2) the presence of a strong sense of school belonging, and (3) having high levels of achievement motivation, and (4) academic self-efficacy will be examined as potential moderators of the relationships between students' intentions to stay in school and 4 known risk factors: (1) parental education, (2) parental involvement in their child's educational experience, (3) grade retention histories, and (4) skepticism about the relevance of school.

Methodology

Research Participants

The current study will sample a group of approximately 1000 Latino freshmen and sophomores (9th and 10th graders) in several high schools in the Chicagoland community (East Aurora High School, Lakeview High School, Highland Park High School) that have graduation rates below the State average for this subset of students. All participating schools are also on "academic watch status" due to their failure to make adequate yearly progress for two years after being placed on an "early watch status." Schools that have been invited to participate

also represent diverse geographic contexts. Each school has a significant Latino population but also has distinctive characteristics that will allow for context-specific patterns to be analyzed.

All enrolled freshman and sophomores will be asked to participate and those who return parental consent forms will be allowed to do so. The reason that 9th and 10th graders were selected as participants for this study is that previous research has found this to be the most vulnerable time for students in regard to their likelihood to dropout of school.

East Aurora High School is a suburban high school that has a 79% Latino student enrollment and a total school population of 2700. Highland Park High School is a Northshore suburban high school that has a 15% Latino student enrollment and a total school population of 1900. Lakeview High School is a Chicago Public School that has a total student body of 1500. The percentage of students who are Latino is 53%. Having students from each of these schools participate in this research will allow for analysis of differences in patterns that may exist between Latino students who are part of the ethnic majority at their school versus kids who are part of the ethnic minority at their school. While there are also significant socioeconomic differences that exist between the Latino and non-Latino students who attend Highland Park High School, fewer such differences exist between each of the Latino samples. In the Lakeview High School and East Aurora samples, there are fewer socioeconomic differences between Latino and non-Latino students at the schools.

Procedure

Procedure

The first stage of this project will involve securing the participation of the schools, discussions which are currently underway. The incentives to participate for the administrators of these schools are twofold. First, once data are collected and analyzed, each school will have information that will assist in understanding the reasons that their Latino students may be motivated to stay in school or be tempted to leave school. Second, based on the outcome of the analyses for each school, preventive interventions aimed at students, parents, and school personnel will be designed and delivered to participating schools in the subsequent school year by the primary investigator and Loyola graduate students.

The primary methodology of the study portion of the project will be survey research where participating youth will be asked to respond to measures that detect the presence of risk and protective factors. In 2006-07, a pilot study was conducted with 100 Latino students at Highland Park High School aimed at developing the survey to be used in the proposed project.

Several incentives will be proposed to promote the individual participation of students. For example, students may be given gift certificates for completed surveys (or other incentives such as a pizza lunch). All students, regardless of whether they complete surveys, will be eligible to attend subsequent programs offered by Loyola personnel, which may serve as another incentive to be involved in the overall project. Parental permission will be required for students who wish to participate. In order to maximize the potential number of signed permission slips (i.e., consent forms), permission slips will be given to parents during Fall Open Houses or Orientation sessions.

The survey itself will be administered either during the school day at a time when students are not involved in academic activities (e.g., lunch or free periods) or after-school, depending on the preference of the individual schools. Loyola graduate students and the primary investigator will be in charge of the administration of all surveys.

Survey Instrument

1. Demographic Questionnaire: Students will be asked to report basic demographic information including their age, gender, ethnic background, family size, generational status, grades, history of grade retentions, employment status, and parents' highest level of formal education.

2. The Psychological Sense of School Membership (Goodnenow, 1993) is a five item measure that assesses the extent to which students feel accepted, respected, and included in their schools. The internal reliability on this measure in past studies was found to be .78.

3. Academic Motivation (Goodenow & Grady, 1999) will be measured by a six-item scale that assesses the importance that students attribute to academic schoolwork. In past studies, this measure has been found to have an internal reliability estimate of .81.

4. Academic Self-Efficacy (Midgley, Maehr, Anderman, Freeman, Kaplan, Kumar, Middleton, Roeser, and Urdan, 1997), or students' perceptions of their competence to do their school work, will be measured using 5 items from the Patterns of Adaptive Learning Survey. This scale has been found to have internal reliability estimates of .77 in past studies.

5. Vaux Social Support Scale (Vaux et al., 1986) will be used to measure support received from family, school personnel, and peers. This measure has been found to have an internal reliability estimate of .80 in past studies.

6. Role Models. The presence and availability of role models will be detected with a three item instrument originally used by Nakkula et al. (1990).

7. Skepticism about the Relevance of School for Future Success (Midgley et al., 1997) will be measured by 6 items that assess the extent to which students believe that academic success is related to their future overall success. This scale has been found to have an internal reliability estimate of .83 in past studies.

8. Parental involvement will be measured with 10 items developed by Eccles and Sameroff (1991) which probe how often parents are involved in activities ranging from helping with homework to attending school activities. This scale has been found to have an alpha of .75 in past studies.

9. Intention to Complete High School and return to school will be measured with 4 questions that directly probe participants' perceived likelihood to continue with school and ultimately, graduate from high school (e.g., One of my goals is to finish high school). These items have been designed by the investigator and will be piloted to determine their reliability and face validity.

10. Enrollment in sophomore or junior year will be assessed from school records the Fall after the initial data collection. Because students who have not enrolled for the following school year

may have transferred to another school, such students will not be counted as having dropped out. A confidential way of obtaining this information will be discussed with each school administrator and the ultimate procedure (e.g., assigning code numbers to students) will be disclosed in the consent forms.

Data Analytic Strategies

The primary statistical analyses used in this project will be multiple regressions that will follow the recommendations of Frazier, Tix, and Baron (2004) for detecting moderator variables. Intention to complete high school, intention to return to school, and re-enrollment in the following school year will serve as the outcome variables. Academic motivation, social support, role models, academic self-efficacy and school belonging will be the protective factors under examination and parental involvement, parental educational level, skepticism about the relevance of school, and a history of grade retention will serve as the risk factors under examination. Interaction effects will be examined to determine whether the protective factors moderate the relationship between risk factors and school dropout. Analyses will look at both the individual ability of a protective factor to moderate the effects of risk factors and the cumulative effects of protective factors in groups.

In addition to examining the moderator hypotheses involving protective factors, data will be analyzed for gender, generational status, and other relevant demographic differences that might exist between the relationships among the primary protective and risk factor variables. The detection of such within-group differences could be useful in tailoring specific dropout prevention programs that will be designed from the data.

Investigator Qualifications

For the past 20 years, I have been involved in providing services to Latino populations in the Chicagoland area. At the end of my graduate school training, I moved to Chicago and worked as a psychology intern at the University of Illinois Chicago where I provided counseling and psychotherapy to Latinos residing in the Pilsen and Little Village neighborhoods. After beginning my appointment at Loyola and receiving my license as a Clinical Psychologist, I began to both provide school-based psychological services and conduct school-based research in the Edgewater neighborhood at Helen C. Peirce Elementary School, a Chicago Public School. The school is predominantly comprised of Latino students, many of whom are members of immigrant families. At that time, I began a 14 year relationship with Peirce School which has afforded me numerous opportunities to develop an expertise in working with Latino students. Additionally, I have had ongoing opportunities to involve my graduate students in providing psychoeducational interventions with the 7th and 8th grade students. I also routinely work with teachers and parents as a part of my work with this school.

In 2007, I began work with xxx on a grant from the Department of Education, Office of English Language Acquisition, entitled, "Chicagoland Partnership for English Language Learners." The primary purpose of the grant is to enhance the educational experiences of immigrant students, among whom many are Latino students. My main role in the project is to assess the relationships that parents have with the schools, to determine how involved they are in their children's educational experiences, and to develop and offer parent workshops aimed at maximizing their involvement. For the grant, my main focus will be on elementary aged

children and their families. For children of this age, promoting school engagement and academic confidence is an important aspect of long-term school success. The main difference between my work on the grant and the proposed leave project, however, is that I will be accessing a different population of kids who are more developmentally advanced in the educational pipeline. The students who are the target of the proposed leave are much more vulnerable to the risk of dropout.

Through my ongoing outreach, service, and applied research with Latino middle school students and my current involvement with immigrant elementary school students, I believe I have gained a great deal of valuable insight about doing research and providing service in the schools. While attempting to intervene to prevent dropout is something I have not specifically targeted in the past, I have engaged in many prevention activities that are aimed at enhancing personal and academic well-being. Furthermore, I have published widely on topics related to prevention with urban, Latino youth. Currently, I have 17 journal article published on this topic and I have co-authored 18 book chapters in this field. I believe that I have a good track record of successful collaborative relationships with schools and community samples and I have engaged in high quality scholarship that has been published in well-read outlets.

Conclusion

The data from this study will be vital to both the design of dropout prevention programs that can be implemented in the schools and policy decisions aimed at maximizing graduation rates. The data will also be important to designing culturally relevant models of school persistence, currently absent from the extant literature. The schools involved in this research

will be the direct beneficiaries of the information gleaned in this study through the ensuing interventions that will be delivered.

References

Battin-Pearson, S., Newcomb, M. D., Abbott, R. D., Hill, K. G., Catalano, R. F., & Hawkins, J. D. (2000). Predictors of early high school dropout: A test of five theories. *Journal of Educational Psychology, 92*, 568-582.

Chin, D. & Kameoka, V. (2002). Psychosocial and contextual predictors of educational and occupational self-efficacy among Hispanic inner-city adolescents. *Hispanic Journal of Behavioral Sciences*, 24, 448-464.

Coley, R. L. & Chase-Lansdale, P. L. (1998). Adolescent pregnancy and parenthood: Recent evidence and future directions. *American Psychologist, 53,* 152-166.

Davidson Aviles, R., Guerrero, M., Howarth, H. & Thomas, G. (1999). Perceptions of Chicano/Latino students who have dropped out of school. *Journal of Counseling and Development*, 77, 465-473.

De La Rosa, D. & Maw, C. (1990). *Hispanic education: A statistical portrait 1990.* Washington DC: National Council of La Raza.

Eccles, J. & Sameroff, A. (1991). *The family school survey study.* University of Michigan: Ann Arbor, MI.

Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115–134.

Goodnenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30, 79-90.

Goodenow, C. & Grady, K. (1999). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education*, 62, 60-71.

Guttman, L. & Midgley, C. (2000). The role of protective factors in supporting the academic achievement of poor African American adolescents during the middle school transition. *Journal of Youth and Adolescence*, 29, 330-358.

Harvard Civil Rights Project (2004). *Losing our future: How minority youth are being left behind by the graduation rate crisis*. Cambridge, MA: The Civil Rights Project at Harvard University.

Harlow, C.W. (2003). *Education and Correctional Populations.* BJS Special Report, NCJ 195670, January.

Midgley, C., Maehr, M., Hruda, L., Anderman, E., Freeman, K., Kaplan, Gheen, M., Kumar, R., Middleton, M., Roeser, R, & Urdan, T. (2000). *Patterns of Adaptive Learning Scales.* University of Michigan.:Ann Arbor, MI.

Nakkula, M.J. et al. (1990). *Teenage risk prevention questionnaire and interview: an integrative assessment of adolescent high-risk behavior*. Piscataway, N.J.: Rutgers University, Graduate School of Applied and Professional Psychology.

Suh, S. & Suh, J. (2007). Risk factors and levels of risk for high school dropouts. *Professional School Counseling*,10(3), 297-306

Trusty, J. & Dooley-Dickey, K. (1993). Alienation from school: An exploratory analysis of elementary and middle school students' perceptions. *Journal of Research and Development in Education,* 26, 232-242.

Werner, E. E., & Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth.* New York: McGraw-Hill.

Vaux, A., Phillips, J., Holly, L., Thompson, B., Williams, D., & Steward, D. (1986). The social support appraisals scale: studies of reliability and validity. *American Journal of Community Psychology, 14*, 195-219.

Impact

The potential impact of this project will be evident at four different levels. First and foremost, the schools which participate in this project will benefit in direct ways. The second phase of the proposed project involves the design and implementation of dropout prevention interventions that would target students, their parents, teachers, and/or school personnel. The research questions under investigation are all issues in which the participating schools have a high investment. Thus, the project has relevance to the participants themselves. Additionally, the data gathered in the first phase of the project will be used to guide the subsequent interventions, which will be tailored for each school and will be delivered by the primary investigator and Loyola students.

The second level of impact is for Loyola University Chicago, its mission, and its students. This project will be one in which university-community collaborations occur for the purpose of meeting the needs of an underserved population, which is consistent with our social justice emphasis. Graduate students in the School of Education and other related disciplines will assist in bringing this project to fruition and in particular, the intervention aspect of the project will provide important training experiences for students in a variety of programs (e.g., school counseling, school psychology, counseling psychology).

The third level of impact is on the fields of education and psychology. Data from this project will advance the knowledge base on preventing school dropout in Latinos and potentially, other ethnic minority groups in the United States. Keeping important social justice issues such as this on the radar of these fields is critical to continuing efforts to combat the problem of school dropout. It is anticipated that multiple publications and conference presentations will emerge from the data set and subsequent interventions. It is also possible that extramural funding for this program of research can be obtained from foundations and federal sources.

The fourth level of impact is individual in that I will clearly benefit from the time granted to me to conduct this important research. It will be an essential element of helping me to develop an expertise in the area of Latino dropout prevention, an area which is both an extension and complement to my previous and current areas of scholarship.

Rationale for Leave

School-based research has been a part of my research agenda throughout my career. However, most of my previous research has been fairly narrow in scope (e.g., involving a single school in a study) primarily due to the time constraints of needing to be off-campus to conduct this research. Since I have selected schools that are geographically diverse, and schools that will require some preliminary relationship building, I will need to spend significant amounts of time in those schools. Having a one-semester leave will allow me to spend the amount of time I will need in all three schools to garner the buy-in from teachers, counselors, parents, and students. Not only will such time be essential to getting a good participation rate in each school, but it will also be critical to having the credibility and familiarity with the school community to have the various constituents be committed to following through on recommendations I make for subsequent programs. Since I will be developing and providing these programs along with my graduate students, my acceptance into the school community is necessary. While the project in all its phases will subsume much longer than one semester, the leave will allow me to put in the time initially that will make my subsequent involvement in the school possible and productive. Being relieved of teaching and other related duties will give me the time I need to plan and implement the project.

Resources

While the proposed project is relatively large in scope, the majority of this project can be completed with a minimum of resources and cost sharing that will involve the participating schools. For example, one of the schools (East Aurora) committed to covering the costs of the printing and duplication of the surveys and consent forms as a sign of their investment in the project. The other tangible costs may involve the provision of incentives to the students who

participate in the survey research. These incentives for participation will be determined on a school by school basis. For example, in conversations I have had with one school, the administrators believe that offering students pizza for lunch will be sufficient in motivating them to complete the survey portion of the project. In another school, the administrator believes that the students will not need tangible incentives because they are accustomed to taking surveys. Rather, the school will provide time during the school day in lieu of a study hall.

To offset the costs of copying, transportation for individuals other than myself who facilitate the completion of the project, and other unintended expenses, I plan to pursue funding from one of a number of foundations and corporations that set aside funds for school improvement projects (e.g., Fry Foundation).

In fact, the largest cost associated with implementing this project is the time necessary to carry out various aspects of the data collection and prevention components. Being awarded this research leave will afford me the time necessary to successfully carry out this project.

Previous Leave Projects

My previous research leave was used to investigate mental health concerns among Latino parents. This leave allowed for the successful implementation of the research project and the subsequent publication and presentation of its findings:

Vera, E. M. & Conner, W. (2007). Latina mothers' perceptions of mental health and mental health promotion. *Journal of Multicultural Counseling and Development,35,*230-242.

Vera, E. M. & Conners, W. (August, 2004). *Latina mothers' perceptions of mental health and well-being*. Poster presented at the American Psychological Association Convention, Honolulu, Hawaii.