



HHS Public Access

Author manuscript

J Prim Prev. Author manuscript; available in PMC 2015 March 31.

Published in final edited form as:

J Prim Prev. 2012 June ; 33(0): 99–110. doi:10.1007/s10935-012-0269-9.

Association between school engagement and disclosure of suicidal ideation to adults among Latino adolescents

Susan M. De Luca, Ph.D. and

The University of Rochester Medical Center, Department of Psychiatry, NRSA Postdoctoral Fellow 300 Crittenden Boulevard Rochester, NY 14642 Phone: 585 275-9251, sdeluca@urmc.rochester.edu

Peter Wyman, Ph.D.

The University of Rochester Medical Center, Department of Psychiatry, Professor, 300 Crittenden Boulevard Rochester, NY 14642 Phone: 585 275-9251, Peter_Wyman@URMC.Rochester.ed

Abstract

We examined associations between Latino adolescents' school engagement and their likelihood of disclosing suicidal ideation (SI) to adults and asking help for SI. Analyses were conducted on the entire sample of 14 schools and a second set of analyses was conducted with Latino youth from "Latino-representative" high schools. The criterion for 'Latino-representative' was that 10% of the school's total population consisted of Latinos. Among 663 Latino/a adolescents from all 14 high schools, 110 reported SI in the past year (17%), compared to 13% for Non-Hispanic White students and 11% for African American students. Among Latinos with SI, 26/110 (24%) told an adult and 38/110 (35%) sought help. Higher levels of reported school engagement were associated with a greater likelihood of receiving help (OR=6.17) and disclosure to an adult (OR=7.64) among Latino boys in the Latino representative schools. For Latinas, school engagement was not associated with disclosure of SI or seeking help. Additional research is needed to clarify processes, including social connectedness, contributing to disclosure and help-seeking for SI among Latinos.

Keywords

Latino; adolescents; suicidal ideation; school engagement

Latina adolescents report the highest rates of suicidal ideation (SI) and attempts (Centers for Disease Control [CDC], 2010). Male Latino adolescents also have elevated rates of SI compared to Caucasian and African American adolescent males. Due to these elevated rates of suicidal behavior, and that Latinos are the fastest growing racial/ethnic group in the U.S. (Census 2011), Latino adolescents are an important priority group for increased research to clarify processes that reduce risk for suicide and self-injury in order to inform suicide prevention strategies.

Correspondence to: Susan M. De Luca.

Individual-level factors such as depression and substance abuse are well established as risk factors for adolescent SI (Gould et al., 1996). Recently, interest has increased in ascertaining social-ecological risk and protective processes associated with adolescent suicidal behavior. Social-ecological factors refer to the systems (e.g. schools) in which adolescents interact and those factors pertinent to suicide prevention include social integration and support, their perceived norms and practices pertaining to help seeking (Wyman et al., 2010).

Previous work has shown relevance in a number of social-ecological factors including associations between acculturation and suicidal risk (Goldston et al., 2008). Higher levels of acculturation have been also linked to increased openness to seek help from formal resources during times of distress (Cabassa et al., 2007). Acculturation can also increase family conflict between parent and child, as children tend to adopt U.S. traditions and norms faster than their parents (Zayas et al., 2005; Samaniego & Gonzales, 1999). The present paper will focus on another social-ecological system – school - where adolescents spend a majority of their waking time.

Disclosure and Receiving Help

Disclosure by adolescents of their suicide concerns to adults who are capable of responding competently (e.g., ascertaining need for services, providing referrals) has emerged as a salient topic in prevention research as disclosure is frequently a necessary first step in the help seeking processes. Overall, few adolescents with mental health problems independently seek help from formal helpers such as school counselors (Husky et al., 2010), and most teens seek help only from their peers (Raviv et al., 2009). Low help seeking from adults is more pronounced among adolescents with suicidal thoughts or behavior, with SI associated with reduced help seeking among adolescents compared to those with a mental health condition alone (Pagura et al., 2009). Therefore understanding factors that facilitate or inhibit suicidal adolescents from seeking out adults is an important topic for research.

Sex and Race/Ethnic Differences in Help seeking

Sex differences have been found in studies evaluating help seeking for distress (e.g., Rickwood & Braithwaite, 1994). Females tend to be more likely to disclose to others their distress resulting from a mood disorder (Kalafat & Elias, 1992; Zimmerman, 1991) and access multiple forms of treatment more often than males (Milner & De Leo, 2010). As symptom severity increases, females have also reported more positive opinions of the benefits of getting help (Spendelow & Jose, 2010). The literature is limited regarding the types of adults Latino adolescents turn to in times of distress, especially involving SI. Studies have examined the protective benefits of mother-daughter connectedness in relation to a Latina's risk for suicidal behaviors (Turner et al., 2002), but disclosure to adults among Latinas experiencing SI was not specifically examined in these models.

Overall, Latinos utilize mental health services at a lower rate than other major ethnic/racial groups (Cabassa et al., 2007; Cabassa et al., 2006), including Latino adolescents with recent suicidal behaviors (Freedenthal, 2007). Latino parents report low levels of help seeking for mental health services for their children (Zimmerman, 1991) even though the need for services may be equal or greater than for other racial/ethnic groups (McMiller & Weisz,

1996). Informal help seeking is also more common with Latinos, who frequently seek help from family members, friends and religious leaders (Goldston et al., 2008; Ocampo et al., 2007). These aforementioned differences may set a norm or pattern of expectations that influence Latinos who experience distress in terms of whether they disclose their SI to an adult or independently try to seek help.

School Engagement and Help Seeking

Among adolescents, being more connected to their school is associated with a variety of health-promoting benefits (Whitlock, 2006), including initiation of sexual intercourse later than their peers (Markham et al., 2010), reduced substance use, mood disorders and more positive academic outcomes (Bond et al., 2007). Students' perceptions of positive school climate, which included components of connectedness, are also associated with increased willingness to go to adults for concerns about bullying and threats of violence (Eliot et al., 2010). Schools are also an appropriate environment to ask teens about help seeking as up to 70% – 80% of mental health services received by adolescents are received within their own schools (Burns et al., 1995). Due to the importance of schools as settings in which students receive help for distress, links between help seeking and connectedness to adults in school, and the positive benefits of school engagement in reducing risk for suicide (Riesch et al., 2008; Wyman et al., 2010), this study extended the premise that school engagement was also related to help-seeking after suicidal ideation. Therefore we tested the association between suicidal Latino adolescents' school engagement and two indicators of help seeking: disclosure of suicide concerns to an adult and intention to get help.

Engagement is also related to informal sources of help as adolescents interact with a number of adults throughout their school day (i.e. teachers, administration and school staff). These adults are involved in formal but also more casual encounters including extracurricular activities, lunch period and study hall. As more personal information is shared during these less formal interactions, adults can become confidants to students similar to their family members, clergy and other trusted adults in the community. Therefore, examining a student's self-reported level of school engagement furthers our understanding regarding how stronger ties to adults could serve as a protective factor not only for suicide prevention (Wyman et al., 2010) but also for help-seeking behaviors after a suicidal ideation. As informal sources of support have been explored with Latino adults (e.g. Cabassa & Zayas, 2007), the literature is limited concerning Latino adolescents (Freedenthal, 2007).

Adolescents who are reluctant to discuss problems or have few connections to adults at school have multiple barriers for seeking help in times of distress (Cigularov et al., 2008; Whitlock, 2006). Teens that reported being uncomfortable talking to adults accessed services less and exhibited more avoidant coping behaviors than those who did seek help from an adult, even if they believe they needed help (Evans, et al., 2005). In addition, school engagement is associated with increased use of mental health care services (Carter et al., 2007).

The Present Study: Model Development and Hypotheses

A first objective of the study was to contrast Latino adolescents' rates of SI with White and African American peers in their schools. Latinas and Latino boys were expected to report higher rates of SI compared to White and African American females and males, respectively, and expected to seek out help less frequently. The primary hypothesis guiding this study was that Latinas and Latino males with higher perceived engagement with their school were expected to be more likely to have disclosed their SI to adults and to report trying to seek help.

The sample was stratified by sex and hypotheses tested separately for males and females. Previous research has sex differences in adolescent help seeking (Rickwood & Braithwaite, 1994). These gender variations have been partially attributed to females typically reporting larger and better-established social supports than males (Vaux et al., 1986) especially support from family members (Feiring & Coates, 1987). The emotional intensity of these relationships are also stronger for females (Youniss & Smoller, 1985) as males tend to have more functional forms of support (Blyth & Foster-Clark, 1987). Sex differences in help seeking are also associated with norms including the broader acceptability for females to obtain help for emotional distress compared to males (Good et al., 1987; Blyth & Foster-Clark, 1989). Past literature contends that there are sex differences comparing Latino males and females and help seeking behaviors as well (McMiller & Weisz, 1996; Pumariega et al., 1998; Ocampo et al., 2007) and large-scale surveillance systems (CDC, 2010) consistently find differences in reported suicide ideation rates among this group.

Stratified samples have been used in previous research testing theoretical models that postulate differences between adolescent boys and girls (e.g. Luthar et al., 2006), drawing on a person-centered approach (Muthén & Muthén, 2000) as population-aggregate methods could potentially overlook important variations embedded within the sample. We also employed a person-centered approach in this study by stratifying our sample by sex. With growing emphasis on identifying intra-individual factors to create targeted prevention initiatives (White et al., 1998), person-centered analyses have examined characteristics among adolescent binge drinkers (Hill et al., 2000), differences in help seeking behavior among victims of interpersonal violence (Ocampo et al., 2007) and help seeking orientations of Latino adolescents (Stanton-Salazar et al., 2001). As the literature postulates that there are divergent help seeking behaviors among Latino males and Latinas (Thomas et al., 2011; Cauce et al., 2002) we believed this specific methodology could contribute to the literature by understanding behavioral outcomes for this high-risk group.

We also examined the association between school engagement, help seeking and disclosure of SI to adults among Latinos in schools with varying levels of 'Latino-representation', that is, the proportion of Latinos in the school. Research has found that ethnic groups have better health outcomes (Becares et al., 2011) including reduced suicide (Neeleman & Wessely, 1999) in communities in which their ethnic status is more "dense". A number of studies with Latino samples suggest that living in areas with greater Latino density is associated with positive health outcomes (e.g. Marsiglia et al., 2010). Those positive effects are posited to be due to greater opportunities for social connectedness and diffusion of support (Pickett &

Wilkinson, 2008). Likewise, we expected the positive benefits of school engagement for Latinos would be enhanced in schools that had a higher proportion of Latino students.

Methods

Participants

Participants were students in 14 high schools in two states (Georgia, New York) selected by random sampling of classrooms after stratification by grade level. Classrooms were selected from those representative of all ability levels in each grade in order to attain representative groups of students in each school. From 2007–08, six schools in Georgia (greater Atlanta area) were selected to complete surveys from 9th and 10th -grade classrooms. In eight schools in New York (2008–09), primarily from rural areas and one small city surrounded by a rural region, 9th – 12th graders were selected. All paper-administration surveys were conducted in English and disseminated in one classroom period. Students were invited to participate in voluntary, anonymous surveys. Parents were provided information about the study and how to decline to have their child participate. The protocol was approved by the University of Rochester IRB.

Analyses were conducted first with all 14 schools. Approximately one-half of the classrooms in the Georgia and New York were randomly selected; of that group 86% and 81% of the students respectively participated in the study. The mean proportion of Latino students school-wide was 16% (range=4–30%). In the total sample across all schools, 2,740 were White (67%), 719 African American (17%) and 663 were Latino (16%); 53% of the sample was female; mean age was 15 years. Schools were equally represented in terms of rural and metropolitan status. Urban schools had a higher proportion of minority students compared to rural schools.

A second set of analyses was conducted with Latino youth from “Latino-representative” high schools. The criterion for ‘Latino-representative’ was that 10% of the school’s total population consisted of Latino students. The rationale for this subsample of schools was to create a sample representative of the population rates of Latinos in these regions of New York and Georgia during the time of the survey dissemination (Pew Hispanic Center 2011a; 2011b; 2011c). The NY schools had an average Latino population of 3% while the Georgia schools had an average Latino population of 12%. Therefore selecting schools with 10% of more of their school’s population with Latino students was a conservative approach. The Latino representative schools subsample characterized just over one-half (8/14) of the sample of schools, covering what would be indicative of the upper median of ‘representativeness’ from participating schools. In addition, we believed there could potentially be differences in reported level of school engagement in which Latinos had a higher level of representation in their respective school. Eight high schools met the criterion of ‘Latino-representative’: three in Georgia and five in New York State (total participants 2,611). There were 1,366 White (42%), 713 African American (27%) and 532 Latino students (20%). In the 8 Latino-representative schools, the mean proportion of Latino students was 20% (range: 10–30%).

Measures

Suicidal Ideation—To assess suicidal ideation in the past year, a widely used measure designed for population-level assessments was taken from the Youth Behavior Risk Surveillance System (CDC, 2010): “During the past 12 months, did you ever seriously consider attempting suicide” with the options to answer “yes” or “no”. Primary analyses were conducted with Latino youth who responded affirmatively to suicidal ideation in the past year.

Disclosure and Seeking Help—Two questions were used as the primary dependent variables. Youth who responded affirmatively to the question about SI in the past year were asked to answer the following two questions: 1) “Did you tell an adult” 2) “Did you try to get help” with options of either “yes/no”. The specific type of help received was not ascertained in the survey, nor the identity of the adult to whom they disclosed SI. Although reliability and validity indicators cannot be generated for these dichotomous items, we developed these questions because there are no well-established measures of SI disclosure currently found in the literature.

Independent Variables

School Engagement—The school engagement scale consisted of four items selected to assess key components of perceived connectedness to school (Whitlock, 2006): involvement in activities, perceived respect from adults, success at school and liking school. Students responded to each question on a four-point scale ranging from 1-rarely to 4-always. A higher mean from these four questions represented a higher level of school engagement ($\alpha=0.63$). This measure has been used previously in the literature (Wyman et al., 2010).

Age, Race and Ethnic Status—Participants were also asked two demographic measures. Respondents were instructed to choose their age (6 options were provided for age “13–18 and older”) and also asked to describe themselves in terms of race and ethnicity the options included “Asian”, “Black/African American”, “White” “Hispanic/Latino” or “other”. Respondents were instructed they would check all the applied.

Data Analysis

Chi-square tests and analyses of variance (ANOVA) were used to compare the primary three racial/ethnic groups on suicide ideation, disclosure/help seeking for SI and to determine if there were significant relationships between the school engagement scale, gender, race/ethnicity and SI. The alpha level for regressions was predetermined as $p < 0.05$. For tests requiring multiple comparisons between White, African American and Latino adolescents we used a Bonferroni adjustment to reduce the possibility of a Type 1 error ($p < 0.003$). Although there was minimal missing data with these univariate statistics, due to the already small sample size as a result of stratification by recent S.I. and gender, we did not utilize listwise deletion as this procedure would reduce the sample size (Allison, 2002).

Logistic regression models estimated separately for Latinas and Latino males examined the predictors of disclosing to an adult and trying to get help, which is appropriate for dichotomous dependent variables (Hosmer & Lemeshow, 2000). In addition, logistic

regression models were estimated using all 14 schools and then the 8 Latino representative schools respectively with dependent variables being: 1) “disclosure to an adult” and 2) “trying to get help”. Student age was a covariate in all models. School was also added as a covariate to account for potential differences. Multi-level modeling was not required because preliminary analyses showed minimal effects of school clustering (intra-class correlations < 0.02).

The Hosmer-Lemeshow statistic tested the goodness-of-fit for all logistic regression models (Hosmer&Lemeshow, 2000). Goodness-of-fit is determined by a p-value of >0.05. The statistic determines if the observed rates mimic the expected rates in subgroups of the model’s population. Odds ratios (OR) clarified the effect size of the significant results.

Results

Suicide Ideation, Help Seeking and School Engagement By Race/Ethnicity

Rates of suicidal ideation and help seeking for SI, and level of school engagement (Mean, SD) for the three primary racial/ethnic groups in all 14 high schools are summarized in Table 1. Latinas (20%; 63/317) reported SI, which was significantly higher compared to African American females. Latino males, (14%; 47/346) reported SI, which was higher than African American boys. Among suicidal Latino adolescents, approximately one-third reported trying to get help (Latinas 42%; Latino boys 32%), and approximately one-quarter reported disclosing their SI to adults (Latinas 22%, Latino boys 28%). Of those Latinos who reported trying to get help, 42% (16/38) also told an adult. There were no significant differences among the major race/ethnic groups on the two help seeking behaviors or school engagement scores.

Latino-representative Schools

Rates of suicidal ideation and disclosure/help seeking, and level of school engagement (Mean, SD) are summarized by race/ethnicity in Table 2 for students in Latino-representative schools. Among Latino adolescents reporting SI, 22% of females stated that they told an adult about their SI (11/49) and 49% reported that they “tried to get help” (22/45). Twenty-eight percent of Latino boys reported telling an adult about their SI (12/43) and 33% reported they tried to obtain help (14/43). The only differences in school engagement were found among Latinas in Latino-representative schools, who reported lower school engagement than non-Hispanic white females.

School Engagement and Suicidal Latinos’ Help Seeking Behaviors—Logistic regression model results estimated for all 14 schools and for the Latino-representative schools, stratified by sex, are summarized in Table 3.

Disclosure of SI to an Adult—In models predicting disclosure of SI to an adult, only one association was significant. Among Latino boys in the Latino-representative schools, higher school engagement was associated with greater likelihood to disclose SI to an adult ($p < 0.04$; OR=7.64; CI=1.14–51.45). School engagement was not associated with disclosure for Latinas. In addition, neither age nor school were predictors of disclosing SI to an adult.

Trying to Get Help—Among Latino males with SI, higher engagement to school was associated with greater likelihood of ‘trying to get help’ in Latino-representative schools. The odds ratio indicated that for every point higher on the school engagement scale a Latino boy reported, the likelihood of trying to get help increased by 517% ($p < 0.02$; CI= 1.33–28.58). Age and school were not predictors of disclosing SI to an adult or trying to get help.

The Hosmer-Lemeshow statistic indicated that all models presented had good fit (i.e. $p > 0.05$) as this test indicates whether or not the predicted probabilities for a measure match the observed probabilities (Hosmer & Lemeshow, 2000). Chi-square tests for both outcome variables and race/ethnicity found that these measures were not related.

Discussion

Drawing on a social-ecological perspective focusing on the relationship systems in which adolescents interact (Wyman et al., 2010), we tested the association between Latino adolescents’ engagement with school and the likelihood of two behaviors related to help seeking for suicidal ideation: disclosing thoughts of committing suicide to an adult and perceiving him/her-self as trying to get help. Schools are a key system in which adolescents interact with peers and with an array of adults, and previous work has linked the quality of adolescents’ relationships in school with positive health behaviors, including adaptive coping skills and reduced suicidal behavior (Borowsky et al., 2001). However, little is known about the mechanisms linking school engagement to health, such as students’ communication of problems and intentions to seek help.

Congruent with nation-wide data, Latinas and Latino males reported higher rates of SI compared to their African American peers (CDC, 2010). As expected, trying to get help and disclosing SI to an adult were moderately inter-related but not identical. Our findings showed that approximately one-third of Latino males (32%) and Latinas (42%) identified themselves as trying to get help and approximately one-quarter of Latinos males (28%) and Latinas (22%) disclosed their SI to an adult. More than three-quarters of Latinas with SI did not disclose their ideation to any adult.

Our finding of comparable help seeking behaviors for SI among Latino and other adolescents was unexpected given prior findings that Latinos are less likely to seek or utilize help for distress (Cabassa et al., 2006). However, the present study leaves several unanswered questions about these help seeking behaviors. The two disclosure questions do not exclude the directionality of one’s disclosure. Therefore more specific questions about help seeking processes are needed in future studies. For example, asking adolescents who initiated the conversation regarding SI can provide a better understanding of one’s willingness to seek help and can shape prevention efforts accordingly.

In evaluating the relatively small proportion of Latinas and Latino males who disclosed their SI to any adult, we note that traditional Latino culture stresses keeping personal matters, especially emotional problems, within the family unit and to not seek formal sources of support (Cabassa et al., 2006). Therefore willingness to tell adults outside of their family about a serious emotional issue such as SI might be seen as culturally incongruent. For

example, the disclosure measure of talking to adults might mask differences in which adults Latino adolescents might turn to during times of distress. As a result, the lack of specificity in the outcome measure “disclosure to an adult” might not be a culturally appropriate measure for Latino adolescents. Differences in the types of relationships White, African American and Latino adolescents associate with in a given day might not truly speak to culturally-specific adults a Latino adolescent might see as a trusted adult.

Another unexpected finding was that the reported level of school engagement among Latinas was lower than African American girls in Latino-representative schools. Based on previous literature (see Neeleman, 2001), we expected that both Latinos who attended schools in which they share more common ethnic affiliation with other students – i.e., in which they are less of a numerical minority – would experience an enhanced sense of belongingness, reflected through school engagement.

In contrast, Latino males reported similar levels of school engagement compared to White and African American males. This finding that Latino boys had similar levels of school engagement could be related to our hypothesis that differing gender roles between Latinas and Latino boys could be a factor with feeling connected to one’s school. Although our findings cannot ascertain the reasons for this difference, we speculate that differences in family expectations could have contributed to these differences. For example, Latinas are often expected to return home directly after school to assist with household chores (Zayas, 1987). These responsibilities may decrease opportunities for Latinas to form connections with adults through extra-curricular activities (Borden et al. 2006). Therefore Latino males might have more opportunities to form stronger bonds with those in-and-out of the classroom setting. Opportunities to engage with a diverse group of individuals may create occasions for males not only to seek help and talk to adults if they are distressed but after school activities have been shown to increase self-esteem and positive youth development (Riggs et al., 2010). However, this study did not have sufficiently large number of schools to account for other school-level differences that may account for these relationships (e.g., income, violence exposure).

Regarding the association between school engagement and indicators of willingness to seek help for SI, greater school engagement was positively associated with an increased likelihood of Latino boys reporting that they tried to get help and disclosed SI to an adult in the last year in ethnically representative schools. This finding was congruent with our hypothesis that Latinos in ethnically representative schools may benefit from their affiliation to their school. Our finding that suicidal Latino males in Latino-representative schools were significantly more likely to seek help and disclose their SI to adults is supported by the literature suggesting that race/ethnic minorities residing in integrated communities exhibit more positive health behaviors (Neeleman, 1997; Neeleman & Wessely, 1999). This finding warrants further investigation on how current prevention programs can target Latino males who typically do not access mental health services (Thomas et al., 2011). Although the outcome measures do not specify whom they contacted, the findings indicate that Latino boys might be more open to disclosing to adults than previously thought. While the cultural norm of “machismo” might sway some Latino males to not seek help (Sobralse, 2011), prevention efforts may be effective by promoting a norm that “machismo” encourages

protecting and taking care of one's family (Zayas, 2011). Therefore, communicating to Latino boys that seeking help due to SI is in actuality a very masculine behavior could be a culturally appropriate prevention strategy tool.

The association between school engagement and willingness to seek help was not observed among Latinas in either sample of schools. Although unexpected given that females tend to access mental health services more than males (Rickwood & Brathwaite, 1994), this finding is congruent with literature specific to adult Latinos where attempters were less likely to get help due to culturally specific coping behaviors (Fortuna et al., 2007). In other words, cultural norms in more Latino representative schools may also exert a dampening effect on help seeking. In future, prevention strategies should incorporate cultural norms (e.g. familism, collectivism) (Marin & Triandis, 1985) increase one's cultural identity (Fortuna et al., 2007) and emphasize that helping oneself also provides stability to the collective family unit. By stressing these cultural norms, Latinas would likely have an increased sense of meaning to help seeking (Fortuna et al., 2007).

As with other health outcomes, culture could help explain the positive relationship between school engagement and help seeking behavior found in our Latino-representative schools. Overall a Latino male's likelihood of trying to get help nearly rose six-fold for each increase in school engagement in Latino representative schools. Collectivism, where the needs of the group supersede individual needs as well as greater opportunities for diffusion of support (Lopez et al., 2002) may be enhanced in Latino-representative schools and could play a role in help seeking (Marin & Triandis, 1985). Higher levels of school engagement might magnify an expectation that others are available and willing to help, especially Latinos in representative schools. Adolescents might disclose due to their perceptions that others subscribe to more collectivist views emphasizing mutual help.

The present study raises questions about how to strengthen community-based protective factors that reduce suicide for Latino adolescents specifically while being congruent with strengths of family and community. Traditional Latino culture stresses keeping personal issues within the familial unit. Therefore, disclosing SI to an adult at school or a mental health professional might conflict with Latino cultural norms. A number of prevention initiatives incorporated students, teachers and staff collectively to become aware of the warning signs of suicide and provide sources to all participants (Wyman et al., 2010). Developing culturally-appropriate preventative components that include parents and adults from the community to encourage Latino teens to disclose distress and SI to adults are important challenges for the future. Program developers and implementers may, for example, seek approaches for involving families and parents specifically in suicide prevention initiatives (see Peña et al., 2011; Gonzalez et al., 2007). As higher levels of mutuality between family members have been linked with decreased suicidal behaviors (Baumann, 2010), encouraging parentchild communication via school-based prevention programs shows promise.

We note that the present study had several limitations. First, our results should be interpreted cautiously and cannot be generalized to the larger population due to the small sample size, stratification by gender and adolescents with recent ideation and the lower cronbach alpha

($\alpha=0.63$) for the School Engagement scale. By surveying students who were attending school on one specific day, it is possible that sampling bias was introduced. Latinos have the highest dropout rates in the U.S. (Census, 2003), and it is possible that our findings do not apply to high-school aged students with poor attendance or who dropped out. Due to the cross-sectional nature of the study, caution should be used with the interpretation of the results presented. As with other self-report questionnaires, students might have answered questions in a socially desirable manner. Due to the stigma of suicidal ideation, the rate of ideation might have been biased. Although steps were taken to reduce this potential limitation, including asking students to sit at a distance to ensure confidentiality, it is possible that some suicidal ideation was under-reported.

Latinos have high rates of ideation compared to their African American and Caucasian peers (CDC, 2010). Yet, prevention efforts specifically focusing on this high-risk group have been limited. This study underscores the need to ascertain factors promoting suicidal Latino adolescents to seek help, how to strengthen those factors, as well as the need to consider gender differences.

References

- Allison, P. Missing Data. New York: Sage Publication;
- Baumann A, Kuhlberg J, Zayas L. Familism, mother-daughter mutuality, and suicide attempts of adolescent Latinas. *Journal of Family Psychology*. 2010; 24(5):616–624. [PubMed: 20954772]
- Becares L, Nazroo J, Stafford M. The ethnic density effect on alcohol use among ethnic minority people in the UK. *Journal of Epidemiology and Community Health*. 2011; 65(1):20–25. [PubMed: 19703909]
- Blyth D, Foster-Clark S. Gender differences in perceived intimacy with different members of adolescents' social networks. *Sex Roles*. 1987; 17(11–12):689–718.
- Bond L, Butler H, Carlin L, Glover S, Bowes G, Patton G. Social and School Connectedness in Early Secondary School as Predictors of Late Teenage Substance Use, Mental Health, and Academic Outcomes. *Journal of Adolescent Health*. 2007; 40(4):357–375. [PubMed: 17367730]
- Borden L, Perkins D, Villarruel F, Carleton-Hug A, Stone M, Keith J. Challenges and Opportunities to Latino Youth Development: Increasing meaningful participation in youth development programs. *Hispanic Journal of Behavioral Sciences*. 2006; 28(2):187–208.
- Borowsky I, Resnick M, Ireland M, Blum R. Suicide attempts among American Indian and Alaska Native youth: Risk and protective factors. *Archives of Pediatrics and Adolescent Medicine*. 1999; 153(6):573–580. [PubMed: 10357296]
- Burns B, Costello E, Angold A, Tweed D, Stangl D, Farmer E, Erkanli A. Children's mental health service use across service sectors. *Health Affairs*. 1995; 14(3):147–159. [PubMed: 7498888]
- Cabassa L, Lester R, Zayas L. "It's like being in a labyrinth:" Hispanic immigrants' perceptions of depression and attitudes toward treatments. *Journal of Immigrant and Minority Health*. 2007; 9(1): 1–16. [PubMed: 17001516]
- Cabassa L, Zayas L, Hansen M. Latino adults' access to mental health care: a review of epidemiological studies. *Administration and Policy in Mental Health*. 2006; 33(3):316–330. [PubMed: 16598658]
- Carter M, McGee R, Taylor B, Williams S. Health outcomes in adolescence: associations with family, friends and school engagement. *Journal of Adolescence*. 2007; 30(1):51–62. [PubMed: 16808970]
- Cauce A, Doemenech-Rodriguez M, Paradise M, Cochran B, Shea J, Srebnik D, Baydar N. Cultural and contextual influences in mental health help seeking: A focus on ethnic minority youth. *Journal of Consulting and Clinical Psychology*. 2002; 70(1):44–55. [PubMed: 11866055]
- Census. [Retrieved on April 26, 2011] Overview of Race and Hispanic Origin: 2010. 2011. from <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>

- Census. School enrollment: 2000 (C2KBR-26). Washington, DC: 2003.
- Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance United States, 2009. Surveillance Summaries. MMWR. 2010; 59(SS-5) 2010.
- Cigularov K, Chen P, Thurber B, Stallones L. What prevents adolescents from seeking help after a suicide education program? *Suicide and Life Threatening Behavior*. 2008; 38(1):74–86. [PubMed: 18355110]
- Eliot M, Cornell D, Gregory A, Fan X. Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of School Psychology*. 2010; 48(6):533–553. [PubMed: 21094397]
- Evans E, Hawton K, Rodham K. In what ways are adolescents who engage in self-harm or experience thoughts of self-harm different in terms of help seeking, communication and coping strategies? *Journal of Adolescence*. 2005; 28(4):573–587. [PubMed: 16022890]
- Feiring C, Coates D. Social networks and gender differences in the life space of opportunity: Introduction. *Sex Roles*. 1987; 17(11–12):611–620.
- Fortuna S, Sinclair J, Hawton K. Adolescents' views on preventing self harm: A large community study. *Social Psychiatry and Psychiatric Epidemiology*. 2007; 43(2):96–104. [PubMed: 17994177]
- Freedenthal S. Racial disparities in mental health service use by adolescents who thought about or attempted suicide. *Suicide and Life-Threatening Behavior*. 2007; 37:22–34. [PubMed: 17397277]
- Goldston D, Molock S, Whitbeck L, Murakami J, Zayas L, Hall G. Cultural considerations in adolescent suicide prevention and psychosocial treatment. *American Psychologist*. 2008; 63(1):14–31. [PubMed: 18193978]
- Good G, Dell D, Mintz L. Male role and gender role conflict: Relations to help seeking in men. *Journal of Counseling Psychology*. 1989; 36(3):295–300.
- Gould MS, Fisher P, Parides M, Flory M, Shaffer D. Psychosocial risk factors of child and adolescent completed suicide. *Archives of General Psychiatry*. 1996; 53(12):1155–1162. [PubMed: 8956682]
- Hill K, White H, Chung I, Hawkins J, Catalano R. Early Adult Outcomes of Adolescent Binge Drinking: Person-and-Variable-Centered Analyses of Binge Drinking Trajectories. *Alcoholism: Clinical & Experimental Research*. 2000; 24(6):892–901.
- Hosmer, D.; Lemeshow, S. *Applied Logistic Regression*. 2nd Edition. Wiley-Interscience Publication; 2000.
- Husky M, Kaplan A, McGuire L, Flynn L, Chrostowski C, Olfson M. Identifying adolescents at risk through voluntary school-based mental health screening. *Journal of Adolescence*. 2010 Jun 17. [Epub ahead of print].
- Kalafat J, Elias M. Adolescents' experience with and response to suicidal peers. *Suicide and Life-Threatening Behavior*. 1992; 22:315–321. [PubMed: 1440745]
- Lopez EJ, Ehly S, Garcia-Vazquez E. Acculturation, social support, and academic achievement of Mexican and Mexican American high school students: An exploratory study. *Psychology in the School*. 2002; 39(3):245–257.
- Luthar S, Shoum K, Brown P. Extracurricular involvement among affluent youth: a scapegoat for "ubiquitous achievement pressures"? *Developmental Psychology*. 2006; 42(3):583–597. [PubMed: 16756447]
- McMiller W, Weisz J. Help seeking preceding mental health clinic intake among African-American, Latino, and Caucasian youths. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1996; 35(8):1086–1094.
- Marín, G.; Triandis, HC. Allocentrism as an important characteristic of the behavior of Latin Americans and Hispanics. In: Díaz-Guerrero, R., editor. *Cross-cultural and national studies in social psychology*. Amsterdam: Elsevier Science Publishers; 1985.
- Markham C, Lornam D, Gloppen K, Peskin M, Flores B, Low B, House L. Connectedness as a predictor of sexual and reproductive health outcomes for youth. *Journal of Adolescent Health*. 2010; 46(3 Suppl):S23–S41. [PubMed: 20172458]
- Milner A, De Leo D. Who seeks treatment where? Suicidal behaviors and health care: evidence from a community survey. *Journal of Nervous and Mental Disorders*. 2010; 198(6):412–419.

- Muthén B, Muthén L. Integrating person-centered and variable-centered analysis: Growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical & Experimental Research*. 2000; 24:882–891.
- Neeleman J, Wilson-Jones C, Wessely S. Ethnic density and deliberate self harm; a small area study in south east London. *Journal of Epidemiology and Community Health*. 2001; 55(2):85–90. [PubMed: 11154246]
- Neeleman, J. The social and epidemiological context of suicidal behavior. Groningen: Van Denderen; 1997.
- Neeleman J, Wessely S. Ethnic minority suicide: a small geographical study in south London. *Psychological Medicine*. 1999; 29(2):429–436. [PubMed: 10218934]
- Ocampo B, Shelley G, Jaycox L. Latino teens talk about help seeking and help giving in relation to dating violence. *Violence Against Women*. 2007; 13(2):172–189. [PubMed: 17251504]
- Pagura J, Fotti S, Katz L, Sareen J. Help seeking and perceived need for mental health care among individuals in Canada with suicidal behaviors. *Psychiatry Services*. 2009; 60(7):943–949.
- Peña J, Kuhlberg J, Zayas L, Baumann A, Gulbas L, Hausmann-Stabile C, Nolle A. Familism, family environment, and suicide attempts among Latina youth. *Suicide and Life-Threatening Behavior*. 2011; 41(3):330–341. [PubMed: 21463357]
- Pew Hispanic Center. Chemung County-NY: 2011a. from <http://pewhispanic.org/states/?countyid=36015>. [Retrieved on September 30, 2011]
- Pew Hispanic Center. Wyoming County-NY: 2011b. from <http://pewhispanic.org/states/?countyid=36121> [Retrieved on September 30, 2011]
- Pew Hispanic Center. Cobb County-GA: 2011c. <http://pewhispanic.org/states/?countyid=13067> [Retrieved on September 30, 2011]
- Pickett K, Wilkinson R. People like us: ethnic group density effects on health. *Ethnicity and Health*. 2008; 13(4):321–334. [PubMed: 18701992]
- Raviv A, Raviv A, Vago-Gefen I, Fink A. The personal service gap: factors affecting adolescents' willingness to seek help. *Journal of Adolescence*. 2009; 32(3):483–499. [PubMed: 18786722]
- Rickwood D, Braithwaite V. Social-psychological factors affecting help-seeking for emotional problems. *Social Science and Medicine*. 1994; 39(4):563–572. [PubMed: 7973856]
- Riesch S, Jacobson G, Sawdey L, Anderson J, Henriques J. Suicide ideation among later elementary school-aged youth. *Journal of Psychiatric and Mental Health Nursing*. 2008; 15(4):263–277. [PubMed: 18387145]
- Riggs N, Bohnert A, Guzman M, Davidson D. Examining the potential of community-based after-school programs for Latino youth. *American Journal of Community Psychology*. 2010; 45(3–4): 417–429. [PubMed: 20300821]
- Samaniego R, Gonzales N. Multiple mediators of the effects of acculturation status on delinquency for Mexican American adolescents. *American Journal of Community Psychology*. 1999; 27(2):189–210. [PubMed: 10425699]
- Sobralnske M. Health Care Seeking Among Mexican American Men. *Journal of Transcultural Nursing*. 2006; 17(2):129–138. [PubMed: 16595400]
- Spendelow J, Jose P. Does optimism bias affect help seeking intentions for depressive symptoms in young people? *Journal of General Psychology*. 2010; 137(2):190–209. [PubMed: 20441133]
- Stanton-Salazar R, Chavez L, Tai R. The help-seeking orientations of Latino and non-Latino urban high school students: a critical-sociological investigation. *Social Psychology of Education*. 2001; 5:49–82.
- Thomas J, Temple J, Perez N, Rupp R. Ethnic and gender disparities in needed adolescent mental health care. *Journal of Health Care for the Poor and Underserved*. 2011; 22(1):101–110. [PubMed: 21317509]
- Turner G, Kaplan C, Zayas L, Ross R. Suicide Attempts by Adolescent Latinas: An Exploratory Study of Individual and Family Correlates. *Child and Adolescent Social Work Journal*. 2002; 19(5):357–374.
- Vaux A, Burda P, Stewart D. Orientation toward utilization of support resources. *Journal of Community Psychology*. 1986; 14(2):159–170.

- White, H.; Bates, M.; Labouvie, E. Adults outcomes of adolescent drug use: A comparison of process-oriented and incremental analyses. In: Jessor, R., editor. *New perspectives on Adolescent Risk Behavior*. New York: Cambridge University Press; 1998. p. 150-181.
- Whitlock J. Youth perceptions of life at school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*. 2006; 10(1):13–29.
- Wyman P, Brown C, LoMurray M, Schmeelk-Cone K, Petrova M, Yu Q, Walsh E, Tu X, Wang W. An outcome evaluation of the sources of strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health*. 2010; 100(9):1653–1661. [PubMed: 20634440]
- Youniss, J.; Smollar, J. *Adolescent relations with mothers, fathers and friends*. Chicago: University of Chicago Press; 1985.
- Zayas LH. Toward an understanding of suicide risks in young Hispanic females. *Journal of Adolescent Research*. 1987; 2:1–11.
- Zayas L, Lester R, Cabassa L, Fortuna L. Why do so many Latina teens attempt suicide? A conceptual model for research. *American Journal of Orthopsychiatry*. 2005; 75(2):275–287. [PubMed: 15839764]
- Zayas, L. *Latinas Attempting Suicide: When cultures, families and daughters collide*. New York: Oxford University Press; 2011.
- Zimmerman, JK. Crossing the desert alone: An etiological model of female adolescent suicidality. In: Gilligan, C.; Rogers, AG.; Tolman, DL., editors. *Women, girls, and psychotherapy: Redefining resistance*. New York: Haworth Press; 1991. p. 223-240.

Table 1
Suicide Ideation, Help-Seeking and School Engagement for Students by Ethnic/Race group (n=4,122)

	All Schools			All Schools		
	White	African American	Latino	White	African American	Latino
Suicidal Ideation (SI) Past Year	16% 241/1502	13% 48/380	20% ^{a,**} 63/317	10% 118/1238	9% 30/339	14% ^{a,**} 47/346
Disclosed SI to an adult	25% 58/232	29% 12/41	22% 13/58	21% 23/112	25% 7/28	28% 13/47
Tried to get help for SI	34% 77/230	28% 11/40	42% 23/55	34% 38/112	21% 6/28	32% 15/47
School Engagement (SD)	2.59 (0.65)	2.56 (0.69)	2.45 (0.72)	2.38 (0.68)	2.63 (0.66)	2.45 (0.62)

^aLatino vs. African American;

**
p<.001

NOTE: "All Schools" = all 14 schools in NY and GA

NOTE: Due to non-response from some adolescents regarding disclosure, proportions for female disclosure are different within ethnic/racial groups

NOTE: A higher mean from these four questions represented a higher level of school engagement ($\alpha=0.63$).

Table 2
Descriptive Statistics: Ideation, Disclosure and School Engagement by Racial/Ethnic Group (n=2,492)

	Latino Representative Schools			Latino Representative Schools		
	White	African American	Latina	White	African American	Latino
Suicidal Ideation Past Year	16% 122/760	11% 47/349	20% 53/265	12% 65/547	8% 25/304	16% 43/267
Disclosed SI to an adult	27% 32/118	30% 12/40	22% 11/49	26% 16/61	26% 6/23	28% 12/43
Tried to get help for SI	35% 41/117	28% 11/39	49% 22/45	42% 26/62	22% 5/23	33% 14/43
School Engagement (SD)	2.86 (0.62)	2.76 (0.64)	2.67 (0.67)^{a,**}	2.75 (0.65)	2.67 (0.69)	2.64 (0.67)

^a Latino vs. African American;

**
p<.001

NOTE: "Latino Representative Schools" = 8 schools that have at least 10% or more of population self-reporting as "Latino/Hispanic".

NOTE: Due to non-response from some adolescents regarding disclosure, proportions for female disclosure are different within ethnic/racial groups.

NOTE: A higher mean from these four questions represented a higher level of school engagement ($\alpha=0.63$).

Table 3

Association between School Engagement, Suicidal Disclosure and Getting Help.

DV=Disclosure to Adult			
	B (SE)	p-value	OR (95% CI)
<i>All Schools:</i>			
Latino Males	1.15 (0.82)	0.16	3.16 (0.06–15.82)
Latinas	0.29 (0.49)	0.56	1.33 (0.51–3.46)
<i>Latino Representative Schools:</i>			
Latino Males	2.03 (0.97)	0.04	7.64 (1.14–51.45)
Latinas	0.39 (0.46)	0.40	1.48 (0.59–3.66)
DV=Tried to Get Help			
	B (SE)	p-value	OR (95% CI)
<i>All Schools:</i>			
Latino Males	1.10 (0.65)	0.10	2.95 (0.83–10.50)
Latinas	0.64 (0.47)	0.16	1.94 (0.77–4.87)
<i>Latino Representative Schools:</i>			
Latino Males	1.81 (0.78)	0.02	6.17 (1.33–28.58)
Latinas	0.52 (0.46)	0.25	1.68 (0.69–4.10)

Note. Analyses were adjusted for age and school for three regression models above.

Note: Analyses were stratified by Latino ethnicity.