

An Examination of the Relation between Adolescents' Academic Aspirations and  
Perceptions of Teen Parenting in a Sample of Hispanic High School Students

BY

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Submitted to the graduate degree program in Clinical Child Psychology and the Graduate  
Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of  
Master of Arts.

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Date Defended: April 30, 2014

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Date approved: April 30, 201

## Abstract

The purpose of this study was to examine the association between Hispanic adolescents' academic aspirations and thoughts on teen parenting. Hope and gender were examined as potential moderators of this association. Participants included 130 students between the ages of 14 and 19 ( $M = 16$ ,  $SD = 1.22$ ) who were recruited from a charter high school located in a large, Midwestern city. Adolescents provided ratings of their academic aspirations, perceptions of teen parenting, and levels of hope. Contrary to expectations, no association between academic aspirations and thoughts on teen pregnancy was evident, regardless of levels of agency and pathways thinking. Differences in this sample compared to previous studies were identified which may have contributed to this null finding, including above average academic goals and attendance at a charter high school. Directions for future research are discussed.

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## An Examination of the Relation between Adolescents' Academic Aspirations and Perceptions of Teen Parenting in a Sample of Hispanic High School Students

Teen parenthood is associated with a variety of negative outcomes, including persistent poverty, poor academic performance, and low rates of high school completion (Perper, Peterson, & Manlove, 2010). Current reports indicate that rates of teen pregnancy have significantly decreased over the last twenty years. For example, pregnancy rates among Hispanic teens between the ages of 15 and 19 decreased from 104.6 per 1000 to 49.4 per 1000 between the years of 1991 and 2011 (Hamilton, Mathews, & Ventura, 2013). Despite this decrease, as of 2011 pregnancy rates among Hispanic adolescents are still relatively high as compared to rates among non-Hispanic Caucasian and African-American adolescents, at 21.8 and 47.4 per 1000, respectively (Hamilton et al., 2013). Thus, further research specifically examining factors that can prevent teen pregnancy among Hispanic youth is needed. The primary goal of the present study was therefore to evaluate the relation between academic aspirations and thoughts on teen pregnancy in a sample of Hispanic adolescents and to examine how hope may moderate this relation.

### **Adolescents' Perceptions of Teen Parenting**

One factor that has been shown to influence adolescents' risky sexual behavior is the perceived consequences of that behavior (Unger, Molina, & Teran, 2000). In fact, previous research indicates that teen pregnancy prevention programs are unlikely to effect change in sexual behavior if adolescents do not see the negative consequences of teen pregnancy as greater than the reward of being a teen parent (Gordon, 1996; Herrman, 2007). One factor that may delay teens' sexual behavior is academic goal setting. In an early study on the topic, Jessor and Jessor (1975) found that adolescents who reported having higher educational goals were more

likely to delay their first sexual intercourse relative to their peers with lower stated educational goals. However, more recent research findings suggest that educational goals may only reduce the risk of teen pregnancy if teens perceive having a child as an impediment to those goals (Jumping-Eagle, Sheeder, Kelly, & Stevens-Simon, 2008).

As noted above, it appears fundamental that in order to prevent teen pregnancy, teens must perceive pregnancy as something that is not desired or is an impediment to their goals (Jumping-Eagle et al., 2008). Preliminary research evaluating non-parenting adolescents' perceptions of teen pregnancy has identified conflicting beliefs about the stress of teen parenting. On the one hand, adolescents report believing that being a teen parent would have negative impacts on their social life, level of stress, and academic and career goals (Herrman, 2008). Conversely, other teens have identified positive consequences of having a baby, including being regarded as more of an adult, having increased support from a romantic partner, and receiving positive attention from friends and family (Herrman, 2008). These findings did not differ across gender, suggesting that both males and females have a range of positive and negative thoughts on teen parenting. Some teens are significantly more likely to view teen pregnancy as less negative; Herrman and Waterhouse (2011) found that teens with a parent who had a child as a teenager were significantly more likely to have a positive appraisal of teen parenthood compared to those who did not.

Overall, if adolescents' positive appraisals of teen parenting outweigh their perceived negative expectations, they are less likely to take steps to prevent pregnancy (Jumping-Eagle et al., 2008; Jaccard, Dodge, & Dittus, 2003). For example, Unger, Molina, and Teran (2000) found that Hispanic teens' contraceptive use was influenced by the teens' perceived consequences of having a baby, such that those who identified fewer negative consequences of having a baby

were more likely to report engaging in unprotected sexual intercourse. Specifically, this relation was strongest for Hispanic teens with low educational goals. Additionally, adolescents with positive perceptions of teen pregnancy, relative to their peers, are less likely to use contraception at last sexual intercourse (Jumping-Eagle et al., 2008) and have an increased likelihood of becoming a teen parent (Jaccard et al., 2003). Taken together, these findings suggest that in order to impact sexual decision making, it is important for pregnancy prevention programs to focus on factors that influence adolescents' perceptions of teen parenting.

One such factor that may influence teens' sexual decision making is their academic aspirations beyond high school. Having high academic aspirations may lead to more negative perceptions of teen pregnancy because having a baby would be seen as an impediment to reaching academic goals. For example, female teenagers who did not feel that becoming pregnant would be an impediment to their future goals or a detriment to their self-esteem were the least committed to remaining non-pregnant (Stevens-Simon, Sheeder, Beach, & Harter, 2005). Given the evidence suggesting that adolescents with higher educational goals delay their first sexual intercourse relative to peers with lower stated educational goals (Jessor & Jessor, 1975), it is possible that high academic aspirations may be associated with less positive perceptions of teen parenthood. Because the influence of academic goals and aspirations on adolescents' sexual behavior is likely dependent on the perceived consequences of that behavior (Jaccard et al., 2003), further research is needed to elucidate under what circumstances future goals, specifically academic aspirations, are associated with negative perceptions of teen pregnancy in order to inform prevention efforts.

Previous research on factors associated with teenage pregnancy has primarily focused on the consequences of becoming a teen parent for females rather than males (U.S. Department of

Health and Human Services, 2013). It is important to evaluate both male and females thoughts on teen parenting because previous research has indicated that males have more positive thoughts on teen parenting than females (Herrman & Waterhouse, 2011). Moreover, adolescent girls' desire to remain non-pregnant during adolescence is influenced by both the perception that a boyfriend wants a baby and expectations about the impact of becoming a parent as a teen (Stevens-Simon, Sheeder, & Harter, 2005). This difference in perceptions in teen parenting is likely due to the fact that teen parenthood may have different consequences for males as compared to females (Hoffman & Scher, 2008). For example, teenage males with and without a history of teen parenthood have similar rates of school attainment (Guagliardo, Huang, & D'Angelo, 1999). In contrast, females who become pregnant are likely to experience significantly reduced academic attainment compared to non-parenting female peers (Basch, 2011). Given that the impact of teen pregnancy may differ between males and females, gender was examined as a potential moderator of the relation between academic aspirations and thoughts on teen parenting in the current study.

### **Hope as a Moderator**

Hope, or goal-directed thinking, represents another factor that may impact the association between academic aspirations and perceptions of teen parenting (Feldman, Rand, & Kahle-Wroblewski, 2009; Gilman, Dooley, & Florell, 2006). Generally speaking, hope reflects the belief that one is capable of attaining one's goals and is able to identify ways to reach them (Snyder, 2002). More specifically, hope is comprised of two equally important components: agency thinking and pathways thinking. Agency thinking is the appraisal that one is capable of attaining one's desired goals. Pathways thinking is the appraisal that one is capable of generating strategies or routes to reach those goals (Snyder, 2002). Previous studies have evaluated the



components of hope in Hispanic youth using the Children's Hope Scale (Snyder et al., 1997). In a sample ( $N = 702$ ) of school children from diverse backgrounds, McDermott and Gariglietti (1999) found that non-Hispanic minority children supported a one-factor model of hope, while Hispanic children ( $N = 204$ ) supported a two-factor model (as cited in Lopez et al., 2000). The two-factor model of hope for Hispanic youth was supported in a subsequent study with 303 Mexican immigrants (Gariglietti, 1999).

Hope has been shown to be associated with a host of positive outcomes in children. For example, Irving et al. (2004) found that for children in psychotherapy, those with higher levels of hope at the onset of treatment demonstrated better coping skills, fewer negative symptoms, and a greater ability to regulate their emotions at the end of treatment. Similarly, another study revealed that children who reported higher levels of hope exhibited lower levels of both internalizing and externalizing symptoms (Hagen, Myers, & Makintosh, 2005). Past research has also demonstrated that hope can help mitigate associations between risk factors and a variety of subsequent problem behaviors. For example, hope has been found to buffer the relation between negative life events and both internalizing and externalizing behaviors in adolescents (Valle, Huebner, & Suldo, 2006). Other studies have found that hope mitigates the relation between pessimism and passive coping (Lopes & Cunha, 2008) as well as the association between rumination and suicidal ideation (Tucker et al., 2013).

Although no known studies have examined hope as a moderator between academic aspirations and thoughts on teen parenting, extant evidence supports the notion that hope may buffer this relation. For example, one study found that adolescents who reported significantly lower levels of hope were more likely to have increased psychological distress, school maladjustment, and lower grades compared with peers with higher levels of hope (Gilman,

Dooley, & Florell, 2006). Teens who have higher levels of hope are likely to feel that their academic aspirations are attainable, making them view anything that may serve as an obstacle to these goals more negatively (Feldman et al., 2009). Given that hope refers to an individual's ability to set and devise pathways to reach one's goals, high hope may reflect a change in cognition that, when co-occurring with high academic aspirations, results in more negative perceptions of teen parenting. Accordingly, the current study examined hope as a moderator of the relation between academic aspirations and perceptions of teen parenting.

### **Current Study**

Compared to Caucasian adolescents in the United States, Hispanic youth are at increased risk for teen pregnancy. Thus, more research is needed to specifically assess attitudes of Hispanic teens towards pregnancy to better inform effective pregnancy prevention programs (Hamilton et al., 2013). The current study builds on previous research by evaluating the relation between Hispanic adolescents' academic aspirations and perceptions of teen parenting and by examining hope as a moderator of this relation. It was hypothesized that adolescents who report high levels of academic aspirations would be more likely to perceive teen parenting as more difficult and stressful than those who report lower academic aspirations. Further, hope was expected to strengthen the relation between academic aspirations and negative perceptions of teen parenting. That is, those adolescents who held higher academic aspirations would report less positive perceptions of being a teen parent, particularly when levels of hope were high. Due to different consequences associated with teen pregnancy for males and females (Hoffman & Scher, 2008), gender was also evaluated as a potential moderator of the relation between academic aspirations and thoughts on teen parenting.

Previous research suggests that teens with a parent who had a child as a teenager are significantly more likely to exhibit a positive appraisal of teen parenthood, compared to those who did not (Herrman & Waterhouse, 2011). Thus, having a parent or sibling who was a teen parent was controlled for in analyses. Further, research suggests Hispanic youth born outside of but educated in the U.S. have a dropout rate of approximately 18% as compared to 14% among Hispanic youth born and educated in the U.S. (Fry, 2003). Accordingly, adolescents' reported location of birth (nativity) was also included as a covariate in the analyses.

## **Methods**

### **Participants**

Participants for this study included 130 9<sup>th</sup>-12<sup>th</sup> graders recruited from a charter high school located in a large, Midwestern city. According to school records, 95% of students at this school qualified for free or reduced lunch. Consent forms, available in both Spanish and English, were presented by researchers to families at a required school conference. School-sanctioned interpreters were available and assisted researchers in the consent process. Students who were 18 years or older were allowed to consent for their own participation. Approximately 70% of the returned consent forms were the Spanish version. Of the 153 students with permission to participate (73% of the student body), 148 (96.7%) completed the survey. Assent was obtained from participants just prior to completing the survey. For the purposes of the current study, participants who indicated that they already had children were excluded from this sample ( $n = 10$ ). Additionally, only participants who self-identified as Latino/Hispanic when completing a demographics form on the survey were included in the analysis ( $N = 130$ ). This subsample is composed of 53% females ranging from 14-19 years of age ( $M = 16$ ,  $SD = 1.22$ ).

## Measures

**Demographics.** The student questionnaire asked basic demographic information including age (response options ranging from 13 to 20 years), gender (male or female), and grade (9<sup>th</sup> through 12<sup>th</sup>). Participants were asked to indicate their ethnic background given the following choices: Hispanic/Latino, African American (Black), Caucasian (White), Native American, Asian, Mixed, or Other. Participants were asked to report whether their parents or a sibling had a child as a teen. Participants were also asked about their place of birth (nativity) and that of their parents. Response choices included: (a) I was born outside the U.S., (b) I was born in the U.S., and both of my parents were born outside of the U.S., and (c) I was born in the U.S., and at least one of my parents was born in the U.S. Responses were recoded into a dichotomous variable: (1) teen was born in the US or (2) teen was born outside of the US.

**Academic Aspirations.** A single item was used to assess adolescents' academic plans for the future. The question was: "What are your school plans?" Students chose 1 of 5 options that were on a continuum: (a) Drop out of high school before graduation and not obtain a degree, (b) Drop out of high school before graduation and eventually get a GED, (c) Graduate high school, (d) Graduate high school and go to a 2 year college/technical school, or (e) Graduate high school and go to a 4 year college or even higher.<sup>1</sup>

**Perceptions of Teen Parenting.** The Thoughts on Teen Parenting Scale (TTP; Herrman & Nandakumar, 2012) is a 44-item measure designed to assess teens' perceptions about the impact of having a baby during adolescence. First, participants were asked six questions that

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<sup>1</sup> Analyses were completed to evaluate whether the academic aspirations measure should be considered using all five response choices, four response choices (items (b) and (c) collapsed into a high school equivalent variable), or three response choices (items (a), (b), and (c))

begin with “Having a baby as a teen...” and focus on perceptions of having a baby as teen generally (e.g., “Having a baby as a teen brings boyfriends and girlfriends closer”). The subsequent thirty-eight questions begin with “If I had a baby as a teen...” and focus on teens’ perceptions of the costs and rewards they see associated with having a baby themselves (e.g., “If I had a baby as a teen I would be more likely to graduate from high school.”). For the current study, adolescents responded with a yes-no dichotomy (1 = *Yes*, 0 = *No*). In the design of this measure, eight domains of behavior were identified, which resulted in four subscales based on factor analyses (Herrman & Nandakumar, 2012). These subscales include time and commitment, personal characteristics, family and finances, and relationships. Items were re-coded such that high values indicate more negative thoughts on teen parenting and low values indicate more positive thoughts on teen parenting. Consistent with previous studies (Herrman & Nandakumar, 2012), a total score reflecting overall thoughts on teen parenting was created by summing the responses from these subscales, with higher cumulative scores indicating more negative appraisals of teen parenting.

The TTP has previously demonstrated strong internal consistency, with alpha levels ranging from 0.89 to 0.93 (Herrman, Moore, & Sims, 2013; Herrman & Nandakumar, 2012; Herrman & Waterhouse, 2011; Herrman, Waterhouse, & Chiquoine, 2011). This measure has been primarily evaluated with minority youth (i.e., African American and Hispanic), suggesting that it is appropriate for the current sample. The estimated internal consistency of the TTP in the current sample was good ( $\alpha = .89$ ).

**Children’s Hope Scale.** The Children's Hope Scale (CHS; Snyder et al., 1997) is a self-report measure that assesses hopeful thinking in children and adolescents. The measure contains six questions and asks participants to respond on a 6-point Likert scale ranging from 1 = *None of*

*the time to 6 = All of the time*. The CHS assesses hope in terms of goal-directedness, which is comprised of three questions evaluating agency (e.g., “I am doing just as well as other kids my age”) and three questions evaluating pathways thinking (e.g., “I can think of many ways to get the things in life that are most important to me”). The CHS has demonstrated adequate psychometric properties across multiple samples of primarily Caucasian children, with internal consistencies ranging from .72 to .86 for total score (Snyder, Lopez, Shorey, Rand, & Feldman, 2003). Studies examining the psychometric properties of this measure in Hispanic youth have supported a two-factor model of hope (agency and pathways), which is consistent with the theoretical model of hope (Gariglietti, 1999; McDermott & Gariglietti, 1999). Accordingly, the agency and pathways subscales were evaluated separately in the current study. The internal consistencies of the hope subscales in the current sample were good (Agency  $\alpha = .86$ , Pathways  $\alpha = .85$ ).

### **Procedure**

This study was approved by the researchers’ institutional review board prior to data collection. Participants completed survey measures during a writing class in which all students were required to enroll. The classes ranged in size from 5-20 students. One member of the research team was present in each class to read each question aloud while participants filled out their own survey. The survey was completed in an average of 30 minutes. With the exception of one classroom, no school personnel were present in the room while surveys were administered to increase participants’ comfort in answering questions and the accuracy of their reports. Analyses were conducted to evaluate whether the presence of a teacher in one classroom resulted in differences across study variables. Children in the classroom with a teacher present were more likely to report having a parent who was a teen parent compared to other classrooms ( $r = .20, p =$

< .05); no other significant differences were identified. School personnel provided names of students who might prefer to take the survey in Spanish, and these students were given the option of completing the survey in either language; six students completed the Spanish version. Students received a \$5.00 debit card for their participation.

### **Data Analyses**

In these analyses the independent variable is academic aspirations and the dependent variable is thoughts on teen parenting. The examined moderators of this relationship are hope and gender. Correlations were first estimated to evaluate bivariate relations between study variables. Multiple regression analyses were then used to assess whether hope moderated the relation between academic aspirations and thoughts on teen parenting. Additionally, gender was evaluated as a potential moderator of this relation. Finally, three-way interactions between academic aspirations, hope, and gender were also examined to determine if the influence of hope on the association between academic aspirations and thoughts on teen parenting depended on gender. Consistent with standard procedures, independent variables were mean centered in order to reduce multicollinearity and aid in the interpretation of effects (Aiken & West, 1991).

Adolescents' report of parents and siblings who had a child as a teen was controlled for in analyses due to previous research that suggests that adolescents whose parents had a child as a teen have more positive perceptions of teen parenting (Herrman & Waterhouse, 2011). Additionally, nativity was evaluated as a potential covariate due to different educational outcomes for those born in versus outside of the U.S. (Fry, 2003).

A post-hoc power analysis was conducted using the software G\*Power (Erdfelder, Faul, & Buchner, 1996). A sample size of 130 and a 2 predictor model was used in this analysis to evaluate the power associated with the hypothesis that hope may moderate the relation between

academic aspirations and thoughts on teen parenting. The effect sizes used for this assessment were as follows: small ( $f^2 = .02$ ), medium ( $f^2 = .15$ ), and large ( $f^2 = .35$ ) (Aiken & West, 1991). The alpha level used was  $p < .05$ . The post hoc analyses indicated that the statistical power for detecting small effect sizes in the current study was .48 and the power exceeded .99 for the detection of moderate to large effect sizes. This indicates adequate power to detect moderate to large effect sizes, but less than adequate power to identify small effect sizes.

## Results

### Descriptive Statistics

Correlations, means, SDs, and ranges of study variables are presented in Table 1. As expected, agency and pathways thinking were highly correlated. Contrary to what was hypothesized, academic aspirations were not significantly correlated with thoughts on teen parenting. Additionally, neither agency nor pathways thinking were significantly related to thoughts on teen parenting. However, academic aspirations were positively related to both agency and pathways thinking. Gender differences regarding thoughts on teen parenting were also observed, with females more likely to appraise teen parenting more negatively (Female,  $M = 28.2$ ; Male,  $M = 24.9$ ).

Thirty-six percent of participants indicated that at least one of their parents had a child as a teen, and 24% indicated that at least one of their siblings had a child as a teen. Having a parent or sibling who was a teen parent was associated with less negative thoughts on teen parenting. Finally, nativity and age were not significantly related with any study variables and therefore were not included as covariates in subsequent analyses.

The majority of participants (87%) indicated having academic aspirations to attend at least some college after high school. More specifically, 27% of students reported planning to



graduate high school and attend a two-year college or technical school, and 60% of students reported planning to graduate high school and attend a four-year college.

Participants also reported slightly more negative than positive thoughts on teen parenting. The mid-point of the TTP measure is 22, which indicates neither positive nor negative thoughts on teen parenting. In this study, scores higher than the mid-point indicate more negative than positive thoughts on teen parenting. The mean for this sample was 26.7, with a range of scores from 10 - 43.

### **First Order Effects**

TTP was regressed on academic aspirations, while considering the variance associated with dimensions of hope and control variables (gender, parent had a child as a teen, and sibling had a child as a teen), in order to examine unique associations with thoughts on teen parenting (see Table 2)<sup>2</sup>. Academic aspirations, agency thinking, and pathways thinking were not significantly related to thoughts on teen parenting. Gender was significantly associated with thoughts on teen parenting, such that females had more negative thoughts on teen parenting. Additionally, having a parent who was a teen parent and having a sibling who was a teen parent were significantly related to less negative thoughts on teen parenting.

### **Moderation Analyses**

Cross-product terms between academic aspirations and agency and pathways thinking were added to the model to determine whether the association between academic aspirations and thoughts on teen parenting depended on levels of hope. When the cross-product term between academic aspirations and agency thinking was added to the model, no significant interaction

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<sup>2</sup> Note that agency and pathways were preliminarily examined in separate models due to power considerations; however, no significant effects emerged. Therefore, models presented include both agency and pathways simultaneously examined.

emerged (see Table 2). Further, academic aspirations was not found to interact with pathways thinking to influence thoughts on teen parenting.

### **Gender Differences**

Gender was also examined as a potential moderator to determine if the relation between academic aspirations and thoughts on teen parenting differed between males and females; however, no significant interaction was evident (see Table 2). Three-way interactions were then added to the model to evaluate whether the role of hope in the association between academic aspirations and thoughts on teen parenting varied across gender. No significant interactions emerged (see Table 2).

### **Discussion**

The current study sought to advance previous research by evaluating the relation between Hispanic adolescents' academic aspirations and thoughts on teen parenting and examining whether hope and/or gender would moderate this relation. High academic aspirations were expected to be associated with more negative thoughts on teen parenting. Contrary to this expectation, however, no relation between academic aspirations and thoughts on teen parenting was evident. Further, support was not found for the hypothesis that hope would moderate this relation. Due to potentially different consequences associated with teen pregnancy for males and females (Hoffman & Scher, 2008), gender was also evaluated as a potential moderator of the relation between academic aspirations and thoughts on teen parenting; though no significant gender differences in these associations were evident.

Some significant relations were identified when evaluating associations between study variables. As expected and consistent with previous research, having a parent or sibling who was a teen parent was associated with less negative thoughts on teen parenting (Herrman, Moore, &

Sims, 2013; Herrman & Nandakumar, 2012; Herrman & Waterhouse, 2011; Herrman, Waterhouse, & Chiquoine, 2011). This finding may indicate that children who have a family member who had a child as a teen may be particularly important targets of pregnancy prevention programs that focus on educating youth about the consequences of teen parenthood. Males and females were found to have significantly different thoughts on teen parenting, with females exhibiting more negative thoughts on teen parenting than males. This finding is consistent with previous research (Herrman & Waterhouse, 2011). This gender difference may suggest that teen girls feel more responsibility and stress associated with having a child than do teen boys.

Additionally, nativity and age were evaluated as potential correlates with study variables, but no significant associations were found. This indicates that, for this sample, whether or not an adolescent was born in the United States did not impact their academic aspirations, hope, or thoughts on teen parenting. Though previous studies have found disparities in academic attainment based on nativity (Fry, 2003), this may not extend to adolescents' academic aspirations. Age was not found to be associated with any study variable at the bivariate level, which suggests that academic aspirations, hope, and thoughts on teen parenting may not differ among high school students on the basis of age.

Previous studies utilizing the TTP have found that, across ethnic demographics, adolescents generally have more negative than positive thoughts on teen parenting (Herrman, Moore, & Sims, 2013; Herrman & Nandakumar, 2012; Herrman & Waterhouse, 2011; Herrman, Waterhouse, & Chiquoine, 2011). Specifically, when examining differences between ethnic groups, Herrman and Waterhouse (2011) found that African American and Hispanic teenagers reported negative thoughts on teen parenting, but that their perceptions of teen parenting were

less negative than their Caucasian peers. The current sample appears to have similarly negative thoughts on teen parenting.

Unique characteristics of this population may have contributed to a null relation between academic aspirations and thoughts on teen parenting. When examining academic aspirations in this sample, 87% of students reported planning to graduate high school and attend some college. This is higher than the national average (66%) of students who actually attending college after completing high school (U.S. Bureau of Labor Statistics, 2013). Further, although the sample in this study attended a school that focuses on college preparation, the school reports that the percentage of students who typically attend some college is lower than the national average. Thus, despite high educational goals, rates of college matriculation for students attending this school are below the national average. This suggests that for this sample of adolescents, academic aspirations are not likely to predict actual educational attainment, and may not be a good proxy for assessing educational attainment in intervention and prevention research. This notion is further supported by research that suggests a disparity between academic aspirations and attainment, particularly in low-income, minority households (Cummings et al., 2012; Menzies, 2013).

Previous literature has primarily focused on the association between hope and academic achievement, showing a positive relation between hope and high grades (Curry, Snyder, Cook, Ruby, & Rehm, 1997; Snyder et al., 2002). This study attempted to extend the literature by evaluating the relation between academic aspirations and hope. As expected, high academic aspirations were associated with high levels of both pathways and agency thinking. This may suggest that adolescents who are able to perceive ways to reach their goals and sustain motivation towards their goals are likely to have high academic aspirations. Contrary to

expectations, however, hope did not moderate the relation between academic aspirations and thoughts on teen parenting. This suggests that being able to generate strategies and sustain motivation to reach one's goals does not impact the relation between academic aspirations and thoughts on teen parenting. Alternatively, hope may be more strongly related to tangible goal setting, like academic aspirations, than to how teens perceive the stress of being a teen parent.

Finally, gender differences were evaluated to determine whether the relation between academic aspirations and thoughts on teen parenting differed between males and females; however, no significant relations were identified. This suggests that gender does not significantly impact the relation between academic aspirations and thoughts on teen parenting.

Several limitations should be considered when interpreting the results of the current study. The primary limitation of this study is its reliance on cross-sectional, self-report data that may have been subject to response bias. Future studies employing longitudinal designs would allow for the evaluation of whether or not academic aspirations predict thoughts on teen parenting, and how hope may impact this relation over time. In terms of social desirability, previous research indicates that adolescents typically respond honestly to questionnaires on sexual practices (Siegel, Aten, & Roghmann, 1998). As described previously, however, 87% of participants reported aspiring to attend at least some college, despite the fact that the actual rate of college matriculation at this school is reportedly below the national average of 66%. The charter school attended by the participants in this study is focused on college preparation, and this self-report may reflect the socially desirable aspirations lauded by the school rather than actual individual goals.

The use of a single item to assess academic aspirations may also be viewed as a limitation. Future studies should use more in-depth assessment of academic aspirations. For example,

previous research has included questions to assess whether or not a student feels that they are able to attain their goals (Jumping-Eagle et al., 2008). The distinction between ideal and realistic academic goals was not assessed in this study and may explain the high academic aspirations relative to expected attainment in this population.

Considering that the school from which this sample was drawn focuses on academics and college preparation, these results may not be generalizable to other Hispanic high school students. Finally, this sample had proportionally less 12<sup>th</sup> grade students surveyed compared to other grades. This may reflect the risk of low educational attainment in this population, with fewer enrolled seniors than freshman. This again suggests that these findings may not be representative of high school students as a whole. Furthermore, the current sample was taken from the Midwest and may not be generalizable to other regions of the country. Future studies would benefit from including a more diverse Hispanic population from multiple school sites, which would allow for more generalizability of results.

Additionally, there may be cultural factors that influence thoughts on teen pregnancy for Hispanic adolescents compared to other ethnicities. It is hypothesized that there may be a sense of conflict between Hispanic parents' own cultural background and perceived cultural norms in the United States, differences in how open Hispanic mothers are in talking about sex with their children, and potential neighborhood variables that may impact rates of teen pregnancy in Hispanic youth (Guilamo-Ramos et al., 2006). Within the intervention literature, recent research targeting HIV (Villarruel, Jemmott, & Jemmott, 2006) and violence prevention (Shetgiri, Kataoka, Lin, & Flores, 2010) suggests the need for culturally specific intervention programs for Hispanic youth. This may indicate that the results from this study may not may not be

generalizable to other ethnicities, while also representing a need for culturally sensitive intervention research.

Specifically, further research is needed to evaluate thoughts on teen parenting in Hispanic youth. It is important to better understand what factors may influence adolescents' thoughts on teen parenting and how these thoughts are associated with the overall risk of becoming a teen parent. Future studies should also focus on academic aspirations and risk of teen pregnancy to better evaluate whether or not targeting academic goals and academic support may be a useful focus of teen pregnancy prevention programs. Additionally, longitudinal research on teens' academic attainment would provide a better understanding of the relations between academic aspirations and attainment, hope, and thoughts on teen parenting.

Overall, further research is needed to better understand potential variables that influence adolescents' thoughts on teen parenting and subsequent risky sexual behavior. This study did identify a positive relation between high academic aspirations and high levels of hope, which suggests that this association should be further explored as it relates to teen pregnancy prevention. Additionally, more research is needed on potential correlates of adolescents' thoughts on teen parenting in order to support the use of the TTP survey as a tool in determining targets for pregnancy prevention programming.

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## Appendix

Table 1

*Correlations, Means, Standard Deviations, and Ranges*

	1	2	3	4	5	6	7	8	9
1. Age	—								
2. Gender	.85**	—							
3. Parent was a teen parent	-.02	-.06	—						
4. Sibling was a teen parent	.02	-.10	.16	—					
5. Nativity	-.06	.05	.00	-.11	—				
6. Academic Aspirations	-.07	.17	-.03	-.01	.10	—			
7. Agency	-.03	-.06	.01	.17	.03	.38**	—		
8. Pathways	-.01	-.04	-.02	.14	.03	.47**	.81**	—	
9. Thoughts on Teen Parenting	.02	.26**	-.25**	-.29**	.13	.12	-.08	-.08	—
M	16.03	-	-	-	-	4.4	4.05	4.14	.62
SD	1.22	-	-	-	-	.85	1.13	1.19	.17
Range	14-19	-	-	-	-	1-5	1-6	1-6	10-43

\*\*Correlation is significant at the 0.01 level (2-tailed).

Table 2

*Hierarchical Regression Analysis*

	1 <sup>st</sup> Order Effects Model		Interaction Effects Models	
	<b>B</b>	<b>SE</b>	<b>B</b>	<b>SE</b>
Gender	.07**	.03		
Parent had a child as a teen	-.05**	.02		
Sibling had a child as a teen	-.08**	.03		
Academic Aspirations (AA)	.03	.02		
Hope, Agency	.00	.02		
Hope, Pathways	.03	.02		
AA X Agency			-.02	.01
AA X Pathways			-.01	.01
AA X Gender			.01	.04
AA X Agency X Gender			-.01	.03
AA X Pathways X Gender			.01	.03

\*\* p &lt; .05