

Preliminary Evaluation Results of Healthy Families: Tomorrow's Future, A School-Based Adolescent Pregnancy and Parenting Program

Tori Sisk, M.Ed., LPC, Arlington Independent School District, Texas
Diane Mitschke, PhD, MSW, University of Texas at Arlington, Texas
Holli Slater, BA, MSSW Candidate, University of Texas at Arlington, Texas

Introduction

Healthy Families: Tomorrow's Future is an enhanced pregnancy and parenting program aimed at teens attending Arlington Independent School District (AISD) who are either pregnant or parenting. The enhanced Parenting and Education Program (PEP) provides additional services to pregnant and parenting teens within the Arlington Independent School District (AISD) including four 30-45 minute individual curriculum-driven sessions with a PEP counselor and two 30-45 minute group curriculum-driven sessions facilitated by a PEP counselor. Curriculum focuses on increasing the internal and external developmental assets of the pregnant/parenting teen, directed goal setting and problem solving skills, and building happiness. In addition to the directed individual counseling sessions, other components of the model include establishing connections with the teen's family of origin. These enhanced program components are included in addition to the basic program, which is offered to all students. The basic program provides transportation, child care services, group counseling, crisis intervention, and job training to all interested pregnant/parenting students within AISD. This program evaluation tests the effectiveness of a comprehensive case management model in preventing pregnancy recurrence among pregnant and parenting adolescents while increasing childhood immunization compliance, graduation rates, knowledge of developmental assets, and happiness.

Methods

A quasi-experimental, two group repeated-measures design is being used to compare the enhanced comprehensive case management model to the basic program. Students who are either new to the program or have been in the basic program for less than six weeks and return both informed parental consent and assent forms are then randomly selected to be in either the intervention group (Group A) or the non-intervention group (Group B). Participants in both Group A and Group B complete a pre-test, in the form of an online survey, following the random selection process. Students in Group A will receive the basic and enhanced services while Group B will continue to receive basic services only. The pre-test is comprised of three measures including the Adolescent Family Life Care Programs Core Baseline Questionnaire for Pregnant or Parenting teens (measure of directed goal setting and problem solving skills), the Oxford Happiness scale (measure of happiness), and the Search Institute's Developmental Assets Profile (measure of internal/external assets). Students in both Group A and Group B will take a post-test which is comprised of the Adolescent Family Life Care Program's Core Follow-Up Questionnaire, the Oxford Happiness Scale, and the Search Institute's Developmental Assets Profile at the end of the school semester and at the 12 month birth date of the child. At this time no 12 month follow ups have been completed.

For data analysis, a variety of statistical procedures were employed due to the nature of the data. The alpha was set *a priori* at 0.10 and the *Statistical Package for the Social Sciences (SPSS)* was used to complete the various analyses. Most of the items in the individual assessments were measured at the nominal and ordinal levels, requiring nonparametric statistics. Parametric statistics were used for a few of the instances where interval/ratio data were available. A few examples of these include analysis on the Search Institute's Developmental Assets Inventory and the Oxford Happiness Questionnaire which both yielded interval scores. Additionally, in some instances, the number of participants answering a particular item was too low, resulting in violations of assumptions necessary for completing a given statistical procedure. In these cases, appropriate statistical controls were employed to account for this.

At the completion of the semester, focus groups were conducted with students in Group A to assess student perception of the costs and benefits of the enhanced version of the program. Focus groups inquired about the students perception of the selection process, content of the intervention modules (e.g. logic model, developmental assets, goal setting), and feelings of happiness. Challenges the student faced by participating (e.g. being pulled from class) were also discussed.

Results

At the completion of year two of the project 76 (Control n=47 and Experimental n=29) participants have provided both baseline and end of semester post-test data. While there appeared to be favorable differences between the posttest and baseline measures there were few objectives that demonstrated statistically significant findings. When asked about repeat pregnancies, only a total of 13 of the 76 participants responded. Of those 13 respondents, there were more repeat pregnancies (n = 1) in the control group than in the intervention group (n = 0). A Chi Square Test of Independence was performed indicating that the groups are not independent of each other ($\chi^2 = 0.929$, $p = 0.335$). However, these results are questionable as the assumption of at least 5 cases per cell necessary for an accurate Chi Square Test of Independence was violated. Due to this, Fisher's Exact Test is used to account for the violation resulting in a change in the significance level ($p = 0.538$). The fact that there were fewer repeat pregnancies in the intervention group than the control group is a chance occurrence and not due to the difference between the interventions offered.

To measure immunization compliance, students were asked 4 questions about 4 different vaccines (Diphtheria Tetanus whole cell Pertussis [DPT], Polio, Haemophilus Influenza type b [HIB], Hepatitis B). Analysis indicates that there was an increase in the number of students acquiring the DPT vaccine for their children in both the intervention (n = 11, 52.4%) and control (n = 28, 73.7%) groups. While some of the increase can be attributed to more students answering this question at follow-up, it is plausible that these students did not answer the question at baseline due to not having understood the question. The Chi Square Test of Independence ($\chi^2 = 2.739$, $p = 0.098$) indicates that the fact that there were more respondents in the intervention group acquiring the DPT vaccination for their children than in the control group at time of follow-up is not a chance occurrence but rather due to the difference between interventions offered.

Increases in number of students acquiring the Polio vaccine for their children were noted in both the intervention (n = 9, 42.9%) and control (n = 28, 73.7%) groups. The Chi Square Test of Independence ($\chi^2 = 5.497$, $p = 0.019$) indicates that the fact that there were more respondents in the intervention group acquiring the Polio vaccination for their children than in the control group at time of follow-up is not a chance occurrence but rather due to the difference between interventions offered.

While increases in number of students acquiring the HIB vaccine for their children were noted in both the intervention (n = 10, 47.6%) and control (n = 24, 63.2%) groups, these results were not significant ($\chi^2 = 1.337$, $p = 0.247$). Increases in number of students acquiring the Hepatitis B vaccine for their children were also noted in both the intervention (n = 16, 76.2%) and control (n = 28, 73.7%) groups; however, these results were not significant ($\chi^2 = 0.045$, $p = 0.832$).

Although there were more respondents in the control group who were in or completed school or a GED program than in the intervention group, this was not significant ($\chi^2 = 1.257$, $p = 0.262$) indicating this difference is due to chance. Responses to the question "Have you completed a job training program?" indicate that the groups are not independent of each other ($\chi^2 = 5.143$, $p = 0.076$). In other words, the fact that there were more students completing a job-training program in the control group than in the intervention group is not a chance occurrence. However, these results are questionable as the assumption of at least 5 cases per cell necessary for an accurate Chi Square Test of Independence was violated.

Analysis on the remaining objectives relating to the students' ability to increase their developmental assets from pre to post assessment as well as students' level of happiness yielded no statistically significant findings.

A total of 27 students from Group A participated in focus groups in May 2008. Preliminary analysis indicates that students overall had a positive perception of the enhanced program and felt privileged to have been able to participate. Participants felt that they benefitted from working with a PEP counselor in a one-on-one setting and felt that the program was instrumental in their academic success and in achieving individual goals. A minority of students also raised concerns about the content of sessions and being removed from class. They provided suggestions for improvement (e.g. longer sessions, focus on student-child relationship).

Discussion

Initial data indicates the enhanced program is positively impacting students; however, these results must be interpreted with caution. The most pressing challenge faced by this evaluation is the ability to recruit participants. While students appear interested in the program, it has been difficult to obtain informed parental consent. One possible step to improve the return rate is to obtain verbal informed consent via telephone with a follow up mailing of the informed consent form to students' parents. Another limitation has been program attrition due to students dropping out of school, moving to another school, or graduating. Due to a large amount of students graduating, it is expected that locating these students at the one year follow-up will be an additional challenge. At this time each of the ten PEP counselors has the capacity to facilitate six students in the intervention group. Due to this personnel restraint the number of students to be included in the intervention group is limited to a maximum of sixty students which may not be an adequate sample if we lose students at the time of follow-up.

Implications

Effectiveness of this program would provide the basis for expanding the basic PEP program to incorporate comprehensive case management to all pregnant and parenting teens in AISD. If the enhanced PEP program is found to positively impact students it may have broad reaching value for other school based pregnant and parenting programs. This project will undergo an additional IRB review in order to allow participation in the cross site evaluation beginning in January 2009.

Contact Information

Name of contact person during abstract review: Holli Slater

Telephone: 214-682-5895

E-Mail Address: holli.slater@mavs.uta.edu