Group counseling has been highlighted as one effective intervention for at-risk students, yet debate remains as to the comparable efficacy of traditional interventions versus thematic interventions. This study compared two psychosocial educational programs, the PEGS and ARK Programs, designed to help elementary school students with social skills development, problem behaviors, bullying, and self-esteem with 15 elementary-aged students. Results revealed no differences between the programs and improvement on many indicators. Implications for school counselors are presented.

Keywords: elementary students, psychosocial education, prevention programs, school counseling, traditional interventions, thematic interventions

Group work can be an effective means of counseling at-risk students. As such, the American School Counselors Association (ASCA) has endorsed group work as an important component of school counseling (ASCA, 2005). Groups can help students learn to solve problems in an efficient and effective manner and is an ideal method for meeting the needs of at-risk populations (Akos & Milsom, 2007). Group counseling allows students to develop connections while at the same time exploring factors that may affect their achievement (Kayler & Sherman, 2009). Groups are used to address such issues as social skills (Bostick & Anderson, 2009), bolstering students’ self-perceptions (Eppler, Olsen, & Hidano 2009), preventing problem behavior (Todd, Campbell, Meyer, & Horner, 2008), increasing academic success (Brigman, Webb, & Campbell, 2007), and reducing school-wide bullying (Allen, 2010). Further, Quinn, Kavale, Mathur, Rutherford, and Forness (1999) conducted a meta-analysis (35 studies) of social skills interventions used with children exhibiting problem or emotional behaviors. Results revealed several important issues. First, it appears that there is a wide range of presenting deficits in children’s social skills. Second, social skills training is widely used as a mechanism to address problem behavior in children; however, it may not be as effective at addressing problem behaviors when used in isolation.

The purpose of this study is to compare the effectiveness of two psychosocial intervention programs, Psychosocial Educational Groups for Students (PEGS) and the At-Risk Kids Groups (ARK) and to assess the impact of each program. The PEGS and ARK Programs are designed to help elementary school students in the following areas: social skills development, problem behaviors, bullying, and self-esteem.

Issues Addressed in Groups

According to Berry and O’Conner (2010), social skills are a set of learned behaviors that allow for positive social interactions, such as sharing, helping, initiating and sustaining relationships. Children who enter the academic setting with problem behaviors are often the children who lack the social skills to create and maintain positive social interactions. In
a recent study by Bostick and Anderson (2009), 49 third graders with social skill deficits participated in a 10-week social skills program aimed at reducing loneliness and anxiety in an academic setting. Findings revealed significant reductions in loneliness and anxiety as well as significant increases in reading scores.

Groups also can be an effective manner in addressing children with problem behavior. For example, Hudley, Graham, and Taylor (2007) studied the level of children’s aggression in relation to personal responsibility. After a series of 12 lessons related to detecting other’s intentions, externalization, and positive responses, students showed improvement in socially acceptable behavior along with a reduction in overall aggression. For additional examples also see Cotugno (2009), McCurdy, Lannie, and Barnabus (2009), and Todd, Campbell, Meyers, and Horner (2008).

Olweus (1997) defines bullying as purposeful behavior, repeated over time, including an imbalance of power. Several psychoeducational programs have been developed to address the issue of bullying in schools (Horne, Bartolomucci, & Newman-Carlson, 2003; Jenson & Dieterich, 2007; Olweus, 1991). At-risk students are at particular risk for bully-related behaviors, including both roles of victim and perpetrator (Allen, 2010). Therefore, group intervention in the schools may be a beneficial way of directly addressing bullying.

Self-esteem, also known as self-concept, is often defined as the way in which children think about themselves in relation to their attributes and abilities (Kenny & McEachern, 2009). “Part of preventing problem behaviors is increasing the self-esteem of those with problem behaviors” (Newgent, Behrend, Lounsbury, Higgins, & Lo, 2010, p. 82). There are relatively few empirical studies, however, on the effectiveness of groups and self-esteem (e.g., O’Moore & Kirkham, 2001; Whitney & Smith, 1993).

Prior Research

A paucity of research exists on addressing multiple presenting problems in children. A major implication of the Quinn et al. (1999) meta-analysis suggested that psychoeducational groups may need to address more than one problem. A study conducted by Newgent et al. (2010) examined the effectiveness of a 6-week psychosocial educational group for students that addressed social skills, problem behaviors, bullying, and self-esteem. Results showed that students with multiple presenting issues benefited from a group addressing multiple issues. Further, results showed that students with no clinically relevant presenting issues also benefited from the multi-issue group (Newgent et al., 2010). In addition, some research is suggesting that while traditional, process-oriented groups can be effective at addressing problems, thematic groups have become more prevalent, especially when there is a time constraint (Hartzler & Brownson, 2001). While the benefit of thematic groups is a more specific or more common goal it also can lack the breadth of more traditional groups.

This study aimed to compare the effectiveness of two selective intervention programs (traditional vs. thematic) on measures of social skills, problem behaviors, teacher- and self-reports of peer relationships (bullying behaviors and peer victimization), self-esteem (self-worth, ability, self-satisfaction, and self-respect) and perception of self. Further, this study aimed to assess the impact of each of the intervention programs. The following research questions were tested: Is there a differential impact when comparing the PEGS Program to the ARK Program? Do the PEGS and ARK Programs have a positive impact on social skills, problem behaviors, peer relationships, and self-esteem?

Method

Participants

Eleven (n = 11) students were enrolled in the PEGS Program and four (n = 4) students were enrolled in the ARK Program. No attrition of program participants occurred. While participation was open to all students, teachers only recommended male students for both programs. Students in the PEGS Program were in the 4th grade and students in the ARK Program were in the 5th grade. In the PEGS Program five students (45%) identified as Caucasian/White, four (36%) identified as African American, one (9%) identified as Hispanic, and one (9%) identified as other. In the ARK Program one student (25%) identified as Caucasian, one student (25%) identified as African American, and two students (50%) identified as Hispanic. No students were identified as having some type of diagnosed learning, behavioral, or emotional disability.

Selective Intervention Program

One of the underlying tenants of the PEGS and ARK Programs is that students should not be labeled or stigmatized for
having problems. Therefore, both programs utilized referrals that were based on underlying characteristics that lead to specific problems, not labels. Thus, students who are impulsive, depressed, dominant, lonely, easily frustrated, anxious, lack empathy, have low self-esteem, have difficulty following rules, are socially withdrawn, view violence in a positive way, have few friends, make negative attributions, have mood swings, instigate conflict, have difficulty handling conflict, or are aggressive or stressed were identified by their teachers and recommended for one of the two programs.

While both the PEGS and the ARK Program cover the same underlying psychosocial educational content, the primary difference is that the PEGS Program consists of traditional psychosocial education units while the ARK Program units are targeted toward peer victimization (i.e., bullying). Both PEGS and ARK provide a series of 6 one-half hour group sessions over the course of 6 weeks for elementary school students in grades 3–5. The six psychosocial education components of each of the intervention programs include: (a) improving social skills, (b) building and increasing self-esteem, (c) developing problem-solving skills, (d) assertiveness training, (e) enhancing stress/coping skills, and (f) prevention of mental health problems/problem behaviors. Lessons for the PEGS Program were adapted from Lively Lessons for Classroom Sessions (Sartori, 2000), More Lively Lessons for Classroom Sessions (Sartori, 2004), and the Missouri Comprehensive Guidance Programs (Frankenbert, Grandelious, Keller, & Schaaf, n.d.). These lessons focused on cooperation, encouraging students to be proud of who they are, breaking the chain of violence, handling anxiety and stress, and tolerance regarding differences. Lessons for the ARK Program were adapted from Bully Busters: A Teacher’s Manual for Helping Bullies, Victims, and Bystanders (Horne, Bartolomucci, & Newman-Carlson, 2003). These lessons focused on increasing awareness of bullying, building personal power, recognizing the bully and the victim, recommendations and interventions for helping victims, and relaxation and coping skills. Puppets were utilized in both programs to help model the lessons being taught. Worksheets related to the lessons also were utilized to help crystallize the concepts.

All recommended students participated in the one of the programs. Given class schedules, the school counselor recommended that students be assigned to one of the programs by grades. Therefore, all recommended 4th grade students were assigned to the PEGS Program and all recommended 5th grade students were assigned to the ARK Program. These assignments were done on a random basis. No control groups were utilized in this study at the school’s request. The same facilitators were used for both programs.

**Instruments**

**Social Skills Improvement System – Teacher Form (SSiS–T).** The Social Skills Improvement System – Teacher Form was developed by Gresham and Elliott (SSiS; 2008) and published by NCS Pearson, Inc. The SSiS–T is an 83-item rating scale designed specifically for teachers to use to assess children’s school-related problem behaviors and competencies. Scores reported for each of the three measurement areas are percentiles. Clinical levels for each of the three areas are as follows: social skills (≤ 16), problem behaviors (≥ 84), and academic competence (≤ 16). That is, lower scores on social skills and academic competence and higher scores on problem behaviors are considered clinically problematic. For the purposes of this study, only social skills and problem behaviors were evaluated. Cronbach alphas for social skills were .95 and .92 at pre- and post-test assessment, respectively. Cronbach alphas for problem behaviors were .86 and .89 at pre- and post-test follow-up assessment, respectively.

**Social Skills Improvement System – Student Form (SSiS–S).** The Social Skills Improvement System – Student Form was developed by Gresham and Elliott (SSiS; 2008) and published by NCS Pearson, Inc. The SSiS–S is a 75-item rating scale designed specifically for students aged 8–12 to use to assess their own school-related problem behaviors and competencies. Scores reported for each of the two measurement areas are percentiles. Clinical levels for each of the two areas are as follows: social skills (≤ 16) and problem behaviors (≥ 84). That is, lower scores on social skills and academic competence and higher scores on problem behaviors are considered clinically problematic. Cronbach alphas for social skills were .80 and .87 at pre- and post-test assessment, respectively. Cronbach alphas for problem behaviors were .74 and .70 at pre- and post-test assessment, respectively.
respectively. Cronbach alphas for victimization were .78 and .90 at pre- and post-test assessment, respectively.

**Peer Relationship Measure – Self Report.** The Peer Relationship Measure – Self Report (Newgent, 2009b) was developed specifically for the PEGS and ARK Programs. It measures students’ perceptions about peer victimization. Nine items measure bullying behaviors and nine items measure victimization. Items are scored as 0 = never, 1 = sometimes, and 2 = a lot, with scores ranging from 0 to 18 for each area. Scores reported for both of the measurement areas are totals. A high score indicates a high level of bullying behaviors and/or victimization; a low score indicates a low level of bully behaviors and/or victimization. This measure is a parallel measure to the Peer Relationship Measure – Teacher Report. Cronbach alphas for bullying behaviors were .07 and .87 at pre- and post-test assessment, respectively. Cronbach alphas for victimization were .81 and .82 at pre- and post-test assessment, respectively.

**Modified Rosenberg’s Self-Esteem Inventory (a).** The Modified Rosenberg’s Self-Esteem Inventory (a) (Zimprich, Perren, & Hornung, 2005) measures an individual’s level of self-esteem (i.e., perception of self-worth, ability, self-satisfaction, and self-respect) and was completed by the students. The 10-item inventory uses a 4-point likert scale (strongly agree, agree somewhat, disagree somewhat, and strongly disagree). Five of the items are reverse coded and the score reported is the total, which ranges from 0–30. A high score indicates a high level of self-esteem; a low score indicates a low level of self-esteem. Cronbach alphas were .60 and .54 at pre- and post-test assessment, respectively.

**Modified Rosenberg’s Self-Esteem Inventory (b).** The Modified Rosenberg’s Self-Esteem Inventory (b) (Zimprich et al., 2005) measures an individual’s self-esteem (i.e., perception of self) and was completed by the students. The 4-item inventory uses a 5-point likert scale (never, seldom, sometimes, often, always). One of the items is reverse coded and the score reported is the total, which ranges from 4–20. A high score indicates a high level of self-esteem; a low score indicates a low level of self-esteem. Cronbach alphas were .59 and -1.56 at pre- and post-test assessment, respectively.

**Procedure**

Fifteen students were recommended by their teachers for the PEGS and ARK Programs and 15 parental consents/child assents were received. Recommending teachers completed the SSiS–T (Gresham & Elliott, 2008) and the Peer Relationship Measure – Teacher Report (Newgent, 2009a) at the start of the PEGS and ARK Programs and at two months after the conclusion of the PEGS and ARK Programs. Ideally, we would have liked an additional follow-up assessment; however, there was difficulty in securing a longer period of involvement in the assessments. Students completed the SSiS–S (Gresham & Elliott, 2008), the Peer Relationship Measure – Self Report (Newgent, 2009b), the Modified Rosenberg’s Self-Esteem Inventory (a) (Zimprich et al., 2005), and the Modified Rosenberg’s Self-Esteem Inventory (b) (Zimprich et al., 2005) at the start of the PEGS and ARK Programs and at two months after the conclusion of the PEGS and ARK Programs. All participating students received a certificate of completion at the conclusion of the last session.

Sessions for both programs were co-facilitated by two graduate students in the counseling and educational research programs. Both facilitators passed criminal background checks and had prior professional experience working with children who exhibit problematic behaviors. Supervision was provided to the facilitators by two counseling faculty members overseeing the programs.

**Data Analytic Plan**

Each student who participated in the PEGS or ARK Programs was assessed at two time points utilizing a variety of measurement instruments (see Instruments section). Pre-test scores on each of the instruments were initially analyzed using independent-samples *t*-tests to test the underlying assumption that participant scores between the groups were not significantly different. Next, scores were analyzed using independent-samples *t*-tests to assess for significant differences on the post-test assessment scores between the PEGS Program and the ARK Program participants. Finally, paired-samples *t*-tests, comparing pre-test to post-test assessment scores within each program, were used to assess the impact of each of the programs. Effect sizes are reported as small (d = .20), medium (d = .50), and large (d = .80) (Cohen, 1992; O’Rourke, Hatcher, & Stepanski, 2005).
Results

Between-Group Analysis

Teacher-reported measures. Results were initially analyzed using independent-samples t-tests comparing the pre-test assessment scores of the PEGS Program to the ARK Program. Statistical comparisons are displayed in Table 1. Analysis of teacher-reported social skills failed to reveal a significant difference between the two groups, \( t(12) = 0.76; p < .46 \). The effect size was computed as \( d = .76 \), which represents a large effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the groups, \( t(10.73) = -0.15; p < .88 \). The effect size was computed as \( d = .08 \), which represents a very small effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the groups, \( t(12) = -0.97; p < .35 \). The effect size was computed as \( d = .97 \), which represents a large effect. Analysis of teacher-reported peer victimization also failed to reveal a significant difference between the groups, \( t(12) = -2.14; p < .054 \). The effect size was computed as \( d = 2.13 \), which represents a very large effect.

Results were then analyzed using independent-samples t-tests comparing the post-test assessment scores of the PEGS Program to the ARK Program. Statistical comparisons are displayed in Table 1. Analysis of teacher-reported social skills failed to reveal a significant difference between the two groups, \( t(12) = 0.08; p < .94 \). The effect size was computed as \( d = .08 \), which represents a very small effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the groups, \( t(12) = -0.28; p < .78 \). The effect size was computed as \( d = .28 \), which represents a small effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the groups, \( t(12) = -1.56; p < .14 \). The effect size was computed as \( d = 1.56 \), which represents a very large effect. Analysis of teacher-reported peer victimization revealed a significant difference between the groups, \( t(11.29) = -3.48; p < .005 \). The effect size was computed as \( d = 1.84 \), which represents a very large effect.

Self-reported measures. Results were initially analyzed using independent-samples t tests comparing the pre-test assessment scores of the PEGS Program to the ARK Program. Mean scores, significance, and effect size are displayed in Table 1. Analysis of self-reported social skills failed to reveal a significant difference between the two groups, \( t(3.25) = 1.16; p < .32 \). The effect size was computed as \( d = 5.88 \), which represents a very large effect. Analysis of self-reported problem behaviors also failed to reveal a significant difference between the groups, \( t(13) = 0.56; p < .59 \). The effect size was computed as \( d = .56 \), which represents a medium effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the groups, \( t(13) = 1.25; p < .23 \). The effect size was computed as \( d = 1.25 \), which represents a very large effect. Analysis of self-reported peer victimization also failed to reveal a significant difference between the groups, \( t(13) = 1.09; p < .56 \). The effect size was computed as \( d = 1.09 \), which represents a very large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the groups, \( t(13) = 0.18; p < .86 \). The effect size was computed as \( d = .18 \), which represents a small effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups, \( t(13) = -1.17; p < .26 \). The effect size was computed as \( d = 1.17 \), which represents a very large effect.

Results were then analyzed using independent-samples t-tests comparing the post-test assessment scores of the PEGS Program to the ARK Program. Mean scores, significance, and effect size are displayed in Table 1. Analysis of self-reported social skills failed to reveal a significant difference between the two groups, \( t(13) = 2.03; p < .06 \). The effect size was computed as \( d = 2.03 \), which represents a very large effect. Analysis of self-reported problem behaviors also failed to reveal a significant difference between the groups, \( t(13) = 0.56; p < .59 \). The effect size was computed as \( d = .56 \), which represents a medium effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the groups, \( t(13) = -1.31; p < .21 \). The effect size was computed as \( d = 3.40 \), which represents a very large effect. Analysis of self-reported peer victimization also failed to reveal a significant difference between the groups, \( t(13) = 0.82; p < .43 \). The effect size was computed as \( d = .82 \), which represents a large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the groups, \( t(13) = 0.79; p < .44 \). The effect size was computed as \( d = .80 \), which represents a large effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups, \( t(13) = 0.33; p < .75 \). The effect size was computed as \( d = .33 \), which represents a small to medium effect.
Table 1

**Pre- and Post-Test Comparisons between the PEGS (Traditional) and ARK (Thematic) Program**

<table>
<thead>
<tr>
<th>Assessment Instrument</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS – Social skill</td>
<td>0.76</td>
<td>.46</td>
<td>.76</td>
<td>.08</td>
</tr>
<tr>
<td>SSRS – Problem behaviors</td>
<td>-0.15</td>
<td>.88</td>
<td>.08</td>
<td>-0.28</td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>-0.97</td>
<td>.35</td>
<td>.97</td>
<td>-1.56</td>
</tr>
<tr>
<td>Peer victimization</td>
<td>-2.14</td>
<td>.054</td>
<td>2.13</td>
<td>-3.48</td>
</tr>
<tr>
<td>Self-reported</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS – Social skill</td>
<td>1.16</td>
<td>.32</td>
<td>5.88</td>
<td>2.03</td>
</tr>
<tr>
<td>SSRS – Problem behaviors</td>
<td>0.56</td>
<td>.59</td>
<td>.56</td>
<td>0.56</td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>1.25</td>
<td>.23</td>
<td>1.25</td>
<td>-1.31</td>
</tr>
<tr>
<td>Peer victimization</td>
<td>1.09</td>
<td>.30</td>
<td>1.09</td>
<td>0.82</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>0.18</td>
<td>.86</td>
<td>0.18</td>
<td>0.79</td>
</tr>
<tr>
<td>Perception of self</td>
<td>-1.17</td>
<td>.26</td>
<td>1.17</td>
<td>0.33</td>
</tr>
</tbody>
</table>

**Within Group Analysis – PEGS**

**Teacher-reported measures.** Results were analyzed using paired-samples $t$-tests comparing the pre-test assessment scores of the PEGS Program to the post-test assessment scores of the PEGS Program. Mean scores, significance, and effect size are displayed in Table 2. Analysis of teacher-reported social skills failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = 0.38; p < .71$. The effect size was computed as $d = .11$, which represents a very small effect. Analysis of teacher-reported problem behaviors also failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = 1.95; p < .08$. The effect size was computed as $d = .59$, which represents a medium effect. Analysis of teacher-reported bullying behaviors failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = 0.13; p < .90$. The effect size was computed as $d = .04$, which represents a very small effect. Analysis of teacher-reported peer victimization also failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = -0.20; p < .84$. The effect size was computed as $d = .06$, which represents a very small effect.

**Self-reported measures.** Results were analyzed using paired-samples $t$ tests comparing the pre-test assessment scores of the PEGS Program to the post-test assessment scores of the PEGS Program. Mean scores, significance, and effect size are displayed in Table 2. Analysis of self-reported social skills failed to reveal a significant difference between the pre- and the post-test assessments, $t(10) = -1.52; p < .16$. The effect size was computed as $d = .46$, which represents a medium effect. Analysis of self-reported problem behaviors revealed a significant difference between the pre- and post-test assessments, $t(10) = 2.81; p < .02$. The effect size was computed as $d = .85$, which represents a large effect. Analysis of self-reported bullying behaviors failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = 0.52; p < .62$. The effect size was computed as $d = .15$, which represents a small effect. Analysis of self-reported peer victimization revealed a significant difference between the pre- and post-test assessments, $t(10) = 2.95; p < .01$. The effect size was computed as $d = .89$, which represents a large effect. Analysis of self-reported self-esteem failed to reveal a significant difference between the pre- and post-test assessments, $t(10) = -0.22; p < .83$. The effect size was computed as...
d = .07, which represents a very small effect. Analysis of self-reported perception of self also failed to reveal a significant difference between the groups, t(10) = 0.76; p < .46. The effect size was computed as d = .23, which represents a small effect.

Table 2

Pre- and Post-Test Comparisons of the Impact of the PEGS Program

<table>
<thead>
<tr>
<th>Assessment Instrument</th>
<th>M (SD)</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td>Teacher-reported (df = 10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS - Social skill</td>
<td>16.45 (16.48)</td>
<td>14.73 (18.93)</td>
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<tr>
<td>SSRS - Problem behaviors</td>
<td>92.45 (9.56)</td>
<td>86.55 (14.77)</td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>8.0 (4.56)</td>
<td>7.82 (4.45)</td>
</tr>
<tr>
<td>Peer victimization</td>
<td>6.45 (3.11)</td>
<td>6.64 (3.93)</td>
</tr>
<tr>
<td>Self-reported (df = 10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS - Social skill</td>
<td>13.27 (7.54)</td>
<td>24.09 (20.46)</td>
</tr>
<tr>
<td>SSRS - Problem behaviors</td>
<td>68.0 (21.52)</td>
<td>54.45 (23.05)</td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>3.55 (1.86)</td>
<td>3.18 (2.82)</td>
</tr>
<tr>
<td>Peer victimization</td>
<td>7.27 (4.2)</td>
<td>5.82 (3.57)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>19.0 (4.88)</td>
<td>19.27 (3.9)</td>
</tr>
<tr>
<td>Perception of self</td>
<td>15.27 (2.94)</td>
<td>14.64 (1.69)</td>
</tr>
</tbody>
</table>

Within Group Analysis – ARK

Teacher-reported measures. Results were analyzed using paired-samples t-tests comparing the pre-test assessment scores of the ARK Program to the post-test assessment scores of the ARK Program. Mean scores, significance, and effect size are displayed in Table 3. Analysis of teacher-reported social skills revealed a significant difference between the pre- and post-test assessments, t(2) = 6.25; p < .02. The effect size was computed as d = 3.61, which represents a very large effect. Analysis of teacher-reported problem behaviors failed to reveal a significant difference between the pre- and post-test assessments, t(2) = 1.84; p < .21. The effect size was computed as d = 1.06, which represents a very large effect. Analysis of teacher-reported bullying behaviors revealed a significant difference between the pre- and post-test assessments, t(2) = 5.00; p < .04. The effect size was computed as d = 2.88, which represents a very large effect. Analysis of teacher-reported peer victimization failed to reveal a significant difference between the pre- and post-test assessments, t(2) = 0.00; p < 1.00. The effect size was computed as d = 0, which represents no effect.

Self-reported measures. Results were analyzed using paired-samples t-tests comparing the pre-test assessment scores of the ARK Program to the post-test assessment scores of the ARK Program. Mean scores, significance, and effect size are displayed in Table 3. Analysis of self-reported social skills revealed a significant difference between the pre- and post-test assessments, t(3) = -4.14; p < .03. The effect size was computed as d = 2.07, which represents a very large effect. Analysis of self-reported problem behaviors failed to reveal a significant difference between the pre- and post-test assessments, t(3) = 1.31; p < .28. The effect size was computed as d = .65, which represents a medium effect. Analysis of self-reported bullying behaviors revealed a significant difference between the pre- and post-test assessments, t(3) = 5.42; p < .01. The effect size was computed as d = 2.71, which represents a very large effect. Analysis of self-reported peer victimization failed to reveal a significant difference between the pre- and post-test assessments, t(3) = 1.14; p < .34. The effect size
was computed as \( d = .57 \), which represents a medium effect. Analysis of self-reported self-esteem also failed to reveal a significant difference between the pre- and post-test assessments, \( t(3) = -0.80; p < .48 \). The effect size was computed as \( d = .40 \), which represents a small to medium effect. Analysis of self-reported perception of self failed to reveal a significant difference between the groups, \( t(3) = -0.69; p < .54 \). The effect size was computed as \( d = .34 \), which represents a small effect.

Table 3

<table>
<thead>
<tr>
<th>Assessment Instrument</th>
<th>( M(SD) )</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>( t )</th>
<th>( p )</th>
<th>( d )</th>
</tr>
</thead>
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<tr>
<td>SSRS – Social skill</td>
<td>24.0 (4.36)</td>
<td>15.67 (3.51)</td>
<td>6.25</td>
<td>.02</td>
<td>3.61</td>
<td></td>
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<tr>
<td>SSRS – Problem behaviors</td>
<td>92.0 (1.0)</td>
<td>84.0 (8.19)</td>
<td>1.84</td>
<td>.21</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>5.33 (1.53)</td>
<td>3.67 (1.15)</td>
<td>5.00</td>
<td>.04</td>
<td>2.88</td>
<td></td>
</tr>
<tr>
<td>Peer victimization</td>
<td>2.33 (2.08)</td>
<td>2.33 (0.58)</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Self-reported (( df = 3 ))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS – Social skill</td>
<td>26.5 (22.29)</td>
<td>49.75 (25.2)</td>
<td>-4.14</td>
<td>.03</td>
<td>2.07</td>
<td></td>
</tr>
<tr>
<td>SSRS – Problem behaviors</td>
<td>74.75 (17.52)</td>
<td>61.75 (19.65)</td>
<td>1.31</td>
<td>.28</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Bully behaviors</td>
<td>4.75 (0.5)</td>
<td>1.25 (0.96)</td>
<td>5.42</td>
<td>.01</td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>Peer victimization</td>
<td>10.0 (4.55)</td>
<td>7.75 (5.25)</td>
<td>1.14</td>
<td>.34</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>19.5 (4.51)</td>
<td>21.25 (5.32)</td>
<td>-0.80</td>
<td>.48</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Perception of self</td>
<td>12.75 (5.5)</td>
<td>15.0 (2.45)</td>
<td>-0.69</td>
<td>.54</td>
<td>.34</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* One teacher failed to return the assessments.

**Discussion**

The purpose of this study was to compare and assess the impact of two selective intervention psychosocial education programs (traditional vs. thematic) on measures of social skills, problem behaviors, teacher- and self-reports of peer relationships (bullying behaviors and peer victimization), self-esteem (self-worth, ability, self-satisfaction, and self-respect) and perception of self in a small number of elementary school students. The PEGS and ARK Programs were designed to be short-term, non-stigmatizing programs that can easily augment current school counselor or school-based counseling services. Two groups of students were assigned to one of two programs. A discussion of the comparison between the programs and impact of each program follows.

**Comparison**

Findings indicated that there were no significant differences between the pre-test assessment measures when comparing the PEGS and ARK Program participants. That is, the participants in each group were comparable prior to their participation in their respective programs. Therefore, should we find significant differences between the two programs at post-test assessment, we may attribute those differences to the impact of the program. Further, there were no significant differences between the post-test assessment measures when comparing the two programs’ participants, with the exception of teacher-reported peer victimization. In other words, participants in each group were comparable after their participation in the respective programs with the exception of participants in the ARK Program having significantly lower levels of
teacher-reported victimization than those in the PEGS Program. Note however that there was no difference between the pre- and the post-test assessment for ARK participants on this measure and only a non-significant increase for PEGS participants.

While these results indicate that the implementation of thematic programming directed at peer harassment does not have a significantly greater positive impact on students than traditional programming directed at students who show more generalized problems, there were some large effects \( (d \geq .80) \) between the groups. This may indicate that there may have been some differences between the participants of the two programs, although not statistically significant.

**PEGS**

Findings indicated that there was significant improvement on self-reported problem behaviors and peer victimization when comparing the pre- and post-test assessments for the PEGS Program participants. In other words, students reported fewer problem behaviors and a decrease in victimization by their peers. While not significant, improvement also was found for teacher-reported problem behaviors and bully behaviors and self-reported social skills, bully behaviors, and self-esteem.

**ARK**

Findings indicated that there was significant improvement on teacher-reported bully behavior and on self-reported social skills and bully behaviors. In other words, students reported increased social skills and both teachers and students reported a decrease in victimization. Additionally, meaningful improvements \( (d \geq .80) \) were found on teacher-reported problem behaviors. That is, teachers noted fewer problem behaviors in students after their participation in the ARK Program.

**Conclusions**

Finding effective programming that can positively impact at-risk students can be difficult. Further complicating the issue is the onslaught of thematic programming targeting specific groups of at-risk students (Hartzler & Brownson, 2001). While targeted programming can be beneficial to a select group of students it may exclude other students who can benefit but may not have the same “label.” This study showed that the more traditional group (i.e., PEGS) was equally effective as the more thematic group (i.e, ARK).

**Limitations and Future Directions**

There were several limitations to this study. First, we were limited to working within the parameters the school established. That is, we were limited to 4th and 5th grade males only and we were limited to providing services during their respective lunch periods. It may have been beneficial to have both genders in each group as well as a mix of grades. Second, group sizes were small. While larger group sizes would result in a greater ability to detect a statistically significant difference if one exists, larger group sizes also can result in reduced effectiveness. Third, we were unable to have a no-treatment group. The use of a control group may have resulted in a more robust study. Finally, the unequal group sizes may have impacted the comparison of the two groups. We attempted to adjust for this by using the Satterthwaite method when the equality of variances was significantly different (O’Rourke et al., 2005).

**Implications**

There are several implications for school and school-based counselors. First, it would be important in program management if school and school-based counselors are made aware that traditional psychoeducational groups are similarly effective to thematic psychoeducational groups. With this information they can make more informed decisions about the type of groups they implement as well as the type of intervention programs they offer and purchase. If the results of this study hold true for other groups of students and other schools, school and school-based counselors who choose to utilize more traditional programming would be able to provide these services to a broader range of students, consistent with the ASCA Model (ASCA, 2005), and not limit it to a select group of students targeted for a specific issue. Additionally, the purchase of thematic intervention programs can be costly given that the use is limited to a smaller number of students and several different types of programs are needed to address students with differing issues.
Second, the PEGS Program is an empirically supported program (see Newgent et al., 2010). It is a short-term, inexpensive, and non-intrusive program that can positively impact students with a variety of underlying issues. School and school-based counselors can easily augment their services with the implementation of this program. School administrators may be more supportive of a program that is both cost effective and would not hinder counselors from fulfilling other duties. The ever changing demands on school and school-based counselors will most likely continue. Counselors need effective tools that they can use to help students address problems, increase self-esteem, improve social skills, and decrease peer victimization.

References


