

Wiz Kidz: fostering school connectedness through an in-school student mentoring program

[Melissa Coyne-Foresi](#)

[Professional School Counseling](#). 19.1 (Aug. 2016): p68.

DOI: <http://dx.doi.org/10.5330/1096-2409-19.1.68>

Copyright: COPYRIGHT 2016 American School Counselor Association

<http://www.schoolcounselor.org/content.asp?contentid=235>

[Listen](#)

Abstract:

This study explores a student [mentoring](#) program called the Wiz Kidz, located within a Canadian urban elementary school of 420 students. The Wiz Kidz participants, their teachers and parents, and a student comparison group provided data on student connectedness to school, peers, and teachers. Overall findings suggest the students involved in the Wiz Kidz program enjoyed participating and reported increases in connectedness at the end of the year, with statistical significance observed for mentors' connectedness to school.

Full Text:

An intervention to improve school connectedness, mentoring can reach a broad range of children (Portwood & Ayers, 2005) by providing social bonding experiences and a sense of belonging while helping students develop stronger relationships to self and others (Karcher, 2005b). Defined by Hagerty, Lynch Sauer, Patusky, and Bouwsema (1993), "connectedness occurs when a person is actively involved with another person, object, group or environment, and that involvement promotes a sense of comfort, wellbeing, and anxiety reduction" (p. 293). Connectedness is not restricted to relationships and can apply to institutions,

such as school, and has the capacity to further develop a student's social network (Karcher, Holcomb, & Zambrano, 2008). The school, as the primary institution outside of the home, is an environment that contributes to the guidance and influence of its students and where positive associations are reflected in adjustment and school climate (Simons-Morton, Crump, Haynie, & Saylor, 1999). Positive school climates create a cooperative peer environment, foster students' attachment to their school, and provide a space where students believe their teachers are supportive and protective of them; students with weak attachment to school reject these messages (Smith, 2012).

Engaging students through bonding opportunities within the school encourages prosocial behavior and commitment to [academic achievement](#), protects from a loss in ambition and susceptibility to misbehavior (Simons-Morton et al., 1999; Tolan, Henry, Schoeny, Lovegrove, & Nichols, 2014), and may counter the normal decline in student connectedness to school observed through the progression of the school year (Karcher, 2005b). Wellborn (2013) said, "One way to address student [motivation](#), especially in unmotivated students, is to increase the involvement, structure, and autonomy support in school and in the learning process" (p. 40).

School-based mentoring programs can offer a range of developmental foci that encourage positive attitudes toward school, much beyond solely treating an identified problem or assisting with academics (Karcher, 2005a, 2014). Although limited, current research suggests that school-based mentoring enhances students' connectedness to school (Karcher, 2005b; Karcher, Davis, & Powell, 2002; King, Vidourek, Davis, & McClellan, 2002; Portwood & Ayers, 2005; Portwood, Ayers, Kinnison, Waris, & Wise, 2005), teachers (Chan et al., 2013), parents (Chan et al., 2013; Karcher, 2005b), family (King et al., 2002), and community (Portwood et al., 2005). School-based mentoring also is considered a key variable for protective social factors (Battistich & Horn, 1997; Chan et al., 2013), leading to such skills as coping and resilience. Students engaged in high-quality mentoring programs are associated with improved academic attitudes, self-esteem and pro-social behaviors (Chan et al., 2013).

The Wiz Kidz in-school student mentoring program involved 24 participants who met weekly during the lunch hour from October through June of the 2013-2014 school year. The program operated under the supervision of the school support counselor, whose role is to address school mental health and emotional issues, crisis situations, parenting and family issues, and conflict resolution through advocacy and individual, family, and group counseling. The goal of the Wiz Kidz program was to foster student engagement as a means to increase connectedness for both the mentors and mentees, while at the same time broadening social skill development, teaching problem-solving skills, and building empathic relationships. An example of practitioner research, the current study explored an in-school mentoring program's influence on promoting elementary school-aged mentors' and mentees' connectedness to school, peers, and teachers, and provided qualitative accounts of the real lived experiences in the program.

STUDENT MENTORING

Although typically not equipped with the same breadth of life experience and maturity of most adult mentors, in-school youth mentors are more accessible to younger mentees and their valuable insights and potential for positive influence qualify them for the role in dyadic relationships. Youth are able to articulate and appreciate others' points of view and possess the unique ability to ignite a younger student's "hero-worship" (Frieman & Frieman, 2000, p. 4), as close proximity in age to their mentors lends them more credibility than adults (Frieman & Frieman, 2000). In other words, the mentee may be more receptive to new teachings presented by an older peer mentor and may be more likely to adopt and internalize the skill. "Cross-age" (Karcher, 2014, p. 239) matches, noted by a minimum 2-year age gap, allow for sufficient developmental distance between mentors and mentees. When matched with youth mentors, young mentees may experience a less intimidating introduction to mentoring relationships as opposed to matches with adults (Karcher, 2005a).

Data from Big Brothers Big Sisters of America show that mentees rarely missed days when mentoring took place (Grossman, Chan, Schwartz, & Rhodes, 2012; Herrera, 1999), as older peer mentors may prove an incentive to attend school.

Students involved with in-school mentoring programs often meet more frequently and for more time than within adult-youth mentoring relationships (Chan et al., 2013; Garringer & MacRae, 2008; Karcher, 2007). Program durations of 24 weeks or more were found to be beneficial for mentored students (Grossman et al., 2012), and this length of time is attainable for an in-school student mentoring program. Even the limited time of a school year can be valuable to mentees because their matches can serve as momentary mentors and be available to offer the mentees brief suggestions, guidance, or support (Payne, DeVol, & Dreussi Smith, 2001). Mentors, too, can benefit from their role; through modeling identity development (Karcher, 2008, 2009), they may experience change in how they see themselves and internalize their social role (Rhodes, 2002) as mature and responsible senior elementary students. Furthermore, youth who mentor younger children report larger gains in school-related connectedness and self-esteem when compared to their peers (see Karcher, 2009).

School Counselors as Facilitators

Karcher et al. (2008) identified that school counselors not only have a significant role in identifying and serving at-risk students, but can also assist in providing students with a sense of belonging. School counselors can encourage students' connections to their school by providing opportunities to create relationships; one avenue used to foster students' social, developmental and academic competencies is through the facilitation of a mentoring program (Karcher et al., 2008). Although not a substitute for professional intervention (Rhodes & Spencer, 2010), an in-school student mentoring program can satisfy an array of goals as diverse as the student population or issues the school counselor targets. School counselors who host well-planned mentoring programs observe the social and emotional gains that students can make and ultimately see what the mentoring process can accomplish (Nakkula & Harris, 2010). The school setting provides the benefit of mentors and mentees attending the same building daily but can sometimes be inflexible regarding what matches can do (Karcher, Herrera, & Hansen, 2010), usually limiting the group to the school grounds.

Garringer and MacRae (2008) suggest that mentor training utilize material that reflects the participants' characteristics and builds on what mentors have already

learned or already know through use of brief, fun, and interactive activities. Seeking input into the training options and activities, welcoming questions, taking breaks, using incentives and prizes, and providing a certificate for participation can assist with student engagement. Planning for future training sessions (Garringer & MacRae, 2008) will enhance the mentors' capabilities and success in engaging with their mentees (Herrera, Sipe, & McClanahan, 2000).

Effective Practices for Program Design

DuBois, Holloway, Valentine, and Cooper's (2002) meta-analysis of the effects of 55 youth mentoring programs found that participation alone yielded small effects, but the impacts were enhanced significantly when programs used effective practices and participants formed strong match relationships. Effective practices identified for youth mentoring programs are (a) length of involvement, (b) contact frequency, (c) mentor screening, (d) mentor training, (e) matching, (f) structured activities, (g) mentoring relationship monitoring, (h) individual supervision, (i) mentor support group, (j) ongoing mentor training, and (k) formal parent involvement (DuBois, Holloway, Valentine, & Cooper, 2002, p. 165). The presence of contact frequency, structured activities, mentoring relationship monitoring, ongoing mentor training, and formal parent involvement can double the effectiveness of the mentoring program (Karcher, 2005b). Conversely, the absence of one or more of the practices of screening, training, and support and supervision can reduce the potential of positive outcomes (Sipe, 1998). There is no one blueprint for a mentoring program and one program alone cannot satisfy all of the needs to be addressed (Roth & Brooks-Gunn, 2003).

The literature on school mentoring programs largely focuses on the work of high school students and adults in a mentoring role to elementary school-aged mentees. Little data is available regarding youth-child mentoring matches in school settings (Karcher, 2005a, 2007, 2014; Portwood & Ayers, 2005) because the school counselors who facilitate these programs are often not connected to agencies that report on mentoring activities (Karcher, 2005a, 2014). Findings from a meta-analytic review of mentoring interventions for at-risk youth suggest program process and implementation frequently lacks descriptive detail (Tolan et al., 2014). School-based programs have consistently smaller impacts on

participants when compared to mentoring programs in other settings (DuBois et al., 2002) and program success is largely dependent on facilitator (Herrera, 1999), mentor (Karcher, 2005b; Morrow & Styles, 1995; Rhodes, 2002), and mentee commitment. However, tapping into the leadership potential of youth mentors and the value in exploring an alternative learning approach to social skill development should not be underestimated.

The Wiz Kidz in-school student mentoring program was created and facilitated by the school support counselor to address the social and emotional needs of some younger students while building on the leadership capacities of older students. The program was conducted within an urban Thames Valley District School Board elementary school in Ontario, Canada, rich with an ethnically diverse population and a general socio-economic status ranging from government-supported to low/average. Mentoring programs can provide an opportunity for less advantaged students to build on their skills and foster a sense of purpose (Rhodes & Spencer, 2010), so the school support counselor sought to utilize mentoring relationships to allow a targeted group to explore their strengths and be positively influenced in a structured and supportive environment.

METHOD

This action research study examined the impact of participation in the Wiz Kidz program, for both mentors and mentees, and whether participation influenced change in the students' connectedness to school, peers, and teachers. Pre- and post-test data were collected using an adapted version of the Hemingway Measure of Connectedness (Karcher, 2011; Karcher & Sass, 2010) for Wiz Kidz participants (N = 24) and a student comparison group (N = 27). The author also created a questionnaire administered to the Wiz Kidz participants (N = 24), their parents (N = 24), and their teachers (N = 8) to gather insight into their experiences and impressions of the program. This study excluded any additional variables related to connectedness, such as impact on student attendance or grades.

Participants

The seventh- and eighth-grade mentor group comprised three male and nine female students ranging in age from 12 to 14. The second- and third-grade mentees included five male and seven female students ranging in age from 7 to 9.

Ten of the 12 matches were paired with a same-sex mentor or mentee. The Wiz Kidz group was predominantly Caucasian, but included students from Aboriginal, Middle Eastern, African-Canadian, and Eastern European cultural and ethnical diversities. Eight participants (two mentors and six mentees) resided in government-assisted housing.

Procedures

Twelve seventh- and eighth-grade volunteers, who self-identified as interested in the concept of mentoring and positively influencing younger students, were selected as mentors. The school support counselor and teachers collaboratively identified 12 second- and third-grade mentees who struggled in social situations or within their home and/or classroom environment. The counselor and teachers believed these students would benefit from one-on-one attention in a safe, welcoming, and fun setting. Mentee grades, attendance, and discipline information did not inform the selection process, but were for many a common thread, perhaps resulting from lack of support in some area of their lives. Mentee candidates known to regularly isolate and intimidate their peers or who possessed high behavioral challenges were excluded from recruitment, because the program would not satisfy the level of intervention required to address their needs.

The 24 Wiz Kidz program participants completed an adapted Hemingway Measure of Connectedness (Karcher, 2011) and a questionnaire seeking information on their pre- and postintervention experiences. Their teachers (N = 8), who each had two to five Wiz Kidz participants in their classes, and participants' parents (N = 24) completed a questionnaire on their pre- and postintervention observations of their student/child.

All students in the same grades and classes as the Wiz Kidz participants were invited to participate (N = 140) as a comparison group. The 27 students (19%) who were granted parental consent to participate as a comparison group were selected and completed an adapted Hemingway Measure of Connectedness (Karcher, 2011). The purpose of the comparison group was to investigate and compare change in connectedness resulting from participation in the Wiz Kidz program.

Data Collection

Hemingway Measure of Pre-Adolescent and Adolescent Connectedness (Karcher, 2011). In November 2013 and May 2014, the 24 Wiz Kidz participants and 27 student comparison group participants completed an adapted version of the Hemingway Measure of Pre-Adolescent or Adolescent Connectedness (Karcher, 2011; Karcher & Sass, 2010) to measure the students' connectedness to school, peers, and teachers. Seventh- and eighth-grade students completed an 18-question adapted Hemingway Measure of Adolescent Connectedness (Karcher, 2011) and second- and third-grade students completed a 12-question adapted Hemingway Measure of Pre-Adolescent Connectedness (Karcher, 2011). Both Hemingway measures required students to respond to how true they believed the statements to be regarding themselves (e.g., I work hard at school, I care what my teachers think of me). Responses were recorded on a 4-point Likert-type scale (not true, sort of true, true, very true) for the adapted Hemingway Measure of Pre-Adolescent Connectedness (Karcher, 2011) and a 5-point Likert-type scale (not at all true, not really true, sort of true, true, very true) for the adapted Hemingway Measure of Adolescent Connectedness (Karcher, 2011; Karcher & Sass, 2010). Reflective of their level of comprehension, the Hemingway Measure of Pre-Adolescent Connectedness was designed for third-grade students and older (Karcher, 2011); the school support counselor was available to assist the second-grade participants, when required.

Karcher's (2011) Hemingway Measures of Pre-Adolescent and Adolescent Connectedness have demonstrated both reliability and validity evidence (Karcher & Sass, 2010; see Gordon, Downey, & Bangert, 2013). Theoretically rooted in self-psychology's (Kohut 1977; Kohut & Wolf, 1978) position that a supportive dyadic relationship with a mature and protective person is required for self-development and feelings of connectedness, the Hemingway's 15 ecological scales are connectedness to (a) neighborhood, (b) friends, (c) self in the present, (d) parents, (e) siblings, (f) school, (g) peers, (h) teachers, (i) self in the future, (j) [reading](#), (k) kids from other cultures, (l) romantic partner, (m) religion, (n) mother, and (o) father.

As instructed by the Hemingway measure manual (Karcher, 2011), any adaptation of the measure must use complete subscales, and the current study involving the

Wiz Kidz program's focus on connectedness to school reflects three: school, peers, and teachers. The Hemingway measure's (Karcher, 2011) connectedness to school is reflected by mentors' perceived work ethic and how much they enjoy school and become involved in being successful at school; connectedness to peers is noted by positive feelings associated with peers, feelings of belongingness and acceptance, and an absence of conflict; and connectedness to teachers is reflected in students' effort and enjoyment with their instructors. The Hemingway measure manual (Karcher, 2011) advises that any incomplete survey data be excluded from analysis.

Questionnaire. Wiz Kidz participants (N = 24), their parents (N = 24), and their teachers (N = 8) were provided with a five-question questionnaire to capture a descriptive account of their expectations, experiences, and impressions of the Wiz Kidz program. The pretest questionnaire in November 2013 asked the participants, parents, and teachers about their expectations of the program throughout the school year, how they believed the participants might benefit, to identify any hesitations, and how they believed the participants might be different upon program completion. It also offered an opportunity to record their early experiences and impressions of the program. The posttest questionnaire in May 2014 asked if the participants', parents', and teachers' expectations of the program were met, if they identified any social or behavioral change, and if they noted any change in participants' connectedness to school, peers, and/or teachers. It also provided an opportunity to reflect on their experience and impressions and to suggest improvements to the program.

The Wiz Kidz program participant mentors and mentees (N = 24) were administered the questionnaire and Hemingway measure (Karcher, 2011) simultaneously in the gym under the supervision of the school support counselor and a school staff member. The Hemingway measure (Karcher, 2011) was completed by the student comparison group participants (N = 27) in a vacant classroom under the supervision of the school support counselor and a school staff member. Some second- and third-grade mentee and comparison group participants received assistance reading the measure questions and support in understanding how to bubble their responses. Questionnaires for teacher

participants were delivered by hand or put in school mailboxes and a reminder e-mail to return the forms was sent one week following the requested return date. Parent questionnaires were sent home with the Wiz Kidz participants and a reminder phone call to return the forms was made one week following the requested return date.

The Wiz Kidz Program

Created as a targeted intervention for a student experiencing significant instability at home, a goal of the Wiz Kidz program was to provide an opportunity to build connectedness to the school as a safe haven and to teachers as a source of support. The school support counselor began to research effective practices for peer mentoring and heavily oriented the Wiz Kidz program design around the meta-analysis findings of DuBois et al. (2002). With the selection of a name reflective of the wizard school mascot, the Wiz Kidz program began the first step in building a sense of connectedness to the school.

Mentor training. Mentors were provided with 2 hours of prematch training that explored themes of the mentoring process, mentee engagement, challenges in the mentoring relationship, and eventual termination. The school support counselor created a mentor manual based on general counselor knowledge and experience and put it through a student lens. The manual introduced the roles in the mentoring process, guided basic listening skills such as use of eye contact when speaking to the mentee, discussed confidentiality, and cited examples of when the supervisor must be notified about concerning information. The mentor manual was followed as a training guide and doubled as a workbook for group discussion of case scenarios, was used in a multiple-choice exercise examining when the mentor is to seek the supervisor's help, and provided an opportunity for mentor reflection on their own life experiences. To learn more about the mentor training manual and/or to receive a copy, contact the author.

The school support counselor provided three additional training sessions, which took place every 8 weeks and focused on topics of need for the group, including setting boundaries, not feeling responsible to "fix" mentees, and a general refresher of the initial training. The goal of training was to orient the mentors in guidelines similar to that of professional counselors in terms of acknowledging the

power imbalance in their role in a trusting relationship and respecting their limitations in their developing abilities as young people. Research shows that the effectiveness of mentoring programs is increased when mentors are provided with 6 hours or more of training (Herrera et al., 2000); the Wiz Kidz program mentors were provided with a total of 5 hours of training.

Matching. Upon meeting, the Wiz Kidz participants followed a natural matching approach (Sipe, 1998), allowing for mentors and mentees to pair themselves through group activities that allowed them to work with a series of different partners and explore the diversity in personalities. After each mentor had experience working with two or three mentees, the school support counselor determined the mentor and mentee matches based on observation and mentor input regarding the connections they made with mentees. The school support counselor also sought feedback from school staff to gain insight into the mentees' needs, which helped clarify which mentor was best suited to enhance the mentee's experience in the Wiz Kidz program. Matches of mentors and mentees already known to each other were not permitted to ensure all in the program began their experience at the same relationship level.

The Wiz Kidz participants were told that each mentor/mentee match was made based on initial connection and potential compatibility. The school support counselor and mentors showed great enthusiasm and offered a "drum roll" before each pair was announced to aid in the mentees' perception of the mentors' interest in working with them and offer a boost to their confidence. The matching reflected that of a celebration, with the matches all excitedly becoming more acquainted once their counterpart was revealed.

Supervision. The school support counselor was present, available, and engaged throughout each session and supervised the Wiz Kidz program at all times during the program's 34-week duration. The participants had structured opportunities for discussion and play and the school support counselor assisted in the mentoring experience by guiding activities and offering direction in mentor/mentee discussions and by identifying and addressing concerns in the relationships.

Attendance was recorded every week and averaged 81% for the mentors and

92% for the mentees throughout the school year. In most cases, reasons for absences were scheduling conflicts.

As part of their commitment to the Wiz Kidz program, mentors were required to participate in 15-minute weekly group supervision meetings that offered a platform to discuss concerns and receive support and suggestions from the school support counselor and other mentors. Some individual mentors brought forward serious concerns for their mentees' behavior and safety outside of the Wiz Kidz program, resulting in two child protective services concerns that school staff dealt with appropriately and followed with a debriefing session for the involved mentors.

Program engagement. Wiz Kidz sessions began with the mentoring partners eating lunch together or in small groups, followed by a guided activity that focused on relationship building and collaboration for the mentoring partners, usually selected from teambuilding literature for children (e.g., Badegruber, 2005; Ellison & Barnett, 2006; Jones, 1998; Lewis, 2005). The sessions ended with a whole-group activity that required group strategy and cooperation, such as an obstacle course or a relay race, or a large group activity requested and instructed by the Wiz Kidz themselves, usually reflective of games the students played at recess. Engagement within the Wiz Kidz program followed that of a "developmental" style (Morrow & Styles, 1995, p. ii) through playful and fun activities with the interaction focusing more on the means to achieve a goal than the goal itself (Morrow & Styles, 1995; Nakkula & Harris, 2010). The school support counselor was alert to more cautionary relationship styles, such as that of a "laissez faire" style (Karcher & Nakkula, 2010, p. 28), which usually results in little relational value in the match (Hamilton & Hamilton, 2010) and can be recognized by non-collaborative and unstructured communication (Karcher & Nakkula, 2010).

A provincial grant of \$750 allowed for the purchase of toys and activities for the Wiz Kidz program, including brain games, interactive games, equipment to encourage physical activity, and art supplies for quieter play. The money also funded a Wiz Kidz parent night, in which each Wiz Kidz participant and one parent were invited for dinner and further explanation of the program and its goals, and

45 minutes of play in the gymnasium demonstrating to parents a typical Wiz Kidz program session.

Termination. The school support counselor began the program's yearend termination process in May 2014 and was vocal about the upcoming end to the school year, when many mentors would transition to high school. Opportunities were provided for the participants to draw pictures or make bracelets for each other, and a group photo was taken for the school yearbook. Copies of the photo were included in a card that each Wiz Kidz participant wrote to his or her match for the last day. As the end of the school year approached, the Wiz Kidz participants were encouraged to give service to their school. Funds raised from a bake sale purchased a park bench etched, "Wiz Kidz Buddy Bench," built by students at the local high school. The bench was installed in the school yard to give younger students a place to sit and be identified by their peers as needing a friend and be welcomed in play.

Last, a year-end party celebrated the Wiz Kidz participants' commitment to the program. Each match exchanged personalized cards and the school support counselor distributed a certificate to each participant, determined by group nominations, identifying a strength or talent that was exhibited throughout the program, such as "Most Caring Wiz Kid," "Funniest Wiz Kid," and "Most Playful Wiz Kid." By design and implementation, the Wiz Kidz program satisfied its target of meeting all of the effective practices in facilitating a youth mentoring group, as identified by DuBois et al. (2002).

RESULTS

Data was available for 91% ($n = 21$) of the Wiz Kidz program participants and 88% ($n = 24$) of the student comparison group participants at post-testing, as incomplete surveys were excluded. One mentor left the program mid-year and that student's data was excluded, as was the questionnaire data provided by the mentor's teacher and parent. The author conducted separate analyses for the second- and third-grade mentee and seventh- and eighth-grade mentor samples due to the expected age differences in connectedness, the different response ranges on the two Hemingway versions, and because the data was not normally distributed for the younger students (Karcher, 2011).

Hemingway Measure of Pre-Adolescent Connectedness Results for Mentees. To test for differences in change over time for the Wiz Kidz participants and the student comparison group at the end of the year, the Wilcoxon Signed-Rank Test (Lowry, 2015) was used because the second- and third-graders' score distribution required the use of a nonparametric test. Results revealed no statistically significant pre- to posttest difference on the Wiz Kidz participants' connectedness to school, peers, and teachers. Separated by subscales, Table 1 presents the connectedness scores' descriptive statistics for the Wiz Kidz program mentees ($n = 10$) at pre- and posttest. A second Wilcoxon Signed-Rank Test (Lowry, 2015) also demonstrated no statistical significance in pre- to postscores for the second- and third-grade comparison group.

The student comparison group was surveyed to assess any change that could be attributed to participation in the Wiz Kidz program in connectedness to school, peers, and teachers, as per the Hemingway measure (Karcher, 2011). The Kruskal-Wallis H Test was chosen as a non-parametric alternative to the one-way ANOVA and used to compare scores between the two groups because the data was not normally distributed, was in two categorical groups, and possessed independence of observations (Laerd Statistics, 2015a). Results from the Kruskal-Wallis H Test (Laerd Statistics, 2015a) show no statistical significance between the Wiz Kidz mentees and the second- and third-grade comparison group on any of the Hemingway measure's (Karcher, 2011) three subscales for connectedness to school, peers, and teachers at posttest. However, the Mann-Whitney U Test (Laerd Statistics, 2015b) showed the Wiz Kidz mentees had lower connectedness at baseline in all three subscales of school ($p < 0.05$), peers ($p < 0.01$), and teachers ($p < 0.05$) than the second- and third-grade comparison group.

Hemingway Measure of Adolescent Connectedness Results for Mentors.

Analyses of covariance (ANCOVA) were used to compare the Wiz Kidz participant group to their comparison group on mean levels of posttest connectedness, controlling for baseline scores on connectedness and gender. Despite the small sample sizes, a normal distribution of scores was found for these two groups, even when examined separately for both groups and for pre- and postscores.

Between-group tests for homogeneity of variance also indicated similar distributions across groups. These analyses suggested that using the parametric test of ANCOVA was appropriate; however, comparisons were run separately for each scale, rather than in one multivariate test, because there were insufficient degrees of freedom for multivariate analyses with seven variables.

Between-group analyses of covariance comparing the Wiz Kidz mentor participants ($n = 11$) and the seventh- and eighth-grade comparison group ($n = 7$) revealed statistically significant differences at posttest with Wiz Kidz mentors reporting higher connectedness to school than the comparison group (see Table 2). Differences in means on connectedness to teachers and to peers were not statistically significant; however, the Wiz Kidz mentors' mean was higher than the comparison group on both. Table 2 reflects the adjusted posttest means on all three scales for the Wiz Kidz program mentors ($n = 11$) and seventh- and eighth-grade comparison group ($n = 7$).

As with the mentee and younger comparison group, the author examined changes in connectedness from pretest to posttest in terms of change scores for the seventh- and eighth-grade sample. Even though none of these comparisons had sufficient statistical power to be reliable, a pattern is clear in which the seventh- and eighth-grade student comparison group declined on all three subscales of connectedness to school, peers, and teachers (Karcher, 2011; Karcher & Sass, 2010), while the Wiz Kidz mentors either remained unchanged or increased in connectedness. Results show that the Wiz Kidz mentor group was more connected to school at the end of the year (.22) and the seventh- and eighth-grade comparison sample was less connected to school at posttest (-.15). This difference in observed change only approached statistical significance ($F = 4.1$, $p = .06$); however, it represents a moderate size effect ($\eta^2 = .22$). Small or no increases were found on Wiz Kidz mentors' connectedness to teachers (.08) and to peers (.02); yet on these measures, the seventh- and eighth-grade comparison group showed declines in connectedness to peers (-.18) and teachers (-.08), as often occurs over the course of the school year (see Karcher, 2005b, 2011).

Questionnaire results. All Wiz Kidz participants who completed the program responded to the questionnaire ($n = 23$). Pretest results showed that 18 mentors

and mentees (78%) identified feeling excited or happy to participate in the program and looked forward to having fun and getting to know their match; one mentor identified feeling "worried" and one mentee identified feeling "shy." Four mentors (36%) communicated their hesitation that their mentees would not listen to them or would irritate them, and two mentors (18%) identified worry that their mentees would not like them. Eight mentors (72%) believed they would be more skilled at working with children and thought the Wiz Kidz program experience would impact them positively.

Posttest results from Wiz Kidz program participants showed that 20 mentors and mentees (86%) identified that they enjoyed playing and engaging with their match, 11 mentors and mentees (47%) noted an improvement in their own social skill development and self-esteem, and seven mentors and mentees (30%) identified no change. In reflection to the question asking if they feel different having participated in the Wiz Kidz program, a mentor reflected, "I'm better with kids now," a mentee responded, "I'm more easy going now," and another mentee replied, "yes, I haven't gotten suspended." The Wiz Kidz participants identified their dislike of some of the mentees' rough play and not listening. Sixteen respondents (69%) identified feeling more connected to the school and to peers, and one mentor commented, "I found out how to be friends with little kids."

Response rates for parents of Wiz Kidz participants averaged 34% ($n = 8$). Six parent respondents (75%) communicated their belief that their children were more connected and involved in the school, community, and with their peers following Wiz Kidz program participation, and this was also supported by 10 Wiz Kidz participants' (43%) responses. Parents added that they believed their children to possess more confidence, pride, and social skills as a result of program participation. A parent of one mentor commented a concern for the mentor's emotional readiness for such responsibility in the role of mentor to a younger mentee.

Three teachers (37%) completed 10 of a possible 23 pretest questionnaires and five teachers (62%) completed 15 of a possible 23 posttest questionnaires.

Results from teachers of mentors confirmed their belief in mentor responsibility and leadership, and noted their observation of mentors' increased involvement in

a helping role with younger students in the school. Ten teacher questionnaires commenting on mentees (83%) cited an increase in their students' sense of community within the school through the provision of positive relationships, adding a perceived increase in their students' confidence, self-worth, and attendance. Teacher responses requested the Wiz Kidz program run again the next school year with more focus on including mentors needing improvement in responsibility and including mentees who are low-esteemed or in need of new friendships, and limiting those with behavioral challenges. Feedback from two teachers (25%) included, "I think Wiz Kidz is a great program to get parents involved and develop a sense of community within the school," and, "Wiz Kidz exceeded my expectations."

DISCUSSION

The goal of this action research was to increase connectedness for Wiz Kidz program participants, both mentors and mentees, through student engagement in weekly mentoring sessions within a supportive environment.

The Wiz Kidz mentee group was found to have significantly less connectedness to all three subscales of school, peers, and teachers (Karcher, 2011) at pretest, as per the Mann-Whitney U Test (Laerd Statistics, 2015b), when compared to the second- and third-grade comparison group. Posttest increases in mentee scores suggests that the small gains from program participation (see Table 1) may reflect decreases in preexisting differences between groups and thereby provide one indicator of positive program effects.

The Wiz Kidz mentor group reported significantly higher connectedness to school after participating in the program than those who did not participate, but the difference in connectedness to peers or teachers between the Wiz Kidz participants and the comparison group was not statistically significant.

Connectedness to teachers and school typically declines from the start to the end of the school year (see Karcher 2005b), and this expected normative was not observed among Wiz Kidz participants, suggesting that participation may have served as a protective factor for the Wiz Kidz mentors and mentees. The mentors clearly benefitted as much as or more than the mentees.

The qualitative data supported the conclusion that the Wiz Kidz participants believed the program resulted in overall student growth. Mentors reported greater responsibility and leadership, and mentees exhibited greater social skills and confidence. Findings in this study mirror those of DuBois and colleagues' (2002) meta-analysis, which found that youth mentoring programs produced modest effects for participants when facilitators adhered to effective practices and demonstrated through lived experience the specificity required in process and implementation that Tolan et al. (2014) found lacking through their meta-analytical review.

A small group of shy and seemingly hesitant mentees were permitted to play around, be loud, and be influenced by the caring and energetic personalities of their Wiz Kidz mentors. Of these students, one parent commented via the questionnaire, "We ran into kids from the program at the grocery store and (mentee) was so excited," and a teacher noted that, "(Mentee) never forgets that it is the day for Wiz Kidz. As he can be easily distracted, this demonstrates how important it has become to him." One teacher commented of a mentee, "I believe Wiz Kidz has helped (mentee) to see beyond her own needs and wants and to see the needs of her group as well. In this, she is more connected to her school." Throughout the program, mentors were observed being more conscious of their behaviors and choices and acting more responsibly, which points to Riessman's (1965) comment on those in a caring role, "While it may be uncertain that people receiving help are always benefited, it seems more likely that the people giving help are profiting from their role" (p. 27). Furthermore, the Wiz Kidz mentors became invested in larger group functions and activities, specifically the parent night and the bake sale, exhibited by their prompt arrival, interest in helping with setup, and eagerness to assist their mentees in serving their guests.

As much as the researched effective practices can be followed as a guide to successful mentoring programming, including strict attention to appropriately matching mentors and mentees, the school support counselor cannot guarantee match cohesion. Limited engagement was observed in two mentors who did not form a bond with their mentees and a loss of interest in the program was demonstrated by either not attending in favor of preferred alternate school

programming or solely associating with fellow mentors during Wiz Kidz program sessions. Behavioral challenges exhibited by some of the Wiz Kidz mentees included rough play, not listening, and walking out of the gym following peer conflict. At mentee selection, these students were identified as possessing moderate behavioral challenges but when combined with like-age peers, their behaviors became difficult to manage at times.

The lessons learned from the Wiz Kidz experience provided the opportunity for more targeted and effective future programming. Much of an in-school student mentoring program's success relies on the school counselor's motivation and enthusiasm, the provision of structured activities for students, and, most important, the selection of a manageable sized group. The Wiz Kidz program has continued at another school site and the school support counselor duplicated and re-named the program to reflect the school mascot at that location.

LIMITATIONS

Many limitations could have affected the outcomes of this study. First, the response rates of the parent and teacher questionnaire were low. The limited response rate of parents may be attributed to a lack of understanding of the Wiz Kidz program goals being rooted in social support, development, and school connectedness, rather than in academic improvement. Information regarding the Wiz Kidz program was communicated to parents through a letter, a phone call, and an invitation to attend a parents' night; alternative methods of informing parents may be considered for future programming to aid in comprehension and assist in participation. Communication with teachers was completed via letter, e-mail and in person and the low response rates may have been indicative of their lack of time or lack of interest. Second, the selection process for both Wiz Kidz program mentors and student comparison group was restricted because the school support counselor accepted the only 12 seventh- and eighth-grade mentors who showed interest and surveyed the limited number of student comparison group volunteers who returned parental consents to participate. Third, examining pre- and posttest school attendance, academic, and/or discipline data would have contributed to the possible influence the program had on other facets of the students' school experience. Last, the sample sizes were too small to give strong

confidence in the findings. In particular, the small sample raises the possibility that mean differences between mentees and their comparison group on connectedness to teachers and peers might have been statistically significant had there been more statistical power to detect these differences.

IMPLICATIONS FOR SCHOOL COUNSELORS

The Wiz Kidz program provides some evidence that student mentoring is an effective intervention in improving student connectedness to school. The growth of student mentoring has surpassed the available research on how best to recruit young mentors and match them with even younger mentees (Karcher, Davidson, Rhodes, & Herrera, 2010). Recommendations to school counselors include strict attention to the mentor and mentee matching process to provide optimal match quality and structure (Nakkula & Harris, 2010), as this phase is key to fostering and improving longer term match relationships. Future research directions may explore other qualitative measures to evaluate and reflect participant experiences in more engaging and creative ways, such as through the use of interviews or group discussions. Researchers may also wish to investigate youth confidence in their role as mentors; results from the current study show a minority of mentors had concern with not being liked by their mentees.

Employing the effective practices found by DuBois et al. (2002) as a guide to the Wiz Kidz program design, the school support counselor frequently reflected on two findings from the literature that assisted with the program's implementation: first, the significant influence the Big Brothers Big Sisters of America's mentoring programs had on their mentee graduates in contributing to positive and productive life choices (Payne et al., 2001); and second, the acknowledgement that school-based programs consistently have smaller effects than that of other mentoring programs (DuBois et al., 2002). Mindful of these findings, the school support counselor provided conditions to foster student engagement in hopes of connecting the targeted mentees with group affiliation to the Wiz Kidz program and the greater school community. The Wiz Kidz program explored an alternative learning approach to social skill development and encouraged empathic growth for all involved. The rationale was that an opportunity, however small, to positively

influence each other in a supportive environment was more valuable than no opportunity at all.

Ensuring that the purpose of the mentoring group addresses a specific need with a targeted population in the school will allow for improved group cohesiveness and ultimately contribute to increased success. It is recommended that a strict limit be placed on participants with moderate behavioral challenges to safeguard against excessive conflict. Limiting the mentoring group participants to a manageable quantity and the space utilized by the group to a manageable size can provide improved effectiveness in keeping student attention. Should a match terminate prematurely, program leaders should use caution before rematching a mentee with an alternate mentor because studies show mentees experience no impact or fare worse in the subsequent match (Grossman et al., 2012; Grossman & Rhodes, 2002).

CONCLUSION

TABLE 1 SECOND- AND THIRD-GRADE WIZ KIDZ PROGRAM PARTICIPANTS: DESCRIPTIVE STATISTICS AND WILCOXON SIGNED-RANK TEST STATISTICS								
Subscale		<i>n</i>	Mean	<i>SD</i>	Min	Max	<i>Z</i>	<i>p</i>
School	pre	10	2.94	0.806	1.60	4.00	-0.715	0.475
	post	10	3.06	0.499	2.40	3.80		
Peers	pre	10	2.66	0.811	1.50	3.50	-1.156	0.248
	post	10	2.91	0.619	1.80	3.50		
Teachers	pre	10	3.24	0.800	1.70	4.00	-0.704	0.482
	post	10	3.39	0.642	2.30	4.00		

Note. Adapted from the Hemingway Measure of Pre-Adolescent Connectedness, by M. Karcher, 2011. Sub-scale scores range from 1.0 to 4.0.

This investigation demonstrated that a school counselor who is regularly present and actively involved in a school has the ability to develop and facilitate a well-planned, in-school student mentoring program tailored to address a specific need. The qualitative data suggested that those involved in the Wiz Kidz program benefitted from the provision of a consistent, engaging, and supportive environment for relationship building and group affiliation.

The Wiz Kidz mentors scored significantly higher on postprogram ratings on connectedness to school than members of their same-age comparison group who had not participated, but no differences were found on connectedness to teachers

or peers. No statistically significant differences were observed between mentees and their comparison group on posttest connectedness to school, peers, or teachers using the Hemingway measure; however, the Wiz Kidz mentees reported a lower baseline score on connectedness to school, peers, and teachers (Karcher, 2011), as compared to their like-age peers. This suggests, as observed previously in research on cross-age peer mentoring (Karcher 2005b; 2008), that program participation may have helped prevent the expected declines in connectedness that commonly occur over a school year.

The author did not investigate other measures specific to change in participant confidence or social ability. The current study contributes to the limited knowledge of the real lived experiences of the successes and challenges of youth-child mentoring matches among elementary-aged students. ?

REFERENCES

- Badegruber, B. (2005). 101 life skills games for children: Learning, growing, getting along (ages 6-12). Alameda, CA: Hunter House.
- Battistich, V., & Horn, A. (1997). The relationship between students' sense of their school as a community and their involvement in problem behaviors. *American Journal of Public Health*, 87, 1997-2004. doi:10.2105/AJPH.87.12.1997
- Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E. O., & Herrera, C. (2013). Pathways of influence in school-based mentoring: The mediating role of parents and teacher relationships. *Journal of School Psychology*, 51, 129-142. doi:10.1016/j.jsp.2012.10.001
- DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30, 157-198. doi:10.1023/A:1014628810714
- Ellison, S., & Barnett, B. A. (2006). 365 ways to raise confident kids: Activities that build self-esteem, develop character and encourage imagination. Naperville, IL: Sourcebooks.
- Frieman, M., & Frieman, B. (2000, April). Reducing harassment in elementary classrooms using high school mentors. Paper presented at the annual conference of the Association for [Childhood](#) Education International, Baltimore, MD. (ERIC Document Reproduction Service No. ED439797).

TABLE 2 SEVENTH- AND EIGHTH-GRADE WIZ KIDZ PROGRAM PARTICIPANTS AND COMPARISON GROUP: ESTIMATED MEANS AND BETWEEN GROUP DIFFERENCE TESTS STATISTICS

Subscale	Group	<i>n</i>	Mean	SE	CI Low	CI High	<i>F</i>	<i>p</i>
School	Comparison	7	3.556	0.142	3.250	3.862	4.730	0.047
	Wiz Kidz	11	3.955	0.113	3.713	4.198		
Peers	Comparison	7	3.310	0.183	2.917	3.702	1.103	0.311
	Wiz Kidz	11	3.557	0.145	3.246	3.869		
Teachers	Comparison	7	3.932	0.172	3.563	4.301	1.528	0.237
	Wiz Kidz	11	4.207	0.136	3.915	4.499		

Note. Adapted from the Hemingway Measure of Adolescent Connectedness, by M. Karcher, 2011. Subscale scores range from 1.0 to 5.0. CI Low = Lower Bound Estimate for 95% Confidence Interval; CI High = Upper Bound Estimate for 95% Confidence Interval. Covariates include pretest scores on connectedness to school, peers, or teachers and each youth's gender.

Garringer, M., & MacRae, P (2008). Building effective peer mentoring programs in schools: An introductory guide. Folsom, CA: The Mentoring Resource Center.

Gordon, J., Downey, J., & Bangert, A. (2013). Effects of a school-based mentoring program on school behavior and measures of adolescent connectedness. *School Community Journal*, 23(2), 227-250.

Grossman, J. B., Chan, C. S., Schwartz, S. E. O., & Rhodes, J. E. (2012). The test of time in school-based mentoring: The role of relationship duration and re-matching on academic outcomes. *American Journal of Community Psychology*, 49, 43-54. doi:10.1007/s10464-011-9435-0

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American Journal of Community Psychology*, 30(2), 199-219.

Hagerty, B. M., Lynch Sauer, J., Patusky, K., & Bouwsema, M. (1993). An emerging theory of human relatedness. *IMAGE: Journal of Nursing Scholarship*, 25(4), 291-296.

Hamilton, S. F., & Hamilton, M. A. (2010) Building mentoring relationships. *New Directions for Youth Development*, 126, 141-144. doi:10.1002/yd.354

Herrera, C. (1999). School based mentoring: A first look into its potential. Philadelphia, PA: Public/Private Ventures.

Herrera, C., Sipe, C. L., & McClanahan, W. S. (2000). Mentoring school-age children: Relationship development in community-based and school-based programs. Philadelphia, PA: Public/ Private Ventures.

Jones, A. (1998). 104 activities that build: Self-esteem, teamwork, communication, anger management, self-discovery, and coping skills. Richland, WA: Rec Room.

Karcher, M. J. (2005a). Cross-age peer mentoring. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 266-285). Thousand Oaks, CA: Sage.

Karcher, M. J. (2005b). The effects of school-based developmental mentoring and high school mentors' attendance on their younger mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools*, 42, 65-78.

doi:10.1002/pits.20025

Karcher, M. J. (2007). Cross-age peer mentoring. *Youth Mentoring: Research in Action*, 1(7), 1-24. Retrieved from http://www.michaelkarcher.com/CAMP_Articles_files/Karcher_07_RIA_issue7_CAMP.pdf

Karcher, M. J. (2008). The cross-age mentoring program: A developmental intervention for promoting students' connectedness across grade levels.

Professional School Counseling, 12, 137-143. doi:10.5330/PSC.n.2010-12.137

Karcher, M. J. (2009). Increases in academic connectedness and self-esteem among high school students who serve as cross-age peer mentors. *Professional School Counseling*, 12, 292-299. doi:10.5330/PSC.n.2010-12.292

Karcher, M. J. (2011). The Hemingway: Measure of adolescent connectedness. Hemingway measure of adolescent connectedness website. Retrieved from <http://adolescentconnectedness.com/media/HemingwayManual2012.pdf>.

Karcher, M. J. (2014). Cross-age peer mentoring. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (2nd ed., pp. 233-257). Thousand Oaks, CA: Sage.

Karcher, M. J., Davidson, A. J., Rhodes, J. E., & Herrera, C. (2010). Pygmalion in the program: The role of teenage peer mentors' attitudes in shaping their mentees' outcomes. *Applied Developmental Science*, 14(4), 212-227

doi:10.1080/10888691.2010.516188

Karcher, M. J., Davis, C., & Powell, B. (2002). The effects of developmental mentoring on connectedness and academic achievement. *The School Community Journal*, 12(2), 35-50. Retrieved from <http://www>.

michaelkarcher.com/CAMP_Articles_files/Karcher_02_DavisPowellCAMPSSK.pdf

Karcher, M. J., Herrera, C., & Hansen, K. (2010). "I dunno, what do you wanna do?": Testing a framework to guide mentor training and activity selection. *New Directions for Youth Development*, 126, 51-70. doi:10.1002/yd.349

Karcher, M. J., Holcomb, M., & Zambrano, E. (2008). Measuring and evaluating adolescent connectedness. In H. L. K. Coleman & C. Yeh (Eds.), *Handbook of school counseling* (pp. 651-672). Mahwah, NJ: Lawrence Erlbaum.

Karcher, M. J., & Nakkula, M. J. (2010). Youth mentoring with a balanced focus, shared purpose, and collaborative interactions. *New Directions in Youth Development*, 126, 13-32. doi:10.1002/yd.347

Karcher, M. J., & Sass, D. (2010). A multicultural assessment of adolescent connectedness: Testing measurement invariance across gender and ethnicity. *Journal of Counseling Psychology*, 57(3), 274-289. doi: 10.1037/a0019357

King, K. A., Vidourek, R. A., Davis, B., & McClellan, W. (2002). Increasing self-esteem and school connectedness through a multidimensional mentoring program. *Journal of School Health*, 72, 294-299.

Kohut, H. (1977). *Restoration of the self*. New York, NY: International Universities Press.

Kohut, H., & Wolf, E. S. (1978). The disorders of the self and their treatment: An outline. *International Journal of Psycho-Analysis*, 59(4), 413-425.

Laerd Statistics. (2015a). Kruskal-Wallis H Test using SPSS statistics. Retrieved from <https://statistics.laerd.com/spss-tutorials/kruskal-wallis-h-testusing-spss-statistics.php#procedure>

Laerd Statistics. (2015b). Mann-Whitney U Test using SPSS statistics. Retrieved from <https://statistics.laerd.com/spss-tutorials/mann-whitney-u-testusing-spss-statistics.php>

Lewis, B. A. (2005). *What do you stand for? For kids: A guide to building character*. Minneapolis, MN: Free Spirit.

Lowry, R. (2015). Subchapter 12a: The Wilcoxon signed-rank test. VassarStats: Website for statistical computation. Retrieved from <http://vassarstats.net/textbook/ch12a.html>

Morrow, K. V., & Styles, M. B. (1995). Building relationships with youth in program settings: A study of Big Brothers/Big Sisters. Philadelphia, PA: Public/Private Ventures.

Nakkula, M. J., & Harris, J. T. (2010). Beyond the dichotomy of work and fun: Measuring the thorough interrelatedness of structure and quality in youth mentoring relationships. *New Directions for Youth Development*, 126, 71-87 doi:10.1002/yd.350

Payne, R. K., DeVol, P. E., & Dreussi Smith, T. (2001). Bridges out of poverty: Strategies for professionals and communities. Highlands, TX: Aha! Process, Inc.

Portwood, S. G., & Ayers, P. M. (2005). Schools. In D. L. DuBois & M. J. Karcher (Eds.) *Handbook of Youth Mentoring* (pp. 336-347). Thousand Oaks, CA: Sage.

Portwood, S. G., Ayers, P. M., Kinnison, K. E., Waris, R. G., & Wise, D. L. (2005). YouthFriends: Outcomes for a school-based mentoring program. *The Journal of Primary Prevention*, 26, 129-145. doi:10.1007/s10935-005-1975-3

Rhodes, J. E. (2002). Stand by me: The risks and rewards of mentoring today's youth. Cambridge, MA: Harvard University Press.

Rhodes, J. E., & Spencer, R. (2010). Structuring mentoring relationships for competence, character, and purpose. *New Directions for Youth Development*, 126, 149-152. doi:10.1002/yd.356

Riessman, F. (1965). The "helper-therapy" principle. *Social Work* 10(2), 27-32.

Roth, J. L., & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 24(2), 94-111. doi:10.1207/S1532480XADS0702_6

Simons-Morton, B. G., Crump, A. D., Haynie, D. L., & Saylor, K. E. (1999). Student-school bonding and adolescent problem behavior. *Health Education Research*, 14, 99-107 doi:10.1093/her/14.1.99

Sipe, C. L. (1998). Mentoring adolescents: What we have learned. In J. B. Grossman (Ed.), *Contemporary issues in mentoring* (pp. 10-23). Philadelphia, PA: Public/Private Ventures.

Smith, J. D. (2012, Summer). Improving school climate to reduce bullying. *Education Canada*, 52(3), 39-42. Retrieved from <http://www.cea-ace.ca/education-canada/article/improvingschool-climate-reduce-bullying>

Tolan, P H., Henry, D. B., Schoeny, M. S., Lovegrove, P, & Nichols, E. (2014). Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review. *Journal of Experimental Criminology*, 10, 179-206. doi:10.1007/s11292-013-9181-4

Wellborn, J. G. (2013, Spring). Motivating unmotivated students: From theory to practice. *The Canadian School Counsellor Magazine* (pp. 39-42). Retrieved from <http://www.marketzone.ca/ebooks/CSC/CSC-Q0113/>

Melissa Coyne-Foresi, M.Ed, RSW, is a school support counselor with the Thames Valley District School Board, Ontario, Canada. E-mail mcoyne@alumni.uwo.ca

DOI: 10.5330/1096-2409-19.1.68

TABLE 1 SECOND- AND THIRD-GRADE WIZ KIDZ PROGRAM PARTICIPANTS: DESCRIPTIVE STATISTICS AND WILCOXON SIGNED-RANK TEST STATISTICS

Subscale		n	Mean	SD	Min	Max
School	pre	10	2.94	0.806	1.60	4.00
	post	10	3.06	0.499	2.40	3.80
Peers	pre	10	2.66	0.811	1.50	3.50
	post	10	2.91	0.619	1.80	3.50
Teachers	pre	10	3.24	0.800	1.70	4.00
	post	10	3.39	0.642	2.30	4.00

Subscale		Z	p
School	pre	-0.715	0.475
	post		
Peers	pre	-1.156	0.248
	post		
Teachers	pre	-0.704	0.482
	post		

Note. Adapted from the Hemingway Measure of Pre-Adolescent Connectedness, by M. Karcher, 2011. Sub-scale scores range from 1.0 to 4.0.

TABLE 2 SEVENTH- AND EIGHTH-GRADE WIZ KIDZ PROGRAM PARTICIPANTS AND COMPARISON GROUP: ESTIMATED MEANS AND BETWEEN GROUP DIFFERENCE TESTS STATISTICS

	Group	n	Mean	SE	CI Low	CI High
School	Comparison	7	3.556	0.142	3.250	3.862
	Wiz Kidz	11	3.955	0.113	3.713	4.198
Peers	Comparison	7	3.310	0.183	2.917	3.702
	Wiz Kidz	11	3.557	0.145	3.246	3.869
Teachers	Comparison	7	3.932	0.172	3.563	4.301
	Wiz Kidz	11	4.207	0.136	3.915	4.499

	Group	F	p
School	Comparison	4.730	0.047
	Wiz Kidz		
Peers	Comparison	1.103	0.311
	Wiz Kidz		
Teachers	Comparison	1.528	0.237
	Wiz Kidz		

Note. Adapted from the Hemingway Measure of Adolescent Connectedness, by M. Karcher, 2011. Subscale scores range from 1.0 to 5.0. CI Low = Lower Bound Estimate for 95% Confidence Interval; CI High = Upper

Bound Estimate for 95% Confidence Interval. Covariates include pretest scores on connectedness to school, peers, or teachers and each youth's gender.

Source Citation (MLA 8th Edition)

Coyne-Foresi, Melissa. "Wiz Kidz: fostering school connectedness through an in-school student mentoring program." *Professional School Counseling*, Aug. 2016, p. 68+. *Academic OneFile*,
go.galegroup.com/ps/i.do?p=AONE&sw=w&u=vol_b92stm&v=2.1&id=GALE%7CA462685442&it=r&asid=3f341860e04f0b0416081eb1c8d32f73. Accessed 25 Apr. 2017.