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## Altruism, Commitment, and Leadership in High School Mentors

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## *Abstract*

*This study investigated the effects of mentoring on selected attributes among high school mentors. Three attributes were explored: altruism, commitment to school, and student leadership. Seventy-four high school juniors and seniors participated as mentors to high school freshmen students. Mentors participated in a leadership training program prior to beginning their mentoring activities. Pre- and post-test measures of the three attributes were administered. Results showed no significant increase in altruism or commitment scores. Unexpectedly, the mentoring experience produced a significant decrease in the perception of leadership scores. Implications for implementing a mentoring program in a high school setting are discussed.*

While peer mentoring programs have existed for decades for various groups, in many environments, and working in a multitude of capacities, they are becoming increasingly popular for the development and education of younger individuals. Indeed, many programs have emerged recently and are operating to connect youth with much needed mentors (Rhodes, Haight, & Briggs, 1999). These programs offer the opportunity for mentors to share and showcase their advanced experiences, understanding of a particular area of expertise, and dedication to junior members of a specific organization (Kram, 1985).

One such organization in which mentoring has become popular is in schools. Since the development of school-based mentoring programs, researchers have become interested in studying the effectiveness of those programs on students who are involved (McGannon, Carey, & Dimmitt, 2005; Whiston & Sexton, 1998). In recent years, schools across the country have

had an increasingly high demand placed upon them to improve student achievement. In response to this demand, mentoring programs have become one method of increasing student achievement and involvement.

Bowman & Myrick (1987) found that student mentees who participated in a mentoring program reported improvement in attitudes to, and connectedness with, one's peer group and school, as well as an increase in academic grades and achievement. Studies have shown that mentors engaging in a mentoring program can experience positive effects similar to those of adolescents who assist in service-learning events (Stukas, Clary, & Snyder, 2000) as well as extracurricular activities (Eccles & Barber, 1999; Hamilton & Fenzel, 1988). The present study investigated the implementation of a school-based mentoring program called B.I.O.N.I.C.: *Believe It Or Not, I Care* (Austin, 2012) in a Midwestern high school and examined selected attributes possessed by effective high-school student mentors.

## **Literature Review**

### **High School Mentoring Benefits**

It is clear that the literature describes a wide variety of positive impacts that peer-mentoring can have on mentees (Karcher, 2008; O'Hara, 2011; Rhodes & Dubois, 2008). For example, Cary, Rosenbaum, Lafrenie, and Sutton (2000) found increased coping skills and social support among a group of high-school mentees over a four-year period. Karcher (2005) found a stronger sense of connectedness to school and parents, improved social skills, and increased self-esteem among high-school mentees. Longitudinal research in a university setting has shown that senior mentors can positively influence freshmen's overall satisfaction with the university: a level of satisfaction that was maintained over the subsequent semester (Sanchez, Bauer, & Paronto, 2006).

### **Mentor Attributes**

In addition to finding benefits for mentees, research has shown that mentoring programs have benefited mentors as well. (Kram, 1985; Allen, 2003; Sanchez, et al., 2006; McQuillin, Smith, & Strait, 2011). For example, Karcher (2009) found significantly higher levels of connectedness to friends, culturally different peers, extracurricular self-esteem, school, sports self-esteem, and school self-esteem among high-school mentors. Overall, a number of mentor attributes have been the focus of several studies. In the present study, three selected mentor attributes were investigated: mentors' altruism, commitment to school, and leadership skills.

**Altruism.** At present, there is a paucity of research with respect to mentor altruism, or taking an interest in the welfare of others. The few studies that have been published are focused primarily on the health and motivational effects of altruism in those who choose to mentor others. For example, in a general adult sample, Allen (2003) found significant associations between the pro-social personality traits of empathy and helpfulness with choosing to mentor others. Similarly, Aryee, Chay, and Chew (1996), found that the impulse to be a mentor may be anticipated by certain characteristics of the individuals, such as positive affectivity and altruism.

A more recent study of the relationship between altruism and the effects on physical health as well as psychological well-being among adolescents showed mixed results (Schwartz, Keyl, Marcum, & Bode, 2009). For male participants, no relationship was found between

altruistic behaviors and either physical health or psychological well-being. However, for female participants, a significant relationship was found between altruism and physical health.

**Commitment.** A student's commitment to school is important to school administrators as well as researchers (see Sanchez et al., 2006). In particular, researchers have investigated the effects that mentoring has had on students' school commitment from both the perspective of mentors as well as mentees. Mentoring programs in schools have also had positive effects on mentees' level of school commitment.

Using a longitudinal approach, Sanchez et al. (2006) found a strong school commitment in a sample of 128 high-school freshmen mentees that continued through to their senior year. Cavendish (2013) found similar results in a sample of high-school students. More specifically, African American mentees reported a higher level of school commitment than both Caucasian and Hispanic mentees. Overall, females showed higher commitment than males.

**Leadership.** With a paucity of research in leadership development within the population of high school adolescents, the discussion of student leadership has focused on the college population. Throughout in the 1990's, a number of scholars addressed the need for the development of leadership skills in young, college-aged students (Astin, 1993; Freeman, Knott, & Schwartz, 1994; Komives, Lucas, & McMahon, 1998). In more recent studies, researchers have studied leadership skills through examining individual characteristics in the college students. For example, Posner (2004) found that fraternity chapter presidents who self-reported as a more effective leader consistently engaged in several leadership practices, including modeling, inspiring, challenging, enabling, and encouraging. In addition, in a study of attributes predicting leadership skills among college students, hope, self-efficacy, and optimism were found to be significant predictors of leadership skills (Wisner, 2011). While research of leadership skills is increasing in the college population, the study of such skills has yet to begin in the high-school population.

Prior research has shown mentoring programs to have positive effects on mentors' sense of altruism in adult samples (Aryee, et al., 1996; Allen, 2003) and in adolescent samples with mixed results (Schwartz, et al., 2009). Research has yielded evidence of increased commitment to school among mentees (Sanchez et al., 2006; Cavendish, 2013), yet little definitive evidence of the effects on mentors' commitment. The study of leadership is evident among college students (Posner, 2004; Wisner, 2011), yet has not been investigated with high-school students, including those students put into leadership positions.

The purpose of this study was to investigate the effects of mentoring on the mentor attributes of altruism, commitment to school, and leadership skills in a high-school sample. Three hypotheses were tested: 1) mentoring would produce an increase in mentors' altruism, 2) mentoring would produce an increase in mentors' commitment to school, and 3) mentoring would produce an increase in mentors' perceptions of their leadership skills.

## **Method**

### **Participants**

Students from a Midwestern public high school were invited to participate in the B.I.O.N.I.C. school-based mentoring program. To fulfill the criteria for entry into the program, each student had to have the recommendation of two teachers from their high school and have a returned signed parental consent. A signature line for the high school students was included on the parental consent form to indicate participant's assent for the program study. Seventy-four

11<sup>th</sup> and 12<sup>th</sup> grade students volunteered to participate as mentors for this study and completed both the pre- and post-test measures.

## **Instrumentation**

Three questionnaires and a demographic survey were utilized in the present study. The questionnaires were used to measure leadership efficacy, altruistic behavior, and diligence (i.e., commitment to school), respectively.

**Student Leadership Practices Inventory (SLPI).** The SLPI was originally designed to mark the progress of an individual's comfort level with a leadership position in college students (Kouzes & Posner, 1987), and was updated by Posner in 2004. The SLPI was modified in item content to better suit a high school sample. The inventory consisted of fourteen items to which participants responded using a Likert scale ranging from 1 (Definitely No) to 5 (Definitely Yes). Examples of items included: *One of my greatest desires is to become a leader*, and *I am comfortable implementing new techniques*. Internal consistency estimates have been reported in several college samples, including fraternity and sorority presidents, ranging from .60 to .75 (Posner & Brodsky, 1994); resident assistants, ranging from .69 to .83 (Posner & Brodsky, 1993); and orientation advisors, ranging from .56 to .66 (Posner & Rosenberger, 1997).

**Altruistic Behavior-Middle School questionnaire (AB-MS).** The AB-MS was designed to measure altruistic behaviors of others (Development Studies Center, 2000). The questionnaire consists of nine items, each using a Likert response scale ranging from 1 (Never) to 5 (More than 10 times). Sample items include: *Have you comforted someone who was hurt or feeling sad?* and *Have you helped a classmate with homework?* A Cronbach alpha reliability estimate of 0.80 has been reported.

**Diligence Scale for Teenagers (DST).** The DST consists of seven items, each using a Likert response scale ranging from 1 (None of the time) to 5 (All of the time), producing an overall diligence or commitment score. Examples of items include: *Do you finish the tasks you start?* and *Do you give up when things get difficult?* A reliability estimate of 0.79 has been reported for the DST (Child Trends, 2013).

## **Procedures**

Prior to beginning their mentoring duties, students participating in this study completed a three-day training institute in July, 2013. Students began each day by participating in team-building exercises in which they developed relationships among fellow mentors. Students also participated in two learning modules each day for a total of six learning modules throughout the entire training institute. Topics of these modules included character building, effective communication skills, dedication, courage, empathy, and building a vision.

At the beginning of the fall semester in August, 2013, all student mentor participants were given the three pre-test measures of altruism, commitment to school, and leadership efficacy, along with a demographic questionnaire.

The intervention consisted of each participant serving as a mentor in the B.I.O.N.I.C. program, in which the student mentor assumed the role of leader within the local high school. The first phase of the program entailed mentors, who were paired with five freshman mentees, to participate in interpersonal and team building activities for approximately thirty minutes before

lunch every day in a classroom with their mentees that was overseen by a school teacher. The team building activities helped the students form relationships and get to know one another more quickly than would have likely occurred in a school setting. Spending time with the mentors also helped the mentees, all high school freshmen, better acclimate to their new high school environment. Following team building exercises, mentors and mentees would eat lunch together. Mentors were encouraged to engage the mentees in meaningful dialogue to get better acquainted and to foster a sense of community.

Initially, mentors and mentees met every day over the first two weeks of school during the fall semester. After which, mentors and mentees met together once a week for more interpersonal activities and lunch. Regular monthly meetings, between mentors and the researchers, were scheduled to help student mentors with any interpersonal issues they might be facing. The researchers meeting with the mentors were graduate students enrolled in a master's level school counseling program. At the conclusion of the fall semester, student participants completed the three post-test measures.

## Results

Data were analyzed using SPSS (IBM Corp.), performing paired-samples t-tests and calculating Pearson product-moment correlation coefficients among the experimental scale scores. Table 1 presents pre- and post-test within-groups Altruism, Commitment, and Leadership scale descriptive statistics, along with Cronbach alpha estimates for the pre- and post-test scales.

Test results showed no significant differences between the pre- and post-test means for either the Altruism ( $t(73) = 0.762$ ,  $p = .448$ ) or Commitment ( $t(73) = -0.762$ ,  $p = .115$ ) scale means. These findings did not support hypotheses #1 or #2, respectively. Results showed a significant difference between the pre- and post-test Leadership means ( $t(73) = 1.91$ ,  $p = .060$ ), not supporting hypothesis #3, evidenced by the decrease.

Table 1. *Pre-test and Post-test, within-groups Leadership, Altruism, and Commitment Scales, along with Alpha estimates (N=74).*

Scale	Pre-Test				Post-Test			
	Mean	SD	SE <sub>mean</sub>	Alpha	Mean	SD	SE <sub>mean</sub>	Alpha
Altruism	31.6	6.5	.76	.81	31.0	6.2	.72	.80
Commitment	30.1	4.5	.52	.79	30.9	2.6	.30	.68
Leadership	61.0	6.5	.76	.85	59.6	8.3	.96	.89

Pearson product-moment correlations among the three measures (post-test) showed that all were positively intercorrelated: that is, the correlations between altruism and commitment ( $r = .36$ ,  $p = .002$ ), between altruism and leadership ( $r = .33$ ,  $p = .004$ ), and between commitment and leadership ( $r = .42$ ,  $p = .000$ ).

## Discussion and Conclusions

The present study investigated three mentor attributes. The results showed no significant differences for altruism and commitment to school following participation in a high-school mentoring program. On the other hand, the findings showed a significant decrease in mentors' perceptions of their leadership skills, a finding contrary to the stated hypothesis.

An important criterion for selection of mentors in this study was the requirement that each must be recommended by two of their teachers. The present findings suggest that the students teachers recommended already demonstrated an increase level of caring for others (altruism) and were known to be dedicated to their academic performance (commitment to school). As a result, selected mentors' self-reported levels of both altruism and commitment to school were already elevated before participating in mentoring activities and not representative of scores which might be seen through a random sampling of high school students. These elevated levels were reflected in the mentors' pre-test scores which were on the higher end of the Likert scale used to measure these characteristics. As a result, it was not surprising to find that their altruism and commitment to school scores were not influenced by their mentoring experience. Although mentoring did not yield significant increases in students' altruism or commitment to school, administrators interested in implementing a mentoring program can screen for these attributes when selecting student mentors.

Beyond the characteristics of altruism and commitment, interesting results were found in the area of leadership. An unexpected result in this study was the significant decrease in mentors' leadership scores. Mentor's self-perception of leadership skills were relatively high prior to their mentoring activities. This increased view of leadership skills could have been due to inflated ego, lack of prior "real-life" leadership opportunities, an idealized view of leadership, or a lack of practical knowledge about what it means to be a leader within a group of individuals. Mentors apparently realized that their skills were not as strong as they thought once faced with real-world leadership demands. Participants reported, after completing their mentoring service, "Leading is harder than I thought it would be ....", "Now I know that leading takes a lot more than just a will to keep going ...." and "I didn't expect obstacles. When you lead, you struggle, but you grow." Consequently, continued monitoring of leadership skills is important, particularly with adolescent mentors.

Peer mentoring is seen as a compelling approach as the peer-group influences adolescents the most (Erikson, 1968). The principal of this high school, based on her 30 years of teaching and administration, recognized the need for a mentoring program to help freshman adjust to high school. Mentees receiving the peer interventions can produce positive benefits, such as improved attendance, increased grades, development of healthy coping skills, social support, decrease of discipline referrals, enhanced school connectedness, and a rise in self-esteem (Cary, et al., 2000; Karcher, 2009, Tobias & Myrick, 1999). Furthermore, mentoring programs can be effective interventions that lead to improved behaviors, attitudes, and academic performances of students (Durlak, 2011). Recognizing how beneficial a mentoring program can be to adolescents inspired us to not only create an effective mentoring program, but one that focused on the needs and leadership of the mentors; junior and seniors, who are in essence implementing the program. With these exciting possibilities for high school students, school programs, and schools in general, this research examined the characteristics of altruism, commitment to school, and leadership among high school adolescents to see if these components are part of the "formula" to creating effective peer mentoring. It was clear from these preliminary results that cultivating and

developing leadership skills in dedicated adolescents is imperative in order to help them prepare to be effective leaders. While altruism, commitment and leadership skills were present and believed to have contributed to this peer mentoring program, due to the self-reported nature of the research, future study is needed to clarify to what extent these attributes effect mentors and a peer mentoring program.

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