Mentor Self-Efficacy and Mentorship Knowledge in Disadvantaged Youth: An Exploratory Study of a Teen Peer-Mentorship Training Certification Program

Dennis Floyd Jones

West Virginia University

Monica Leppma

West Virginia University

Denise Jones

Columbia University

Jason Bishop

West Virginia University

Abstract

Research demonstrates that the predisposition of youth from disadvantaged communities to negative outcomes can be neutralized by protective factors and resilience. Accordingly, researchers are now focusing on variables that promote positive youth development, such as supportive peer relationships. This study examined the effects of youth enrichment summer programming on mentor self-efficacy and peer mentor content knowledge of 66 high school students from disadvantaged communities. Students were recruited from select classrooms and were required to complete an application to participate in the program. Results indicated that participants’ mentor self-efficacy and content knowledge scores increased after the teen mentor certification training, and the number of hours in the various youth enrichment programs predicted mentorship content knowledge scores. Implications and future research are also discussed.

Keywords: *peer mentoring, mentor self-efficacy, urban adolescent development*

Mentor Self-Efficacy and Mentorship Knowledge in Disadvantaged Youth: An Exploratory Study of a Teen Peer-Mentorship Training Certification Program

 Adolescents living in low-income, urban communities often confront complex and multi-faceted challenges that work either alone or in combination to place these youth at risk for adverse outcomes (Moody, Childs, & Sepples, 2003). Scholars note that these impediments—economic insecurity, housing instability, and unsteady employment— likely hinder low-income students’ academic achievement, socio-economic mobility, and personal development. They also obfuscate the interactions and support mechanisms between low-income parents and their children (Johnson, Simon, & Mun, 2014; Raver, 2002). This is especially problematic because research emphasizes the importance of parental involvement in adolescents’ academic achievement. In a meta-analysis including 21 studies examining the influence of parental involvement in student achievement, Jeynes (2003) found that parental involvement significantly affects academic outcomes across race, particularly in African American children.

Although most parents desire to provide their children with supportive environments and enhanced developmental opportunities, low-income parents are often without the time, resources, family structures, and capacity to deliver (Heymann & Earle, 2000).

With this reality, many low-income parents are absent from—or unable to monitor—their children’s daily encounters. The void of parental involvement and positive adult interaction, coupled with exposure to negative neighborhood factors, often lead low-income youth to engage in gangs, criminal activity, substance usage and premature sexual relations (Naccarato et al., 2013). Such participation has detrimental effects on low-income youth and likely manifests into negative peer relationships, violence, teen pregnancy, lower high school graduation rates (Gallagher et al., 2015; Heinrich & Holzer, 2011), poor attendance, behavioral problems, and minimal extracurricular involvement (Bridgeland, DiIulio, & Morison, 2006). Unsurprisingly, data indicate a strong relationship between an individual’s failure to acquire a high school diploma and unfavorable personal outcomes—including, but not limited to, increased unemployment (Heinrich & Holzer, 2011; Bridgeland et al., 2006) and heightened criminal justice system involvement (Bridgeland et al., 2006; Naccarato, Brophy, & LaClair, 2013).

The *social stress model* (Rhodes & Jason, 1990) provides an explanation as to why challenging environmental conditions are associated with negative behavior in youth. According to the *social stress model* adolescents engage in substance abuse and other risky behaviors as a coping mechanism in response to stressors related to family, academics, peer group, and their environment. Rhodes and Jason (1990) suggested that participation in prosocial support networks would buffer adolescents from engaging in adverse behavior. Access to “community resources, role models, and opportunities” (p. 396) mediates the likelihood of risky behaviors (Rhodes & Jason, 1990). In more general terms, as adolescents develop, there is a transaction between risk factors that promote negative outcomes and protective factors that promote resilience and prosocial behavior. Thus, risks predisposing youth to negative outcomes can be neutralized by protective factors and resilience. Accordingly, researchers are now focusing on positive youth development (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). For example, Wang, Brinkworth, & Eccles (2013) examined whether a supportive relationship with a non-parent individual (e.g., teacher) would buffer adolescents against depression and misconduct. Their results suggested that positive teacher-student relationships protected adolescents against depression and misconduct and also moderated the effect of negative risk factors. Similar to teachers, mentors serve as role-models to children (Ferro, De Wit, Wells, Speechley, & Lipman, 2013). Thus, one way to circumvent disadvantaged youth’s challenges including low-graduation rates and negative environmental factors may be to expose youth to mentoring program opportunities. Mentoring programs offer a promising approach to counteract low self-efficacy and other risk factors to which disadvantaged youth are susceptible (DuBois et al., 2011; Parra, DuBois, Neville, & Pugh-Lilly, 2002).

The cumulative and harmful nature of community challenges, limited support, and neighborhood effects on low-income youth have created a sense of urgency to find solutions to attenuate their impact. Researchers target youth development organizations and mentoring programs as mechanisms to rectify disadvantaged youths’ engagement in hazardous activity and their lack of positive interaction. Non-profit and faith-based organizations are heading such initiatives in communities. An abundance of research substantiates youth development organizations’ roles in helping low-income students overcome the aforementioned obstacles. Arbreton, Sheldon, and Kerrera (2005) found that disadvantaged youth in the Boys and Girls Club Enhancement Project improved their academic performance, school attendance, and involvement in comparison to their non-club peers. Likewise, scholars discovered that youth in the Across Ages Intergenerational Mentoring and Community Substance Abuse Prevention Program significantly improved their well-being and overall perceptions of school and their futures (Taylor, LoSciuto, Fox, Hilbert, & Sonkowsky, 1999).

Similar bodies of literature explore successful accounts of adult and peer mentoring programs (Clutterbuck, 2001; Hay, 1995). For example, Tenenbaum, Jett, Anderson, and Yourick (2014) examined peer mentoring programs and discovered advantageous results for troubled youth. These results included increased sense of intrinsic satisfaction, enhanced self-concept, improved self-efficacy, and increased confidence in youths. Other scholars demonstrate the depths and results of such mentoring programs (Shrestha, May, & Edirisingha, 2009), and illustrate how positive peer social networks influence adolescents’ behavioral choices and outcomes (Karakos, 2014; Tucker, Cheong, Chandler, Crawford, & Simpson, 2015).

While numerous scholars have studied the efficacy and impact of youth development and mentoring programs, they have focused less attention on mentorship characteristics that aid in fostering behavioral changes and positive outcomes among disadvantaged youth. Our study seeks to extend the literature by examining the impact of a positive youth development peer-mentoring program, the Youth Enrichment Services’ Teen Mentor Certification Training (TMCT), on disadvantaged youth’s peer mentorship knowledge and mentor self-efficacy, key indicators of effective mentors. We hypothesized the following: (a) Students who participate in the TMCT will demonstrate increased mentor self-efficacy scores; (b) Students who participate in the TMCT will demonstrate increased peer mentorship content knowledge scores; and (c) Students’ level of attendance in various YES programs will predict mentorship content knowledge scores. We chart the course of our study by first exploring the underlying theoretical framework, the definition and purpose of peer mentoring, indicators of effective mentoring relationships, and then a description of the TMCT.

**Theoretical Foundation**

Social Cognitive Theory (SCT) forms the theoretical basis for the intervention used in the present study. SCT refers to a psychological model of learning and behavior that emerged from Albert Bandura’s work (1986). Initially developed with an emphasis on the acquisition of social behaviors, SCT elucidates how people acquire and maintain behavioral patterns and how learning is constructed through the observation of social contexts and environments (Bandura, 1997). From this perspective, scholars view human functioning as the product of a dynamic interplay of personal, behavioral, and environmental influences. SCT integrates this conceptual foundation, along with five core concepts that shape the framework and the mechanism for understanding human functioning: (a) observational learning, (b) outcome expectations, (c) self-efficacy, (d) goal-setting, and (e) self-regulation. The five core premises of SCT are defined as follows.

*Observational learning*, the first core premise of SCT, is the process of learning through watching others, retaining the information, and then later replicating the behaviors that were observed (Bandura, 1997). The second core premise, *outcome expectations*, reflects individuals' beliefs about what consequences are most likely to ensue if particular behaviors are performed (Bandura, 1997). *Self-efficacy*, a core SCT premise assessed in the present study, reflects individuals' beliefs about whether they can achieve a given level of success at a particular task (Bandura, 1997). The fourth SCT core premise, *goal setting*, reflects cognitive representations of anticipated, desired, or preferred outcomes and illustrates one’s agency (Bandura, 1986; Schunk, 1990). The final core concept, *self regulation*, exemplifies the underlying assumptions regarding agency and the influence of personal factors on behavior and the environment (Bandura, 1997).

SCT has been validated in several domains of human functioning. Most notably, SCT has been employed to analyze people’s career choices, organizational behavior, athletics, classroom learning, and mental and physical health. It has also been utilized to design, implement, and evaluate programs, as it provides a tangible model for behavior and a clear foundation of the interactional links between the subsystems of influence (Bandura, 1986). Youth Enrichment Services (YES), the youth development peer mentorship program investigated in the current study, utilizes SCT as a central framework for understanding human behavior.

**Peer Mentoring**

*What is peer mentoring?*

Previous scholars denote the challenge in narrowly defining mentoring, as it exists in multiple forms and is partly defined by the origin, purpose, nature, and site of the mentoring relationship (Clutterbuck, 1996). However, current work around mentoring has attempted to conceptualize the definition of mentoring, particularly within a peer-to-peer context. A consensus of scholarship describe peer mentoring as the well-established process through which a more experienced peer encourages and assists a less experienced peer to develop his or her potential within a shared area of interest (Watson, 2000; Hensen, 2003; Mee-Lee & Bush, 2003; Farrell, Pastore, Handa, Dearlove, & Spalding, 2004). The dynamics of this relationship often connote the more experienced peer as the mentor and the less experienced peer as the mentee and depict a reciprocal process of the giving and the receiving of wisdom (Omatsu, 2011; Selzer, 2015). In peer mentoring, the trained mentor interacts with mentees, “sharing his or her knowledge and experience, and thereby improving students’ understanding and learning” (Minor, 2007, p. 2). At the core of peer mentoring, peer mentors provide their insight to encourage their near-aged mentees’ academic and personal growth, build relationships, and guide their peer mentees in navigating their worlds.

*Why Peer Mentoring?*

A persuasive body of research and professional literature suggests that peer mentoring has become a more common—and important—approach in addressing adolescents’ concerns, challenges, and growth. During the adolescent developmental stage, youth spend considerable time with peers and are highly influenced by them (Albert, Chein, & Steinberg, 2013). According to Astin (1999) “the strongest single source of influence on cognitive and affective development is the student’s peer group. . . [which has] enormous potential for influencing virtually all aspects of the student’s educational and personal development” (p. 590). Peer mentors can serve as positive role models of prosocial behavior and goal attainment, such as completing high school and pursuing higher education. In addition, peer mentorship provides valuable experiences and leadership opportunities to mentors and potential mentors (Pluth et al., 2015). Thus, mentorship benefits mentees by providing them with guidance, encouragement, and support, as well as the mentors themselves, by providing opportunities that improve communication skills, self-confidence, and professional and personal development (Ehrich et al., 2004; Minor, 2007; Pluth et al., 2005).

Due to students’ close association with other students, peer mentoring is extremely important in that it promotes healthy peer interactions and creates a culture of wisdom within their community, allowing peers to reference their own personal learning communities for tangible advisement (Minor, 2007, Omatsu, 2011). Research shows that some of the best mentors of students are other students and that peers are often each other’s first line of contact (Minor, 2007; Omatsu, 2011). Peers take their peers’ perspectives seriously and work collectively to mitigate each other’s challenges (The Mentoring Partnership of Southwest Pennsylvania, 2010). In fact, students who confront academic and personal challenges conventionally seek out—and respond to—advice from a peer mentor before they connect with an adult, faculty member, counselor, or administrator (NESTA, 2009). Therefore, the need to create strong, internal self-motivators and dynamics of empowerment, shared from peer to peer, became absolutely essential in defining young people’s ascendance towards academic and career success.

*Peer Mentoring Programs*

Because peers have had such an impact on one another (sense of self-worth) and play such a significant role in each other’s development, programs, universities, and organizations have made numerous attempts to harness and utilize this influence more formally. Institutions, nationally, have specifically implemented peer mentoring infrastructure in multiple capacities, and have found compelling results that demonstrate the efficacy of collaboration between peers—particularly for their learning communities. Based on an informal survey at California State University, Northridge (CSUN), EOP Director José Luis Vargas found that the single most important factor associated with high retention and graduation rates for low-income, first generation college students was their ability to find—and to be advised by— a peer mentor. These results illustrate the importance of peer mentoring programs and emphasize the significance of positive peer interaction.

**Effective Peer Mentoring and Relationship Quality**

*Positive Peer Development and Positive Mentor-Mentee Relationship*

Peer influence results in either positive or negative outcomes (Karakos, 2014). However, appropriately matched peer mentorship provides the opportunity for positive peer influence (Selzer, 2015). A positive relationship is the medium for behavior change in psychotherapy—and the quality of the relationship is the most significant predictor of positive outcomes. Quality positive peer relationships can help students refuse engagement in risky activity and embody prosocial behavior. Positive, supportive relationships can also increase one’s well-being and serve as buffers against stress, attenuating an individual’s need to engage in hazardous behaviors (Cohen & Wills, 1985). Scholars note that positive peer relationships promote goal attainment, such as completing high school, and pursuing higher education (Goldstein, Davis-Kean, & Eccles, 2005), which has positive benefits for both parties. In fact, engaging with a person who reflects similar characteristics and has achieved targeted goals can make those goals appear more attainable, particularly in the absence of positive adult role models (Minor, 2007; Pluth, Boettcher, Nazin, Greenaway, & Hartle, 2015).

*Mentor Self-Efficacy*

Self-efficacy is one characteristic of mentors that influences the mentor-mentee relationship (Parra, Dubois, Neville, Pugh-Lilly, & Povinelli, 2002). Self-efficacy is a person’s belief in his or her ability to successfully complete a behavior necessary to reach a certain goal (Bandura, 1997). Perceived self-efficacy affects psychological functioning and is critical to adolescent development (Caprara, Barbaranelli, Pastorelli, & Cervone, 2004). Self-efficacy also influences adolescents’ academic and career choices (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). Mentor self-efficacy is important because successful mentors need to have confidence in their knowledge and ability to provide support to their mentees. Parra et al. (2002) identified mentor self-efficacy as critical to effective mentorship. Perceived self-efficacy affects the amount of effort a mentor will employ as well as the level of persistence in overcoming obstacles during the mentoring process (Caprara et al., 2004). Mentor-mentee relationships are more likely to be successful if mentors have high mentoring self-efficacy (Parra et al., 2002).

 Research has demonstrated that mentor self-efficacy is also positively related to the quality of the mentor-mentee relationship (Karcher, Nakkula, & Harris, 2005; Parra et al., 2002). According to Parra et al. (2002), mentor self-efficacy predicted greater contact and more positive experiences between mentors and mentees. Karcher et al. (2005) found that mentor self-efficacy had a strong, positive relationship with the perception of a high quality relationship. Therefore, it is important to monitor and promote mentor self-efficacy because of its effect on the relationship (Karcher et al., 2005). Many of the challenges that disadvantaged youth face center around a lack of support and modeling of successful behaviors. Mentors who perceive themselves as possessing higher levels of self-efficacy can serve to help increase self-efficacy of their mentees by providing support and modeling. In addition to self-efficacy, according to Bandura’s (1986) social cognitive theory, it is also important for effective mentors to acquire knowledge.

*Peer Mentor Content Knowledge*

Content knowledge is one competency—and desirable attribute— of an effective mentor (Kupersmidt & Rhodes, 2013; Martin, & Sifers, 2012). Obtaining peer mentorship knowledge is valuable for mentors as it equips them with the expertise to support their mentees and helps them make sense of their mentorship experience. Within the context of a mentor-mentee relationship, mentors must comfortably share their mentorship knowledge—as mentees seek to learn from their mentors (Bowman & McCormick, 2000). Since mentors are expected to help mentees, it is imperative that mentors embody conceptual knowledge and an understanding of the skills that are inherent in becoming an effective mentor. Mentorship knowledge is a variable in our study and is measured among our participants.

Teen Mentor Certification Training Programs, similar to the one used in our study, provide a wealth of opportunity for aspiring mentors to further develop their content knowledge of mentorship and to apply that knowledge in an authentic setting. This authentic learning experience is crucial to mentors’ development and provides a practical avenue to ensure mentors are equipped with the knowledge and skills to advance their mentor-mentee relationship.

**Description of YES Program**

 Youth Enrichment Services, Inc. (YES), a non-profit 501 (c)(3) corporation (Federal ID 25-1737929), was formed in 1994 to design and implement educational programs for children living in public housing and in economically disadvantaged communities. Youth Enrichment Services’ central mission is to provide socially and economically at-risk teens with opportunities to achieve success through their participation in educational and cultural programs. Peer mentorship training certification is at the heart of the organization.

 YES’ mentoring-based program incorporates peer-mentor certification, life skills, and communication skills training to address at-risk behavior among adolescents. YES uses this programming to empower youth and to strengthen their sense of community, their self-awareness, and their global understanding of the world. These programs are built around YES’ Peer Mentoring and Learning Model and etched in YES’ fundamental philosophy of improved physical, emotional, and academic development; cultural enrichment; and career and life skills development.

 **Faith Ranch.** A core aspect of YES is the TMCT. The TMCT aims to teach prospective mentors to understand the scope and limits of their role as mentors (and mentees), to develop effective mentoring relationships, to advance competency in the area of motivating others, and to understand the concept of positive peer development. TMCT focuses on improving adolescents’ teamwork skills, developing cultural awareness, critical consciousness, commitment to the community, and increasing confidence as they become certified teen mentor leaders.

The TMCT program is designed as a four-day seminar based on Covey’s (1998) *7 Habits of Highly Effective Teens* (See Table 1)*.* It consists of 50-minute workshops, taught by trained facilitators, on each of the seven habits as well as a two-hour mentorship training program. In addition, the program includes (a) team building and physical activities (obstacle course, daily 2-mile run, horseback riding, nature exploration, ultimate Frisbee, zip lining, campfire, talent show, and swimming), (b) arts and crafts, (c) workshops on leadership, (d) cultural and social development, and (e) student presentations.

 **Additional YES Programs.** In addition to TMCT, YES offers four additional sequential programs. Summer Work for Success, YES’ second summer program, is a four-day seminar that teaches employment and work skills through workshops and activities. Summer Magic, the third summer enrichment program, is a six-week program that provides science, technology, engineering, and mathematics (STEM) education to middle school students. Designed to prevent summer learning loss, Summer Magic is also crafted to improve students’ public speaking skills, personal hygiene, social etiquette, and physical fitness through life skills and physical education workshops. The fourth program, Summer Study for Success (SSFS), is a six-week intensive academic experience that introduces students to initial research and career exploration. It requires a 170-hour minimum commitment and focuses on research, critical thinking, writing, and presentation skills. The final program is Learn to Earn. In this program, 14 to 21 year old disadvantaged youth are provided employment around the Pittsburgh area. The students work 25 hours per week at minimum wage in diverse jobs to gain work experience, technical skills, knowledge of employer expectations, and exposure to potential career paths.

**Method**

**Participants**

 Sixty-six adolescents, with ages ranging from 14 to 20, (41 females, Mage = 15.09, *SD* = 1.24; MSchoolGrade = 10.08, *SD* = 1.35, 94.5% African-American), determined at-risk, were enrolled in the YES program in the western part of Pennsylvania. Twenty participants (13 females, Mage = 15.0, *SD* = 1.3; MSchoolGrade = 8.95; 95.0% African-American) completed the Mentoring Self-Efficacy Scale, and 31 participants (15 females, Mage = 14.73, *SD =* .98; MSchoolGrade = 9.77; 93.5% African-American) completed the Mentor Training Content Knowledge Assessment. Participants were recruited from April to July in 2015. Recruitment procedures included distribution of programmatic flyers and informational presentations to select classrooms in high schools in the region. Students were required to complete an application for each program. Application materials included a narrative essay, a questionnaire, and assent to participate in the study.

**Measures**

 *Mentor Self-Efficacy Scale (MSES)*

 The MSES is an 11-item, Likert scored scale used to measure the mentor’s level of confidence in his/her knowledge and ability to provide support to a child in a peer mentoring relationship. The MSES was developed based on Bandura’s (1997) social cognitive theory, which theorizes that behavior is learned by observing the modeling of others. This social learning is shaped by one’s perceived self-efficacy, or the belief in one’s own ability to carry out the observed behavior. Participants were asked to rate their confidence as a mentor to their matched child in a number of areas, including, for example: facilitating discussions about troubling choices or behavior; promoting problem-solving ability; and possessing the skills necessary to be an effective mentor. Scoring for this instrument includes four response options per item: “not at all confident” (score of 0), “somewhat confident” (score of 1), “confident” (score of 2), and “very confident” (score of 3). Total scores range from zero to 33 with higher scores indicating greater levels of mentoring confidence. The scale assessed four mentoring skill dimensions including (a) mentor potential, (b) mentorship profile, (c) mentor effectiveness, and (d) mentor relational health. The MSES demonstrates acceptable internal consistency, Cronbach’s alpha = .81 (Ferro, De Wit, Wells, Speechley, & Lipman, 2013).

*Mentor Training Content Assessment*

 The Mentoring Training Content Assessment was a 33-item, multiple choice formatted assessment tool. Item responses included three foil responses and one correct answer. The correct response was randomized, and a clarification check indicated that no predictable pattern of the correct response existed. The questionnaire content included four questions for each of the seven habits taught in the TMCT program, and four additional items capturing the construct of the mentor training material. Psychometric properties of the tool have not been evaluated or published. However, the questionnaire was developed by an expert in educational measurement and evaluation. Face and content validation were acquired by attaining feedback from two additional experts. All modifications of the questionnaire were made prior to its administration. Higher test scores reveal greater understanding of the seven habits and the mentorship concepts.

**Assessment Procedure**

 Pre and post-tests were administered by YES summer staff in two 50 minute intervals to assess mentor self-efficacy and content-based knowledge of the information, ideas, and concepts presented in Sean Covey’s 7 Habits of Highly Effective Teens and in the Mentor Training Session. Students were given the opportunity to have the assessments read to them, if necessary. Tests were taken at the Faith Ranch Camp Site in Jewitt, OH. The pre-tests were administered before the program began in June, and the post-tests were administered after the conclusion of the TMCT, at the beginning of the following YES program, in August.

**Results**

 A paired samples t-test was used to assess mean difference between children’s pre- and post-test scores on mentor self-efficacy. Twenty children completed both the pre-test and post-test questionnaire. Results indicated a significant increase in mentor self-efficacy *t*(1, 19) = 2.15, *p* = .04, ES = .52. Mean scores increased from 43.70 (SD = 4.24) to 45.20 (SD = 4.10). Cohen’s d indicates a moderate effect size. Chronbach’s alpha revealed high internal reliability of the questionnaire, α = .84.

 A paired samples *t*-test was used to assess mean differences between children’s pre- and post-test scores on the Mentor Training Content Assessment after completing TMTC. Thirty-one participants completed both the pre- and post-test questionnaire. Results indicated a significant increase in content knowledge, *t*(1, 30) = 2.92, *p* = .01, ES = .43. Mean scores increased from 13.45 (SD = 3.15) to 14.87 (SD = 3.41). Cohen’s d indicates a moderate effect size. Chronbach’s alpha revealed adequate internal reliability of α = .69.

 Next, a regression analysis was conducted to determine if post-test scores of the Faith Ranch portion of the program could be predicted by the amount of time spent engaged in the YES program. Four data points were removed due to missing data (total time spent in program) for a total sample of 27 for the regression analysis. The results indicated a significant proportion of the total variation in post-test scores were predicted by the amount of time spent engaged in the program, *F*(1, 26) = 10.11, *p* = .004. The unstandardized slope (.008) and standardized slope (.529) were significantly different than 0 (*t*(26)=3.18, *p*=.004). The prediction equation, Post-Test Scores = 12.76 + (.008 x Time Spent in Program), indicated that for every 125 hours completed in the program, participant scores increased by 1 point. The confidence interval around the unstandardized slope did not include 0 (.003, .012). The R2 value indicates that 28% of the variance in post-scores was attributed to hours spent in the YES program.

**Discussion**

 The purpose of the study was to assess the effects of participation in the TMCT on mentor self-efficacy and determine if participation in the TMCT, as well as in various YES programming, increased content knowledge of peer mentorship. Our results demonstrated that peer mentorship training for adolescents had a positive effect on mentor self-efficacy. Overall, participants who engaged in the TMCT program increased their mentor self-efficacy scores. This is important because research suggests that mentor attitude has a significant effect on peer mentorship outcomes. For example, in a study of fourth to ninth grade students, peer mentors who demonstrated positive attitudes toward youth were paired with mentees who were academically disconnected (Karcher, Davidson, Rhodes, & Herrera, 2010). Results indicated that the mentees (*n* = 205) were more invested in the mentoring relationship and also reported developing stronger relationships with their teachers when compared to a control group (*n* = 182). According to Rhodes and DuBois (2008) the effects of mentoring programs are greater when programs support the development of the mentor-mentee relationship.

 Our second aim was to explore whether participation in the TMCT increased participant knowledge of the mentorship material. Those who completed the TMCT demonstrated increased knowledge regarding mentorship at posttest, suggesting that the students learned the information presented as intended. Karcher et al. (2010) advised that mentor training is important because the mentor’s approach has an impact on the efficacy of the mentor-mentee relationship. Therefore, the fact that the mentorship certification training was successful “may affect the kinds of behaviors among mentors that are most likely to result in stronger relationships and better outcomes” (Karcher et al., 2010, p. 226).

 Finally, with regard to mentorship content knowledge, our results indicated that those in the TMCT who scored the highest on content knowledge related to peer mentorship demonstrated higher attendance in the various YES programs. This finding provides support that the various aspects of YES contribute to mentorship training. Because the teen/peer mentor model is the foundation of YES, it was important to determine that YES programming supported mentor development. The results of this study contribute to the knowledge base regarding enrichment programs that promote academic achievement and positive outcomes in socially and economically disadvantaged youth

**Implications**

 These findings have broader implications for promoting empowerment and achievement in disadvantaged youth. Neurodevelopmental researchers suggest that the brain structure during adolescence increases susceptibility to peer influence (Albert et al., 2013). Because adolescents spend more time with peers, and their brain reward centers are vulnerable to immediate gratification resulting from risky behaviors encouraged by peers, this is a time when positive peer influence is most critical (Albert et al., 2013). As mentioned earlier, youth living in socioeconomically disadvantaged areas experience challenges such as exposure to higher criminal activity and substance use (Cheong et al., 2014). Peers not only provide social support, but they also influence learning and development (Minor, 2007). It is important that these adolescents have the opportunity for positive experiences and positive peer influence offered in peer mentoring programs. In addition, it is important for adolescents to feel that they fit in. If surrounded by negative peers, adolescents are more likely to join in negative behaviors. Providing youth with positive experiences increases the likelihood that they may associate with higher performing peers. Moreover, it is important to provide adolescents with experiences of success. Youth programming creates opportunities for success; increases in mentor self-efficacy and knowledge about mentorship are experiences of success.

 Finally, an important goal in helping disadvantaged youth is increasing prosocial behavior. Mentorship itself is prosocial, as it involves helpful behavior and promotes interpersonal connection. Due to the adversities inherent in disadvantaged communities, Selzer (2015) suggested that meaningful connection through mentorship relationships are needed now more than ever. Moreover, the influence of peer mentors on mentees also promotes prosocial behavior through social cognitive learning (Bandura, 1986). According to Rhodes and DuBois (2008) the relationship between mentor and mentee is the foundation for change across social, emotional, and behavioral domains. Similar to the agent of change in psychotherapy (Ardito & Rabellino, 2011), the efficacy of mentoring is dependent on the quality of the relationship between the mentor and mentee (Rhodes & DuBois, 2008). Therefore, our findings suggest that programs focused on peer-mentorship knowledge and mentor self-efficacy have a positive effect on disadvantaged youth.

**Limitations of the Study**

Several limitations warrant consideration in interpreting the results of this study. This pilot study contains internal and external threats to validity. First, only two-thirds of the participants enrolled in the TMCT program completed the exit survey. Next, the scale used to measure content knowledge of the TCMT program has not yet undergone psychometric testing to assess its level of reliability and validity. Finally, the study did not have a control group to control for possible confounding variables associated with test results. Despite these limitations, however, this was the first study to explore the efficacy of the YES, Inc. TMCT program on mentor self-efficacy and mentorship knowledge.

**Recommendations for Future Research**

As the current study was exploratory, future research should seek to increase the generalizability of the findings by utilizing a larger sample size and including a control group for comparison. Research is also needed to assess the psychometric properties of the Mentor Training Content Assessment. In addition, a longitudinal investigation tracking participants’ development of mentor self-efficacy and retention of content knowledge over time may offer insight for youth development programs. Furthermore, research should determine if mentor self-efficacy translates into positive outcomes for mentors and mentees.

In conclusion, this study investigated the effectiveness of a youth empowerment and peer mentor training program for increasing mentor self-efficacy and mentorship content knowledge in disadvantaged adolescents. The results indicated that the TMCT program was effective for increasing mentor self-efficacy in participants and also increased knowledge about mentorship. The findings also provided preliminary support for the effectiveness of participation in the series of YES, Inc. programs to increase mentorship knowledge. These promising preliminary results support continued investigation of peer mentorship training and youth empowerment programs.

References

Albert, D., Chein, J., & Steinberg, L. (2013). The teenage brain: Peer influences on adolescent decision making. *Current Directions in Psychological Science, 22*(2), 114-120.

Ardito, R. B., & Rabellino, D. (2011). Therapeutic alliance and outcome of psychotherapy: Historical excursus, measurements, and prospects for research. *Frontiers in Psychology, 2*(270), 1-11.

Astin, A. W. (1999). Involvement in learning revisited: Lessons we have learned.” *Journal of College Student Development*, *40*(5), 587-598.

Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). Self-Efficacy: The Exercise of Control. New York: Freeman.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children’s aspirations and career trajectories. *Child Development, 72*(1), 187-206.

Bridgeland, J. M., DiIulio, J. J., & Morison, K. B. (2006). The silent epidemic: Perspectives of high school dropouts. Washington, DC: Civic Enterprises.

Caprara, G. V., Barbaranelli, C., Pastorelli, C. & Cervone, D. (2004). The contribution of self-efficacy beliefs to psychosocial outcomes in adolescence: Predicting beyond global dispositional tendencies. *Personality and Individual Differences, 37*, 751-763.

Cheong, J., Tucker, J. A., Simpson, C. A., & Chandler, S. D. (2014). Time horizons and substance use among African American youths living in disadvantaged urban areas. *Addictive Behaviors, 39*(4), 818-823. doi:10.1016/j.addbeh.2013.12.016

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357.

Covey, S. (1998). *The 7 habits of highly effective teens*. New York, NY: Fireside.

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12*(2), 57-91.

Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly, 40*(4), 518-540.

Ferro, A., De Wit, D., Wells, S., Speechley, K. N., & Lipman, E. (2013). An evaluation of the measurement properties of the Mentor Self-Efficacy Scale among participants in Big Brothers Big Sisters of Canada community mentoring programs. *International Journal of Evidence Based Coaching and Mentoring, 11*(1), 146-161.

Gallagher, M., Pettigrew, J., & Muldoon, O. (2015). Occupational choice of youth in a disadvantaged community. *The British Journal of Occupational Therapy, 78*(10), 622-629. doi:10.1177/0308022615583065

Goldstein, S. E., Davis-Kean, P. E., & Eccles, J. S. (2005). Parents, peers, and problem behavior: A longitudinal investigation of the impact of relationship perceptions and characteristics on the development of adolescent problem behavior. *Developmental Psychology, 41*(2), 401-413.

Heinrich, C. J., & Holzer, H. J. (2011). Improving education and employment for disadvantaged young men: Proven and promising strategies. *The Annals of the American Academy of Political and Social Science, 635*, 163-191.

Jeynes, W. (2003). A meta-analysis: The effects of parental involvement on minority children’s academic achievement. *Education & Urban Society, 35* (2), 202-218.

Johnson, V. L., Simon, P., & Mun, E. (2014). A peer-led high school transition program increases graduation rates among Latino males. *The Journal of Educational Research, 107*(3), 186-196. doi:10.1080/00220671.2013.788991

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.

Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors’ and mentees’ assessments of relationship quality. *Journal of Primary Prevention, 26*(2), 93-110.

Karakos, H. L. (2014). Positive peer support or negative peer influence? The role of peers among adolescents in recovery high schools. *Peabody Journal of Education, 89*(2), 214-228.

Kupersmidt, J. B., & Rhodes, J. E. (2013). Mentor training and support. In D. L. DuBois and M. J. Karcher (Eds.), Handbook of youth mentoring (2nd Ed.) (pp. 439–468). Thousand Oaks: Sage Publications.

Lee, L. M., & Bush, T. (2003). Student mentoring in higher education: Hong Kong Baptist University. *Mentoring & Tutoring: Partnership in Learning,* *11*(3), 263-271.

Martin, S. M., & Sifers, S. K. (2012). An evaluation of factors leading to mentor satisfaction with the mentoring relationship. Children and Youth Services Review, 34(5), 940–945.

Mentoring Partnership of Southwest Pennsylvania, (2010). *Peer mentor handbook*. Retrieved from http://www.mentoringpittsburgh.org/pages/mentor-resources

Minor, F. D. (2007). Building Effective Peer Mentor Programs. *Learning Communities and Educational Reform*. 1-13. Retrieved from <http://evergreen.edu/washingtoncenter/docs/monographs/lcsa/lcsa4building.pdf>

Moody, K. A., Childs, J. C., & Seples, S. B. (2003). Intervening with at-risk youth: Evaluation of the Youth Empowerment and Support program. *Pediatric Nursing, 29*(4), 263-270.

Naccarato, T., Brophy, M., & LaClair, K. (2013). Summer engagement for at-risk youth: Preliminary outcomes from the New York State Workforce Development Study. *Child Adolescent Social Work Journal*, 30, 519-533.

Parra, G. R., Dubois, D. L., Neville, H. A., Pugh-Lilly, A. O., & Povinelli, N. (2002). Mentoring relationships for youth: Investigation of a process-oriented model. *Journal of Community Psychology,* *30*(4), 367-388.

Pluth, M. D., Boettcher, S. W., Nazin, G. V., Greenaway, A. L., & Hartle, M. D. (2015). Collaboration and near-peer mentoring as a platform for sustainable science education outreach. *Journal of Chemical Education, 92*, 625-630.

Raver, C. (2002). Emotions Matter: Making the Case for the Role of Young Children’s Emotional Development for Early School Readiness. *Social Policy Report*, 16 (3): 1-20.

Rhodes, J. E., & DuBois, D. L. (2008). Mentoring relationships and programs for youth. *Current Directions in Psychological Science, 17*(4), 254-258.

Rhodes, J. E., & Jason, L. A. (1990). A social stress model of substance abuse. Journal of *Consulting and Clinical Psychology, 58*(4), 395-401.

Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist*, 25, 71-86.

Selzer, L. (2015). Spiritual mentoring for healthy family development. In W. Jeynes & E. Martinez (Eds), *Ministering spiritually to families* (pp. 45-70). Heidelberg, Germany: Springer International Publishing.

Taylor, A. S., LoSciuto, L. Fox, M., Hilbert, S. M., & Sonkowsky, M. (1999). The mentoring factor. Evaluation of the across ages’ intergenerational approach to drug use prevention. Child and Youth Services, 20, 77-99.

Tucker, J. A., Cheong, J. Chandler, S. D., Crawford, S. M., & Simpson, C. A. (2015). Social networks and substance abuse among at-risk emerging adults living in disadvantaged urban areas. *Addiction, 110*, 1524-1532.

Wang, M., Brinkworth, M., & Eccles, J. (2013). Moderating effects of teacher-student relationship in adolescent trajectories of emotional and behavioral adjustment. *Developmental Psychology, 49*(4), 690-705.