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College Mentors: A View From the Inside of an Intervention to Promote Health Behaviors and Prevent Obesity Among Low-Income, Urban, African American Adolescents

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Abstract

This article examined the views of college mentors who administered Challenge!—a home- and community-based health promotion/overweight prevention intervention that effectively reduced the progression to overweight among African American adolescents. In-depth qualitative interviews among 17 mentors (81%) conducted 1 year following the intervention yielded four primary findings: (a) the importance of a strong mentor–mentee relationship often extending beyond the issues of diet and physical activity, (b) concern at the adversities the adolescents faced (e.g., poverty and household instability); (c) the personal impact of the mentoring process on the mentors' own dietary and physical activity behavior and career choices; and (d) recommendations regarding subsequent mentoring programs. In summary, college students are a valuable resource as mentors for low-income, African American adolescents and provide insights into the success of health promotion/overweight prevention interventions.

Keywords

adolescent; health promotion; overweight prevention; college mentors; obesity; African American

Pediatric obesity¹ is a serious public health problem that is increasing in prevalence, particularly among minority children (Ogden, Carroll, & Flegal, 2008; Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). African American adolescents have been disproportionately affected, experiencing the highest rate of obesity among all racial/ethnic groups (Ogden et al., 2008).

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¹Obesity is body mass index (BMI, weight in kg/height in m²) 95th percentile and overweight is BMI 85th percentile, based on CDC age- and gender-adjusted growth charts (<http://www.cdc.gov/growthcharts>).

Environmental and psychological factors that contribute to increases in physical activity, reductions in sedentary activities, and decreases in consumption of high-fat foods are often the focus of preventive interventions. However, evidence from recent meta-analyses of prevention trials found limited impact on overweight status (Harris, Kuramoto, Schulzer, & Retallack, 2009; Kamath et al., 2008; Zenzen & Kridli, 2009). Many interventions lacked a theoretical framework, did not involve families and peers, and provided little information on the characteristics and experiences of those who delivered the intervention.

We demonstrated that Challenge!—a 12-session home and community-based health promotion/obesity prevention intervention delivered to urban, African American adolescents—was successful in preventing an increase in overweight status, in reducing the decline in physical activity typically seen among adolescents, and in improving the adolescents' diets (Black et al., 2010). The three psychosocial theories that formed the basis of Challenge! are as follows: (a) developmental ecological theory (DET; Bronfenbrenner, 1979), (b) social learning theory (SLT; Bandura, 1977), and (c) the trans theoretical model of the stages of change (TTM; Prochaska & DiClemente, 1992). During the formative phase of the project, adolescents recommended using “personal trainers” to coach them in adopting healthy dietary and physical activity behaviors (Black et al., 2010). Therefore, guided by theories and prevention science (Weissberg, Kumpfer, & Seligman, 2003), we developed and evaluated Challenge! using college mentors as trainers.

BACKGROUND

Mentoring programs, which connect adolescents with adults for support and advice, have attracted national attention to reduce adolescent risk behaviors (Karcher, 2008; Rhodes, 2002; Sipe, 2002). Mentored adolescents are less likely to participate in high-risk behaviors, such as substance use, weapon carrying, and intercourse (Beier et al., 2000; Zimmerman, Bingenheimer, & Notaro, 2002), and are more likely to experience academic success (DuBois & Silverthorn, 2005; Klaw & Rhodes, 1995; Rhodes & Grossman, 2000) than unmentored adolescents. Mentoring operates through a mentor–mentee relationship based on support and guidance (Sipe, 2002). However, most evaluations focus on the mentee, with little attention on the mentor (Rhodes, 2002). In this study, we examine mentors' views regarding (a) mentor–mentee relationships, (b) program impact on mentor behavior, and (c) future advice for mentoring programs.

METHOD

Mentors

We recruited minority college students and recent graduates and trained them to be positive role models and behavior change agents. The criteria were personal healthy lifestyle, interest in being a positive health role model, experience with adolescents, and commitment to urban communities. Mentors received \$12 an hour and worked 10 to 20 hr/week. During the 3-year intervention period, more than 70 individuals applied to be mentors; 21 were hired.

The 12-session Challenge! intervention was delivered weekly or biweekly over 3 to 6 months (Black et al., 2010). Mentors met with teens after school, early evening, or on

weekends, primarily in the teens' homes but also in the surrounding community through field trips to convenience stores, fast-food restaurants, parks, and community centers. Mentors worked with two to five adolescents concurrently. Most mentor–mentee pairs (97%) were gender and race matched.

Training.—Mentor training was comprehensive, hands-on, and ongoing. Initial training required 40 hr and included in-depth reviews of the theories underlying the intervention, adolescent development (Steinberg, 2008) and motivational interviewing (Miller & Rollnick, 2002). Training emphasized active listening skills so mentors were prepared to help adolescents set personal health goals, increase their self-efficacy, and devise strategies to accomplish their health goals. Mentors acted as participants for all Challenge! lessons. They participated in food demonstrations and learned to set and track their own diet and physical activity goals. Mentors received instruction on home and neighborhood safety and behavior management. As new mentors joined the team, current mentors conducted the training under the guidance of a supervisor.

Supervision.—Mentors met with a supervisor (psychology doctoral student) weekly to provide support, ensure intervention fidelity, and monitor mentor–mentee relationships (Sipe, 2002). Mentors kept track of their mentee contacts through personal contact records (PCRs) that included visit location, date, others present, and mentees' responsiveness and weekly goals. Prior research has documented the benefits of mentors maintaining journals or logs (Sipe, 2002).

Structure.—The intervention was conducted in cohorts of 18 to 30 teens and five to eight mentors, coinciding with semesters. This strategy enabled a consistent schedule based on mentor–mentee class schedules. Each cohort began with a group family meeting that included an overview of the program, a nutritious meal, and the initial mentor-teen meeting. At the conclusion, each cohort had a group graduation that included families and graduation certificates.

Data Collection

An in-depth guide was constructed prior to conducting the interviews (Spradley, 1979). The primary topics were the mentor–mentee relationship, impact of the intervention on mentor behavior, challenges and highlights of the intervention, and future recommendations. Probes were included to encourage detailed descriptions.

Interviews were conducted by telephone 6 to 12 months after intervention completion. The interviewer had been trained and did not know the mentors personally. The 20- to 70-min interviews were tape-recorded and transcribed, removing personally identifying information. The protocol was approved by the university institutional review board and participants gave permission to be recorded.

Mentors Revisited

Mentors included 21 African American/African individuals aged 19 to 31 years (males = 8, females = 13); 17 were undergraduates and 4 were graduate students or recent graduates.

Mentors were asked to make a one-semester commitment (approximately 6 months) to ensure that they completed training and at least one intervention cohort. Nineteen mentors (86%) met the commitment and 11 (52%) renewed their commitment for additional semesters. Mentors left the project because of school demands or to enter graduate school.

We contacted 17 of the 21 mentors (81%) and all participated. The remaining mentors could not be located. Two were teachers, two were nurses, one was an accountant and also directed a nonprofit organization for urban youth. Twelve were in graduate school: medicine (two), social work, public health, education, health education (two), psychology (two), health science, public administration, and nursing.

Data Analysis

The data were analyzed using a phenomenological qualitative approach, which uses detailed personal descriptions gathered through open-ended interviews (Creswell, 1994; Strauss & Corbin, 1998). Three coders read each transcription multiple times. None knew the mentors or had been involved in the intervention. Text was coded line by line, using the interview questions as a guide, and labels were applied to each distinct concept. Transcriptions were reread and relevant passages were highlighted based on themes and concepts previously noted. During rereading, additional constructs were noted and combined with the coded and highlighted passages to identify preliminary patterns that reflected mentoring experiences. Constructs were discussed and placed on index cards to be sorted.

The coders sorted the index cards into piles based on their perceptions of relations among the constructs. After discussing their sorting decisions, they re-sorted the cards (Kreuger, 1997). Intercoder reliabilities resulted in 94% agreement (Miles & Huberman, 1994).

The resulting categories were organized into clusters of overarching themes (Merriam, 1998), which were reviewed and verified by two mentors who participated in the intervention. These processes allowed us to create a structured narrative, grounded in the data.

RESULTS

Four theses emerged from the interviews with mentors.

Mentor–Mentee Relationships

Having a mentor–mentee relationship was an over-arching theme and included three subthemes: friendship, positive influence, and teen success.

Friendships.—Many mentors spoke about becoming a mentor as a way to “give back to the community,” “to help inner-city kids,” or “to do some good.” Many were surprised to discover that they also formed friendships with the teens. One mentor mentioned, “The emotional attachment that some of the teenagers had with me ... seeing their face when I would come over and the parents, their appreciativeness, they were so appreciative.”

The relationships became strong enough that the teens talked to their mentors about other issues: “They would ask questions about other things they were dealing with.”

Many mentors reported that relationships with the teens made it difficult to separate when the program ended. One mentor reported, “I had some (teens) who really, like, when it was time for the sessions to end you could tell they did not want it to end.”

Positive influence.—Many mentors expressed the personal highlights of being a positive influence in the teens’ lives, “Just having a person there ... even though health was the basis of the talk, I think just us being there helping them out ... I don’t think they’ll forget us.”

The mentors described how the positive influence went beyond the curriculum, and extended into the teens’ lives, providing them with positive models, “It made me really think about how many kids are out there that really need someone and if you come into their life and help them in certain parts of their life then they can turn their life around, they’re still so young and they can get out of their situation before it’s too late ... someone they look up to can really help them change their life and I think that’s just amazing.”

Often, mentors mentioned that they were not only helping the teens learn about health but also about life skills, “Outside of teaching the kids about nutrition there were a lot of vital things the kids learned, like a lot about making good decisions, a lot about processing, evaluating yourself.”

Successes.—Mentors reported that the teens’ interest in health and in setting and attaining goals was a highlight of their experience. One male mentor remarked, “It’s a lot of stuff going on with some of my kids. So the fact that the kids could overcome a lot of those challenges that they had and still meet goals, you know, it wasn’t school, you know, it wasn’t something mandatory for them to do, but to see that they would invest in themselves in that way, that’s always a plus for me.”

Adversities

Mentors talked spontaneously about the adversities in the teens’ daily lives. They were shocked at the poverty, illiteracy, and household instability. In some cases, the mentors mentioned that the poverty was so dire that the teens had not eaten and there was no food in the house, “overwhelming problems ... there are so many family problems ... way more than I expected. Like I’ve had kids whose parents have AIDS, who lost both their parents, who are in foster care, so they were so unstable and that was very, very hard to deal with or even to tell kids, ‘oh you should worry about what to eat,’ when they don’t even have nothing to eat, so that was very, very difficult for me to deal with.” Another mentor reported severe and chronic food shortages, “A couple of my teenagers wouldn’t have food in the refrigerator ... and I might ask them why you didn’t eat dinner? And they would say well we didn’t have food in the house.”

Instability, including frequent moves, was an adversity that affected not only the mentors’ ability to contact the teens but also the teens’ ability to concentrate, “One day they live with

their parents, next they are with their grandparents, next they are over their aunts, it was difficult trying to keep a record of where they were actually staying or living.”

Personal Impact

There was consensus that mentoring had positive impacts on the mentors' health and life choices.

Health.—Although the mentors were generally health conscious, they spoke of gaining a new awareness of health. One female mentor commented, “Well, I was an athlete and I am health conscious, but you know there were some new things I hadn't paid attention to before that opened up my eyes. Simple things you would just brush off like reading the food labels and stuff like that, you know that's commonsense stuff that you would think that people would do and yeah, I would do it occasionally ... but I found I got more involved and started paying more attention, a lot more, to those things.” Another mentor reported, “Yeah, actually I felt like if I am going to be telling people they need to be more active and eat healthier, I was already eating healthier, but I felt like okay (I) need to be more active.”

Life choices.—Many mentors spoke about how they changed their perspectives based on their mentoring experiences. One explained, “It's amazing how sometimes when you sit and discuss and give a child an opportunity to process through the information ... sometime the kids discover some things that you never have touched upon before.”

Many mentors mentioned that Challenge! enhanced their college experience and sometimes even shifted their life goals and career choices. One female mentor said, “Actually I want to go into health promotion, public health, and promoting various health lifestyles.” Another mentor reported, “I've always been interested in working with youth and especially inner city youth. What (Challenge!) did for me was like it really motivated me to continue ... with urban development and working with youth.” A third mentor said, “It let me know there's a lot of work to be done with obesity and just eating healthy ... a lot of policies that need to be changed and somebody has to do it and it might as well be me.”

Future Advice

Many mentors put forward programmatic advice for future mentoring programs, primarily focused on location, supervision, and teen involvement.

Location.—A frequent recommendation was to conduct the lessons/sessions in a central location, rather than the teens' homes. Mentors reported that homes were distracting, with multiple interruptions, making it difficult to focus on the lessons. In one example, “Be prepared for anything if you go to their houses. I would tell (the teens) to really try to focus on getting their minds away from their environment.”

Other reasons for using a central location included mentor safety, the teens' desire to be outside of their home, and the lack of necessary equipment/resources in the homes to conduct the lessons effectively (i.e., a quiet space, a table with chairs, a VCR, an accessible kitchen, etc.).

Many mentors suggested that group sessions would enable the teens to discuss the material with other young people and may enhance a shy teen's experience in the program. In addition, because the teens' environment was often unstable (i.e., phones being disconnected, moving), many mentors reported unexpected gaps between lessons due to communication difficulties. They suggested regularly scheduled meetings in a central location as a strategy to reduce scheduling and communication difficulties.

Supervision.—Throughout the intervention, mentors met in a weekly group supervisory session. Nearly all mentors mentioned that these meetings were very helpful in exchanging experiences, sharing effective strategies, and learning from other mentors. One female mentor said, "I think what was good was that we had those weekly meeting that forced us to process, to look at things that were working and what wasn't working." Another mentor reported, "[The weekly meeting] was helpful as far as keeping us as a team."

Teen involvement.—Mentors spoke about having the teens actively involved through demonstrations, goal setting, joint physical activities, and field trips to community sites. They described these activities as holding the teens' attention, helping them feel part of the program, and aiding in their learning. A female mentor reported, "Some of the better [lessons were] going to the grocery store ... going to the gym ... walking with a pedometer. ... The trips we had, when we took them hiking ... were the best."

DISCUSSION

Most evaluations of mentoring programs have focused on mentees. Our results have shown that mentoring can also have substantial effects on mentors. Inter views with mentors yielded four major findings.

First, the mentors described the importance of mentor–mentee relationships, noting that relationships often extended beyond diet and physical activity to include issues of relevance to the teens. In keeping with both DET and SCT, relationships are central to mentoring (Sipe, 2002). Mentors described integrating instrumental and emotional support into helping teens set goals and analyze why they had or had not met their goals. They described feeling that they were making a difference in the lives of the teens and helping them build life skills. A helping relationship often merged into friendships. Although friendship with a well-educated young adult provides a unique role model for teens (Ball, Kerig, & Rosenbluth, 2009), the mentors expressed concern regarding termination. To address these concerns, we initiated a group graduation ceremony to promote closure.

Other mentoring programs have found that close relationships between mentoring pairs, particularly females, may enable the teens to ask for assistance and to use the information provided by the mentors (Spencer & Liang, 2009). Future research into mentoring programs may address strategies to facilitate successful termination.

Second, mentors expressed concern at the common adversities of poverty, low literacy, and household instability. Many teens lived in low-income, single-parent households and were exposed to negative role models in their communities. Although some mentors expressed

frustration at how family and environmental conditions limited the teens' abilities to adopt health promotion recommendations, others looked for innovative solutions, such as going to community locations (e.g., parks and recreation centers), to implement the program. DET emphasizes the environmental influences on individual behavior (Bronfenbrenner, 1979). By focusing on environmental opportunities and positive role models, we attempted to help the teens identify positive and accessible resources in their communities.

Third, mentors described how mentoring influenced their own dietary and physical activity behaviors and career choices. We selected mentors with a personal commitment to a healthy lifestyle, including a healthy diet and regular physical activities. Serving as a mentor and encouraging teens to adopt healthy dietary and physical activity behaviors seemed to reinforce their own health behavior choices, perhaps extending to career choices. However, mentors' decisions to enter health-related fields, often for graduate study, cannot be attributed to mentor-ship because we recruited candidates who had experience working with teens and were committed to mentoring. Yet mentoring provided practical experiences that may have increased the mentors' commitment to a health-related career. As others have reported (Rhodes, 2002), the benefits of mentoring can be reciprocal.

The mentors made suggestions for future mentoring programs. In designing Challenge! we were guided by recommendations that health promotion programs should involve families. We designed a home- and community-based program to incorporate health-related practices into teens' daily lives. However, many of the mentors found it difficult to meet individually in homes, citing limited resources in the homes, difficulty scheduling appointments, and safety concerns. They suggested that through a group format, teens could discuss the material, adopt health-related behaviors, and experience peer support. Conducting Challenge! in a group format at a central location could reduce some of the logistical problems mentioned by the mentors, but strategies would be necessary to ensure family involvement. In addition, the quality of the mentoring relationship will differ when mentors are shared by a group of teens.

The mentors reported that they valued weekly group supervision to support one another, to discuss challenges and rewards of mentoring, and to obtain feedback on their progress.

Finally, the mentors were very supportive of the active orientation of Challenge! They reported that they and the teens enjoyed the activities and found sharing food and physical activities to be a comfortable context to discuss concepts of health. In keeping with the TTM, they described teens who had never tried specific foods (specific vegetables, diet soda), and subsequently realized that they liked them and would choose them in the future. They endorsed the goal setting activities that are an inherent part of SLT and described how effective they were with the teens and with themselves.

As with all studies, there are cautionary considerations. The mentors were a self-selected, well-educated, highly motivated group of young people who were committed to healthy living themselves and interested in "giving back" to their community. Although they are not necessarily representative of college students, it is likely that similar groups of young people exist in many colleges. In addition, reflecting back on an experience may have influenced

their recall. However, the analytic process relied on consensus and reduced the likelihood that single reports could bias the data. Finally, we did not collect systematic data on the mentors' body size, diet, or physical activity. Therefore, our interpretation that they benefited from the experience is based on their report.

CONCLUSIONS

In summary, involving college students as mentors is a valuable resource in promoting health behaviors among urban teens. As systems theory would predict, the relationship that underlies mentoring has beneficial effects for both teens and mentors, and was associated with positive health behaviors for both.

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