

ACADEMICALLY AT-RISK STUDENTS

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INTRODUCTION

Many educators consider formal and natural mentoring to be unique experiences that may prevent school dropout. It is widely held that pairing academically at-risk students (AARS) with a well-intentioned adult, “competent” peer or experienced teacher typically may improve AARS’ adjustment. The proliferation of mentoring programs implemented in schools and communities around the world without prior careful evaluation illustrates the predominance of this view (Randolph & Johnson, 2008). Yet recent studies and meta-analyses suggest that the impact of mentoring on the development of AARS is modest at best and can even be detrimental under certain conditions (Blinn-Pike, 2007; Eby, Allen, Evans, Ng, & DuBois, 2008; Wood & Mayo-Wilson, 2011). A comprehensive evaluation of the benefits of mentoring for AARS first requires a clear understanding of the prevalence, determinants and impact of the risk for academic failure. Without such insight, conclusions regarding the effectiveness of mentoring among this population will remain unclear. This chapter constitutes an important update of the chapter first published in 2005. It includes several novel elements, notably an analysis of recent theoretical perspectives on mentoring AARS, a review of empirical studies published since 2000 and a proposition of key reflective actions for mentoring practitioners.

Who are Academically At-Risk Students?

Academically at-risk students are a heterogeneous population. There are many ways for students to be considered “at-risk” for lower academic achievement and school dropout. AARS may present *negative internal forces* acquired over the course of their development and/or may have experienced *negative external influences* that undermine their school adjustment. For instance, negative internal forces may include behavior and/or emotional problems in early childhood (e.g., aggressiveness and

hyperactivity), poor study skills in early adolescence and career indecision in late adolescence. Indicators of negative external influences may include family or community-based poverty, unstable family circumstances (e.g., divorce), peer rejection, and academic challenging situations (e.g., school transitions). Such negative forces and influences are recognized as having the potential to alter the quantity and quality of academic support available to students by challenging parental school involvement and academic relationships with peers and teachers (Tyler & Lofstrom, 2009). Within this context, it is not surprising that AARS are more likely to drop out of school.

High school dropout continues to be an important social and economic problem in western nations. In 2005, 10% of Canadians between the ages of 20 and 24 had not graduated from high school or were not enrolled in high school (Bowlby, 2005). In 2007, this same statistic stood at 16% in the United States among those 16 to 24, for a total of 3.3 million young adults (Cataldi, Laird, KewalRamani, & Chapman, 2009). In countries of the European Union, 15% of young adults aged 18 to 24 had failed to obtain a high school diploma in 2007, although rates vary significantly between countries (e.g. 5% in Poland and 36% in Portugal; Pour la Solidarité, 2009). In most of these countries, dropout rates are higher among boys, ethnic minorities -especially African-Americans and Hispanics in the United States- and youth from lower socioeconomic status. School dropout has been associated with a number of individual and social consequences, such as receiving social aid, having physical or mental health problems, involvement in illegal activities, and becoming the parents of children more likely to drop out (Tyler & Lofstrom, 2009).

The next section focuses on some of the different theoretical perspectives on which recent AARS mentoring research has been based. These perspectives help document research that has addressed the effectiveness of mentoring, and elaborate on potential underlying mechanisms at the heart of the mentoring process.

THEORY

Approaches to mentoring research that involve AARS may be grouped into three categories. The first category comprises atheoretical research. It justifies the relevance of mentoring through empirical evidence (e.g., the fact that mentoring relationships should be sustained over a period of at least 6 months), but does not rely on any theories or perspectives to describe mentoring processes. The second category includes research based on established theory or *general models* used in fields outside mentoring (e.g., attachment theory) without addressing issues specifically related to the mentoring experience (e.g., Larose, Bernier, & Soucy, 2005). Finally, the third category includes recent models inspired by mentoring research that sheds light on the mechanisms involved in the experience of being mentored (*specific models*) (e.g., Keller, 2005). In the next section, we describe the general and specific models.

General Models

Attachment theory (Bowlby, 1982) is often cited in research on mentoring AARS (Gormley, 2008). It suggests that attachment patterns which developed over time (secure, ambivalent or avoidant) influence the likelihood of seeking a mentor or agreeing to be mentored, and thereby moderate the outcomes related to the mentoring process. Youth raised in fragile environmental contexts characterized by low parental sensitivity may have developed negative perceptions of self and others that are believed to undermine their faith in others as sources of support and in the usefulness of using such support in crisis situations. Certain youth may actively seek help from others (i.e., ambivalent attachment) only to feel unsupported as a result of their intense focus on their emotional turmoil or inability to detach from the conflict of their family of origin. Other youth do not actively seek out support since they have come to expect dysfunctional interpersonal

reactions from others and prefer to rely on themselves to overcome their difficulties (avoidant attachment). In a theoretical paper, Gormley (2008) suggests that insecure attachment styles of both mentees and mentors can significantly limit the capacity of mentoring to improve youth development (moderating effect).

Prevention theories are often mentioned when attempting to identify the degree of mentoring required to promote school completion (Randolph & Johnson, 2008). Mentoring can be based on a selective prevention approach targeting students who display moderate risk. In such cases, students are identified using a series of risk and contextual factors and mentoring is provided before they encounter academic failure. Mentoring may also be offered to those who have experienced repeated academic failure (indicated prevention). The mentoring activities are then more targeted, prescriptive and often combined with other approaches, such as tutoring, social skills development and remedial courses. Finally, mentoring may be used to promote academic success of all students regardless of their risk level (universal prevention). Intervention in this case is often less intense and aims mainly at encouraging the vocational development and institutional bonding of students.

Given the highly heterogeneous profiles of the AARS population, we propose that the application of selective prevention strategies constitutes the most promising avenue for mentoring AARS. Such an approach helps target negative internal and external influences prior to high-risk situations becoming overly complex and more difficult to address by mentors and non professionals. Further, selective prevention strategies may provide mentors guidance in targeting the kind of support and the activities they might engage in with mentees. This hypothesis is consistent with the concept of resilience, often used in prevention research, which posits that youth raised in fragile environmental contexts characterized by economic and social adversity can

nevertheless fare well when exposed to protective factors such as natural and formal mentoring (Randolph & Johnson, 2008).

Another perspective that has shed light on AARS' mentoring processes is derived from Mentoring Functions Theory. This theory, which was adapted for mentoring college students (Crisp & Cruz, 2009), posits four interconnected functions: 1) psychological and emotional support, 2) support for setting goals and choosing a career path, 3) academic subject knowledge support, and 4) role modeling. Proponents of this view believe that mentoring serves as a psychosocial resource that enables AARS to fulfill their security and affiliation needs (function 1). It entails providing emotional and social support, such as listening and taking part in shared social activities. Mentoring is also thought to provide AARS with a context that allows them to evaluate their strengths and aspirations (function 2). Coaching, challenging current plans and progress and goal setting are examples of actions that fall under this function. For others, mentoring provides AARS with a way to enhance their knowledge and acquire strategies useful to academic success (function 3). Teaching study strategies and tutoring are examples of actions stemming from this function. Finally, mentoring can serve as a locus of identification (function 4). By promoting institutional values and sharing their experiences about the school, mentors provide mentees with opportunities to bond and develop attitudes and behaviors that will help them progress.

Specific Models

Three specific models offer interesting research avenues for understanding the mechanisms involved in mentoring AARS. First, the Youth Mentoring Model (Rhodes, 2005) suggests that mentoring relationships built on reciprocity, trust and empathy promote the development of AARS by increasing their social skills and emotional well-being (e.g., asking teacher for help), fostering

their cognitive skills (e.g. critical thinking and self-awareness) and exposing them to a positive role model with whom they can identify. This theoretical approach also suggests that these “developmental gains” gradually change the dynamics between AARS and the important people in their lives, such as parents, peers and teachers, and that these changes account for the effects of mentoring on the subsequent academic and social adjustment of AARS.

Second, the Systemic Model of Youth Mentoring (Keller, 2005) posits that mentor-mentee relationships must be understood within the larger context of all possible relationships, including those among mentors, mentees, parents, and teachers. It stipulates that these relationships are interconnected and that the activities, discussions and emotions experienced during mentoring both influence and are influenced by the mentee’s other relationships. The model also suggests that the actions of mentors can indirectly influence parent-adolescent and teacher-adolescent relationships. When interacting with their mentees, mentors can validate and reinforce the views of parents and teachers, provide them with autonomy support, which, in turn, can help them better manage their relationships with authority figures, or simply brighten their lives, generating positive emotions that can be transposed to other relationships.

Third, unlike the two previous models, the Mentoring Sociomotivational Model proposed by Larose and Tarabulsy (2005), which was inspired by Self-Determination Theory (Deci & Ryan, 1985), places additional importance on mentor behaviors. According to this model, four sets of mentor behaviors are critical for improving AARS development: structure, engagement, autonomy support and competence support. A mentor who establishes clear guidelines in terms of mentoring objectives, activities and functioning (structure), who openly and respectfully discusses personal, academic, and career issues with the AARS (engagement), who accepts and validates AARS’s personal choices without exercising any control or pressure (autonomy support) and who is able to

increase the AARS's feelings of competence following negative experiences (competence support) should develop a more productive relationship with the student. The resulting positive relationship is believed to foster AARS's feelings of competence, relatedness, autonomy, and support which might improve their social and academic adjustment.

Both general and specific models provide promising avenues for research and intervention with AARS. First, they suggest the existence of several interactive psychological processes whose effects may influence relationships other than those between AARS and mentors. These processes include identification, attachment, critical reasoning, self-reflection, perceived social and instrumental support, resilience, and satisfaction of motivational needs. Such processes should be part of targeted experimental and longitudinal investigations in future mentoring research.

Second, several models suggest the importance of multi-level interventions (with at-risk students, but also with their parents, teachers and peers) and organized actions that reflect the rules and values of the significant individuals in the lives of AARS. They propose that mentors' actions within the mentoring relationship could generate positive collateral effects, which could result in a less fragile environmental context for AARS. For example, promoting the expectations of parents and teachers within the mentoring context may improve relationships between AARS and their parents and teachers, and possibly, encourage parents to become more involved in their youth's education, and teachers to build stronger interpersonal bonds with the mentored youth.

RESEARCH

Here, we review findings of empirical studies that: 1) focus on the determinants of student involvement in mentoring, 2) address theoretical predictors of mentoring relationship quality for AARS and other student populations; and 3) explore several hypothesized effects and processes

driving the mentoring experience of AARS. The studies reviewed have, for the most part, been identified through the usual data bases, PsycLit and ERIC, with the following key words: youth, mentoring, student, at-risk student, high school, college, academic adjustment, performance. All empirical studies published since 2000 that dealt with formal or informal mentoring and included samples of elementary, high school and/or college students were considered.

Determinants of Participation in Mentoring

In a prospective study, Larose and colleagues (2009) showed that low-risk students with the most personal resources (i.e., positive help-seeking attitudes, perceived support from friends and school motivation), but fewer environmental resources (low maternal income and education, leaving home to attend college, belonging to a family of recent immigrants, not having any siblings who previously studied in college) were more likely to accept the support of a formal mentor upon entering college. These observations are in part similar with those reported in a longitudinal study on natural mentoring involving over 12,000 American youth (Erickson, McDonald, & Elder, 2009), which found that students with the most personal (e.g., personality, physical appearance, and college aspirations) and environmental resources (e.g., parental income and education, friends, peer network centrality) were more likely to have had a mentor in their lives than other students.

These findings suggest that youth who are the least socially and academically equipped have a lower chance of crossing paths with a natural mentor or of accepting formal mentoring opportunities. They also propose that youth with modest personal resources living in difficult circumstances may be open to formal mentoring program participation. Such findings give us a better sense of the youth who are most likely to form natural mentoring relationships and helps identify those who will need assistance to establish a formal mentoring relationship through a

program. The challenge, then, is to identify strategies to attract to mentoring those with limited personal resources who might also benefit from mentoring.

Determinants of Mentoring Relationship Quality (MRQ) for AARS

We know that mentors' background in a helping profession (DuBois, Holloway, Valentine, & Cooper, 2002), mentor perceptions of their own competence as mentors (i.e., mentor efficacy) (Karcher, Nakkula, & Harris, 2005), and the previous attachment patterns of AARS (Larose, Bernier, & Soucy, 2005) are personal factors that affect the MRQ. The quality of training and supervision offered to mentors (Rhodes & DuBois, 2006), the possibility of choosing one's mentor (Kendall, 2007), and the duration and frequency of relationships (Grossman & Rhodes, 2002) are significant organizational parameters that positively influence MRQ.

The content and manner of negotiating mentoring activities also contribute to MRQ but the latter process seems more critical. A recent study on mentoring of low risk college students (Larose, Cyrenne, et al., 2010) found that MRQ was positively influenced by a set of mentor behaviors that combined emotional engagement and reciprocity with some directivity (i.e., a more authoritative style). In this study, the MRQ was not found to be affected by specific mentoring content (i.e., discussing academic issues, doing specific activities or trying to solve specific problems). Similarly, in a study of BBBS school-based mentoring students, Karcher, Herrera, and Hansen (2010) reported unique contributions made to MRQ by both relational and goal-directed activities. They report that collaboratively negotiated activities of any kind were best for student outcome. Taken together, these studies suggest that what may matter most for establishing positive bonding with AARS is not so much the specifics of the mentoring activities per se, but rather the manner in which mentors and mentees choose the experiences they engage in.

The similarity of interests between mentors and AARS also appears to be a determinant of MRQ. In a research synthesis of mentoring programs intended for different categories of high-risk adolescents, it has been shown that AARS who perceived high levels of similarity with their mentors in terms of vision, perspective and values, but not in terms of demographics, reported greater liking and satisfaction with their mentors (Sipe, 2002). Alternatively, one study has shown that students considered to be at risk because of low high-school grades displayed more adaptive behaviors and perceptions in mentoring and earned higher grades when their attachment orientation to parents was in contrast to their mentor's relational style (Bernier, Larose, & Soucy, 2005). AARS presenting dismissing attachment tendencies benefited more from working with mentors who valued dependency, relationships and closeness, whereas AARS presenting preoccupied/anxious attachment tendencies hold more gain from working with mentors who valued self-reliance, achievement and autonomy. Providing the AARS with a challenging relational stance that is not in line with the student's own seems to reinforce a process of exploration and change which may positively affect the course of the relationship.

Effects and Explanatory Processes of Mentoring

Formal mentoring. In the last 15 years, there have been many independent – sometimes small-scale – experimental and quasi-experimental studies suggesting that formal mentoring of AARS can lead to changes in a number of cognitive, emotional, and behavioral outcomes. For example, formal mentoring has been found to improve attitudes toward school and helping, academic confidence, school connectedness, perceptions of parental and teacher relationships, vocational and reading skills, participation in college preparatory activities, and persistence in college (see Blinn-Pike, 2007; Eby et al., 2008 for reviews). Yet, conclusions from meta-analyses suggest that the above

findings must be interpreted with caution. In fact, the reported effects of formal mentoring were modest, with Cohen's *d* coefficient rarely exceeding .20 (Blinn-Pike, 2007; DuBois, Holloway et al., 2002). Two such analyses even suggest that the outcomes of formal mentoring for youth are much more limited than those associated with workplace mentoring and volunteer tutoring (Eby et al., 2007; Ritter, Denny, Albin, Barnett, & Blankenship, 2006).

Most studies on the impact of formal mentoring involve short-term evaluations. Only three studies provide exceptions by following up samples some time after the end of the mentoring program. The first evaluated the Quantum Opportunity Program (QOP) (Rodriguez-Planas, 2009). QOP was an intense case management and mentoring after-school program for low-achieving students. The mentoring component involved assigning 15 to 25 youths to case managers with whom they were expected to develop trusting relationships. Case managers were also required to establish links with schools, families and friends. In addition to mentoring, QOP offered students developmental activities, community and educational services and financial incentives. Using a randomized control trial, the study showed modest short-term gains on high school graduation and on the pursuit of postsecondary studies, especially among younger adolescents, girls and lower achieving students. However, these effects decreased over time, and 5 years after the program, the QOP had no detectible impact on the educational or employment outcome of its participants.

The second study evaluated the long-term effects (15 months after the match) of the BBBS school-based mentoring program using a randomized control group design and involving the participation of 10 agencies in the United States (Herrera et al., 2007). Researchers followed AARS in primary and high school, where 52% of the experimental group students continued to receive mentoring after one-year. The study showed no long-term impact of the program on the majority of

the academic (e.g., general academic performance, GPA, quality of class work) and non-academic (e.g., substance use, social acceptance, and relationship with parents) outcomes examined.

The challenge of proving long-term effects was also documented for AARS at early elementary levels. In a prevention program for aggressive elementary school students, Hughes et al. (Hughes, Cavell, Meehan, Zhang, & Collie, 2005) compared the impact of two mentoring programs, which lasted 3 semesters and involved college students as mentors. The first program (Prime Time) combined community-based mentoring (weekly visits) with a focus on child skills training and consultation for parents and teachers. The second program (Lunch Buddy) was a stand-alone, school-based mentoring program that involved two visits a week during lunch times in the presence of non-mentored peers, with a different mentor being assigned each semester. Using a randomized control trial, authors found that in the short term, both programs reduced children's externalizing problems and increased their level of academic and behavioral skills. Surprisingly, at the one- and two-year follow-ups, the effects observed among participants of the Prime Time program had completely faded, while Lunch Buddy participants were evaluated by their teachers as displaying a higher skill level and fewer externalizing problems. This was found to be the case even though the mentoring relationship of the Lunch Buddy program was of lower intensity than that of the Prime Time program (i.e., multiple shorter matches rather than one longer match). Factors related to the quality of interactions with peers were used to explain these findings.

To summarize, the studies that have examined the long-term effects of formal mentoring suggest that acquired progress is difficult to maintain. Various factors, including the initial characteristics of students and mentors, the intensity and degree of contact or the nature of the relationship forged between the mentor and the mentee, may explained this situation. In this context, it is pertinent to

examine the factors that potentially buffer or emphasize the effects of formal mentoring on AARS (i.e., moderating factors).

Moderating processes. Although risk level has often been considered an important moderator of mentoring effects, research findings in this area are mixed. Stronger effects for high-risk students on social and behavioral adjustment indicators were reported when student risk was estimated using academic indicators (e.g., low GPA, high absence rate from school; Whiting & Mallory, 2007; Rodriguez-Planas, 2009). Some studies also suggest that boys with low academic scores are especially responsive to formal mentoring (Whiting & Mallory, 2007). Other studies have found that mentoring was helpful for all students, but that risk moderated mentoring outcomes. For example, in a study evaluating a program that used both peer leaders and adult mentoring, results showed that high-risk students (grades below 70% and/or more than 8 school absences) improved their ability to resist peer pressure during the transition to high school, while low-risk students enhanced their capacity for making friends (Holt, Bry, & Johnson, 2008). Conversely, Morrow-Howell and colleagues (2009) showed that the effect of formal mentoring on reading comprehension was less pronounced for a higher risk, special education group of students than for non-special education students, suggesting that the impact of mentoring may be less evident when a student's risk level presents greater psychological or learning challenges. Finally, one study has found that when the risk was based on the student's feelings of being disconnected from school, having a mentor holding positive views regarding youth behaviors lead AARS to be more emotionally engaged in the mentoring relationship and, subsequently, to report stronger relationships with their teachers (Karcher, Davidson, Rhodes, & Herrera, 2010).

The hypothesis that greater psychological or learning difficulties moderate the youth mentoring outcomes is consistent with the studies that include emotional indicators in their definition of risk.

Among students with lower high school grades, but sufficient to be admitted to college, those who reported more insecure attachment relationships to their parents were less likely to hold positive perceptions of mentoring and, subsequently, more likely to report high levels of conflict with their teachers (Larose, Bernier, & Soucy, 2005). This latter finding underlines the challenge of mentoring AARS when emotional factors are considered.

Certain characteristics of mentors themselves also seem to play an important role, in addition to mentee levels of risk. The effects of mentoring AARS appear to be greater when mentors feel they have the competence to help (Parra, DuBois, Neville, Pugh-Lily, & Pavinelli, 2002), hold highly positive attitudes towards youth (Karcher, Davidson, Rhodes, & Herrera, 2010), express high motivation for self-enhancement (Karcher, Nakkula, & Harris, 2005), and when they have a background in a helping profession (DuBois, Holloway et al., 2002), are not poor, and are not married (Grossman & Rhodes, 2002). Studies also suggest that high school and college student mentors have more difficulty generating positive results among at-risk mentees than adult mentors or teachers (Whiting & Mallory, 2007; Hughes et al., 2005; Converse & Lignugaris/Kraft, 2009).

Some contextual factors also play a role in program effectiveness. These factors include initial and ongoing, structured training for mentors, monitoring of program implementation and parental involvement (DuBois, Holloway et al., 2002). In addition, programs viewed as effective allow for more extended contact between mentors and AARS, engage AARS in social and academic activities, and structure interactions in such a way as to favor the development of AARS autonomy in decision making (Morrow-Howell et al., 2009; Blinn-Pike, 2007).

Mediating processes. While several models suggest the presence of different mediating processes to explain mentoring outcomes (see THEORY), such processes have rarely been studied. Rhodes and colleagues (Rhodes, Grossman, & Resch, 2000; Rhodes, Reddy, & Grossman, 2005) found that

improvements in the quality of relationships with parents mediated the impact of the BBBS community match programs on youth self-worth, school value, and grades, as well as on peer relationships, but only for youth involved in relationships that lasted more than 12 months. This study included 959 adolescents and used a randomized control trial design. Authors claim that this mediating process may have been the result of a gradual change in mentee representation models of relationships with parents or a decrease in the tension experienced between youth and their parents. They also suggested that short-term mentoring does not provide sufficient opportunity for the development of secure relationships. Similarly, other reports revealed that perceived connectedness to parents and perceptions of support from significant adults outside mentoring act as mediators of the link between formal mentoring and mentee academic adjustment (Karcher, Davis, & Powell, 2002; DuBois, Neville, et al., 2002).

Two quasi-experimental studies explored the role of interpersonal processes in mentoring as mediators of AARS outcomes. The first study was conducted with students who had failed more than half of their first semester courses. Results showed that mentees who had a positive working alliance with their mentors (i.e., agreement on goals, positive bonding) were more likely to improve their academic competence, participation in class, tendency to seek help from teachers, and academic perseverance than were mentees in less collaborative mentoring relationships or students in a control group (Larose, Monaghan, Chaloux, & Tarabulsy, 2010). The second study, conducted with low-achieving students, indicated that youth-perceived autonomy and relatedness support in a teacher-student mentoring relationship led to better academic adjustment (Larose, Tarabulsy, & Cyrenne, 2005).

Such studies support the argument laid out in several models, suggesting that the impact of mentoring on dropout prevention may be explained in part by the satisfaction of motivational needs, the quality of the mentoring relationship, and an improvement in youth relationships.

Natural mentoring. Studies on the impact of natural mentoring of AARS are much less common. Here, we present the conclusions of one of the largest longitudinal studies conducted in the United States on natural mentoring and education (Erickson et al., 2009). Beyond the effect of personal and environmental resources (e.g., parental income and education, number of friends, school size, physical appearance, and personality), natural mentoring was positively associated with academic performance in high school and with subsequent youth's educational status (i.e., highest degree achieved). For youth with existing resources, natural mentoring with relatives (e.g., brother, sister, grandparent) had a positive effect on educational status. When these resources are limited, mentoring by a teacher was identified as having the most positive impact. This last finding is consistent with observations made by DuBois and Silverthorn (2005), indicating that at-risk youth with non-familial mentors were more likely to complete high school than those who identified a familial mentor. In addition to having an impact on AARS in the classroom, teachers appear to be meaningful models for preventing student dropout among this population.

The number of natural mentors, their characteristics and the type of relationships they build with their mentees also play a significant role in preventing academic difficulties. In a correlational study among 140 Latino from an urban public high school deserving a predominantly low-income student population (Sanchez et al., 2008), the presence of a natural mentor was found to be associated with fewer absences in class, greater educational expectations, and strong sense of school belonging. Further, the number of reported mentors was positively related to academic outcomes. Finally,

mentors' education, frequency of contact, relationship length, and total form of support provided by mentors were positively related to student academic outcomes.

In sum, research on mentoring AARS over the last 15 years has mainly addressed the short term impact of mentoring and its moderating processes. Research on natural mentoring is clearly less abundant than that on formal mentoring. As such, many issues will require further careful analysis in future works: What factors attract youth to formal mentoring? How can mentoring reach the most emotionally at-risk youth? Who is best positioned and skilled to support AARS? What are the long-term effects of formal and natural mentoring? What developmental mechanisms account for these long-term effects? On the methodological front, longitudinal follow-up, the systematic quantification of size effects, the use of randomized designs, including various "mentoring" conditions, and controlling for confounding factors before and during the mentoring experience are important parameters that must be accounted for in future research.

PRACTICE

This review draws out the need to implement mentoring programs with great care and by considering an important number of parameters. The following are a series of key reflective actions which we perceive to be important in designing, implementing and managing mentoring programs for AARS (see Table 1). One such action specifically concerns natural mentoring.

Program Promotion, AARS Screening and Mentor Selection

It has been shown in the research section (e.g., Larose et al., 2009) that students who lack personal resources are not as likely to have the opportunity to be mentored or to agree to take part in a formal program. Thus, program managers may wish to implement promotional approaches that

will help AARS understand that mentoring is not a threat, but rather a useful tool that may fulfill personal and academic needs. Furthermore, advertising the instrumental (e.g., help with school work) and vocational functions (e.g., enhanced knowledge of the job market) of mentoring may attract more AARS, particularly some boys who may feel uncomfortable in close relationships.

Few programs establish diagnostic profiles of the youth they seek to help. Yet doing so might be helpful to identify the degree and origin of an AARS's difficulties and therefore better prepare mentors adapt the quantity of mentoring provided. Even major national mentoring programs, such as the QOP or the American BBBS school-based mentoring program, were not able to generate meaningful long-term outcomes on the academic success and educational status of AARS, indicating the need to better understand and be responsive to the needs of participating students, potentially improving the long-term effect of intervention.

The reviewed studies also underline the importance of choosing teachers as mentors for AARS (e.g., Converse & Lignugaris/Kraft, 2009) and questions the effectiveness of programs that call on high school and college mentors (e.g., Whiting & Mallory, 2007), except those who are especially well suited to serve as mentors. While it cannot be concluded that younger mentors should be excluded from mentoring programs devoted to AARS, they should be carefully selected based on maturity, social skills and interpersonal abilities. In our view, young mentors should also be provided with substantial training and supervision. It may be helpful that they be mentored themselves by more experienced adult mentors.

Mentor Training and Supervision

Ten years ago, some studies estimated that nearly half of the mentoring programs implemented in schools contained no more than two hours of mentor training (see Larose & Tarabulsky, 2005). A

recent national survey on practices of BBBS programs in the United States suggest that the situation has not significantly progressed since that time. In fact, only 1% of the agencies surveyed reported providing their mentors more than 4 hours of initial training (BBBSA National Office, 2009). Initial training and mentor supervision are key practices that should not be neglected.

Fortunately an increasing number of programs devoted to AARS are investing equal amounts of resources in training and supervising mentors. For example, the MIREs program (Larose et al., 2011) which aims at helping students complete science programs at the college level, offers two days of initial training, as well as several individual and group meetings throughout the mentoring program. It also features a hands-on component, whereby mentors practice interacting with a mentee through simulated videotaped scenarios under the supervision of instructors. The program and mentoring meetings are structured on the basis of the Sociomotivational Model of Mentoring. Mentors learn how to structure mentoring relationships on an instrumental and emotional level, and to support mentee autonomy.

While the content of training sessions might vary significantly from one mentoring program to another, research suggests that certain goals should be prioritized when intervening with AARS (Tyler & Lofstrom, 2009; Keller, 2005; Crisp & Cruz, 2009; Larose, Cyrenne et al., 2010). These are: to identify the protection and risk factors of school dropout, to enhance the mentors' abilities for empathy, authenticity, and collaboration, to learn how to practice efficient academic problem solving, to understand the potential effects of the student's academic and interpersonal profile regarding their expectations, emotions and behaviors throughout mentoring, and to intervene with parents, peers and teachers. We also believe that supervision should both equip mentors to respond to the timely needs of mentees and aim at consolidating their perceived competence in their ability

to be helpful. Modeling and constructive feedback may be used by supervisors to achieve these goals in their meetings with mentors.

Matching Mentors and Mentees

Research suggests that matching AARS and mentors based on similarity of views help to strengthen the quality of the bond (Sipe, 2002). Allowing AARS to select their mentor appears to be a promising strategy to achieve this goal (Kendall, 2007). However, freely choosing a mentor implies complex logistics and a level of resources that most organizations do not have. Matching AARS and mentors must therefore be based on criteria that respect both the mentee and the resources available to the mentoring organization, in a way that will maximize the quality of the future relationship. Such criteria may include personal, social, and vocational interests, mentoring expectations, and views about the implication of parent and teacher in the mentoring process.

The Mentoring Relationship

Ensuring frequent, high-quality contact is a recommendation that applies to all mentoring programs, regardless of the specific clientele targeted. In light of the findings on the long-term effects of mentoring AARS (e.g., Herrera et al., 2007), the issues that must be raised concern the intensity and responsiveness of the specific mentoring experience. Should a youth experiencing a difficult single-parent context and one who has had behavioral problems since kindergarten be offered the same type of mentoring? At the elementary level, does a student with reading and writing difficulties not require a more specialized mentor than another experiencing anxiety about the transition to high school? Is one year of mentoring sufficient to lessen the impact of a high-risk situation, which in certain cases, began in early childhood? In our opinion, the quantity of

mentoring must be adjusted to the level of risk for academic failure and, in certain cases, an offer of mentoring over several years might be considered.

Reinforcing the link between mentor and the AARS' teacher is an aspect of mentoring practice that merits further attention. This type of action is at the core of several intervention and mentoring programs, such as The Check and Connect Program (Sinclair, Christenson, & Thurlow, 2005) and The Achievement Mentoring Program (Holt et al., 2008), intended for primary and high school AARS. Within such programs, mentors are not only expected to conduct a systematic follow-up of mentees' academic behavior and achievement, but also of being in constant contact with the mentees' teachers. In this context, the mentor becomes a kind of mediator, informing teachers of mentee progress, so that teachers may be sensitive to these aspects and reinforce this progress within the classroom setting.

Natural Mentoring

Natural mentoring is a unique experience that benefits the youth involved. Unfortunately, those who need it most have fewer opportunities for accessing it. This knowledge alone justifies the importance of implementing mentoring programs. It also calls upon schools and communities to consider the predominant culture in their environments and adopt measures that will foster the creation of natural mentoring relationships between adults and youth.

CONCLUSION

In conclusion, many scientists and practitioners view mentoring as a preventive action having the potential to support academic functioning in AARS and reduce the risk of dropping out of

school (Tyler & Lofstrom, 2009; Wheeler et al., 2010). However, the causal relation between taking part in mentoring programs and the reduction of high school dropout are not as convincing as it might be. The body of knowledge reviewed in this chapter is vast, though highly focused on the short-term effects of programs implemented in schools and communities. Future research would do well to address the long-term outcomes of mentoring relationships and examine the dynamics within these relationships (e.g., mentor strategies, mentee behaviors, conflicts, activities). In pursuing both of these objectives, the highly heterogeneous profiles of at-risk students should also be considered. This will no doubt lead to more comprehensive and nuanced intervention models that will better meet the needs of the AARS population.

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*Table 1**Key Reflective Actions for Practitioners Working with Academically At-Risk Students*

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1. Promote formal mentoring among AARS with fewer personal resources (e.g., negative help-seeking attitudes, low school motivation) by targeting them in recruitment efforts (both seeking them out and promoting their participation through general invitation messages).
 2. Quickly identify the factors involved in a youth's lack of academic success (e.g., personal, contextual) and determine the nature and level of risk, by using diagnostic profiles.
 3. Attract mentors who are teachers or who have experience in the helping professions, such as is currently practiced in the Achievement Mentoring Program (Holt, Bry, & Johnson, 2008).
 4. Offer mentors comprehensive initial training that aims to achieve the following goals: a) identify the protection and risk factors of school dropout; b) enhance abilities for empathy, authenticity, and collaboration; c) learn how to practice efficient academic problem solving; d) understand the potential effects of the student's academic and interpersonal profile on expectations, emotions and behaviors throughout the mentoring process.
 5. Encourage mentors to intervene with parents and teachers (e.g., serving as an advocate) by informing them about program objectives, rules and policies, mentor profile and role, and program expectations with regard to parent and teacher collaboration.
 6. Allow AARS to select their mentors or match them based on shared academic or vocational interests.
 7. Offer mentors support and supervision during the intervention and foster their perception of competence. Providing mentors early feedback on their mentee's view of the match may serve to bolster mentor efficacy.
 8. Adjust the quantity of mentoring based on the student's level of risk, and be clear about the expected duration of the relationships (e.g., one year, one semester, longer).
 9. Establish mechanisms to support mentoring relationships over multiple years, ideally across key normative school transitions (e.g., middle school to high school). Provide mentors and AARS with support to fulfill this goal.
 10. Create academic cultures that value natural mentoring between adults and AARS through strategies such as social marketing, focus groups, and social network connections.
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