

Women with Attentional Issues: Success in College Learning

By Jill Hinckley and Peg Alden

ABSTRACT: This pilot study, funded from a 5-year grant from the U.S. Department of Education Title III Strengthening Institutions Program, explores the factors identified by women with AD/HD that are necessary to their achieving college success. The results of this study, based on 13 in-depth interviews with women who are both academically successful *and* have AD/HD, highlight the influence of motivation, attitude, support systems, self-reflection, and social-academic balance on academic success. The article concludes with implications that may help instructors and institutions better serve women with attentional issues in the college setting.

The postsecondary setting is a challenging and dynamic environment in which to teach and learn. Unfortunately the admirable aims and sincere efforts of educators, administrators, and service providers do not yield success for all students. Some will not succeed because the desire or the ability is not strong enough but there are other students who are serious and capable scholars who none the less fail in their attempts at higher education. It is the writers' contention that many students with a diagnosis of Attention Deficit/Hyperactivity Disorder (AD/HD), or the characteristics of attentional difficulties, fit into this "at risk" category and that the women among them share some particularly unique perspectives on success.

The American Psychiatric Association's (1994) *Diagnostic and Statistical Manual* (DSM-IV) has recognized AD/HD as a disorder of developmentally inappropriate attention, impulsivity, and motor hyperactivity. Because the symptoms of AD/HD manifest in varying degrees and combinations, the DSM-IV also categorizes the disorder by subtypes: inattentive, impulsive/hyperactive, and combination type. Current estimates of how many college students have AD/HD range from 65,000 to 650,000, but

despite this discrepancy there seems little doubt that the number is growing (DuPaul et al., 2001; Farrell, 2003). Nor is there doubt that these students face heightened challenges, such as lower grades, more academic problems, and more academic probations than their peers without attentional disorders (DuPaul et al., 2001; Heiligenstien, Guenther, Levy, Savino, & Fulwiler, 1999).

Experts in the field of learning disabilities have maintained that there is a higher incidence of males with learning disabilities than females; however, it appears that this belief may be a result of cultural bias and a reliance on clinical research that has disproportionately studied the disorder in young boys (DuPaul & Stoner, 1994). Some researchers contend that the gender stratification of AD/HD exists due to the unrecognized nature of gender differences in relationship to AD/HD (Nadeau & Quinn, 2002). These unrecognized, and thus unexplored, gender differences can be better understood by looking at some of the gender-related issues surrounding diagnosis and gender-specific experiences of women living with AD/HD.

Gender-Related Issues in AD/HD Diagnosis

The DSM-IV does not provide gender-specific criteria with relationship to attention, impulsivity, and hyperactivity and instead lists traits that are predominantly observed in young males. As Nadeau, Littman, and Quinn emphasize, “checklists commonly used by schools, pediatricians, and psychologists to identify children with AD/HD continue to emphasize hyperactive/impulsive behavior-patterns more typical of boys” (1999, p. 17). This focus means that many females are going undiagnosed or receiving late diagnosis because they do not present the “typical” behavior problems of their male classmates with AD/HD (Rucklidge & Kaplan, 1997; Szatmari, 1992).

Another gender-related issue in the diagnosis of AD/HD is the degree to which presenting behaviors are disruptive to the classroom environment. Girls with AD/HD tend to exhibit less severe symptoms of hyperactivity, impulsivity, and distractibility (Gaub & Carlson, 1997) but instead tend towards being “distracted, disorganized, quiet daydreamers” (Nadeau, Littman, & Quinn, 1999, p. 18). Given the fact that AD/HD is a disorder diagnosed on a continuum from mild to severe it is easy to see how many girls, whose presenting behaviors are “milder” and less disruptive, are slipping below the diagnostic and remedial radar.

In addition, a number of authorities in the field of AD/HD have suggested differences between males and females in the age of onset of significant AD/HD symptoms (Quinn & Nadeau, 2002). Also, puberty tends to increase the severity of symptoms in girls (Huessy as cited in Quinn & Nadeau, 2002). Currently, in order to receive a diagnosis of AD/HD one needs to have been exhibiting symptoms since early childhood. For girls, whose symptoms are typically less severe, less disruptive, and later to manifest, the current system of diagnosis frequently fails them.

As Quinn and others work to revise the DSM-IV to include more gender-specific norms for diagnosis, it is hypothesized that the ratio of males to females being diagnosed with the disorder will be significantly altered. Indeed, newer studies investigating gender ratios of adults with AD/HD have found that the difference in prevalence rates may diminish in adulthood (Faraone et al., 2000; Walker, 1999). In the meantime, the phenomenon of female under representation in the ranks of children and young adults with an AD/HD diagnosis highlights how important it is that educational institutions, including postsecondary settings, recognize the particular needs of women learners,

whether they have been formally diagnosed or simply show signs of difficulty with attention and consequently with performance (Biederman as cited in Arnold, 1996).

Gender-Related Issues in AD/HD Experience

It is significant that AD/HD is not only a problem in the classroom but across a range of settings. Often the behavioral challenges are coupled with emotional components of the diagnosis, such as anxiety or depression, which further compound the issues that women with AD/HD must manage (Brown, 2002; Katz, 2003; Nadeau & Quinn, 2002; Rucklidge & Tannock, 2001; Solden, 1995).

Whether through biology, socialization or some combination of the two, women tend to exhibit certain gender-specific behaviors (Bratton & Rosen, 2000) and are held to gender-specific moral and social expectations. These expectations pose significant challenges for women with AD/HD as they typically rely on social competencies that are impaired by an AD/HD diagnosis (Novotini, 1999). For example, the challenge to balance several roles in one's daily life is one that is faced by most women in our society, but this challenge is increased exponentially for the woman with attentional issues (Littman, 2002).

In conjunction with these social expectations, moodiness, volatility, and emotional instability are frequent side affects of puberty, and seem to be exacerbated for the young woman with AD/HD (Quinn, 2002; Ratey, Miller, & Nadeau, 1995). This interaction between changing hormonal states and AD/HD symptoms appears to follow the pubescent girl into her womanhood (Ratey et al., 1995). Along with the moodiness, and perhaps because of it, these girls tend to experience more peer rejection as they age

(Brown et al, 1991), repeating in their adulthood their painful childhood experiences of not being able to manage socially.

The role expectations for women collide directly with the specific difficulties that women with ADD face, causing a great deal of inner conflict and stress. All women are exposed to and often struggle with these expectations, but for ADD women, whose difficulties form the very basis of these expectations, the problems are compounded and intensified. (Solden, 1995, pp. 81-82)

Given the many societal demands placed upon women in general and females with AD/HD in particular, it is not surprising that women students who are diagnosed with this disorder struggle to find acceptance, understanding, and success.

AD/HD and the Challenges of College

College places new demands on students, including increased requirements for planning, prioritizing, time management, and follow-through, what is often referred to in the AD/HD literature as “executive functioning” (Herbert, Strothman, & Fein, 2001). These executive functioning demands can be daunting for any student but overwhelming for students with AD/HD (DuPaul et al., 2001; Heiligenstien et al., 1999; Shmulsky, 2001).

[As this population ages] the delay in these executive functions will no longer appear as exaggerated activity levels but will be manifest as deficiencies in working memory, private speech, rule-governed behavior, and emotional/motivational self-regulation, and even later as deficiencies in problem-solving, behavioral flexibility and creativity, sense of time, and management of one’s behavior relative to it. (Barkley, 1997, p. 321)

Barkley posits a new model for thinking about AD/HD by arguing that AD/HD is not so much an issue of inattention but rather an inability to consistently attend to tasks that “require planning, self-control, and persistence” (Barkley, 1997, p. 321). This model challenges the frequently held assumption that the poor college performance of students with AD/HD can be attributed to behavioral flaws, lack of desire or discipline, or willful

disregard for the educational processes. By reframing AD/HD as an innate inability to persist on tasks that necessitate *both* self-motivation *and* self-regulation it becomes clear that the conundrum for many college students with attentional disorders rests in their very strong desire to perform and their frustrating inability to consistently monitor those skills necessary for that desired performance. An inquiry examining behaviors and attitudes of successful AD/HD students can help provide insights about how to address such student frustrations.

Methodology

This study set out to answer the following question: What do women with AD/HD who have achieved academic success in college identify as the supports necessary for that success? Since the focus of this inquiry was the participants' own perceptions of success and the elements that support that success, the qualitative method of open-ended questioning was used. Although a sorting activity was introduced into the interviews, it was meant less as a way to quantify student responses than as a prompt for deeper reflection on the part of the interviewees.

Participants were drawn from the 400-member student body of a small, private, 2-year, liberal arts college in northern New England. The college is designed exclusively for high potential students with learning disabilities or AD/HD. After culling through grade reports and psychoeducational files and eliminating all students who had a previous academic relationship with the researchers, 13 students were found to meet the criteria of being female, being in good academic standing, which is defined as earning a C or above in every credit bearing course, and having a primary diagnosis of AD/HD. All 13 women enthusiastically volunteered for the study. These women had a range of experiences at

Landmark College from having one semester of credit-bearing courses to being one semester away from graduating with their Associate's degree.

Data for this study were drawn from three sources. The first source was transcripts of preadmission interviews that had taken place 1 to 3 years previous to participants' involvement in this study. The researchers were particularly interested in the sections of the interviews that focused on the student's self-report of her perceived areas of strengths and weaknesses prior to being admitted to the college. These self-reports identified three areas of difficulty (time management, writing output, and procrastination) that, although frequently downplayed by each individual woman in her admissions interview, were reported by all participants. Since many of the participants had never experienced academic success prior to coming to Landmark College, the data generated from these preadmission self-reports did not directly address the issue of success factors, yet the information gleaned had implications for the findings that emerged as the study progressed.

The second source of data was a one-on-one, 1 ½-hour, semistructured interview. All interviews were conducted and transcribed verbatim by one researcher and later analyzed by both researchers. The protocol for this interview included a series of open-ended questions that probed for descriptions of participants' academic experience (i.e., "Please describe your academic experience in college so far."), their definitions of academic success (i.e., "Please describe a time in which you felt academically successful."), and their sense of what has contributed to their own success (i.e., "What has been particularly helpful in aiding you as a college student?"). The probes were

general, allowing participants to express their personal perspectives in their own words, an important characteristic of the qualitative approach to interviewing (Patton, 2001).

After responding to the interview questions, the participants engaged in a sorting activity designed to determine the importance of particular contributors to their academic success. In this oral form of a written survey, each participant was given a stack of cards listing 14 possible contributors (ranging from academic supports to social relationships to personal characteristics to lifestyle choices) and instructed to categorize each as “not very important to my academic success,” “somewhat important to my academic success,” or “very important to my academic success.” Participants asked clarifying questions as they sorted the cards, which allowed for a deeper understanding of their choices. After the sorting activity, participants were invited to “make more cards” in order to identify contributors to success which may not have been mentioned by the researcher. Participants ranked the top three factors “most important” to their academic success.

The qualitative analysis process included unitizing and coding the data, designating emergent categories for organization of the data, and exploring themes, patterns, and relationships between these categories (Erlandson, Harris, Skipper, & Allen, 1993; Guba & Lincoln, 1992; Marshall & Rossman, 1998). Each of these steps was completed and documented in this study. Although the study intended to identify and describe (as opposed to quantify) success factors for the participants, a factor was not included in this report unless it was independently reported or ranked as “very important” in the sorting activity by at least 8 of the 13 participants. The researchers strove for internal validity by triangulating the information from the interviews and sorting activities, by combining their independent investigations of the data, by inviting peer and

student examination through campus-wide presentations and preliminary reports, and by receiving “member checks” from five of the research participants (see Merriam, 1998 for further discussion of validity and reliability in case study research).

Discussion of Findings

The women interviewed for this study have not always achieved success in the academic arena; indeed all have records of repeated failure. What is important about their collective story is that they are currently all successful college students. This next section will explore these women’s perspective on *why* they are succeeding by highlighting five success factors identified through the interview and sorting processes. It is understood by these researchers that Landmark College is in the unique position to offer to its students a program that other colleges cannot necessarily replicate, and that the conclusions drawn are based on a relatively small sample. Still, the collective voice of this small group of women can make an important contribution to those who seek a glimpse into the experiences of college women with AD/HD.

Success Factor #1: The Ability to Internalize and Regulate Motivation

In keeping with the literature that recognizes the importance of both cognitive skill *and* motivation for academic achievement (Linnenbrink & Pintrich, 2002; Pintrich & Schunk, 2002), the participants in this study acknowledged the necessity of regulating their motivation in order to consistently succeed in college. Although many participants noted that motivation became more regulated as success occurred and that tangible positive results spurred their motivation, all felt that motivation was first and foremost a drive that occurred initially *within* and then was supported, but not altered, by something *external*. These findings support the contention that “motivation is not easily susceptible

to modification through eternal reinforcement” (Julkowski-Cherkes, Sharp, & Stolzenberg, 1997, p. 96). The idea that success is a matter of “determination...being able to have that mindset, and trying hard, and working for it,” or what many of the participants called “motivation,” was echoed throughout the interviews. While it is clear that no institution can provide motivation for its students, most college programs provide an advising component that could shift its focus to a developmental approach that offered structured support for planning and goal setting that enhanced or stabilized motivation. In many cases the simple acknowledgement that they were accountable for their own motivation seemed to help these women regulate motivation. As one participant described, “only you can make it happen.” In essence, these students were developmentally ready to bear the responsibility for their own learning.

The techniques that students use to take responsibility for their motivation and make that success “happen” include setting and achieving small goals, using positive “self-talk,” and celebrating their newfound sense of achievement. Students’ thoughts about their motivation play a key role in mediating their engagement and subsequent achievement (Linnenbrink & Pintrich, 2002). Such research is echoed by the women in this study’s ability to regulate their motivation and achieve in ways which had previously been difficult for them.

Linking internal motivation to external goals was yet another way in which some students took responsibility for their own motivation: “The other thing about being successful is having your own self-motivation and knowing that [self-motivation] is being able to say, ‘Where do I want to be in life?’”

Indeed self-efficacy and an assurance of one's own ability to manage successfully in various academic domains and tasks (Bandura as cited in Linnenbrink & Pintrich, 2002) seems to be a central component of academic motivation (Linnenbrink & Pintrich, 2003; Zimmerman, 2002). For students whose diagnosis makes sustained motivation difficult and academic failures all too commonplace, maintaining an internal belief in personal capabilities can be very difficult. It is significant to note that the majority of the participants in this study have identified a new-found sense of self-efficacy as a spiraling, positive impact on their sense of self, their academic motivation, and ultimately on their success.

Success Factor #2: The Ability to Monitor and Stabilize Attitude Toward Self and Learning

It is not surprising that a positive attitude towards oneself enhances the educational experience for students (Martin, Swartz-Kulstad, & Madison, 1999; Zimmerman, 2002), but it is remarkable that virtually all of the women interviewed noted that without a positive attitude toward learning and themselves, their ability to perform successfully was marginalized. Indeed, repeated failures in other college programs left them feeling diminished and unable. In many ways, their failure at previous institutions laid the groundwork for reflection and change. It was clear to them that an adjustment to how they responded to work and themselves in a college environment needed adjustment. Once, however, these women recognized that they could achieve given the right environment and support, they were able to adjust their response to academics.

If I don't have a good attitude, how am I going to manage my life? How am I going to be happy? I think that affects academics [because] it's all connected.

Having a great attitude influences the way I learn or pay attention.

[When I have a positive attitude towards learning] I get very passionate....I will go out and learn everything I can....When I feel passion and love of learning I feel academically successful.

Given the greater risk of having diminished self-esteem for adolescents and adults with AD/HD than for those without the disorder (Vine, 1999), such a negative attitude about oneself could put the participants of this study in a persistently negative frame of mind that could result in poor academic performance and, conversely, a positive attitude toward self and learning could provide a key to success. Participants noted the important role that their relationships with encouraging, positive faculty members played in their maintaining a sense of themselves as potentially successful students, despite previous failures in the academic arena.

There was a strong consensus among participants that “academic success is a balance of doing well *and* feeling good about yourself,” confirming previous studies that showed self-confidence to be associated with success in college for students with AD/HD (Wallace, Winsler, & NeSmith, 1999). When negative emotions threatened to upset their good record of academic achievement and/or their sense of themselves, a number of the women in this study turned to the guidance of a counselor, close friends, or parents for added support. It was clear to them that sustaining an emotional equilibrium was necessary to perform to the best of their ability.

Women reported on a variety of triggers that negatively impacted their attitude toward themselves or their learning, from lack of connection with an instructor to a setback in performance such as a missed assignment or a failed test. Regardless of the particular trigger, participants highlighted the tenuous nature of self-esteem and the importance of finding strategies to maintain a positive attitude in the face of waning

attention and academic demands. As one student summed it up, “If you are negative, you are not going to want to do anything...unless you have the attitude to succeed.”

Success Factor #3: The Ability to Self-reflect and Use Self-knowledge to Create and Adjust Academic Strategies

Clearly, accurate self-knowledge is crucial for learning (Pintrich, 2002; Pintrich & Schunk, 2002). Women with AD/HD should enter college with an understanding of their approach to learning, the specific strategies needed to succeed, and an ability to identify strengths and weaknesses (Guthrie, 2002). This may seem like a tall order since the ability to self-reflect and then utilize that reflection as a learning tool is a developing skill in most college students. Yet, it is remarkable that most of the successful women with AD/HD interviewed for this project have recognized the importance of this skill and working to use their self-knowledge to help meet academic demands.

Indeed, without prompting, all of the women who were interviewed made reference to making progress in the areas that they had reported in their admissions process as being “trouble spots.” The fact that these “trouble spots” were still salient to students semesters later, and that they noted the importance of progress on these academic fronts indicated a testament to their ability to self-reflect and use that self-knowledge in a strategic way. Aided by an academic culture that emphasizes metacognition (or the awareness of how one learns) and prompts for self-advocacy, these successful women had increased their ability to persist over time, to reflect on gains, and to adjust strategies to meet their ever-evolving challenges.

The women interviewed made it clear that, before they could put their self-knowledge to the task of creating and adjusting academic strategies, they had to first be able to acknowledge their potential. “There’s believing and knowing. You can know

something and not believe. Just last semester I started knowing. This semester I'm starting to believe.”

The participants also reported that a solid sense of self and a positive self-esteem did much to enable them to acknowledge their potential. This belief in potential then becomes, in effect, the underpinning of reflection. It is important to note, however, that students were aware that they needed to move beyond a sense of feeling good about themselves to also believing in their ability in order to perform academically. Many of the research participants found that they must also “understand that I can do it, do what I never thought possible, and [then] push myself to this point and the next and be able to [keep] doing it.”

According to the participants, the ability to use self-knowledge to predict and select strategies that will enhance positive outcomes, is just as important as understanding potential and persevering with a task. “You're the person setting the goals, and you're the person who decides whether or not they happen. You have to know yourself and what you need.”

Although self-awareness without the necessary skills is not sufficient to yield success, it can create the readiness to transform abilities into success-producing, academic skills (Zimmerman, 2002). Many of these women have reached a point in their self-understanding where they know when they are creating effective strategies and when they are using less successful strategies. An internal sense of something “not quite right” is often the first indicator that their strategies aren't working. “There was something on the inside telling me that I was working too hard, that there had to be something different. It's important to be able to explore your resources and ask for what you need.”

These women have discovered that a good plan for meeting academic demands should result in less stress, a better sense of control, and an improved ability to perform consistently to meet goals. “There’s not the sense that I’m always trying to catch up. Yes, I may be rushing, but I’m not frantic and overwhelmed.”

These successful women report that it is important to take as much control as one can over learning and to recognize when adjustments to strategies are needed. Whether the adjustment is emotional (such as shifting a negative response to work) or practical (such as adjusting an existing plan), these women report that understanding oneself and having the flexibility to make adjustments based upon those understandings is key to success. All of the women interviewed have reported ebbs and flows to their motivation and production but believe that, as long as they know themselves well enough to anticipate these times and adjust their responses accordingly, they can, and ultimately will, succeed

Success Factor # 4: The Ability to Take Advantage of Systems That Aid in Monitoring and Organizing Performance

Strategic learning, or the ability to utilize learning and study strategies, has been shown to be a predictor of academic success for college students with an AD/HD diagnosis (Wallace et al., 1999), as well as college students in general (Everson, Weinstein, & Laitusis, 2000; Zimmerman, 2002). Unfortunately, because of the nature of their disability, many students with AD/HD are lacking in the skills and traits associated with this type of strategic learning.

The women in this study seemed all too aware of the tenuousness of their organizational abilities and were thankful for systems, such as electronic grade reporting and planners, which helped them to both organize and monitor academic performance

consistently and clearly. Indeed, these women felt that their ability to take advantage of these systems was central to their success.

According to participants, monitoring systems worked in two important ways. First, they provided quick feedback and, therefore, quick corrective responses on the part of the students. And second, they enabled students to self-correct more quickly and thereby motivated them to continue to set and achieve goals that seemed manageable. An added advantage to these monitoring systems was that participants were better able to understand their successes or failures in accurate, calibrated detail, detail important to realistic self-assessment, possible adaptation, and ultimate success (Bandura as cited in Linnenbrink & Pintrich, 2002; Pintrich, 2002). Although college students in general demonstrated a strong preference for instructional practices that included frequent and specific feedback (Belcheir, 1998), this type of feedback was especially important to the women in this study since it was often difficult for them to trust and accept their own academic success. “I wish I could understand that I was successful from something coming from myself, but I haven’t really figured that out. It’ll take a long time to figure that out.” Another woman was cautious in proclaiming her academic success: “Well I kind of felt it. I had this feeling inside that told me I was doing really well, but not necessarily the confirmation until my teachers and my mom and everybody said how proud they were of me.”

Students were quite enthusiastic about their instructors’ use of grading software, noting how regular distribution of electronic reports provided tangible evidence of performance and allowed for a clearer understanding of course-specific strengths and weaknesses. Since these grade reports were physical proof of performance, women could

access them readily when reflecting on goals and use these records to support short term memory, an ability often compromised in those who have AD/HD (Barkley, 1997). As one student noted, grading software “is very helpful and lets you know where you are going down and where you are struggling.” The majority of women interviewed stated that any system that aided in monitoring performance had to be external (outside of any independent self-analysis) and presented objectively before they could progress towards using that knowledge to devise strategies for academic success.

Since managing time and organizing tasks are executive functioning skills that are both essential to college success and typical deficit areas for students with AD/HD (Hallowell & Ratey, 1994), participants in this study were confronted daily with managing weaknesses that affected every facet of their academic lives. Even among those women who reported successes in performance-monitoring, many were quick to report that the areas of time management and organization continued to be huge challenges. “For me, one of the biggest challenges is trying to stay organized. I keep a planner out and it becomes [my] control.” Finding some system that helps with organization and time management was repeatedly reported as a factor in most participants’ success.

About a year ago I was losing stuff. I’d put my papers in a folder and they would get bunched up and fall out and I would find things under my bed. I was trying to make notes and I would find them in my pocket...The big thing now was that I got organized.

Although some of the participants relied on campus centers for assistance with organization, others preferred to work with instructors or advisors to help them monitor organization. Many noted the importance of one-on-one conferencing or after-class check-ins as a way to receive and internalize feedback on organization. Coaches can

provide students a range of invaluable functions, from organizational structure that promotes on-task behavior to on-going encouragement (Turnock, 1998). From the Center for Academic Coaching to paper or electronic personal planners, study participants used a combination of systems to aid in monitoring their current organizational needs and plan for future needs. Although the type of system varied from student to student, the fact that all of the participants attributed their success, at least in part, to a consciously chosen and utilized system of organization is significant.

Success Factor # 5: The Ability to Balance Social and Academic Demands

Many of the women participating in this study cited as important the need to have a fulfilling social life that helped them remain more balanced in their approach to work and also provided them the emotional support they needed to remain positive about their academic goals. But, maintaining such a balance is far from simple for the majority of these women: “Females with AD/HD can make friends but they can’t keep them...being equal to [my] peers is very, very difficult.”

Difficulty with managing their social lives, either because of a tendency to spend more time socially than appropriate or an inability to consistently manage positive friendships, was a recurring theme for these women. Yet investing the time and energy needed to maintain a balance of social and academic demands was seen by these women as essential for academic success. “If I’m doing well with my friendships, I’m happy and I want to work and I’ll be able to focus on my work, but if they’re not going well than I’m concentrating on friendships rather than school.”

Many of the women in this study spoke of the importance of “talking through” issues, either personal or social, in order to resolve them and clear a space for the

challenges of their academic work. This type of female, peer-assisted interaction seemed to be important for learning in college women in general (Martinez 1994, 1997) but was *essential* for this group of women with AD/HD. “I think for me as a woman with AD/HD there needs to be this verbal processing...There needs to be a celebration of that and the emotional venting and laughing.” Without this opportunity to “celebrate” and “vent and laugh”, these women had a harder time focusing on the academic tasks at hand. The college experience was incomplete without the sense of collaboration and emotional support that strong peer interaction can bring.

It should be noted that although women spoke most often about the social supports and demands of their friendships, many also mentioned the important role that family played in their lives. Parents, in particular, were cited as being significant supports for participants’ academic success. Finally, these women were quick to report that the best classes were the ones in which instructors built a strong and collaborative relationship with students and encouraged this same collaboration among classmates.

In sum, all of the women interviewed reinforced the notion that they learn best in an environment that values “connected knowing” – learning based on social interactions (Belenky, Clinchy, Goldberg, & Tarule, 1986). Despite the difficulties that might come hand-in-hand with these interactions, there was a strong consensus that these women’s success as learners was closely tied to their ability to create and maintain significant social relationships and engaging in a balance of academic and social needs. College, after all, is a time of forging life long friendships and establishing networks of like peer groups as well as a commitment to the intellectual enterprise of learning.

For me, I think the only way you can be academically successful in school is when you have every other aspect of your life in control. You have the

family piece. You have time with your friends. I think people who have the hardest time with academic success are those who don't make time for their friends.

Recommendations

Throughout these interviews the participants were clear that success was achievable when the right conditions were in place. Although these women were committed to making changes within themselves and in their approaches to learning, they also stressed how important individual teachers and institutional practices were to their success. For this reason, the following recommendations, based on the findings of this pilot study, will be directed toward institutions interested in optimizing success for their female students with attentional issues.

The fact that study participants were attending a college designed specifically for students with AD/HD and/or learning disabilities limits the transferability of findings to other settings. However, although participants had far more services and academic interventions available to them than the typical college student, their perspectives on which factors contributed to their success can be applied to help make the college experience more accessible, meaningful, and successful for women with AD/HD elsewhere. Additional study regarding the application of recommendations in alternative settings will strengthen understanding of factors contributing to success in college for women with attention issues.

Recommendations for Instructors

Create systems to provide frequent and tangible feedback. Any assignment that results in a grade should have assessment measures clearly articulated, thus allowing women to direct their focus to salient components of the assignment. Likewise, instructors should strive to provide regular and specific feedback to enhance students'

ability to self-correct when necessary, to maintain short-term goals and motivation, and, ultimately, to sustain academic tasks to completion (Pintrich, 2002).

Establish strong, supportive instructor-student relationships. Faculty opinions had a powerful influence on the self-perceptions of the women in this study, and positive relationships with instructors were deemed very important to success. Given that success for these women rested on a strong belief in their own capabilities, the significance of seemingly simple words of instructor encouragement should not be underestimated. Likewise, faculty practices that allow for one-on-one interaction, such as regular office hours, should help students feel connected to and respected by their instructors.

Model clear organization. By creating and utilizing a logical, well-communicated, and predictable system of organization, instructors can remove some of the organizational “load” of their students while simultaneously modeling organization (Turnock, 1998).

Provide learning opportunities that draw upon and encourage social interactions. Instructional methods should include small group work, collaborative projects, and problem solving (Belenky et al., 1986). Activities which require the exchange and pooling of information provide opportunity to verbalize and exchange viewpoints, both of which were important ingredients of success for the women studied.

Link motivation to goals. Being able to keep both short-and long-term goals in the forefront of their minds was important to these women’s success (Linnenbrink & Pintrich, 2002; Pintrich & Schunk, 2002). Instructors should ask students to record their goals for being in college, for taking particular classes, or for completing an assignment

at hand. Frequent references to these goals can help women with attentional issues stay focused and motivated.

Expect students to take responsibility for their own learning. Deflecting responsibility for outcomes, or what is often referred to as having “an external locus of control” (Rucklidge & Kaplan, 1997), was considered by the women in this study to be an impediment to success. Instructors need to negotiate the fine line between providing useful and appropriate accommodations to students with attentional issues and impeding their ability to take personal responsibility.

Encourage metacognition. Perhaps the most useful strategy that an instructor can adopt is the inclusion of metacognition as one of their course objectives. By providing opportunities for students to experiment with various learning strategies and evaluate their personal usefulness, mentors help to enlarge students’ educational toolboxes and their likelihood of success (Guthrie, 2002).

Recommendations for Institutions

Create curriculum and services that focus on metacognition, organization, and self-advocacy. Offering metacognition courses that focus on self-reflection and the study of learning styles engages both faculty and students in a dialogue about *how* to teach and learn as well as *what* to teach and learn. Similarly, introducing self-advocacy and organization courses into the curriculum allows students to simultaneously develop essential skills for academic success *and* increase their content knowledge in disciplines such as psychology, sociology, neuroanatomy, and communication. In addition, campus-wide services, such as study labs, peer tutoring, and coaching programs (Turnock, 1998) are likely to improve student outcomes for women with attentional issues.

Provide support for flexible scheduling. Institutions can be more supportive of women with attentional issues by constructing academic schedules that allow sufficient time offered routinely during which students and instructors meet individually. Although most postsecondary institutions have the expectations that students will self-advocate, the sudden and sometimes overwhelming demands of college life can impair students' ability to manage the increased responsibility of higher education (Richard, 1995). Programs that allow for more guidance from the instructor can help students—particularly students compromised by attention problems—assess their progress and learn how and when to ask for the help they need.

Recognize the importance of residential life and cocurricular programs. It is essential that institutions recognize that without positive residential and cocurricular experiences, women with attentional disorders are unlikely to be able to attend to their academics. The link between in-class success and out-of-class life is strong for these women, and helping to create a positive social environment will likely pay off in academic outcomes (Novotini, 1999).

Create ways for students to easily connect with sources of emotional support. All of the women in this study reported that maintaining an emotional balance was crucial to their success (Wallace et al., 1999). For this reason, it is essential that emotional support systems, such as counseling services, peer support groups and 12-step programs, be made easily accessible to students.

Conclusion

The collective stories of these women illustrate remarkable perseverance. Faced with a disorder that not only robs them of their ability to consistently sustain attention but

also impedes the skills necessary to prioritize tasks, these students face profound academic disadvantages. College work requires an attention to enormous detail across multiple disciplines. College success requires, among other things, that one make transitions easily and quickly, holds on to numerous details in order to move through a process, and keeps track of ideas while stopping and starting assignments, all functions that participants in this study struggled with both over time and across a range of settings. Along with these compromised organizational abilities is the parallel difficulty of managing social expectations and emotional stability while at the same time attending to a college course load.

Despite having achieved external standards of success, these women highlighted the vulnerability they still felt regarding their academics. They reported that their ability to manage academic and emotional priorities shifted daily and that their success felt tenuous. They feared that their achievements on one day would not necessarily translate to the next. They acknowledged that each day required a delicate balancing of the intellectual and emotional demands of college.

These women recognize, as should professionals who work with them, that their successes rest in an ability to integrate the social and emotional functions required to manage cognitive performance. They know that social competency and emotional well-being weigh heavily into their academic performance. It is imperative for instructors and administrators to provide the supports that will increase the likelihood of success while honoring these students' ongoing struggle to stabilize all the factors – social, emotional, and academic – that influence their college performance.

The women in this study are unique in that they all have the advantage of attending a college that is specifically designed to address their attentional disorders. Yet, perceptions of what factors have led to their success reveal factors that can be incorporated into any higher education environment seeking to support their female students with attentional difficulties. Similarly, we suspect that the educational practices that these women identified as *essential* for their success, might prove helpful to a broad range of struggling college students.

Since 1973, section 504 of the Rehabilitation Act required colleges to offer academic support for students diagnosed with AD/HD. However, there is still very limited understanding about what types of supports lead to academic success for women with attentional issues. The findings of this study are a small step in this direction.

Clearly, women learners with AD/HD have much to offer the institutions they attend. They are often creative and dynamic students looking to challenge themselves intellectually and to have a voice in their academic community. Colleges that provide support, such as the recommendations made in this study, will help enable these women to fully realize their academic potential. “The question is not whether or not women with AD/HD are going to college. The question is whether [they] are merely surviving rather than thriving...and what factors make the difference” (Guthrie, 2002, p. 289).

References

- Arnold, L. E. (1996). Sex differences in AD/HD: Conference summary. *Journal of Abnormal Child Psychology*, 24, 555-569.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Barkley, R. A. (1997). *ADHD and the nature of self-control*. New York: Guilford Press.
- Belenky, M. F., Clinchy, B., Goldberg, N., & Tarule, J. (1986). *Womens' ways of knowing*. New York: Basic Books.
- Belcheir, M. J. (1998, October). *Age and gender differences in instructional preferences*. Paper presented at the annual meeting of the Rocky Mountain Association for Institutional Research, Bozeman, MT. (ERIC Document Reproduction Service No. ED443358)
- Bratton, E. B., & Rosen, L.A. (2000). Self-regulation of affect in attention deficit/hyperactivity disorder (ADHD) and non-ADHD boys: Differences in empathetic responding. *Journal of Consulting and Clinical Psychology*, 68, 313-321.
- Brown, R. T., Madan-Swain, A., & Baldwin, K. (1991). Gender differences in a clinic referred sample of attention deficit disordered children. *Child Psychiatry and Human Development*, 22, 111-218.
- Brown, T. E. (2002, February). *ADHD impairments in learning and "emotional intelligence": Assessment and treatment of complicated cases*. Presentation at Landmark College, Putney, VT.
- DuPaul, G. J., Schaugency, E. A., Weyandt, L. L., Tripp, G., Kiesner, J., Kenj, O., & Stanish, H. (2001). Self-report of ADHD symptoms in university students: Cross-gender and cross-national prevalence. *Journal of Learning Disabilities*, 34(4), 370.
- DuPaul, G.J., & Stoner, G. (1994). *ADHD in the Schools: Assessment and intervention strategies*. New York: Guilford Press.
- Erlandson, D., Harris, L. E., Skipper, L. B., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, CA: SAGE Publications.
- Everson, H. T., Weinstein, C. E., & Laitusis, V. (2000, April). *Strategic learning abilities as a predictor of academic achievement*. Paper presented at the annual meeting of the American Education Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED441837).

- Faraone, S. V., Biederman, J., Spencer, T., Wilens, T., Seidman, L. J., Mick, E., & Doyle, A. D. (2000). Attention deficit/hyperactivity disorder in adults: An overview. *Biological Psychiatry, 48*, 9-20.
- Farrell, E. F. (2003 September, 26). Paying attention to students who can't. *The Chronicle of Higher Education* (p.A50-51).
- Gaub, M., & Carlson, C. (1997). Gender differences in AD/HD: A meta-analysis and critical review. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 1036-1045.
- Guba, E. G., & Lincoln, Y. S. (1992). *Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches*. San Francisco: Jossey-Bass.
- Guthrie, B. (2002). The college experience. In P. Quinn (Ed.), *Understanding women with AD/HD* (pp. 288-312). Bethesda, MD: Advantage Books.
- Hallowell, E. M., & Ratey, J. J. (1994). *Driven to distraction: Recognizing and coping with attention deficit disorder from childhood through adulthood*. New York: Touchstone.
- Heiligenstein, E., Guenther, G., Levy, A., Savino, F., & Fulwiler, J. (1999). Psychological and academic functioning in college students with attention deficit hyperactivity disorder. *Journal of American College Health, 47*(4), 181-185.
- Herbert, C., Strothman, S., & Fein, A. (2001). Student self-management: Time, tasks and materials. In S. Strothman (Ed.), *Promoting academic success for students with learning disabilities* (pp. 27-50). Putney, VT: Landmark College.
- Julkowski-Cherkes, M., Sharp, S., & Stolzenberg, J. (1997). *Rethinking attention deficit disorders*. Cambridge, MA: Brookline Books.
- Katz, L. J. (2003). The college student with AD/HD. In L. Shea & S.W. Strothman (Eds.), *Understanding learning disabilities at the post-secondary level* (pp. 33-62). Putney, VT: Landmark College.
- Linnenbrink, E. A., & Pintrich, P.R. (2002). Motivation as an enabler for academic success. *School Psychology Review, 31*(3), 313-327.
- Linnenbrink, E. A., & Pintrich, P.R. (2003). The role of self-efficacy beliefs in student engagement and learning in the classroom. *Reading and Writing Quarterly: Overcoming Learning Difficulties, 19*(2), 119-137.

- Littman, E. (2002). Gender differences in AD/HD: The sociocultural forces. In *Gender Issues in AD/HD* (2002). Silver Spring, MD: Advantage Books.
- Marshall, C., & Rosman, G. B. (1998). *Designing qualitative research*. Newbury Park, CA: SAGE Publications.
- Martin, W. E., Jr., Swartz-Kulstad, J. L., & Madison, M. (1999). Psychosocial factors that predict the college adjustment of the first-year undergraduate students. *Journal of College Counseling*, 2(2), 121-133.
- Martinez Aleman, A.M. (1994, April). *The cognitive value of college women's friendships*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. (ERIC Document Reproduction Service No. ED372118)
- Martinez Aleman, A. M. (1997). Understanding and investigating female friendship's educative value. *Journal of Higher Education*, 68(2), 119-159
- McCormick, A. (1998). Retention interventions for college students with AD/HD. In P. Quinn & A. McCormick (Eds.), *Re-thinking AD/HD: A guide for fostering success in students with AD/HD at the college level* (pp. 85-89). Bethesda, MD: Advantage Books.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Nadeau, K. G., Littman, E., & Quinn, P.O. (1999). *Understanding girls with AD/HD*. Bethesda, MD: Advantage Books.
- Nadeau, K. G., & Quinn, P.O. (Eds.). (2002). *Understanding women with AD/HD*. Bethesda, MD: Advantage Books.
- Novotni, M. (1999). *What does everybody know that I don't?* Plantation, FL: Specialty Press.
- Patton, M. Q. (2001). *Qualitative evaluation and research methods*. Thousand Oaks, CA: SAGE Publications.
- Pintrich, P.R. (2002). The role of metacognitive knowledge in learning, teaching, and assessment. *Theory into Practice*, 41(4), 219-225.
- Pintrich, P, R., & Schunk, D. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle, NJ: Prentice-Hall, Inc.
- Quinn, P. O. (2002). Hormonal influences on women with AD/HD. In K. Nadeau & P. Quinn (Eds.), *Understanding women with AD/HD*. Bethesda, MD:

- Advantage Books.
- Quinn, P. O., & Nadeau, G.K. (Eds.). (2002). *Gender issues and ADHD: Research, diagnosis, and treatment*. Bethesda, MD: Advantage Books.
- Quinn, P. O., Ratey, N.A., & Martland, T.L. (2000). *Coaching college students with AD/HD*. Bethesda, MD: Advantage Books.
- Ratey, J. J., Miller, C.A., & Nadeau, K. G. (1995). Special diagnostic and treatment considerations in women with attention deficit disorder. In K.G. Nadeau (Ed.), *A comprehensive guide to attention deficit disorder in adults: Research, diagnosis, and treatment* (pp. 260-283). New York: Brunner/Mazel, Inc.
- Richards, T. L., Rosen, L. A., & Ramirez, C. A. (1999). Psychological functioning differences among college students with confirmed ADHD, ADHD by self-report only, and without ADHD. *Journal of College Student Development*, 40(3), 229-304.
- Rucklidge, J.J., & Kaplan, B.J. (1997). Psychological functioning in women identified in adulthood with attention-deficit/hyperactivity disorder. *Journal of Attention Disorders*, 2, 167-176.
- Rucklidge, J., & Tannock, R. (2001). Psychiatric, psychosocial and cognitive functioning of female adolescents with ADHD. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(5), 530.
- Solden, S. (1995). *Women with attention deficit disorder*. Grass Valley, CA: Underwood Books.
- Shmulsky, S. (2001). Developing critical thinking in college. In S.W. Strothman (Ed.), *Promoting academic success for students with learning disabilities: The Landmark College guide to practical instruction* (pp. 105-127). Putney, VT: Landmark College.
- Szatmari, P. (1992). The epidemiology of attention-deficit hyperactivity disorder. *Child and Adolescent Psychiatric Clinics of North America*, 1, 361-371.
- Turnock, P. (1998). Academic coping strategies in college students with symptoms of AD/HD. In P. Quinn & A. McCormick (Eds.), *Rethinking AD/HD* (pp. 76-84). Bethesda, MD: Advantage Books.
- Vine, F.L. (1999). *Self-esteem within children, adolescents, and adults diagnosed with attention-deficit hyperactivity disorder: A review of the literature*. Unpublished doctoral dissertation, Biola University, La Mirada, CA. (ERIC Reproduction Service No. ED437768)

Wallace, B.A., Winsler, A., & NeSmith, P. (1999, April). *Factors associated with success for college students with ADHD: Are standard accommodations helping?* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada. (ERIC Document Reproduction Service No. ED431350)

Walker, C. (1999, May). *Gender and genetics in ADHD: Genetics matters; gender does not.* Paper presented at the Attention Deficit Disorder Association Regional Conference, Chicago.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41*(2), 64-72.