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## The Academic Support Center Environment: An Assessment of Student Use at the Student Academic Assistance Center

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*This study assessed the services provided at a Student Academic Assistance Center (SAAC) at a large, public, Research I university in the Midwest. Students who used the SAAC responded to a survey that measured motivation for using the SAAC, the academic support services offered, preferred educational environments and satisfaction with the SAAC. Results showed that students used the SAAC approximately once a week, preferred one-on-one tutoring, sought academic support when needed, and were satisfied with their use of the SAAC. An implication of the study is support for SAACs as valuable resources for college students.*

### Introduction

Undergraduate students sometimes find themselves in learning distress; often due to: poor previous academic preparation, lack of effective study skills, topic apprehension, lack of focus during classroom learning and/or study time, or low motivation. With specific assistance, many such students can be helped to succeed. Some students are consciously aware that they have problems and some of these even understand why problems occur; others remain unable or unwilling to admit that they need help. In recent years, several institutions have recognized this problem and have made available professionally and peer staffed tutoring centers. (Petress, 1999, p. 247)

A public, Research I institution in the Midwest is one such university that has implemented academic support services through a Student Academic Assistance Center (SAAC). The SAAC was developed to address the needs of many new students for accessible assistance in the math, writing, and study skills crucial to academic success at a large university; to provide opportunities for these students to interact in a non-threatening environment; and to improve students' overall college experience (Morgan, 1996).

According to the university's Office of Institutional Research (2001), in its first year of operation (1996-1997), the SAAC had a positive effect on persistence for both resident and non-resident freshmen of all ability levels. In the 1999-2000 academic year, research also

showed that students who used the SAAC in the fall had statistically significant higher fall and spring semester GPAs than non-users. Although these results are encouraging, there is a lack of research that identifies why students use the Center. This study seeks to more thoroughly understand and assess motivations for use, services provided and overall satisfaction with the SAAC.

A brief analysis of the academic environments on college and university campuses indicates the importance of establishing the role academic support services will play on a campus. It is essential to examine a student's fit into the campus' academic environment. Holland, as cited in Strange and Banning (2001), refers to this fit as the person-environment congruence, which explains the congruency between an environment and the student's personality type. "A person is said to be congruent with an environment if his or her type is the same as the dominant type within that environment" (p. 52). A student's learning style is an aspect of a personality type, and its congruence with the learning environment is essential for maximum learning. Learning is a process that creates knowledge through the transformation of experience, and the concept of a "learning style" refers to how people prefer to learn (Cano-Garcia & Hewitt Hughes, 2000). A learning style, according to Dunn and Dunn (1993, as cited in Dunn & Stevenson, 1997) is "the way each individual begins to concentrate on, process, internalize, and remember new and difficult academic information or skills" (p. 334). Environmental, emotional, sociological, and physiological elements should be considered when analyzing learning styles. Each of these elements can individually or collectively influence the interaction between a student's learning style and the learning environment that determines the person-environment congruence.

Terenzini (1999) examined learning environments and found that "the extent to which learning occurs is related in important ways to the extent to which the learner is directly involved in the learning process" (p. 35). Student involvement in the learning process is negatively affected by what Barr and Tagg (1995) refer to as the Instruction Paradigm. This paradigm places the emphasis on the delivery of the instruction, instead of the quality of the learning. An instructor who espouses the Instruction Paradigm would assume the following: 1) students are equally prepared; 2) students learn at the same rate; 3) students learn in the same way and through the same set of activities; 4)

differences in performance are more likely due to differences in student ability than to the faultiness of any of the foregoing assumptions (Terenzini, 1999). These assumptions ignore different learning styles and might not provide an opportunity for all students to become directly involved in the learning process.

Any instructional process that tries to influence how students learn either encourages and reinforces one's preferred styles, or creates pressures for a student to modify them (Grasha & Yangarber-Hicks, 2000). When the instructional process encourages and reinforces preferred learning styles, achievement scores are higher (Dunn & Stevenson, 1997). Unfortunately, in most cases, instructional methods and learning styles are not complimentary. According to Schroeder (1993), over half of today's students prefer concrete concepts and active methods of instruction. In contrast, three-quarters of faculty teach with an emphasis on abstract concepts and passive instruction. A study conducted by Terenzini (1999) at a Research I institution reveals that 80 percent of a typical college class is spent lecturing, and the students are only attentive for 50 percent of that time. Therefore, one might conclude that lectures, as a part of abstract and passive instruction, do not tend to involve students in their learning.

"Post-secondary learning is qualitatively different from learning at earlier levels of education. Therefore, students need, first, to be open to new ways of learning in order to develop intellectually, and second, to be willing to invest personally in the learning process" (Donald, 1997, p. 79). Research has shown that students are now coming to college under-prepared for the rigor of post-secondary learning (Donald, 1997). It is thus becoming the responsibility of the college or university to help these students learn how to succeed. Hirsh (2001) explains that students should, "focus on what they have control over, use small study goals and tangible rewards for goal attainment" (p. 76).

Colleges and universities can help students reach their goals by creating a sense that the campus is a learning community (Donald, 1997). This can be established by implementing academic support programs on campus that are available for all students. Donald (1997) has also shown that when students invest in their learning, these students tend to seek assistance and desire to learn strategies for learning that will enable them to reach their learning goals. In addition, Eppler and Harju (1997) suggest that as students become more actively involved in their learning process and less concerned with their final

outcomes (their grades), students will become more academically successful. Therefore, it seems appropriate for campuses to strive to exist as learning communities that encourage and enable students to take an active role in their learning and to succeed academically.

The importance of student involvement in the learning process should encourage colleges and universities to find alternatives for students who do not benefit from the current learning environment. As a result, several college and universities have begun to evaluate out-of-class activities. Approximately 80 percent of a student's time is spent outside of the classroom setting (Kuh, Schuh, Whitt & Associates, 1991, as cited in Terenzini 1999). These out-of-class experiences influence students' academic and cognitive development (Terenzini, Pascarella, & Blimling, 1999). When in-class learning is supplemented by positive out-of-class experiences, student learning is more likely to be successful (Terenzini, 1993). The emphasis on both in-class and out-of-class experiences acknowledges that students are not simply vessels to be filled; most students need to participate actively with their learning (Terenzini, 1999). Out-of-class environments, such as academic support services, provide students with the opportunity to learn in a more active learning environment than the traditional college classroom.

Services that are typically provided by learning assistance centers include tutoring, academic counseling, and study skill programs (Maxwell, 1997). Maxwell explains that larger institutions may have the resources to support various types of academic support services. Burns (as cited in Maxwell, 1997) proposes a model that identifies the following characteristics as being essential for any learning assistance center's success: providing individualized and self-paced learning, being visible to the campus community and being open to all students. According to White, Jr., Kyzar, and Lane (1990), a learning assistance center's physical location on campus can influence student use; "more students, especially, drop-ins, use the center when its name is 'inclusive' and when they know where it is" (p. 64). Current research is devoted to academic support programs that target specific student populations including minority students or first-generation college students (Petress, 1999; Hodges, 2001), but Maxwell explains that if inclusive academic support services are offered, "many students reflecting all levels of preparation will come" (1997, p. 5).

Since tutoring is a major component of academic support services, it is crucial to focus on literature examining the effects of tutoring

on students. According to Maxwell (1990), "a well-trained tutor can serve a vital role in helping fellow students attain their academic goals" (p. 110). It has been challenging, however, to prove that tutoring has a positive impact on students' grades. "Because tutoring is only one part of the services for under-prepared students, and because it can take many forms (individual, group, drop-in, as an adjunct to programmed material, etc.), it is often impossible to show that one-to-one tutoring, by itself, leads to higher grades for developmental students" (Maxwell, 1990, p. 111). However, research suggests that students who are tutored persist further through college than those who are not tutored (Vincent, 1983, as cited in Maxwell, 1990). Some literature recently cited by Rheinheimer (2000) indicates that tutoring can have a positive impact on final grades in tutored courses and course completion. While much of the literature pertaining to tutoring focuses on under-prepared students, the positive effects associated with tutoring can be applied to students of all levels of academic preparedness (Petress, 1999; Hodges, 2001).

In reviewing other aspects of typical learning assistance centers, limited literature exists explaining the specific benefits of academic advisors and study skill workshops. The literature that does exist, however, indicates that academic advisors and study skill workshops are effective means of academic support. Polson and Jurich (1979) indicated that "advising students has the potential to enhance their learning process and to provide a crucial link between the student and the university that can reduce the student's feelings of alienation" (p. 249). It has also been found that academic advisors provide academic information as well as information about other campus services. As advisors promote these services, students become more aware of their existence, and, in turn, use them more frequently (Middleton, 1989). Some campuses have implemented academic support services that include study skills workshops. Levin et al. (1997) explains that comprehensive academic support programs should strive to offer proactive academic assistance. Levin also notes that academic assistance should be provided in a small group instruction format and it should teach learning and test-taking strategies in the context of college or university courses. Study skills classes or workshops espouse these characteristics of academic assistance.

## Method

### Sample

The participants of the study consisted of a convenience sample of 124 students, over the age of eighteen, who utilized the services at the Student Academic Assistance Center (SAAC) at a large, public, residential Research I institution in the Midwest. The SAAC is located in a residence hall, one of eleven residence centers at the university, which houses approximately 900 students. Developed by a committee convened by the Dean of Faculties and comprised of staff members from a variety of student support services, the SAAC was established to improve the quality of intellectual life in the residence halls. These improvements were designed to encourage persistence at the university. The SAAC consists of four main units: an academic problem-solving unit (offering weekly academic support workshops), a writing tutorial unit, a mathematics help unit, and an academic advising office. The SAAC is open four hours a night, five days a week, and the services offered are easily accessible and available to any student on the university campus.

During a one-week period, students leaving the SAAC were approached to complete a survey. One hundred and twenty four students completed the questionnaire, and approximately 20 declined participation. Out of the 124 students who participated, 41 were male, and 83 were female. Eighty two percent of the participants were first-year students, with ages of all participants ranging from 18 to 22 years. Of the 124 participants, 94 students optionally reported their race: 82 percent were White, 7 percent were Black, and 4 percent were Asian. A variety of academic majors were represented and were categorized into five major groups: 35% were classified as Business, 16% were classified as Math and Science, 16% were classified as Humanities and the Arts, 16% were classified as Social Science, and 17% were classified as Undecided. Fifteen participants lived off campus. Of the 109 participants who lived on campus and reported their housing unit, 56 resided in the residence hall containing the SAAC. Only 10 of the respondents resided in a hall that was not in close proximity to the residence hall that housed the SAAC.

### Instrumentation and Procedure

The researchers met with the Director of the SAAC to gain permission to survey students about their use of the SAAC. The director provided the researchers with access to statistical research

from previous years. A 91-item questionnaire, specifically designed to assess student use of the SAAC, was subsequently developed. The questionnaire consisted primarily of questions in five point Likert scale format, with two open-ended questions. Based on literature reviewed, the questionnaire was constructed to measure characteristics of participants, frequency of use, motivation to use the SAAC, academic services used, actual versus preferred educational environments, and satisfaction with the SAAC.

Data were subsequently coded and entered into SPSS where correlations and t-tests were run to test for statistical significance. Correlations between each item on the survey were examined to determine the strength of relationships between items. Paired t-test analyses for the strongest correlations were conducted. Independent correlations were also run to determine significant relationships between select items and gender, as well as select items and participants' class standing. Data for participants' class standing was coded such that first-year students comprised one group and all upperclass students constituted the other group. Independent t-test analyses for all items were conducted to determine possible differences between respondents in different groups.

## Results

### Use/Motivation

When asked how often the SAAC was used, participants reported that, on a scale of one to five, one representing "infrequently" or "once a month," and five representing "frequently" or "once a day," 2.94 (approximately once a week), was the mean response. Subsequent results are reported from participant responses to the questions asked, in Likert scale format, on the survey instrument. The scale ranged from one to five, one representing "not at all" or "never" and five representing "very much" or "very often." Participants indicated that their instructor ( $M = 3.20$ ) and friends ( $M = 3.04$ ) had the greatest influence on their decision to visit the SAAC. Participants also indicated that difficulty with homework ( $M = 4.30$ ) and an upcoming exam or assignment ( $M = 4.16$ ) motivated them to use the SAAC.

Correlation analyses revealed that participants who were motivated to use the SAAC by an upcoming exam or assignment indicated that their preferred study environment was the SAAC ( $r = 0.313$ ,  $p <$

0.05). With regard to specific characteristics of the SAAC, participants expressed that the free, drop-in tutoring ( $M = 4.75$ ) and the SAAC's hours of operation (Sunday-Thursday 7-11 p.m.) ( $M = 4.65$ ) most influenced use. When asked about the degree to which the participants sought academic support when needed, respondents reported they almost always did so ( $M = 4.02$ ). A correlation analysis indicated that these participants who use academic support when needed also use the SAAC frequently ( $r = 0.299$ ,  $p < .05$ ).

### *Academic Support Services*

Participants were asked about their use of tutoring during high school; participants were then asked about their use of tutoring in college. While participants indicated they used tutoring more in college ( $M = 2.67$ ), there was a significant correlation between those participants exposed to tutoring in high school ( $M = 2.01$ ), and their use of college tutoring ( $r = 0.271$ ,  $p < .05$ ). Of the services provided at the SAAC, math tutoring was the most used service ( $M = 3.89$ ) followed by writing tutoring ( $M = 2.21$ ). A negative relationship supported by correlation results ( $r = -0.204$ ,  $p < .05$ ) indicated that participants use either math tutoring or writing tutoring, but surprisingly not both. Math tutoring at the SAAC is provided in a group format, while writing tutoring is provided on a one-on-one basis. When asked about the extent to which they prefer specific types of tutoring, participants responded that they prefer one-on-one tutoring ( $M = 4.55$ ) as opposed to group tutoring ( $M = 3.24$ ). Additional analysis revealed a significant correlation between participants preferring one-on-one tutoring and participants who prefer to study alone ( $r = 0.199$ ,  $p < 0.05$ ). Further analyses indicated a significant correlation between participants who preferred group tutoring and those who preferred to study with friends or at the SAAC ( $r = 0.277$ ,  $p < 0.05$ ).

### *Educational Environments*

Participants were asked about the style in which their classes were taught (large lecture, medium lecture, and small lecture). Responses were evenly distributed among the options. However, when asked about their preference for learning in the same environments, participants expressed an overwhelming preference for learning in a small lecture environment ( $M = 4.27$ ), and least preferred learning in a large lecture environment ( $M = 2.20$ ). Participants were asked to indicate

the extent to which they preferred to study in eleven possible environments. "Alone in a quiet place" was the most preferred study environment ( $M = 4.23$ ). Participants also expressed a preference for studying in the SAAC ( $M = 3.34$ ). The preference to study in the SAAC was the only of the eleven study environments that significantly correlated with the participants' tendency to seek academic support when needed ( $r = 0.319$ ,  $p < 0.05$ ). Interestingly, correlation analysis revealed that participants who preferred to study in their residence hall lounge also reported that the location of the SAAC in a residence hall influenced their decision to use it ( $r = 0.244$ ,  $p < 0.05$ ). Additional analyses revealed a negative correlation between participants who indicated a preference for studying in their own room and indicated that the location of the SAAC in a residence hall had an influence on their use ( $r = -0.194$ ,  $p < 0.05$ ). Finally, when asked at which time of the day participants preferred to learn/study, the 6:00 p.m. to midnight option yielded the greatest response ( $M = 4.22$ ). Coincidentally, the hours of operation of the SAAC fall within that block of time.

### *Satisfaction*

Overall, participants were satisfied with their use of the SAAC ( $M = 4.42$ ). For all closed-ended questions, there were no statistically significant differences between the responses from male and female participants, nor were there statistically significant differences between first-year respondents and upperclass student respondents.

In addition, two open-ended questions inquired about the positive and negative aspects of the participants' experience at the SAAC. Forty-two percent of the responses included positive remarks with regard to the friendly, helpful, and knowledgeable personnel. One participant commented that positive aspects included "[a] friendly environment and helpful people who listen to my needs." Twenty-nine percent of the responses included comments related to when and how services were available. A participant commented, "It's free! And there are math and writing tutors available every day." When asked about the negative aspects of the SAAC, 70% of the responses included remarks related to the crowdedness and busyness of the SAAC, in addition to a request for more tutors. One participant commented that the SAAC "need[s] more tutors because it is crowded and it is hard to help everyone."

### **Discussion**

In discussing the results of the study, implications can be drawn from the areas outlined in the Results section, namely motivation to use the SAAC, academic support services, educational environments, and satisfaction with the SAAC. Since instructors had the greatest influence on students' decision to visit the SAAC, instructors should continue to be educated and informed about the SAAC. These instructors might recommend it highly because they have had success with students who have used the services. Furthermore, students were most likely to use the SAAC for academic purposes that they identified on their own (difficulty with homework, upcoming exam and/or assignment). Instructors and advisors could take a more active role in helping students identify their need for academic support.

Likewise, students using the SAAC are taking a more active role in their learning. These students can participate more actively at the SAAC, as compared to passive classroom instruction. When looking at preferred methods of instruction, research shows that students prefer concrete and active methods (Schroeder, 1993). Results of the study indicate that participants find active instructional methods at the SAAC. Participants greatly preferred one-on-one tutoring, arguably a more active method of instruction than the traditional lecture-style format. Further, some open ended responses revealed that positive aspects of the SAAC were "it helps you learn and understand what you are learning as you go through class day by day," "there are plenty of tutors and I never felt stupid for asking 'why?' ten times," and "[positive aspects include] one on one attention, [a] comfortable environment, [and a] non-judgmental environment." All of these responses describe positive outcomes associated with active methods of instruction.

Results of the study support that the SAAC exhibits the general characteristics of an academic assistance center similar to those proposed by Burns (as cited in Maxwell, 1997). Specifically, participants mentioned that "you can go [to the SAAC] with a question on the homework and just drop by" and that "if you bring specific things to work on, the tutors will help." These responses attest to the "individual and self-paced learning" (Maxwell, 1997, p. 64) characteristic of the SAAC. Additionally, the variety of influences on participants' decision to use the SAAC, such as a friend or instructor, point to the Center's visibility on campus. Finally, the diversity in demographics of participants in the sample illustrates Burns' assertion that student academic assistance centers are "open to all students" (Maxwell, 1997, p. 64).

In terms of the specific academic support services offered at the SAAC, results indicated that students who used tutoring in high school also used tutoring in college. Some implications for this might include the idea that students who have been previously exposed to tutoring will seek out academic support services in college and have high expectations for these services. Thus, the SAAC might want to target those students who have not been exposed to tutoring in high school, since they would be less likely to be aware of the services offered by the SAAC. Additionally, the SAAC should continue to offer high quality services for those students who expect them.

A closer look at participants' use of tutoring services reveals that all types of tutoring are used more often in college than in high school. This trend could be explained because the degree of difficulty in college might be greater than that in high school (Donald, 1997). Furthermore, students might be more aware of the academic support services offered in college than those available in high school. Additionally, participants most often used the services at the SAAC (namely tutoring) when they had difficulty with homework or had an upcoming exam/assignment. These students might have sought academic support to ensure that they would do better on their homework or perform better on an exam.

Participants used math tutoring more frequently than writing tutoring and they preferred one-on-one tutoring significantly more than group tutoring. An explanation for this might be that the format of group tutoring can serve a greater number of students and is less structured. While math tutoring is currently offered in a group format and writing tutoring is offered as one-on-one, different formats might reduce the discrepancy between what is preferred and what is offered. Therefore, one option might be to offer one-on-one math tutoring. Another option would be to look at the group interactions taking place during math tutoring and possibly extend these interactions to a writing or other discipline tutorial.

The notion that students who prefer to study alone also prefer one-on-one tutoring and that students who prefer to study with their friends prefer the group tutoring format might have some implications for the physical layout of the SAAC. It might be appropriate to consider providing small, individual study spaces for those students who prefer to study alone or with a one-on-one tutor. Additionally, designated group study rooms could be provided to accommodate those

students who prefer to study and be tutored in a social environment.

Environmental preferences for learning and studying may also lead to some implications. The participants who are influenced by the SAAC's location in a residence hall do not prefer to study in their room, but do prefer to study in their residence hall lounge. Therefore, residence hall administration might want to consider making lounges and other spaces such as classrooms or conference rooms more study-friendly, especially in residence centers that do not house an SAAC. Based on the idea that those students who are motivated to seek academic support are those students who use the SAAC, it might behoove the Center to reach out to those students who might not be inclined to seek academic support when they need it.

The results of the study in regard to person-environment congruence are encouraging. Participants demonstrated a strong preference for learning in a small lecture environment. Consistent with these preferences, it was indicated by the participants that slightly more of their classes were taught in a small lecture environment as compared to larger lecture sizes. Hence, these results show that it is possible to provide classes congruent with participants' preferred learning environments. These results might also imply that participants could choose to use the SAAC because the environment is similar to that of a small lecture.

Further investigation of preferred learning environments results in the examination of other academic support services available on campus. Participants tend to seek help when they need it, yet they do not utilize the other services on campus, such as mentoring programs or the Career Development Center. Conversely, by looking at participants' infrequent use of other academic support services, one might predict that participants would not use the SAAC frequently. However, results show that participants did use the SAAC approximately once a week. Participants' frequent use of the SAAC and not other academic support services could be a result of some aspects of the SAAC's environment. Environmental features could include convenience factors such as drop-in advising, late hours, and the location in the residence hall. Students felt that the late hours of operation at the SAAC influenced their use; this was consistent with their preferred study time being 6 PM - midnight. Since participants use the SAAC more than other academic support services, SAAC staff might want to inform students who use the Center about other services available to them on campus.

In evaluating the open-ended responses intended to measure satisfaction, some interesting conclusions could be drawn. Because participants conveyed favorable opinions regarding the SAAC staff, SAAC administration should make a point to recognize and support the efforts of the tutors, academic advisors and administrative assistants. Comments about the negative aspects of the SAAC also warrant further examination. Since 70% of the responses expressed concern with crowdedness and busyness of the SAAC, Center administration should consider hiring more tutors to meet the high demand for math and writing tutoring services.

Further research in this area would be useful, particularly in some specific areas. First, it would be beneficial to consider the perspective of Center staff, such as tutors, academic advisors, workshop facilitators, and front desk staff in order to gain a broader assessment of student use. Additionally, since the study was only conducted over a specific one-week period, more accurate results of overall use of the Center might be obtained by conducting the study for an extended period of time, such as a semester or academic year. A future study might also examine whether use of the Center is influenced by students' level of academic achievement (as determined by GPA). Finally, because the participants in the sample resided predominately in the residence hall housing the SAAC or a surrounding residence hall, further research might focus on whether those students who live outside the vicinity of the SAAC utilize the services to the same extent or for the same reasons as the participants in the sample.

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