**INTRODUCTION**

In 2004, the University of Virginia’s Office of Institutional Assessment and Studies completed a study to determine why African-American students are less satisfied with the University than white and other race students—both generally and in specific areas, such as the reporting in *The Cavalier Daily* and race relations. After conversations with faculty and administrators, IAS formulated a number of hypotheses from the collected survey data. These hypotheses were thoroughly tested and discussed in the May 2003 report, “Enrolled Undergraduate Student Relations Survey: Final Report of Results.” Copies of the questionnaire and report of results for the Enrolled Undergraduate Student Relations Survey are available at the web at http://www.web.virginia.edu/iaas/reports/year/2003-04/enrolled.htm.

Two hypotheses that were not investigated in that report are examined in this article. The central hypothesis to be tested is that African-American students who participate less in student organizations are less satisfied with their overall UVa experience. Although we had not formulated questions with these hypotheses in mind prior to fielding the survey, there were questions in the survey which could be used to test them. We asked students a series of questions about how they spend their time each week, including questions about time spent participating in student organizations and watching television/playing electronic games. How these questions relate to overall satisfaction with the University is the subject of this edition of UVAssessment.

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**Assessment**

February 2005

**Are African-American Undergraduates Bowling Alone?**

An Examination of Involvement in Student Organizations from the Enrolled Undergraduate Student Relations Survey 2003-2004

**Hypothesis:** African-American students dissatisfied with the University are less involved in student organizations.

African-American students estimated they spend 4.7 hours per week, on average, participating in student organizations. This was roughly equal to white students and students of other races, who estimated spending 4.4 hours per week, on average, participating in student organizations. About 18% of African-Americans reported no participation in student organizations whatsoever, compared to 21% of white and other race students. When asked how many hours they spent serving in a leadership capacity for student organizations, African-Americans reported that they spent more hours, on average (2.6 hours per week), than white/race students (1.8 hours).

When we examined the relationship between overall satisfaction with the University and the number of hours African-American students were involved in student organizations, it became clear that the relationship was not linear. In other words, satisfaction did not increase steadily with the increasing number of hours students dedicated to student organizations. Rather, it was whether the students were involved at all.

African-American students who were involved in student organizations at all were similarly satisfied with the University, ranging from 84% satisfied for those involved only 1-2 hours per week to 91% satisfied for those involved 16-20 hours per week. However, only 68% of those African-American students who were not involved in student organizations reported that they were similarly satisfied with the University (see Fig. 1).

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2 White and other race students are combined for the purposes of this article. Complete results by race can be found in the full report. There were no statistically significant differences between any of the racial groups (white, African-American, Asian-American, Native-American, Hispanic-American and the rest of the group combined) in the reported time spent working for student organizations. Testing by IAS on a variety of survey questions, both from past surveys and the Enrolled Student Survey, has shown that Asian- and Hispanic-American student responses to survey questions are generally (with some exceptions) closer to white student responses than to African-American responses. There are so few Native-Americans at UVa that separate analysis is statistically unreliable.
African-American students who express dissatisfaction with the University overall are, in fact, more likely to not be involved in student organizations at all. Interestingly, only 13% of white/other race students who were not involved in student organizations at all were dissatisfied with the University overall. Non-involvement did not seem to affect the satisfaction of white and other race students with the University.

When asked, “If you had it to do over again, would you choose to attend UVa again?” African-American students who are not involved in student organizations at all are more likely to say “no.” Of African-American students who were not involved in student organizations, 32% said they would not choose UVa again, compared to 14% who were involved. Once again, this pattern did not hold true for white and other race students (see Fig. 2).

How much influence does non-involvement have on satisfaction when controlling for other important influences on satisfaction?

In the final report for the Student Relations Survey, we identified seven statistically significant variables influencing African-American satisfaction with the University. When entered into the multiple regression equation, non-involvement reached a high level of statistical significance, explained a moderate amount of the variance in the final equation, and improved the overall explanatory value of the equation. The effect of non-involvement was negative. In other words, overall satisfaction with the University declined for uninvolved students.

One important qualification to these findings is that correlation cannot be interpreted as causation. It certainly could be the case that instead of non-involvement causing dissatisfaction, dissatisfaction caused non-involvement. It is also possible that non-involvement is both a cause and effect of dissatisfaction. Yet, from the available data, there is no way to determine the direction of causality.

What can be said is that the data from the Student Relations Survey supports the hypothesis that dissatisfied African-Americans are more likely to be completely uninvolved in student organizations. The original hypothesis, that African-American students dissatisfied with the University are less involved in student organizations, requires this modification.

A Strong Gender Effect

An interesting pattern emerges when examining the relationship between involvement and satisfaction by gender. While almost the same percentage of African-American men and women were not involved in student organizations at all (19% for women; 18% for men), the negative effect of non-involvement on satisfaction is significantly greater for African-American women. Forty-two percent of African-American women who were not involved with student organizations at all were dissatisfied with their overall experience at UVa, compared to 23% of African-American men (see Fig. 3).

Why would women who were not involved in student organizations be so much less satisfied than men? One hypothesis is that men are more likely to be student athletes and are heavily involved in intercollegiate sports programs. Intercollegiate sports participation (for African-American men) thus serves a similar purpose as involvement in student organizations for students who are not athletes, in terms

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| Percent of Students Who Would Not Choose UVa Again by Involvement in Student Organizations and Race |
|---|---|---|---|
| Involvement in Student Organizations |
| White & Other Races (n=674) | African-American (n=366) |
| Involved | 7 | 14 |
| Not Involved at all | 11 | 32 |

Appendix A

These variables were, in order of explanatory value: satisfaction with quality of relationships with students, satisfaction with overall quality of education, satisfaction with race relations, satisfaction with quality of relationships with faculty, satisfaction with extra-curricular opportunities, satisfaction with sense of community at UVa, and a self-efficacy scale. The adjusted R square value was .624, meaning that the model explained most of the variance in satisfaction in African-American satisfaction with the University overall. The R square statistic is an indicator of the “goodness of fit” of the model. In other words, how much of the variance in the dependent variable (overall satisfaction) is explained by the independent variables included in the final equation. An r square of 1 would mean that all variance had been explained by the model.

Non-involvement was entered as a dummy variable. Uninvolved students were coded “1” and involved students were coded “0.”

This was particularly impressive because of the strong r square value and the number of highly significant variables in the original equation (without non-involvement included). Out of eight variables in the new equation, non-involvement was the fifth most significant variable. The adjusted R square value improved from .624 (original equation) to .637 (with non-involvement) - a small by noteworthy increase in overall explanatory value of the equation.
of increasing their satisfaction with the University. It is indeed the case that African-American men are far more likely to play an intercollegiate sport (in fall 2004, 4% of African-American women were intercollegiate athletes, compared to 21% of men). We could not test the second part of this hypothesis (that intercollegiate sports participation for African-American men increases their satisfaction with the University) because there were not a sufficient number of student athletes in the sample.6

The Role of Sports Participation

We did ask a question about how much time students spent, on average, “exercising or participating in sports” each week. The first part of the hypothesis—that African-American men reported spending more time each week than African-American women exercising or participating in sports is true for our sample. The average number of hours African-American women reported exercising or participating in sports was 2.7, compared to 7 for men—a very substantial difference.

Secondly, we wanted to know if an increased level of participation in sports and exercise by African-American men accounts for their greater satisfaction than women among those who do not participate in student organizations. To test this, we divided the sample into three groups—those who reported scant participation in sports (less than 3 hours per week), those who reported participating 3-10 hours per week, and those who reported participating more than 10 hours per week. Only 3% of African-American women fell into the latter category, compared to 22% of African-American men (see Fig. 4).

If the gap in satisfaction between involved and uninvolved African-American men and women is eliminated when the control variable level of participation in sports or exercise is added, then the hypothesis would be supported. In fact, the results were remarkable. Men who participated very little in sports (less than 3 hours per week) were dissatisfied at the same level as African-American women (44%).

However, men who participated 3 hours or more per week were much more satisfied (83%)—just as satisfied as those men who participated in student organizations (see Fig. 5).

Thus it appears that the effect of non-involvement in student organizations on satisfaction is not as strong for African-American men because they are participating in sports activities at a much higher rate than African-American women. These sports activities, social and participatory in nature, are likely filling a similar need for the involvement students would have gotten from participating in student organizations. African-American women who do not participate in student organizations (and who are, in general, less involved in sports) may be somewhat more alienated and thus less satisfied with the University overall. Unfortunately, there were not enough cases of uninvolved women who participate in sports more than 2 hours a week to determine if sports participation would improve their satisfaction with the University as well.

(continued on page 4)

6We did make an extra effort to get a sufficient sample of African-American student athletes. Seventy-seven African-American athletes were invited to participate in the survey but only 31 responded. We did extend the field period and send additional emails from Sylvia Terry, Associate Dean of the Office of African-American Affairs and Kathryn Jarvis, Athletic Department Academic Advisor, to athlete non-respondents.
**Effect of Non-involvement on Academic Performance**

Other than being negatively correlated with overall satisfaction with the University, how else does lack of involvement affect students’ college careers? An obvious area of inquiry is academic performance. By merging ISIS data with the survey responses, we are able to look at how these students are performing in terms of their grade point averages. One might expect that uninvolved students, being less satisfied overall and involved in activities not related to academic performance, would not perform as well academically. For African-Americans as a whole, in our sample, this is not supported by the data. Uninvolved African-Americans’ grade point averages did not differ significantly from those African-Americans who were involved in student organizations (2.7 and 2.6 mean GPAs, respectively). Interestingly, uninvolved white and other race students did have slightly lower GPAs than white and other race students who were involved in student organizations (3.0 versus 3.2, respectively). When breaking the results for African-Americans down by gender, the results did not change. African-Americans who were not involved in student organizations, regardless of gender, achieved similar grade point averages to those who were involved.

**Hypothesis:** African-American students who are not participating in student organizations spend more time watching television or playing video or computer games.

One possible consequence of non-involvement in student organizations, and perhaps a degree of alienation or disconnection from the University, might be that students spend more time in solitary pursuits. The question was asked, how many hours per week do you spend, “watching TV, playing video or computer games?” African-Americans reported spending, on average about 6 hours per week on these activities, a bit more than whites and other race students, who spend about 4.7 hours per week.

To test whether non-involvement in student organizations is correlated with an increase in TV watching, we divided the sample into 3 levels of TV watching/electronic game playing—2 hours per week or less, 3-10 hours per week and more than 10 hours per week. Thirty-four percent of African-Americans reported watching/playing 2 hours per week or less, 49% reported 3-10 hours per week, and 17% reported watching/playing more than 10 hours per week (see Fig. 6).

![Figure 6 Percent Who Watch TV/Play Electronic Games by Race](image)

Cross-tabulating this variable with non-involvement reveals a moderate relationship between non-involvement and TV watching/electronic game playing. Fifteen percent of those African-Americans who are involved in student organizations reported watching/playing more than 10 hours a week, compared to 31% of those students who are not involved at all in student organizations. While this does indicate that African-American students who are not involved in student organizations spend more time watching TV/playing games than African-American women, who spend even less time than white/other race students watching TV/playing electronic games (a mean of 4.6 hours per week). This is a moderate but noteworthy difference and carries over when looking at the relationship between involvement and TV watching/electronic game playing.

Only eight percent of African-American women who are involved in student organizations watch TV/play electronic games more than 10 hours per week, compared to 19% who are not involved at all in student organizations. This is not a statistically significant difference, although it is worth noting that only 19 African-American women (10% of the total) reported watching TV/electronic games more than 10 hours per week.

In contrast, 53 African-American men (25% of the total) reported watching TV/play electronic games more than 10 hours per week. Of those African-American men who are involved in student organizations, 21% reported more than 10 hours per week of TV watching/electronic game playing, compared to 44% of those African-American men who are not involved in student organizations (see Fig. 7). This is a moderately strong relationship, meaning that many, indeed almost half, of African-American men who are not involved in student organizations spend a substantial amount of time watching TV/electronic games. So for African-American men, particularly those who spend substantial amounts of time watching TV/playing electronic games, the question is—what is the effect of all this TV watching/electronic game playing?


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*A similar pattern is found for white and other race students. That is, women watch less TV per week (3.6 hrs.) than men (6.2 hrs.).*
Effects of TV watching/game playing on satisfaction with the University and academic performance

While African-American men watch more TV, especially those who are not involved in student organizations, this is not correlated with any dissatisfaction with the University. Men who watch TV/play electronic games less than 11 hours per week or 11 or more hours per week are equally satisfied with the University -- about 84% satisfied. Interestingly, the few African-American women (11 cases) who watch TV 11 or more hours per week are less satisfied — 58% percent satisfied; compared to 81% of African-American women who watch/play less than 11 hours per week (see Fig. 8).

This is probably related to the previous analysis that showed that many of the African-American men who are not involved in student organizations are more involved in sports and this seems to be a substitute for involvement with student organizations. There are not, however, a sufficient number of cases to combine these two analyses. What we can do is see how each variate fits into the final multi-variate regression model predicting satisfaction with the University and whether there are any differences by gender. When adding TV watching as an independent variable to our model predicting satisfaction with the University for African-Americans, the variable is not a significant predictor of satisfaction for either African-American men or women. This means that, when controlling for other influences on satisfaction, TV watching by itself did not explain any of the variation in satisfaction for either African-American men or women.

TV watching did not directly influence satisfaction with the University. Did it have an effect on academic performance? We tested this by looking at the mean cumulative grade point average of those who reported watching varying amounts of TV per week. None of the tests produced any statistically significant difference in the grade point averages. In other words, whether African-American students watched no TV or 20 hours a week, academic performance was similar. We ran these same tests by gender and discovered that, while there were no differences for African-American women, African-American men who reported watching 3 hours or more of TV per week had slightly lower grade point averages than men who watched less than 3 hours per week of TV (2.6 versus 2.8, respectively).

While TV watching/electronic game playing is one way African-American students who are not involved in student organizations are spending their time, it did not have an appreciable effect on either satisfaction with the University or academic performance.

How do African-Americans who are not involved in student organizations spend their time?

For this analysis we looked at the following questions about how students spend their time:

- Participating in student organizations
- Serving in a leadership capacity for a student organization
- Doing community or volunteer service
- Exercising or participating in sports
- Watching TV, playing video or computer games
- Studying/doing homework
- Participating in formal or informal religious activities
- Participating as a member of a fraternity or sorority
- Working for pay
- Partying
- Socializing with friends
- Working for a political party, candidate or political action group
- Other, respondent reported activities

(continued on page 6)
We separated the results by gender because of the gender effects discovered previously. Table 1 lists the results for this analysis. We tested the differences in means for statistical significance by comparing the means of those students who are involved in student organizations and those who are not, within each gender group. In other words, the means for males who did not participate in student organizations are compared to means of males who did participate in student organizations. Mean differences that are statistically significant at the .05 level are denoted by an *.

In examining the differences between involved and uninvolved students, the data indicates that both African-American men and women who are not involved in student organizations spend more time watching TV/playing electronic games—about 2 more hours per week for women and 3 more hours per week for men. Uninvolved men and women also spend less time doing community or volunteer service—less than an hour per week, compared to about 2.5 hours for involved students. The remaining observed differences between involved and uninvolved students are different for each gender.

While uninvolved men spend 2.4 hours more per week exercising or participating in sports, uninvolved women spend 1.5 hours less per week exercising or participating in sports. Uninvolved men spend 2.1 more hours per week working for pay, and 1.5 hours less per week participating as a member of a fraternity. Uninvolved women spend nearly 3 hours less per week studying/doing homework and a bit less time participating in formal or informal religious activities - 1.3 hours versus 2.7 hours.

**Summary and Conclusion**

African-American students who are not involved in student organizations are less satisfied with the University overall and are less likely to say they would choose UVa again. Overall, non-involvement was a significant factor influencing African-American satisfaction with the University, or vise versa. The effect of non-involvement among African-Americans is much stronger for women than for men; African-American men participate at a much higher rate in exercise and sports activities, and this activity seems to act as a substitute for involvement in student organizations.

The implication for policy makers highlighted by this finding is clear—it is important to devote resources to finding ways for African-Americans to become involved in student organizations and activities. This is particularly the case for African-American women and men who do not participate in sports activities.

In examining the question of how uninvolved African-American students spend their time, we discovered that more time is spent watching television/playing electronic games and less time is spent on activities such as studying and volunteering/doing community service work. Once again, gender differences were found. African-American men watched substantially more TV than women, but the effect of additional TV watching/electronic game playing on satisfaction with the University was only true for women.

Neither the lack of involvement in student organizations, nor the additional TV watching/electronic game playing seemed to have much of an effect on academic performance, at least in terms of grade point averages. Nevertheless, enriching extracurricular activities, such as participating in student organizations, is one ingredient to getting the most out of a college career. The fact that about one fifth of African-American students, indeed one fifth of students of other races as well, are not participating in student organizations, should be of concern to University administrators and faculty. That African-Americans who are uninvolved with student organizations are less satisfied with their University experience, and spending more time watching television, underscores the importance of establishing policies that will help students get involved in student organizations. This is particularly important for African-American students.---

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Mean Hours Per Week: African-American Participation in Various Activities</th>
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<td></td>
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<tr>
<td>Participating in student organizations</td>
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<td>Doing community or volunteer service</td>
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<tr>
<td>Exercising or participating in sports</td>
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<td>Participating as a member of a fraternity or sorority</td>
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<td>Other, respondent reported activities</td>
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*Indicates a statistically significant difference at the .05 level between involved and uninvolved students within each gender.