The Benefits of Changing NCAA Division I Levels: A CVM Measurement

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Abstract: The authors surveyed alumni, faculty, staff, and students of Eastern Kentucky University (EKU) in an attempt to measure the stakeholders' benefits of the school changing classifications in NCAA membership from FCS up to FBS. Using the contingent valuation method, these intangible benefits are measured for each group. It is determined that the most-generous reading of these benefits would add up to almost $8 million, but that the benefits are likely quite a bit lower. Because of EKU's size and history, this potentially gives an upper bound to these benefits for any school.

Introduction

In 2015, the Sun Belt Conference was looking to expand. In part, this would allow it to have a conference championship game in football, which, it was hoped, would bring in more money to the conference (Wolken, 2015). Eastern Kentucky University (EKU) was one of the schools under consideration to be one of the new members. EKU has a long, successful history in athletics, winning NCAA titles in football (1979 and 1982 in what was then Division I-AA), and the school applied to become a Sun Belt member. It then hosted a delegation from the conference and held forums to convince internal stakeholders of the advantages from the move to the new conference. More importantly, EKU continued a process of improving its position for a move (Brown, 2015). Renovations on existing stadiums were begun. Athletic salaries were increased. The overall athletic budget expenditures increased by over $1.6 million from 2012 to 2015, an increase of almost 12.5% (*USA Today*, 2017).

The reason EKU would want a change to the Sun Belt from its current conference (the Ohio Valley Conference) is that it would be a step up in the collegiate athletic world. Both conferences play in the NCAA's Division I, the highest division. However, the Sun Belt is a Football Bowl Subdivision (FBS) conference, whereas the Ohio Valley is a Football Championship Subdivision (FCS) conference, and FBS is a step above FCS within Division I. This distinction applies mainly to the sport of football, but it makes for a large difference in conference revenues and public opinion.

In the end, EKU did not receive a bid to join the Sun Belt Conference, which instead opted for Coastal Carolina University. This put the move to FBS on a back-burner because a school generally needs an invitation from an existing FBS conference to move up. Other budgetary issues have further complicated a move to FBS, but EKU has positioned itself better for the next time an FBS conference is looking for a new member.

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This decision by EKU to consider moving up in athletics has not been without controversy, of course. EKU is primarily an academic institution. Its state appropriations have been shrinking, with changes on the horizon likely to decrease appropriations even more. Other areas of the university have faced budget cuts, including program closures (Blackford, 2016). It does not sit well with many to see academic programs cut, benefits packages decreased, and academic departmental budgets decreased while the athletics department increases its budget.

Why would EKU (or any FCS school) want to move to FBS? Economists have examined many of the arguments in favor of having an athletics program as part of a university. While there is some support for many of the arguments, the overall results seem to show athletics has a small effect and, even then, often only for successful football programs (see Getz and Siegfried, 2010, for a summary).

It seems fairly clear that most universities do not directly benefit financially from their athletic departments. Though accounting practices obscure the actual net revenue of schools (Goff, 2000), very few schools claim to make money directly from intercollegiate athletics. In 2014-15, only twelve out of 231 Division 1 schools in the *USA TODAY* database did not subsidize their athletics departments in some way (*USA Today*, 2017). These subsidies can come from the institution directly or from separate fees charged to students (Matheson *et al*., 2012) Yes, there are huge payoffs from having successful programs, particularly in football. These gains in revenue, however, often offset increases in spending elsewhere within athletics. Orszag and Orszag (2005) found that every athletic department whose school switched from Division II to Division I from 1994-2002 saw a decrease in net revenue when the subsidies were not included. However, Hoffer and Pincin (2015) found that moving from FCS to FBS in football, in particular, might increase net revenue.

A successful athletics program might help the university by increasing applications to the university, known as “the Flutie Effect” after Boston College saw applications grow tremendously when Doug Flutie won the Heisman Trophy as the most outstanding college football player in 1984. This increase in applications can help the university in different ways. For one, the university might simply admit more students and increase revenue from tuition, fees, and room and board. This often seems to be true (Mixon and Ressler, 1995; Smith, 2012). Alternatively, the university can keep admission numbers the same and thereby decrease its acceptance rate and increase average SAT scores (McCormick and Tinsley, 1987; Zoda, 2012). This will help it move up the various rankings of schools, making it more prestigious. Apparently, universities tend to do some of both (Pope and Pope, 2009).

Unfortunately, this increase in applications is relatively short-lived (Pope and Pope, 2009), might primarily be a result of football success (Tucker and Amato, 1993 and 2006), and is more pronounced in private schools (Pope and Pope, 2009). Also, several studies define “successful” as playing at a level much higher than a school moving from FCS to FBS could reasonably expect. For example, Pope and Pope (2009) use ranking in the top 20 football programs as one of their measures of athletic success. This is not likely for a school which is just moving into FBS.

For Segura and Willner (2018), it appears that participating in an end-of-year bowl game is important for generating the results the university is after. Also, there are variations within the FBS, and membership in the top few conferences might be what is actually important (Tucker and Amato, 2006).

It is also possible that intercollegiate athletics will increase alumni donations. This has been studied extensively (see, e.g., Baade and Sundberg, 1996; Grimes and Chressanthis, 1994; and Harrison et al., 1995). These studies do not agree, but it seems that there might be some increase in donations when athletic programs are successful. Also, former athletes tend to give more (Monks, 2003). However, the evidence is not overwhelming. In addition, some of the same concerns noted above related to applications arise here. There are also questions about how much donations earmarked for athletics actually substitute for donations which would otherwise be used for academics (Matheson *et al.*, 2012).

For public universities, playing football at the upper levels can increase government allocations (Humphreys, 2006; Alexander and Kern, 2010). Moving from FCS to FBS, in particular, has been shown to increase allocations from the state (Jones, 2015).

There are other benefits schools claim from athletics. For example, having successful intercollegiate athletics might help with diversity because of an increase in the proportion of males (Getz and Siegfried, 2012), racial minorities (Pugh, 2013), and geographically diverse students (Mixon and Ressler, 1995). Also, the advertising effects of successful athletic programs can increase a school's ranking on subjective measures (Trenkamp, 2009). Surprisingly, it seems the geographic area around the school does not benefit from athletics in spite of the increase in people coming to campus for sports events (Baade, *et al*., 2008).

For EKU, these results are particularly important. EKU subsidizes its athletics department. EKU is a public school which could not expect to be ranked among the top 20 FBS schools in football. The Commonwealth of Kentucky has moved towards performance-based funding (SB153, 2017), so it is not clear that appropriations would increase. In a forum for the campus community where EKU made the case for considering a move to an FBS conference (EKU, 2014a), the school explicitly expressed a desire to raise money from a move up and to increase the university's image. The school implicitly expressed an expectation that it could increase enrollment and would keep up with others who have made the move. That move is expensive, however, and the added costs of moving from FCS to FBS might not outweigh the traditional benefits. However, there are additional potential benefits which have not been measured.

One of the main arguments in favor of intercollegiate athletics that has gotten little academic attention is that athletics yields intangible benefits like an increase in school spirit and camaraderie. This public good or externality argument is plagued with measurement problems, however. School spirit is not traded in a market, and so a measure of the value of school spirit is made much more difficult.

Weight *et al.* (2019) have attempted to look at the psychic income of residents of Chapel Hill, NC, received from the University of North Carolina's athletics department and found significant predictors of who would benefit from athletics. They found that those who received more psychic income from collegiate athletics tended to be single, have a higher education level, report a higher interest in sports, and have a stronger believe in the economic impact of those athletics. Dixon *et al.* (2012) attempted to measure the consumer surplus of fans and found that spending on athletics might indeed be worthwhile. However, both of these studies were looking at much larger universities, and both looked at the benefits of athletics as a whole. The question here is about the marginal benefit of a change in NCAA status as it compares to the marginal cost. One work which looked explicitly at the move from FCS to FBS in football (Barnhill *et al*., 2016) looked at students' beliefs about the costs and the benefits of the transition and saw how that affected whether or not the students supported such a move.

One tool which has been developed to try to measure these intangible benefits is the contingent valuation method (CVM). CVM consists generally of asking stakeholders for a willingness to pay for the non-traded item in a hypothetical, but plausible, situation. This procedure has been used in examining sports economics questions such as the benefits of a professional sports team (Johnson, *et al*., 2001; Johnson, *et al*., 2007; Owen, 2006; Fenn and Crooker, 2009), an athletic stadium or arena (Groothis, Johnson, and Whitehead, 2004; Harter, 2015), or hosting the Olympic games (Wicker *et al*., 2015). Johnson and Whitehead (2000) specifically examined an NCAA facility. None of these projects, however, looked at the external value of a change in the NCAA status of the athletics program.

While the interpretation of CVM gives a range of possible valuations to combat nonresponse bias (Mitchell and Carson, 1989), the maximum value is perhaps the most important here. Survey responses are responses to hypothetical situations, so the responses might not be accurate. In fact, this hypothetical bias seems to be that respondents tend to overstate the value of the item (Hausman, 2012), but even then, the maximum value from the item is often less than the public money spent (Johnson and Whitehead, 2012). So, the question becomes: would even the most-generous reading of the responses support the public good argument to justify EKU's increasing athletic spending to the point necessary to move to FBS?

EKU offers a particular case that is, perhaps, most likely to benefit from the move. It is a successful FCS program and is already on the cusp of moving up. This is not a small FCS school, but one which is clearly "close." Certainly EKU itself thinks so since it applied for membership in the Sun Belt conference (Brown, 2015). Perhaps this school can do better than an average FCS school would. This project is an attempt to examine that issue by trying to measure the intangible benefits to EKU's stakeholders and can help determine an upper bound of these external benefits.

Methodology (or "Survey")

In an effort to measure the willingness-to-pay (WTP) of Eastern Kentucky's stakeholders to a move up in NCAA status, a CVM survey was conducted. The survey was designed for EKU students, faculty, staff, and alumni, using the online survey software, SurveyMonkey.

The survey began by pointing to the athletics construction on campus and indicating that EKU was open to considering a move from the Football Championship Subdivision (FCS) to a conference in the Football Bowl Subdivision (FBS). The respondents were told that this move would be "a step up in terms of prestige, publicity, and money. However, it is also more expensive." The survey then asked about the respondents' interest in and engagement with sports in general and EKU athletics in particular.

Then, a series of CVM questions were asked. These asked if the respondent would be willing to pay a certain amount for a move up to the FBS. The amount was started at $1 per year and gradually increased to $100 per year ($1, $5, $10, $15, $20, $25, $35, $50, $75, and $100). Once the respondent did not indicated a willingness to pay that amount, the survey would skip the remaining CVM questions. If the respondent was unwilling to pay any amount for a move to FBS, an additional question asked why not in an effort to gauge if the answer was a true unwillingness or a "protest" vote in spite of an actual benefit from the move.

Because the various stakeholders would pay for the move in different ways, the CVM questions were different, depending on the respondent's status. For example, the students were asked about their willingness to pay added student fees, faculty and staff were asked about a voluntary deduction from their paychecks, and alumni were asked about a donation. The alumni were asked two additional questions: if they had ever donated to EKU and if they had ever donated to EKU Athletics.

The final part of the survey asked the demographic questions and other items of interest, such as if the respondent was ever an intercollegiate athlete.

A link to the survey was then e-mailed to the stakeholders. The EKU Office of Alumni Engagement e-mailed the survey to its list in late November, 2018, with a reminder in mid-December. The EKU student and faculty/staff e-mail distribution lists were used to send a link to the survey directly from the authors in late November.

Overall, 3,422 responded to the survey, but many did not complete it. In the end, we received 2,884 responses with a measurable WTP (631 students, 365 faculty, 328 staff, and 1,560 alumni). The responses are summarized in Table 1.

(Insert Table 1 here)

Data

From the data, we can see that respondents were 37% female, 71% Kentucky residents, and 93% White. Around 47% had been graduated from graduate school. The average age was just over 41 years old, with an average family income of over $90,000. Only 11% were former intercollegiate athletes, and 57% attended no football games. However, 64% thought athletics in general, and 52% thought EKU sports in particular were important or very important.

For the willingness-to-pay questions, 45% expressed a willingness to pay some amount to help EKU move from FCS to FBS. When looking more closely at the different stakeholders, students were most likely to be willing to pay anything (55%), followed by alumni (50%), staff (35%), and faculty (19%).

Empirical Model and Results

In order to estimate the willingness-to-pay (WTP) for the various EKU stakeholders, the data were broken into four separate groups: alumni, faculty, staff, and students. These groups are sufficiently different that a single WTP is less meaningful than an estimate for each group separately. For each, the WTP is predicted using a model based on:

(1) WTP = f(ATHIMPORT, EKUIMPORT, FBATTEND, ATTENDMORE, PASTDONATE, KYRESIDENT, FEMALE, MIDPTAGE, WHITE, EDUCATION, MIDPTINCOME, ATHLETE),

where ATHIMPORT and EKUIMPORT are measures of the respondent's beliefs about the importance of athletics in general and EKU athletics in particular. FBATTEND is a measure of attendance at football games. KYRESIDENT takes the value of 1 if the respondent is a resident of Kentucky. Similarly, FEMALE takes the value of 1 if the respondent is a female, and WHITE is 1 if the respondent's race is white. MIDPTAGE and MIDPTINCOME use the midpoints of the ranges for age and income from the survey. EDUCATION is a measure of the level of education of the respondent. ATHLETE is a dummy variable with value of 1 if the respondent is a current or former intercollegiate athlete. ATTENDMORE is 1 if the respondent indicated a desire to attend more football games if EKU does move up to the FBS, and PASTDONATION is 1 if the respondent has donated to EKU in the past.

Some variables are not relevant for some of the stakeholders. PASTDONATION and EDUCATION, for example, are not likely to be relevant for students. Also, there is strong correlation among some of the variables. So, several variables were omitted, depending on the stakeholder in question. The following four models remained:

(2) WTPALUM = f(ATHIMPORT, FBATTEND, ATTENDMORE, PASTDONATE, KYRESIDENT, FEMALE, MIDPTAGE, WHITE, EDUCATION, MIDPTINCOME, ATHLETE)

for the alumni WTP,

(3) WTPFACULTY = f(ATHIMPORT, FBATTEND, ATTENDMORE, FEMALE, MIDPTAGE, WHITE, MIDPTINCOME, ATHLETE)

for the faculty WTP,

(4) WTPSTAFF = f(ATHIMPORT, FBATTEND, ATTENDMORE, FEMALE, MIDPTAGE, WHITE, EDUCATION, MIDPTINCOME)

for the staff WTP, and

(5) WTPSTUDENT = f(ATHIMPORT, FBATTEND, ATTENDMORE, FEMALE, MIDPTAGE, WHITE, MIDPTINCOME, ATHLETE)

for the student WTP.

WTP should increase with an increase in the importance of athletics, attendance at football games, desire to go to potential FBS games, and income. Alumni who have donated to EKU in the past might be expected to be more willing to pay for moving to FBS. It is not clear how gender, age, race, or education level would affect the WTP. Similarly, Kentucky residents and former intercollegiate athletes would not necessarily be expected to have a higher WTP.

Because the possible values for WTP cannot be less than zero, the model is evaluated using Tobit (see Johnson and Whitehead, 2000). The results are presented in Tables 2 through 5. In general, the more important the respondent views sports, the more EKU football games attended, and the more likely to increase attendance if EKU should move to FBS, then the higher WTP is for moving to FBS. These are significant at the 5% level for all four groups. On the other hand, being female is negatively related to the WTP, though significant for alumni and students only. Interestingly, age is significant at the 5% level for faculty and students, but the coefficient has different signs – negative for faculty and positive for students. It is negative and significant at the 10% level for staff. Similarly, being an intercollegiate athlete is significant only for alumni and faculty, and is positive for alumni, but negative for faculty. Race and education do not seem to be statistically significant. A higher family income is positively related to WTP and significant for alumni and students (at the 5% level) and staff (at the 10%) level. The marginal value is very small, however, for all three groups. For alumni, being a Kentucky resident is negatively related, and having donated to EKU in the past is positively related. Both are statistically significant.

(Insert Tables 2-5 here)

With these results, marginal effects can be used to predict the WTP. For alumni, the expected WTP is $53.24. The expected WTP is $30.21 for faculty, $42.21 for staff, and $39.99 for students. This is not surprising. Alumni have an interest and the money, and so would be anticipated to have the highest WTP. Faculty would have the lowest. Students would be greatly affected by the move to FBS, particularly since that group has a higher response rate from intercollegiate athletes than the student population overall. The staff category is very broad. Some staff would clearly benefit from being in the FBS, but others would not. A head coach is likely to have a different outlook from a custodian.

If the samples are representative of the underlying populations, then the overall WTP can be found by multiplying the expected willingness to pay by the number of people in each group and then summing across groups. The number of people in each group is not always clear, however. According to IPEDS data, there were 15,815 students and 1,099 faculty when the

survey was administered. The number of staff was not reported, however. In 2015, EKU claimed having 1,195 faculty and 2,188 staff (EKU, 2015). Without knowing if that number increased or decreased in the intervening three years, 2,300 seems like a comfortably large estimate. For alumni, the number is always changing. The EKU Alumni Office estimated that, as of March 2020, there were approximately 116,892 living alumni. Using 117,000 as a reasonable estimate, the total WTP would be $6,229,049 for alumni, $33,204 for faculty, $97,073 for staff, and $632,509 for students. This gives an overall total WTP of $6,991,835.

Of course, this likely overstates the benefits to EKU stakeholders. Besides using generous estimates of the numbers of persons in the different categories, and besides knowing that these types of surveys often elicit responses which are higher than the true value (Hausman, 2012), there is also the issue with non-response bias. Following Mitchell and Carson (1989), a lower bound for the WTP can be found if none of the non-respondents placed any value on moving to the FBS. In other words, given that the entire population was solicited to respond, multiplying the expected WTP by the number of respondents in each category gives an estimate of the lowest possible total WTP in that category. So, the minimum WTP would be $63,568 for alumni, $8,127 for faculty, $11,142 for staff, and $19,477 for students. Total minimum overall WTP would then be $102,315.

Many respondents gave a WTP of $0, but it is possible that the true WTP is larger. For example, faculty who are upset at program closures in the university might claim no WTP even though they might actually enjoy having EKU in a higher NCAA subdivision. Consequently, a process used by Owen (2006) is followed where these “protestors” are eliminated from the regression. Respondents who were not willing to pay $1 to move up to FBS were asked why they would not be willing to pay. If their unwillingness to pay was due to a belief that asking them to pay would be “unfair,” as one example, then it is possible that they were simply protesting. If, however, they felt that EKU would not benefit from moving to FBS, then it was assumed that their WTP of $0 was genuine. Using this process, up to 317 responses might have been “protests.” If true for all of them, the maximum WTP would increase to $7,074,276.

In addition, the wording of the survey specifically used the word, “semester,” for the students when it also specifically mentioned a yearly payment for the other groups. Consequently, the student responses are potentially half of the true WTP. This would mean that the most-generous reading of the responses would be a total WTP of $7,729,685.

Conclusion

This project indicates that the most-generous reading of the data gives an upper limit to the benefits for a university’s stakeholders from moving up in the NCAA from FCS to FBS that rounds up to $8 million annually. Of course, it is also possible that the numbers were much lower. In 2018, the last season before the survey was administered, EKU’s home football attendance averaged just under 7,300 per game (EKU, 2019). In 2014, the most recent time EKU hosted a football playoff game, that game’s attendance was 1,941 (EKU, 2014b). These numbers fall far short of the attendance requirement for NCAA FBS membership and seem to argue that actual interest in EKU sports is lower than the respondents claim.

In addition, it is noteworthy that the vast majority (over 80%) of that benefit accrues to alumni. A move from FCS to FBS necessitates a large increase in expenses. It is expected that the university's Athletic Department would also see a large increase in revenue. EKU's own presentation of why it wanted to move up listed over $1 million more in conference revenue sharing that it could receive. It also listed more lucrative guarantee games as a likelihood. However, in another place of the same presentation, a permanent increase of over $2.5 million in expenses was enumerated (EKU, 2014a). When Georgia Southern University was considering a similar move in 2009, it estimated needing an increase of $5.1 million in revenue beyond alumni giving in order to balance its athletics budget (Georgia Southern University, 2009). If, as Orszag and Orszag (2005) found for moving from Division II to Division I, the university's net revenue decreases, then the university would want to actually collect some of that benefit to pay for the move. A university has mechanisms it can use to collect from students or from employees, but it is much more difficult to avoid a free-rider problem with alumni.

This paper looks only at the benefits of a move up in the NCAA from FCS to FBS, but not at the benefits of athletics overall. Future research might be useful to see if these stakeholders are receiving a return in line with what they are already paying to subsidize athletics. In 2015, EKU subsidized almost 74% of its athletics budget (Carpenter et al., 2016). Less than $4 million of the over $14 million in expenses was revenue generated by Athletics. Since this $4 million already includes alumni donations (*USA Today*, 2017), that indicates a substantial benefit to the other stakeholders if athletics is justifiable.

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Table 1

Variable Definitions and Descriptive Statistics

Variable	Description	Obs	Mean	Std. Dev.	Min	Max
ATHIMPORT	Athletics important (Likert scale)	3392	3.529186	1.458874	1	5
EKUIMPORT	EKU athletics important	3390	3.225369	1.381902	1	5
ATHENGAGE	Engaged with athletics (1: "never", to 4: "frequently")	3404	3.267039	0.9554062	1	4
EKUENGAGE	Engaged with EKU athletics	3394	2.643783	1.046	1	4
FBATTEND	Home football attendance	3357	1.686625	0.9461561	1	4
ATTENDMORE	1 if will attend more in FBS	3373	0.359917		0	1
PASTDONATE	1 if donated to EKU in past	1714	0.7310385		0	1
ATHDONATE	1 if donated to EKU athletics	1692	0.2050827		0	1
KYRESIDENT	1 if Kentucky resident	3214	0.7115744		0	1
MADCO	1 if Madison County resident	3192	0.3082707		0	1
FEMALE	1 if female	3083	0.3668505		0	1
MIDPTAGE	Age using midpoint of options	3118	41.42559	13.47446	9	55
WHITE	1 if race is white	2975	0.9341176		0	1
EDUCATION	Education level	3170	3.774763	1.314432	0	5
MIDPTINC	Income using midpoint of options	2771	90912.13	43192.13	10000	150000
ATHLETE	1 if intercollegiate athlete	3175	0.113386		0	1
ALUMWTP	MaxWTP if alumni	1560	21.91731	36.11032	0	100
STUDWTP	Max WTP if student	631	19.60222	32.85101	0	100
FACWTP	Max WTP if faculty	365	6.331507	20.963	0	100
STAFFWTP	Max WTP if staff	328	13.56098	30.56195	0	100
OVERALLWTP	Max WTP	2884	18.48789	33.62262	0	100

Table 2
Determinants of Alumni WTP

Variable	Coef.	Std. Err.	P>|t|
ATHIMPORT**	10.86891	1.867096	0.000
FBATTEND**	24.28457	3.13925	0.000
ATTENDMORE**	67.32763	5.56289	0.000
PASTDONATE**	36.66742	6.286306	0.000
KYRESIDENT**	-17.7259	5.296876	0.001
FEMALE**	-16.1421	5.731543	0.005
MIDPTAGE	-0.20291	0.246353	0.410
WHITE	1.945597	9.948475	0.845
EDUCATION	0.242799	2.640991	0.927
MIDPTINCOME**	0.000281	0.000065	0.000
ATHLETE**	15.46587	6.987895	0.027
_cons	-147.669	20.71874	0.000

n=1194

** - significant at 5% level

* - significant at 10% level

Table 3
Determinants of Faculty WTP

Variable	Coef.	Std. Err.	P>|t|
ATHIMPORT**	12.71567	4.977315	0.011
FBATTEND**	32.08676	7.052481	0.000
ATTENDMORE**	53.65306	18.84867	0.005
FEMALE	-3.483201	12.53135	0.781
MIDPTAGE**	-2.010397	0.7152649	0.005
WHITE	-4.656109	24.34165	0.848
MIDPTINCOME	8.49E-06	0.000178	0.962
ATHLETE**	-159.2379	69.1318	0.022
_cons	-60.69795	43.50137	0.164

n=269

** - significant at 5% level

* - significant at 10% level

Table 4
Determinants of Staff WTP

Variable	Coef.	Std. Err.	P>|t|
ATHIMPORT**	15.27675	4.201997	0.000
FBATTEND**	20.7256	4.896141	0.000
ATTENMORE**	41.24082	11.24808	0.000
FEMALE	-3.469252	10.45835	0.740
MIDPTAGE*	-1.057505	0.5695557	0.064
WHITE	-15.4843	19.06338	0.417
EDUCATION	5.234233	4.887695	0.285
MIDPTINCOME*	0.0002727	0.0001434	0.058
_cons	-115.1279	38.92465	0.003

n=264

** - significant at 5% level

* - significant at 10% level

Table 5
Determinants of Student WTP

Variable	Coef.	Std. Err.	P>|t|
ATHIMPORT**	12.2331	2.20767	0.000
FBATTEND**	11.87238	2.947354	0.000
ATTENDMORE**	31.56273	6.022847	0.000
FEMALE**	-15.1996	5.438323	0.005
MIDPTAGE**	0.8270512	0.2777856	0.003
WHITE	-3.710998	9.644932	0.701
MIDPTINCOME**	0.0001869	0.0000577	0.001
ATHLETE	2.815532	7.777122	0.717
_cons	-103.43	17.28608	0.000

n=487

** - significant at 5% level

* - significant at 10% level