Investigating differences between female and male athletic donors: A comparative study

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The purpose of the study was to identify differences between male and female donors of athletic programmes in order to improve fundraising effectiveness. Simple random techniques were used to gather data for the study.

The total sample size was 387 from which 115 were female and 272 were male donors of the athletic programmes of a large eastern state university.

The classification with discriminant analysis results showed that motives (priority seating and professional contacts), annual contribution, personal and household income, attendance of sport events and years of sport experience significantly discriminated between female and male athletic donors.

The athletic fundraising practical implications are explored.

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Introduction
Charitable contributions constitute one of the main sources of funds for the non-profit organizations such as educational institutions, religious organizations and health institutions, environmental and cultural organizations.

Giving to charities is increasing gradually in the United States. Americans donated to charities $116 billion in 1995, almost 2% of their personal income while decedents left $9.8 billion on bequests (Clotfelter, 1997). In 2003, individuals, estates, foundations and corporations gave $240.72 billion to charitable causes, an increase of 2.8% ($234.09 billion) over 2002 (American Association of Fundraising Counsel 2004).

Similarly, giving to educational institutions has increased over the years. In 1993, educational institutions was the third most funded sector after religious organizations (57.5%) and human services (9.4%), and received 8.9% of the total household contributions (Hodgkinson, 1996). In 2000, annual giving to higher education institutions reached $19.5 billion (Ehrenberg and Smith, 2003). Research universities received on average almost $76 million each in 2000–2001. Alumni contributed $6.8 billion to colleges and universities during the same period (Marr et al., 2005). According to the 2004 Voluntary Support Of Education Report, contributions to colleges and universities in the United States raised to $24.4 billion (Council for Aid to Education, 2004).
Donation behaviour has been explained by several approaches such as the charitable, the econometric and the marketing. The first school of thought suggests that donations are the result of altruism and philanthropic motives (Brakeley, 1980; Blankey, 2004). The econometric models state that giving is a function of several variables such as income, frequency of messages for the public good and tax deductions (Okunade, 1994; Baade and Sunberg, 1996; Clotfelter, 1997; Ehrenberg and Smith, 2003; Tucker, 2004). The marketing approach is based on consumer behaviour and exchange theories. Giving is considered as a buyer–seller relationship between donors and non profit organizations engaging in exchange activities (Kotler, 1975; Duke, 1986; Guy and Patton, 1989; Tsiotsoou, 1998; Sargeant, 1999).

According to Giving USA 2003, 76.3% of total contributions are made by individuals whereas 48.8% of giving to educational institutions came directly from individual donors (alumni and non alumni) in 2004 (Council for Aid to Education, 2004). From the above figures, it becomes apparent that personal giving plays a substantial role in total giving. Almost half of the donations made to education come from individual donors. Donors have attracted the interest of several researchers especially the last two decades due to the important role they play in fundraising.

Research on donors of educational institutions has been mainly focused on demographic variables such as income, education, age, residency, marital status, religion and motives. One of the main goals of these studies was to collect information that could be useful in identifying prospective donors and improve donor cultivation strategies.

Athletic fundraising presents the greatest percentage increase in universities the last few decades, (McGinnis, 1980; Waddell, 1992). Demographics and motives for donation have been frequently studied to gain better understanding of how and why some people make donations to intercollegiate athletic programmes. Webb (1989) and Hammersmith (1985) presented the profile of intercollegiate athletic donors. Donors in athletics are married males from 40–60 years old, they are engaged in a profession or business, they are residents of the state, and they live within 200 miles of the campus. They are not yet retired, and over 65 percent of them have incomes exceeding $40 000 per year. More men (96%) give to intercollegiate athletics than women. Prominent women and successful women alumni give support more readily to women’s sport programmes. Donors prefer that their donations go to the major revenue producing sports (football, men’s basketball, baseball and wrestling), and football is the number one event that donors prefer. Both alumni and non-alumni donors at all levels of contribution exhibit a greater interest in football than any other athletic programme by frequently attending football games and by purchasing season football tickets. Finally, small to medium size donations is the most popular and generates the most money in cash (Kern, 1983).

The athletic fundraising literature focuses on issues such as the role of demographics, motives and winning records as related to athletic giving. The relationship between the success of the football and/or basketball team and athletic boosters contributions has been studied extensively (Coughlin and Erekson, 1984; Staurowsky, 2004; Tucker, 2004).

However, studies on female athletic donors and how or if they differ from male athletic donors are limited. The studies on female athletic donors focus on their profile using as main variables demographics and motives (Staurowsky, 1996; Verner, 1996). No much data is available and more research needs to be conducted to better understand female athletic donors.

The purpose of this study was to identify differences between men and women who donate to university athletic programmes in an effort to determine cultivation strategies, organize sound campaigns and improve fundraising effectiveness. This study draws mainly from the marketing and fundraising literature and combines demographics and motives with variables that have not been used often in other studies such as sport experience, attendance of sport events, sport involvement to gain a better
understanding of male and female athletic donors.

This paper is organized as follows. First, the review of related literature that provided the theoretical framework and assisted in developing the hypotheses of the study is presented. Then, the methodology and the results are reported followed by the discussion and implications section. Finally, the paper concludes with the limitations of the study and future research recommendations.

Theoretical framework

Women versus men donors

Women are becoming an important source of funds because more and more are entering into the labour market and their earnings are increasing over the years. In 1995, 1.4 million working women earned more than $74 000 annually. However, according to the United States Bureau of Labor Statistics, women earned 62% of what men earned in 1979, 73.8% in 1996 (Capek, 2001), 76.6% in 2002, and 75.5% in 2003 (USA Today, 2004). The income gap is highest among women over 55 years old. It reaches 65% whereas the gap is lowest for younger women. Women 26 to 33 years old earn 98% of what men earn. In 1996, women owned 8 million businesses in the United States, generated over $2.28 trillion in sales and employed over 18.5 million people (Capek, 2001). According to the Census Bureau annual report, the median income for men working full time in 2003 was $40 668 while the median income for women working full time was $30 724 (USA Today, 2004).

According to a survey contacted in 1999 among women entrepreneurs whose companies generate annual revenues of $15 million, and women who manage companies with annual revenues of more than $100 million, 95% of these women donated money and 73% gave time to charitable organizations. Furthermore, 27% of women whose net worth was more than $50 million reported that as philanthropists, they were not taken as seriously as men donors (The Women’s Fund, 2004). Another study contacted in 2000 by Merril Lynch and the National Foundation for Women Business Owners reported that 50% of women with assets of $1 million or more donate at least $10 000 per year to philanthropic causes whereas only 40% of men with the same assets made equivalent donations (The Women’s Fund, 2004).

Nonprofit organizations need to realize that women have the resources to contribute and they should not rely on the myth that women are not capable and do not have the capacity to give. Women have become a significant economic force and should be taken seriously by fundraisers. A study conducted in the State of Michigan in 2003 revealed that the number of women donors increased over the years and exceeded that of men. In 2003, the number of women (83.1%) making contributions exceeded the number of men (75.1%). This gender gap in giving was 0.5 points in 2001 and 5.3 points in 2002 (Michigan Giving and Volunteering, 2003).

Recently, several fundraising campaigns are created and launched especially for women donors. The American Heart Association created the ‘Go Red for Women’ and raised more than $10 million in 2004 whereas the ‘Women in Medicine’ annual lunch organized by Children’s Hospital Boston in 2004 attracted more than 400 women that made gifts larger than $100 000 (The Chronicle of Philanthropy, 2004).

Fundraisers of colleges and universities need to identify the needs and motives of female donor to gain a better understanding of their donation behaviour. Webb (1989) summarized the findings of researchers such as Critz, Mills, Holmes and Halsey who studied donors of educational institutions. He found that women usually make numerous small gifts rather than a few substantial ones. Females give a higher percentage of their income than males. Both mothers and fathers become more active in fundraising campaigns after their universities developed programmes that actively involved the parents. Self-esteem for male donors is greater than for female donors.

With regard to motivation, it seems that women donors are motivated by different
factors than men donors. Wealthy women are less motivated by tax and estate laws to give to charity than are wealthy men, and more inspired by strong feelings about a cause (The Chronicle of Philanthropy, 2001). The motive of altruism is greater for female donors than for male donors (Webb, 1989). Women donate to make a personal impact, to make a difference, and offer time and money whereas men give for recognition, benefits, networking, tax purposes and business reasons (Sublett and Stone, 1992). Furthermore, women donors are more task-oriented (curiosity, involvement, and commitment) whilst men donors are ego-oriented (power, self-esteem and material benefits) (Parkhouse et al., 1997).

An interesting topic on women’s donation behaviour is the causes women prefer to make contributions. Women are more likely to give for programmes and people; they favour the humanities, religious causes, health sciences, and the fine arts (Webb, 1989; Capek, 2001). However, women avoid donating to women’s organizations. According to Giving USA 1997, women donors did not make their contributions of a million dollars or more to help women’s organizations. They choose less threatening and controversial causes than women’s organizations (Capek, 2001).

Another debated issue is how similar or different are female donors from male donors. Capek (2001) has argued that women donors do not differ significantly from men donors. Controlling for variables such as age, income level, number of dependents, secure pension and health, few differences seem to exist between men and women donors. She states that only a few sources of reliable data are available that accurately present women’s donation behaviour or differences between the two sexes. She attributes this phenomenon to misinterpretations of survey data, to gender stereotyping and inappropriate generalizations of unpublished works and case studies. She presents survey data and challenges the conclusions drawn regarding the differences between married male and female donors. Moreover, she points that in non-married households, donation patterns are only slightly different between men and women. Finally, she concludes that gender is not a reliable predictor of giving behaviour and it does not account significantly for the differences among donors. Her argument has been supported by Okunade’s findings where no significant differences between men and women donors were found (1994).

Gender differences in donation behaviour need to be further investigated by taking into account not just demographics but other factors too.

Income
A debated issue in donor research is the role of income on giving. In other words, scholars do not agree whether or not income influences a donor’s decision to give and how much. McKinney found that the higher a donor’s income is, the larger the contribution is whereas Gardner and O’Connor did not confirm this relationship (Duke, 1982). However, most of the studies on fundraising have reported that there is a significant relationship between income and amount being donated (Blakeley, 1974; Duke, 1982; Hammersmith, 1985; Glotfelter, 2003; Hrung, 2004). High income is a significant predictor of large contributions regardless other factors such as being alumni of an educational institution or being satisfied with the undergraduate experience (Glotfelter, 2003). Hammersmith (1985) studied the donors of the West Virginia University and reported that income level was one of the factors related to contribution level. Finally, it has been found that parental socioeconomic status (SES), an index based on income and education, is related to giving. Individuals coming from more affluent families are more likely to make donations than those from less affluent ones. Parental income is a better predictor of giving than a person’s own current family income (Spaeth and Greely, 1970).

Finally, it has been proposed that a U-shape characterizes the relationship between giving as a proportion of income. Thus, low and high-income individuals give more (4.4% and 3.1%
from their income, respectively) than medium income individuals (2.5%). However, it has been reported that those with incomes larger than $100,000 (representing only 3.9% of all taxpayers) donate 22.9% of total giving (Clotfelter, 1997). Due to the important role income plays in giving it was hypothesized that:

H1: Men and women athletic donors will differ in their personal income.
H2: Men and women athletic donors will differ in their household income. Because giving is closely related to income, it seems fair to posit:
H3: Men and women athletic donors will differ in the amount of their annual contribution.

Motives of athletic donors

Motives of giving behaviour to athletics have been reported to be: tax deductions, priority seating, professional and social contacts, special parking, complimentary programmes, license plates, membership plaques, decals, hospitality rooms, trips and priority on tickets for away games and bowl games (Barnes et al., 1982; Hammersmith, 1985; Webb, 1989; Tsiotsou, 1998).

There are contradictory findings regarding the role tax deductions play in motivating giving mainly because of frequent changes in tax laws. It has been argued that tax deductions do not affect giving but only the time and the form a contribution is made (Bakal, 1979). The lack of relationship between tax deductions and giving has been explained by Smith (1989). Smith suggested that the above relationship was found before 1989 when the Internal Revenue Service (IRS) rulings had not yet been introduced. When the IRS rulings were in effect and diluted or deleted tax deductions of contributions, then tax deductibility became the topic of intense discussions and negotiations among athletic fundraisers. However, Hammersmith argues that tax deductions are an important factor in motivating non-alumni donors (1985). Furthermore, Clotfelter (1997) suggests that tax deductions do not determine whether or not to give but influence the amount donated.

Many researchers agree that priority seating for athletic events is an important motivator for individuals to donate to an intercollegiate athletic department (Alger, 1969; Barnes et al., 1982; Hammersmith, 1985; Isherwood, 1986; Kern, 1983; Coughlin and Ereksen, 1984; Nelson, 1984; Webb, 1989). The use of athletic tickets for business purposes is one of the motives for giving to athletics (Smith, 1989). According to Hammersmith (1985), priority seating is ‘the most motivating factor determining the amount of the contribution from each donor, especially at the middle contribution level’ (p. 181). Smith (1989) reported that 92% of alumni and non-alumni athletic donors rank the opportunity to obtain tickets as one of the most important in making donations. In addition, priority seating may be the only reason for giving by non-alumni.

However, an inverse relationship between motives and annual contributions have been reported in the fundraising literature. Motives such as priority seating, tax deductions, professional and social contacts were found to have no effect on the amount donated but donations to athletics significantly affected these motives (Tsiotsou, 1996). The Giving to Athletics Model (GAM) developed by Tsiotsou (1998) showed that emotional motives make athletic donors give to athletic programmes. However, when the amount of donation is increasing, the motives of athletic donors that are more practical in nature such as priority seating and tax deductions are influenced too. Thus, these (practical) motives become more important to athletic donors when their contributions increase.

Other reasons that motivate giving are: maximizing profits, investing in activities that have indirect utility to the donor (for individuals); gains in research in the area of the company’s needs, production of trained personnel, employees’ morale and satisfaction, the resultant good public relations, enhance the political influence of the business, and professional contacts (for corporations) (Brittingham and Pezzullo, 1990).

With regard to gender differences on factors that motivate giving, women athletic donors
are less motivated by the social and benefits aspects of giving than men. Thus, priority seating or preferred parking might not motivate women to give. Moreover, since it seems that women athletic donors make small contributions, benefits derived from tax deductions might not be a motivation factor (Staurowsky, 1996).

The role of motivation is also important in donation behaviour. Four basic motives identified in the review of literature were used for the purpose of the study: priority seating (M1), Tax deductions (M2), professional contacts (M3) and personal contacts (M4). Thus, it was hypothesized that:

H4: Men and women athletic donors will differ in their motives (M1, M2, M3, M4).

Sport experience

It has been reported that experience with sports positively affects the level of involvement with athletics and indirectly affect the amount of money donated (Tsptsou, 1996). Except involvement, sport experience seems to be associated with attendance of sporting events. Graham studied the spectators attending the U.S. Men’s Clay Court Championship in 1992 (1994). He found that the majority of the spectators (89.6% and 85.6%) were former or current players. Moreover, they participated in at least four other types of sports (golf, swimming, jogging and biking), they attended sports (basketball, football, baseball and golf), and they watched sports on TV (tennis, football, basketball and baseball). These findings indicate that spectators of sport events have prior experience and are highly involved in sports.

In terms of women’s sport experience, increasing participation numbers have been presented over the last decades. In 1971, 300,000 females participated in high school sports whereas in 1998 this number increased to 2,100,000 (Lichtman, 1998). Similarly, female athletes represent 43% of the total varsity athletes whilst frequent female participation in fitness activities increased by 24% during the decade 1990–2000 (Women’s Sport Foundation, 2002). However, a recent study reported that in 2-year colleges the number of women participating in sports reached only 32% (Mumford, 2005). Though more women participate in sport activities, studies on athletic fundraising have not investigated whether or not female athletic donors have sport experience and for how long.

One of the recommendations for future research suggested by Smith (1989) was to study previous participation in athletics and its relationship to athletic giving. Sport experience might be an important factor in athletic giving though it has not been used by other studies to identify differences between men and women athletic donors. Due to the above reasons, sport experience was included in the current study and it was hypothesized that:

H5: Men and women athletic donors will differ in sport experience.

Attendance of sport events

Attendance at sport events has been found to be related to alumni athletic donations (Hammersmith, 1985). Attendance of football home games was the strongest predictor ($r = 0.721$) of annual athletic fundraising contributions in McEvoys’s study (2005). It has been argued that attendance is the key factor in athletic giving, even more than winning records (Coughlin and Ereckson, 1984).

However, alumni athletic donors are more likely to attend athletic events than non-alumni. Attendance of home and away football and basketball games, attendance of bowl games and purchase of season football and basketball tickets are related to athletic giving (Hammersmith, 1985). This may happen because several universities combine their ticket programmes with their athletic contribution programme (boosters).

Hammersmith (1985) studied the athletic donors of the West Virginia University and found that alumni athletic donors attended athletic events. Donors who did not attend athletic events made smaller contributions to the athletic programme. In addition, alumni donors were more likely to donate to other
units of the university as well as to athletics than non-alumni.

As participation figures of women rise through the years, the number of women who attend sport events is increasing too. Women make up 40% of the people who attend games of the National Football League (NFL) and 46.5% of the people who attend Major League Baseball (MLB) games (Women’s Sport Foundation, 2002). Thus, studying female athletic donors' attendance of sport events might provide some useful insight and better understanding of their giving behaviour. Therefore it was posit that:

H6: Men and women athletic donors will differ in attendance of sport events.

**Sport involvement**

Engel (1987) has proposed the active and passive reasoning theory of involvement borrowed from the marketing literature to explain donor behaviour. According to this theory, when a donor is highly involved with a cause, there is high awareness that leads to careful evaluations of the various alternatives. The donor makes a decision to contribute to certain cause(s). This decision is consistent with other underlying factors (motives) and is perceived as offering personal benefit. When involvement is low, there is low level of awareness that leads to action before a decision is weighed carefully. Such decisions however, may not be made in the future.

Ostland and Brown (1985) found that involvement in intramural sports was also a discriminating factor between donors to athletics and non-donors. Another study reported that involvement with athletics is one of the most significant factors that explain giving to athletic programmes (Tsiotsou, 1998). Moreover, sport involvement discriminates between small and large donations to intercollegiate athletic programmes (Tsiotsou, 2004).

Furthermore, involvement with a product is related to intentions for future purchases. A study of baseball fans indicated that involvement has a significant positive effect on attendance intentions. Fans who were highly involved in baseball were more willing to attend future baseball games than the low involved (Wakefield and Blodgett, 1994).

Sport involvement of athletic donors has not been studied and neither any comparison has been made between male and female athletic donors. A study that examined gender differences in leisure involvement reported that men and women differed significantly (Wiley et al., 2000). Since fewer women participate and attend sport events, it should be expected that they would probably be less involved in sports. However, this hypothesis needs to be tasted empirically before a conclusion is drawn. Thus, it was fair to hypothesize that:

H7: Men and women athletic donors will differ in sport involvement.

**Women versus men athletic donors**

Women are changing the culture of philanthropy and the way in which it is conducted because they have different needs than men. These needs must be identified and understood by fundraisers in order to make women more actively involved in athletic giving (Verner, 1996).

Not many studies exist on women who make donations to athletic programmes. One study investigated the demographic characteristics and donor motivation profiles of athletic donors. In drawing the profile of the female donors, it has been reported that female athletic donors are younger than their male counterparts, contribute at lower donation levels, are more inclined to give to women’s programmes, and are more motivated by success and philanthropic factors. Women donors differed from men donors in terms of age, level of education, sex of support groups, motives and annual contribution to athletic programmes (Staurowsky, 1996). Because the existing literature suggests differences between male and female athletic donors, it was posit that:
H₈: Motives (M1, M2, M3, M4), annual contribution, personal income, household income, sport experience, attendance of sport events and sport involvement will discriminate between men and women athletic donors.

If women and men athletic donors differ, fundraisers need to know more about these differences in order to apply specific strategies for appealing to each gender. The following section presents the hypotheses of the study derived from the review of literature.

Methodology

The study utilized the survey research method to study donors of the athletic programme and other educational units in a large eastern state university in the United States. A self-administered anonymous questionnaire was sent by mail to 800 subjects. Simple random sampling techniques were used to gather information. The 800 individuals in the sample returned 387 usable questionnaires for a 48% response rate. However, it should be mentioned that it was not possible to assess the extent of non-response bias regarding some demographics due to random selection of the sample and the refusal of the nonprofit organization to release additional information.

The questionnaire of the study consisted of four parts. Part I gathered demographic data. Part II measured the respondents’ involvement with the athletic programme of the university. The revised version of the Personal Involvement Inventory (PII) developed by Zaichkowsky (1985, 1994) was used to measure involvement. The revised Personal Involvement Inventory is a 7-point bi-polar scale consisting of 10 pairs of adjective and has a reported reliability of 0.90. It has been used extensively in the marketing literature to measure consumer involvement with products, advertising and purchase decisions (Goldsmith and Emmert, 1991). Part III included four motives (priority seating, tax deductions, professional contacts and social contacts) to be evaluated on a 5-point scale (1 = unimportant, 5 = important). Part IV consisted of two items. The first item measured sport experience in years and the second item asked about attendance of sport events by using a 5-point scale (1 = never, 5 = very often). The amount of money donated was provided by the nonprofit organization of the university by using a double coding system that guaranteed questionnaire anonymity.

Results

Sample demographics

A preliminary analysis of the demographic characteristics of the sample showed that 70.3% (272) of the respondents were males whereas 29.7% (115) were females (Table 1). Regarding their education, most athletic donors held a graduate degree (48.1%), many completed college (45.2%) and several had some college education (4.4%). In terms of personal income, 35.4% of respondents had an income between $50 000 and $99 999, 24.3% had an income between $20 000 and $49 999 and several had an income larger than $200 000 (14.7%). Regarding household income, 39.8% of respondents had an income between $50 000 and $99 999, 24.3% had an income between $20 000 and $49 999 and several had an income larger than $200 000.

Classification with discriminant analysis

To compare men and women athletic donors and identify differences classification with discriminant analysis was used. Classification with discriminant analysis involves classifying subjects into the one of several groups on the basis of a set of measurements and describing major differences among groups. Moreover, discriminant analysis was chosen because it provides ‘parsimony of description’ and ‘clarity of interpretation’ as Stevens (1992) has recommended.

Though the sample size was not very large (N = 387), it was enough for running the classification with discriminant analysis and having confidence on the results. According to Stevens (1992), 20 subjects per variable are adequate for running discriminant analysis.
without being cautious in interpreting the results. A sample size of 387 subjects is considered more than adequate for the 10 variables of the study. Thus, the analysis of the data continued.

The total sample was randomly split by the SPSS statistical programme into a development sample of 185 subjects and a cross validation sample of 202 subjects to assess the classification accuracy of the discriminant variates. The classification function was computed first on the development sample and then checked its hit rate on the cross validation sample. The independent variables of the study were annual contribution, personal income, sport experience, involvement with sports and the motives: priority seating, tax deductions, professional contacts and personal contacts. Descriptive statistics of the variables are presented on Table 2.

In a preliminary analysis of the data, a case analysis was conducted to identify possible

### Table 1. Sample demographics \((N = 387)\)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Education</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males 272 (70.3%)</td>
<td>Some high school</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Completed high school</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Females 115 (29.7%)</td>
<td>Technical school</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Some college</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Completed college</td>
<td>175</td>
<td>45.2</td>
</tr>
<tr>
<td></td>
<td>Graduate school</td>
<td>186</td>
<td>48.1</td>
</tr>
</tbody>
</table>

### Table 2. Descriptive statistics of the independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Values range</th>
<th>Mean</th>
<th>Donor group means</th>
<th>Donor group standard deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority seating</td>
<td>1–5</td>
<td>3.47</td>
<td>3.724</td>
<td>3.192</td>
</tr>
<tr>
<td>Tax deductions</td>
<td>1–5</td>
<td>2.76</td>
<td>3.000</td>
<td>2.558</td>
</tr>
<tr>
<td>Professional contacts</td>
<td>1–5</td>
<td>2.09</td>
<td>2.152</td>
<td>1.654</td>
</tr>
<tr>
<td>Personal contacts</td>
<td>1–5</td>
<td>2.80</td>
<td>2.848</td>
<td>2.558</td>
</tr>
<tr>
<td>Annual contribution</td>
<td>20–10800</td>
<td>970.02</td>
<td>1289.96</td>
<td>361.808</td>
</tr>
<tr>
<td>Personal income</td>
<td>1–6</td>
<td>3.32</td>
<td>3.724</td>
<td>2.558</td>
</tr>
<tr>
<td>Household income</td>
<td>1–6</td>
<td>3.63</td>
<td>3.952</td>
<td>3.077</td>
</tr>
<tr>
<td>Attendance of sport events</td>
<td>1–5</td>
<td>3.43</td>
<td>3.610</td>
<td>3.019</td>
</tr>
<tr>
<td>Years of Sport experience</td>
<td>0–70</td>
<td>25.80</td>
<td>29.938</td>
<td>16.750</td>
</tr>
<tr>
<td>Sport involvement</td>
<td>1–7</td>
<td>5.715</td>
<td>5.748</td>
<td>5.562</td>
</tr>
</tbody>
</table>

Total sample was randomly split by the SPSS statistical programme into a development sample of 185 subjects and a cross validation sample of 202 subjects to assess the classification accuracy of the discriminant variates. The classification function was computed first on the development sample and then checked its hit rate on the cross validation sample. The independent variables of the study were annual contribution, personal income, sport experience, involvement with sports and the motives: priority seating, tax deductions, professional contacts and personal contacts. Descriptive statistics of the variables are presented on Table 2.

In a preliminary analysis of the data, a case analysis was conducted to identify possible
outliers and violations of the assumptions of independence, multivariate normality and the homogeneity of variance/covariance matrices. No serious violations of the assumptions were identified. The homogeneity of variance/covariance test (Box’s M) indicated that the data did not violate the assumption (fail to reject at the 0.01 level; $F = 1.361, p = 0.039$).

The overall multivariate relationship (MANOVA) was statistically significant at the 0.05 (chi square $= 50.617$; Wilk’s $\Lambda = 0.766; p = 0.000$) indicating that the two genders were statistically significant different. Thus, the discriminant function extracted was significant. The MANOVA results indicated that men athletic donors differed significantly from women athletic donors with regard to the means of the independent variables. Thus, overall the variables used in the study were able to discriminate between men and women athletic donors.

The analysis continued by evaluating the contribution of each independent variable to the discrimination of the two donors groups. Seven out of the ten univariate $F$-tests were significant as shown on Table 3. The $F$-tests of the discriminant analysis indicate if there are significant differences between the means of the two groups. Priority seating, professional contacts, annual contribution, personal and household income, attendance of sport events and sport experience contributed significantly to the discrimination of the two gender groups whereas tax deductions, personal contacts and sport involvement did not contributed to the discrimination. The $F$ values on Table 3 indicate the extent to which each independent variable makes a unique contribution to the prediction of gender membership.

The next step of the analysis was the classification of the subjects and the evaluation of the classification procedure. The classification was based on the Bayesian probability of group membership, assuming group priors equal to the relative group sizes. The prior probabilities of group membership were 0.736 for male athletic donors and 0.264 for female athletic donors. To accomplish this classification the Fisher’s Linear Discriminant Functions were used (Table 4).

The analysis continued with the evaluation of the performance of the classification procedure which is set up to maximize the number of correct classifications. To assess the accuracy of the number of correct classifications, the random cross validation sample was used. According to Stevens (1992), the use of a random cross validation sample provides a ‘good check on the external validity of the classification function’ (p. 293). Table 5 shows the ‘hit rate’ for both the development and the cross validation sample. The results for the development sample indicated a 77.7% correct classification rate. The ‘hit rate’ for the cross validation sample decreased to 71.6%. The ‘hit rates’ in both samples were acceptable since they were higher than the proportional

### Table 3. Univariate $F$tests for the Independent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wilks’s $\Lambda$</th>
<th>$F$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority seating</td>
<td>0.979</td>
<td>4.180</td>
<td>0.042</td>
</tr>
<tr>
<td>Tax deductions</td>
<td>0.983</td>
<td>3.405</td>
<td>0.067</td>
</tr>
<tr>
<td>Professional contacts</td>
<td>0.967</td>
<td>6.597</td>
<td>0.011</td>
</tr>
<tr>
<td>Personal contacts</td>
<td>0.991</td>
<td>1.793</td>
<td>0.182</td>
</tr>
<tr>
<td>Annual contribution</td>
<td>0.951</td>
<td>10.068</td>
<td>0.002</td>
</tr>
<tr>
<td>Personal income</td>
<td>0.896</td>
<td>22.677</td>
<td>0.000</td>
</tr>
<tr>
<td>Household income</td>
<td>0.936</td>
<td>13.272</td>
<td>0.000</td>
</tr>
<tr>
<td>Attendance of sport events</td>
<td>0.947</td>
<td>10.941</td>
<td>0.000</td>
</tr>
<tr>
<td>Years of Sport experience</td>
<td>0.865</td>
<td>31.005</td>
<td>0.001</td>
</tr>
<tr>
<td>Sport involvement</td>
<td>0.995</td>
<td>1.050</td>
<td>0.307</td>
</tr>
</tbody>
</table>

### Table 4. Fisher’s Linear Discriminant Functions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority seating</td>
<td>0.362</td>
<td>0.371</td>
</tr>
<tr>
<td>Tax deductions</td>
<td>0.707</td>
<td>0.670</td>
</tr>
<tr>
<td>Professional contacts</td>
<td>0.145</td>
<td>−0.297</td>
</tr>
<tr>
<td>Personal contacts</td>
<td>−0.103</td>
<td>4.709</td>
</tr>
<tr>
<td>Annual contribution</td>
<td>−1.110</td>
<td>−1.160</td>
</tr>
<tr>
<td>Personal income</td>
<td>0.408</td>
<td>−0.325</td>
</tr>
<tr>
<td>Household income</td>
<td>2.025</td>
<td>2.418</td>
</tr>
<tr>
<td>Attendance of sport events</td>
<td>1.715</td>
<td>7.578</td>
</tr>
<tr>
<td>Years of sport experience</td>
<td>5.686</td>
<td>1.436</td>
</tr>
<tr>
<td>Sport involvement</td>
<td>4.185</td>
<td>4.189</td>
</tr>
<tr>
<td>(Constant)</td>
<td>−22.064</td>
<td>−19.570</td>
</tr>
</tbody>
</table>
chance criterion of 50% and the maximum chance criterion of 50.9%. Moreover, Press’s Q statistic confirmed that the predictions in both samples were significantly better than chance (Q = 0.127, p < 0.001). The precision of correct classification was satisfactory and for this reason the use of the procedure for classification of future subjects is recommended.

Discussion/implications

The results of the study provide some important information on both, male and female donors of athletic programmes. The purpose of this study was to investigate differences between male and female donors in order to gain a better understanding, improve fundraising practices and effectiveness. Moreover, the study assisted in drawing a more complete profile of female and male athletic donors based not only on demographics, motives and annual contributions as it was done before (Staurowsky, 1996) but taking into account factors such as sport experience, attendance of sport events and sport involvement.

In general, the results of the study are significant for theoretical and practical reasons. The analysis has given some very important insight into the role of income, motives, annual contributions, sport experience, attendance of sport events and sport involvement in discriminating between female and male athletic donors. Moreover, the study confirmed previous findings about the important role of income and motives in discriminating between the two genders in athletic fundraising. The study also provides new insights into the relationship between gender and income, motives, annual contributions, sport experience, attendance of sport events, and sport involvement.

The classification with discriminant analysis was used to identify similarities and differences between female and male athletic donors. Income, annual contribution, motives, sport experience, attendance of sport events and sport involvement were the variables used to identify differences and to predict the gender the athletic donors. The overall hypothesis (H8) that these variables will discriminate female from male athletic donors was confirmed. However, not all variables contributed significantly to the classification of the two gender groups. Priority seating (M1), professional contacts (M3), annual contribution, personal and household income, attendance of sport events, years of sport experience had a significant contribution whereas tax deductions (M2), personal contacts (M4) and sport involvement did not contribute significantly to the discrimination between female and male athletic donors. Six out of the eight hypotheses of the study were confirmed (H1, H2, H3, H5, H6, H8) whilst hypothesis H4 was only partially confirmed (H4 for M1 and M3).

The group means of the independent variables show that female athletic donors were less motivated by the motives used in the study (M1, M2, M3 and M4) than men. Although the mean scores of each motive were lower in the women’s group, the order of importance is the same for both sexes. This order is as follow: priority seating (M1) received the highest mean score in each group, second came tax deductions (M2), third was personal contacts (M4) and fourth motive was professional contacts. As it has been reported before by other scholars (Alger, 1969; Barnes et al., 1982; Hammersmith, 1985; Isherwood, 1986; Kern, 1983; Coughlin and Erickson, 1984; Nelson, 1984; Webb, 1989), priority seating seems to be the most important motive to both sexes for donating to intercollegiate athletic

### Table 5. Classification accuracy

<table>
<thead>
<tr>
<th>Actual group</th>
<th>No. of cases</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Men</td>
<td>145</td>
<td>130 (89.7%)</td>
</tr>
<tr>
<td>Women</td>
<td>52</td>
<td>29 (55.8%)</td>
</tr>
<tr>
<td>Total correct classification = 77.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>127</td>
<td>117 (92.1%)</td>
</tr>
<tr>
<td>Women</td>
<td>63</td>
<td>44 (69.8%)</td>
</tr>
<tr>
<td>Total correct classification = 71.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
programmes. However, priority seating and professional contacts are less important motives for women donors than for men. Thus, athletic fundraisers need to emphasize equally to both genders tax deductions and opportunities for personal contacts and to emphasize more the benefits of priority seating and opportunities for professional contacts when contacting male than female donors. Athletic fundraisers could use the above information when cultivating prospect donors; include these benefits in all communication material and forms of contact of the organization to increase motivation to give.

With regard to annual contribution, females donated almost 3.5 times less than their counterparts. This finding confirms previous studies where female donors contributed less than male donors (Webb, 1989; Staurowsky, 1996). Moreover, the income (personal and household) of female athletic donors was less than that of male athletic donors. In terms of attendance of sport events, female attend less frequently sport events whilst male athletic donors have twice as much sport experience and are more involved in sports than female athletic donors. Consequently, athletic fundraisers should design different fundraising programmes or campaigns for female athletic donors that will be less expensive for the nonprofit organization and can be afforded by the female donors.

Statistically significant differences were found between the means of the two gender groups in relation to two motives (priority seating and professional contacts) annual contributions, personal and household income, attendance of sport events, and years of sport experience. Female and male athletic donors did not differ significantly in the other two motives (tax deductions, personal contacts) and in sport involvement. This last finding related to sport involvement is important considering that females had less sport experience and attended sport events less frequently. However, female athletic donors are involved in sports as much as their male counterparts. Athletic fundraisers should provide more information about the athletic programmes of the university when contacting female athletic donors and try to keep their involvement high. For example, they could produce materials such as electronic newsletters or newspapers that will be sent personally to each donor’s e-mail each month. Such actions will increase communication and keep female athletic donors informed and involved in new developments in the athletic programmes. Moreover, to motivate attendance of sport events and increase involvement with the athletic programmes, fundraisers could organize events especially for their female athletic donors before a sport event so that they attend it afterwards.

Another important outcome of this study is the increase of women athletic donors. It seems that more women give to athletics than it was reported in previous studies (Webb, 1989; Hammersmith, 1985). Almost thirty percent (30%) of the total sample were women whereas on the studies of Webb (1989) and Hammersmith (1985) the percent of female donors reported was only four percent (4%). Moreover, recent universities’ reports show an increase of female donors in athletics with percentages closed to the findings of this study. For example, the athletic department of Saint Mary’s College announced its donors for the period July 2001–June 2002. From a total of 501 individuals who donated to its athletic programmes, 170 (34%) were females and 331 (66%) were males. Furthermore, Staurowsky’s sample consisted of 108 male and 87 female athletic donors, representing 55% and 45%, respectively (1996). It seems that women donors of athletic programmes are increasing through the years. This is a very important trend that might result from the increased number of working and consequently financially independent women. In addition, more and more women are involved in sports either by playing or by attending sporting events. Still more men than women give to intercollegiate athletic programmes as it has been reported by other scholars (Hammersmith, 1985; Webb, 1989). However, athletic fundraisers should not disregard female donors because they constitute a significant segment that is gradually growing in size and importance.
The results of the study show that female and male athletic donors differ significantly. Female athletic donors have become an important part of the donors' population and constitute a distinct donor segment. They have different needs, motives, and priorities than male athletic donors. Athletic fundraisers should be aware of these factors to understand them better, to produce material and plan practices that best fit the interests of female athletic donors. In addition, marketing practices such as segmentation and target marketing should be incorporated by fundraisers to assist them in organizing more effective fundraising campaigns.

Future research recommendations/limitations

More studies on women as donors are essential to gain a better understanding on their donation behaviour in an effort to increase fundraising effectiveness. Female donors of athletic programmes and of other causes such as religious, health, environmental and social should be studied so that fundraisers implement strategies that would be more appealing to women and make them more active in giving. Studies on demographics, life style, motivation and satisfaction from giving are some of the issues that need further investigation. Motives as well as preferred modes of giving need to be further investigated.

The findings of this study are limited to the female donors of the athletic programme studied and the sample investigated. Generalizations should be made with caution.

Biographical notes

Rodoula Tsiotsou is currently Assistant Professor at the Department of Commerce and Advertising of ATEI Crete. She has worked as marketing director for the daily sports newspaper 'Protathlitis' and as marketing manager for the Hellenic Professional Basketball League. She received her Ph.D. in Marketing Sport Services from Florida State University and she has been a visiting Professor at Democritus University of Thrake and at National & Kapodistriako University of Athens. She has published in several international and national scientific journals and participated in many conferences. Her areas of research interest are: athletic fundraising, marketing leisure services (sport, tourism and arts), sponsorship-advertising, and consumer segmentation.

References


Differences between female and male donors


