

CHARACTERISTICS OF ALUMNI DONORS AND NONDONORS AT A RESEARCH I, PUBLIC UNIVERSITY

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This study was an investigation of selected attitudinal, demographic, involvement, and philanthropic characteristics of alumni donors and nondonors from a Research I, public university. A random sample of 500 alumni (250 donors and 250 nondonors) was selected from a population of 37,691. There were 371 (74%) usable surveys returned. A discriminant function analysis was used to predict group membership of donors versus nondonors, and high donors versus low donors. Using the classification step, 65 percent of the alumni were correctly classified as donors or nondonors, and 87 percent of the alumni high donors and low donors were correctly classified.

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Obtaining adequate financial resources to meet educational and institutional needs continues to be a major problem for colleges and universities. While institutions solicit funds from the corporate and private business sector, alumni also represent an important source of funding. Understanding the factors influencing alumni giving is essential if it is to be a regular part of the institution's revenue process (Bristol, 1990). Research on alumni as a funding source reveals different reasons for which alumni contribute to their alma mater. Leslie and Ramey (1988) reported that alumni contributions are usually based upon a desire to repay the institution for an education received or are based upon an increased recognition of the academic benefits provided by the institution. Alumni involvement in fund-raising projects and activities reflects a positive psychological commitment to the institution, generating enthusiasm and momentum for reaching those who are less committed (Loessin, Duronio, and Borton, 1986). Shadoian (1989) pointed to another benefit derived from alumni financial stewardship which could enhance the potential for support from other

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private sources: "Alumni giving is the single most important index of esteem in which the institution is held by a key group of individuals" (p. 1).

The process of building a knowledge base on alumni donors should be independent of the size of their gifts. Knowledge of all donors is important. Once alumni become donors, regardless of the size of their gifts, they are likely to continue their support through the years (Eldridge, 1964).

While donor consistency is important to alumni giving, number of donors and size of gift are of similar importance to comprehensive fund-raising programs. Donors and nondonors have different relationships with their alma mater and, therefore, are expected to be treated in a more individual manner. Melchiori (1988) acknowledged the importance of nurturing people with the greatest probability of giving major gifts differently from the consistent but average giver. Thus, an important function of fund-raising is to develop a process that will segment groups of alumni into more defined prospect pools. This process is possible because the characteristics associated with giving and the relationships between donors and their alma mater are often controlled by the institution (Leslie and Ramey, 1988). Understanding the giving relationship between donors and their alma mater is useful information in developing effective fund-raising strategies.

The purpose of this study was to learn about the philanthropic behavior of alumni donors and nondonors from a Research I, public university. Through the examination of findings from this study on attitudinal, demographic, involvement, and philanthropic variables, development professionals may improve their ability to discriminate alumni donors from nondonors. Also, annual fund-raising can be improved if a reliable approach to identifying potential donors from nondonors can be developed for use in campaign strategies.

Although alumni giving is the largest donor category within institutions of higher education (Council for Financial Aid to Education, 1989), it remains a source of income that has not been fully developed or understood. This study focused on predicting alumni into donor and nondonor groups. In addition, donors were then predicted into high- and low-donor groups.

LITERATURE REVIEW

While there is ample literature on organizing, planning, and administering annual funds, the information about characteristics of alumni donors is lacking (Shadoian, 1989). Also, fund-raising function being a relatively new addition to public institutions, literature on fund-raising in public research universities is sparse. While this study builds on and adds to some of the ideas found in prior studies conducted under different settings, it is a new contribution to an evolving theoretical foundation on fund-raising in public research universities.

Due to the nonexistence of fund-raising theories and to minimal published

literature on the subject, most of the empirical references are drawn from doctoral dissertations. The dissertations provide a foundation for the selection of variables included in the study. These variables are examined as demographic, attitudinal, philanthropic, or involvement variables, and have been important in predicting donor status (donor or nondonor) and/or donor level (high or low). The earliest examination of alumni donors and nondonors was done by O'Connor (1961), in a study of Alfred University alumni. Following that, a number of dissertations examined donor characteristics and suggested that knowledge of alumni and their interests, needs, and goals has a positive effect on fund-raising (Pray and Frantzreb, 1971; Davis, 1969; Eldridge, 1964; Melchiori, 1988).

The four categories of independent variables were selected on the basis of the review of literature and for the discriminating statistical significance of the variable in previous studies. Attitudinal variables referred to "emotional attachment to the university" (Beeler, 1982; Shadoian, 1989), "satisfaction with educational experience" (Shadoian, 1989; Oglesby, 1991), "recommending the university to others" (Shadoian, 1989), "satisfaction with preparation for first job after graduation" (Shadoian, 1989), and "perceived need for financial support" (House, 1987).

Demographic variables included "distance of permanent residence from campus" (Beeler, 1982; Oglesby, 1991), "year of graduation" (Shadoian, 1989), "total years of attendance as an undergraduate and graduate student" (Beeler, 1982), "highest degree received from the university" (Beeler, 1982), "school attended within the university" (Beeler, 1982; Shadoian, 1989), "academic major" (Grill, 1988), "recipient of scholarship or grant" (Grill, 1988; Shadoian, 1989), "subsequent enrollment for graduate work" (Shadoian, 1989), "number of children" (Beeler, 1982), "age range of children" (Haddad, 1986), "birth order" (Ryan, 1990), "religious preference" (Morris, 1970; Oglesby, 1991), "political affiliation" (Gardner, 1975; McKinney, 1978), "occupation" (Grill, 1988; Shadoian, 1989), "family income" (Grill, 1988), "age" (Grill, 1988; Oglesby, 1991), and "gender" (Grill, 1988; Oglesby, 1991).

Involvement variables included "postgraduate participation in campus events" (Grill, 1988), "involvement with university as an alumnus/a" (Oglesby, 1991), "maintaining contact with faculty, administrators, and staff (Shadoian, 1989), "reading alumni publications" (Grill, 1988; Shadoian, 1989), and "involvement in extracurricular activities" (Grill, 1988).

Philanthropic variables referred to "financial support to the university," "spouse contributes to one's alma mater" (Oglesby, 1991), "support other charitable causes" (House, 1987; Oglesby, 1991), "active volunteer in community work or organizations" (Markoff, 1978), "active in civic organizations" (House, 1987), and "active volunteer for a political organization" (House, 1987). These variables were expected to influence donor status. Following is an examination of literature on the predictor variables used in the study (Table 1).

TABLE 1. Listing of Categories and Variables by Citation

Category	Variable	Prior Studies That Included This Variable
Demographic	Family income	McNulty (1976), Miracle (1977), McKinney (1978), Koole (1981), Korvas (1984), McNally (1985), House (1987), Grill (1988), Oglesby (1991)
	Distance of permanent residence from campus	Beeler (1982), Oglesby (1991)
	Scholarship/grant recipient	McNulty (1976), Dahl (1981), Beeler (1982), Korvas (1984), Dietz (1985), Grill (1988), Shadoian (1989)
	Year of graduation	Caruthers (1973), McKee (1975), McNulty (1976), Beeler (1982), Keeler (1982), Korvas (1984), Haddad (1986), Grill (1988), Shadoian (1989), Oglesby (1991)
	Subsequent enrollment for graduate work	Koole (1981), Beeler (1982), Shadoian (1989)
	Highest degree	Broms and Davis (1966), Morris (1970), McNulty (1976), McKinney (1978), Beeler (1982), Korvas (1984), Chewning (1984), Haddad (1986), Oglesby (1991)
	Total years of attendance as undergraduate and graduate student	Morris (1970), Caruthers (1973), Gardner (1975), Koole (1981), Dahl (1981), Beeler (1982), Korvas (1984)
	School attended within a university	Caruthers (1973), McNulty (1976), Dahl (1981), Keller (1982), Beeler (1982), Dietz (1985), McNally (1985), Haddad (1986), Bruch (1988), Shadoian (1989), Springer (1991)
	Academic major	Miracle (1977), Koole (1981), Korvas (1984), Grill (1988)
	Number of children	Morris (1970), Caruthers (1973), McNulty (1976), Koole (1981), Keller (1982), Beeler (1982), Korvas (1984), Haddad (1986), Oglesby (1991)
	Age range of children	Caruthers (1973), Keller (1982)
	Religious preference	Morris (1970), Gardner (1975), McNulty (1976), McKinney (1978), Korvas (1984), Oglesby (1991)
	Political affiliation	Gardner (1975), McKinney (1978)
	Birth order	Ryan (1990)
	Occupation	Morris (1970), Bragg (1971), Miracle (1977), Koole (1981), Beeler (1982), Dietz (1985), Grill (1988), Oglesby (1991)

TABLE 1. (continued)

Category	Variable	Prior Studies That Included This Variable
	Age	McNulty (1976), Miracle (1977), McKinney (1978), McNally (1985), Haddad (1986), House (1987), Bruch (1988), Oglesby (1991)
	Gender	McKee (1975), McNulty (1976), McKinney (1978), Korvas (1984), Dietz (1985), McNally (1985), Haddad (1986), House (1987), Bruch (1988), Grill (1988), Oglesby (1991), Springer (1991)
Attitudinal	Emotional attachment to university	Spaeth and Greeley (1970), Gardner (1975), McKee (1975), Miracle (1977), Koole (1981), Beeler (1982), Chewning (1984), House (1987), Grill (1988), Shadoian (1989)
	Satisfaction with educational experience	Caruthers (1973), Miracle (1977), Korvas (1984), Nelson (1984), House (1987), Burt (1989), Shadoian (1989), Oglesby (1991)
	Recommended university to others	Hall (1967), Bragg (1971), Caruthers (1973), McKee (1975), Gardner (1975), McKinney (1978), Pickett (1986), Shadoian (1989)
	Satisfaction with preparation for first job after graduation	Spaeth and Greeley (1970), Gardner (1975), Miracle (1977), Anderson (1981), Koole (1981), Beeler (1982), Shadoian (1989)
	Perceived need for financial support	McKee (1975), Miracle (1977), House (1987)
Involvement	Postgraduate participation in campus events	Hall (1967), Bragg (1971), Caruthers (1973), McKee (1975), Miracle (1977), Korvas (1984), House (1987), Shadoian (1989), Oglesby (1991)
	Involvement with university as alumnus/a	Broms and Davis (1966), Simpson and Hirsch (1968), Caruthers (1973), McNulty (1975), Miracle (1977), Markoff (1978), Koole (1981), Keller (1982), Korvas (1984), Haddad (1986), Bruch (1988), Grill (1988), Springer (1991), Oglesby (1991)
	Maintaining contact with faculty, administrators, and staff	Hall (1967), Shadoian (1989),
	Reading alumni publications	Bragg (1971), MacIsaac (1973), McKee (1975), Miracle (1977), Carlson (1978), McKinney (1978), Aug (1987), Grill (1988), Shadoian (1989)

TABLE 1. (continued)

Category	Variable	Prior Studies That Included This Variable
Philanthropic	Involvement in extra-curricular activities	Seymour (1966), Gardner (1975), Keeler (1982), Beeler (1982), Korvas (1984), Nelson (1984), Burt (1989), Oglesby (1991)
	Active volunteer in community work or organizations	Miracle (1977), Markoff (1978)
	Active in civic organizations	Miracle (1977), Markoff (1978), House (1987)
	Active volunteer for a political organization	House (1987)
	Spouse contributes to one's alma mater	Caruthers (1973), Keller (1982), Haddad (1986), Oglesby (1991)
	Support other charitable causes	McNulty (1976), Miracle (1977), Markoff (1978), House (1987), Oglesby (1991)
	Financial support of the study institution	Miracle (1977)

Demographic Variables

Many previous studies have identified one or more of the demographic variables to be significantly related to giving. McKinney (1978) found "family income" to be a significant discriminator of donor and nondonor groups, while Oglesby (1991) concluded that as family income rises, so does the percentage of donors in each higher income level. Contrary to these findings, House (1987) and Grill (1988) found no significant evidence along these lines. Beeler (1982) found that for the variable "scholarship or grant recipient," the donor mean differed significantly from the nondonor mean. House (1987) supported this finding by concluding that it had a significant correlation with every measure of the extent of giving. While Grill (1988) and Shadoian (1989) found no statistical difference between donor and nondonor groups on this variable, Oglesby (1991) found a significant inverse relationship between "receipt of academic performance scholarship" and donor level.

Oglesby also found an inverse relationship between giving and "year of graduation." Haddad (1986) and House (1987) found "number of years since graduation" to be a significant predictor of donor status. Shadoian (1989) found that "period of graduation" was not a significant predictor of either donor level or status. The variable "subsequent enrollment for graduate work" was found to determine significantly group membership for donor status, contrary to the findings by Shadoian (1989). Beeler (1982) found no significant relationship between giving and highest degree earned, contrary to the findings by Morris

(1970), Haddad (1986), and Oglesby (1991). Support for "total years of attendance" as a predictor of donor behavior can be found in the findings of Morris (1970) and Gardner (1975); Beeler (1982) found no significant relationship between "length of attendance" and donor status. But Beeler found "school attended within the university" to be significantly related to donor status, wherein graduates of the School of Arts and Sciences give to the university's annual campaigns in proportionately greater numbers than do graduates of the School of Management. Haddad (1986) found support for this finding in his study, while Shadoian (1989) found no support for such a relationship.

The variable "academic major" was found to be related to donor status and level, according to the study conducted by Grill (1988). Korvas (1984) found no such relationship in his research on Rockhurst College alumni. Neither did Korvas find any significant relationship between donor status and the variable "number of children." Morris (1970) and Haddad (1986) found significant predictive ability in this variable. Oglesby (1991), however, found mixed results. His study demonstrated that "number of children" was significantly related to donor level; he found no support for a relationship to donor status. Other than mixed findings by Caruthers (1973), Haddad (1986), and Keller (1982), not much research has been done on the relationship of the variable "age range of children" to giving.

Results from studies on the "religious preference" of alumni are very different. At the University of Michigan, no significant difference between donors and nondonors was found (Morris, 1970). Gardner (1975) concluded that alumni who have the same religious preference as the denominational affiliation of their alma mater were more likely to be donors than nondonors. McKinney's (1978) findings support Gardner in this regard, while Oglesby (1991), who examined the religious preference of alumni of Southwest Baptist University, found his results suspect due to the religious composition of the sample. According to Gardner (1975), "political affiliation" played a major role in donor behavior, with 82 percent of his study group of alumni considering themselves to be politically conservative. McKinney's study reports findings along this line (1978). On the variable "birth order of alumnus/a," the only study available was that of Ryan (1990); this study reported that giving attitudes are related to "birth order."

As for the variable "occupation," the findings are inconclusive. Beeler (1982) concluded in his study that donors held jobs requiring greater skill and responsibility than those held by nondonors. Oglesby (1991) found support for a statistically significant relationship between "occupation" and donor status. The results from studies conducted by Morris (1970), Haddad (1986), and Grill (1988) show no significant difference between donors and nondonors on the basis of occupation. "Age" was included as a variable in the studies conducted by Haddad (1986) and Oglesby (1991), and was found to be a significant pre-

dictor of donor status—the donors were consistently older than the nondonors. Oglesby also discovered that the higher the age, the larger the size of the gift. Gender was another demographic variable used in prior studies. While many studies (Haddad, 1986; House, 1987; Oglesby, 1991) asserted the relationship of gender to donor level, suggesting that male alumni are more likely to give larger gifts than female alumni, Haddad, Grill (1988), and Oglesby found no significant relationship between donor status and gender.

Attitudinal Variables

Many studies have indicated that emotional attachment to one's alma mater was significantly related to giving (Gardner, 1975; Beeler, 1982; Shadoian, 1989), while many others have found no difference between donors and nondonors on the variable "emotional attachment." Limited research on "perceived need for financial support" reveals that it is an important predictor of alumni giving (Miracle, 1977; House, 1987). Miracle and House, however, did not find "satisfaction with educational experience" to be a significant predictor of donor status, contrary to the findings by Shadoian (1989) and Oglesby (1991) that reported significant differences between donors and nondonors on that variable.

Most of the prior studies that examined the variable "recommend university to others" found that it determined group membership between donors and nondonors (Gardner, 1975; McKinney, 1978; Shadoian, 1989). According to these findings, a majority of donors occasionally or frequently try to interest a student in attending their institution. Gardner (1975) and Beeler (1982) realized the importance of the variable "satisfaction with preparation for their first job after graduation" when their findings revealed that donors reported being significantly more satisfied than nondonors with respect to undergraduate preparation for their first job. An older study by Miracle (1977) and a study by Shadoian (1989) did not find significant results in this regard.

Involvement Variables

The relationship between "postgraduate participation in campus events" and donor behavior is subject to contradictory prior findings. Shadoian (1989) found a significant difference between the group means for donors and nondonors on the number of campus visits. Contrary to this finding, Miracle (1977), House (1987), and Oglesby (1991) concluded that no support was found for a statistically significant relationship. "Involvement with the university as an alumnus/a" was a significant predictor of donor behavior in the research studies of Miracle (1977), Haddad (1986), and Grill (1988). Oglesby

(1991) added a further distinction in his study by stating that although support could be found for a strong relationship with donor level, no support could be found for donor status. The variable "maintaining contact with faculty, administrators, and staff" was first examined as a predictor of giving by Shadoian (1989), who reported that more donors than nondonors maintained contact, especially with faculty, after graduation.

Miracle (1977), McKinney (1978), Grill (1988), and Shadoian (1989) arrived at similar findings about the positive relationship between the variable "reading alumni publications" and giving. Level of "involvement in extracurricular activities" distinguished alumni donors from nondonors in studies conducted by Morris (1970), Gardner (1975), Miracle (1977), Shadoian (1989), and Oglesby (1991), each concluding that the group mean for donors on the number of extracurricular activities was higher than that for nondonors. Beeler (1982) proved otherwise in his study, indicating that nondonors participated in a larger number of activities than did the donors. Studies such as the one by Grill (1988) found that little to no significant differences existed between donor status and the number of extracurricular activities. No trends about the significance of these variables could be discerned, and hence were included in this study.

PHILANTHROPIC VARIABLES

The literature yielded sparse research on the relationship of the variable "active volunteer in community work or organizations" to alumni giving. Miracle (1977), in his study, found statistical significance in this relationship. Miracle (1977) and House (1987) found a significant correlation between alumni who participated in civic organizations and the extent of alumni giving. "Active volunteer in political organizations" was another variable that correlated significantly with giving (House, 1987). Not much research was done in this regard. Haddad (1986) and Oglesby (1991) examined spouses of alumni in their studies to conclude about the variable "spouse contributes to one's alma mater." Haddad concluded that alumni who married alumni contributed at a higher level than those who married nonalumni individuals. Oglesby found no statistical significance in his study of this variable. A number of studies have found the variable "support other charitable causes" significant in establishing donor status (Miracle, 1977; House, 1987; Oglesby, 1991), suggesting that alumni who support other charitable causes were more likely to support their alma mater financially. "Past financial contribution to an institution" (past giving history) has been suggested by very few studies to be a predictor of donor behavior (Miracle, 1977). Limited research on this and other variables, coupled with

inconclusive findings, and difference in the types of institutions studied, necessitate the inclusion of the aforementioned variables in the study.

METHODS

Setting and Sample

This study was an ex post facto descriptive study of alumni at a Research I, public university. The study population represented 37,691 (20,441 donors and 17,250 nondonors) alumni living in the United States, who graduated from the study institution between the years 1975 and 1985. A random sample of 500 alumni, 250 donors and 250 nondonors, was selected from the population. Some of the key demographic traits of the alumni surveyed are as follows: a majority were male (57%); about 88 percent of the alumni fall within the age range of 29–42; 70.4 percent of the respondents were in the occupational category of “professional”; the largest percentage (43.1%) of them were moderate democrats; 39.6 percent of them had no children; the highest degree attained by 58.2 percent of them was a bachelor’s degree, followed by 22.9 percent with a master’s degree; 60.1 percent of the respondents did not attend the university for a graduate degree; only 23.5 percent of the alumni surveyed were recipients of scholarship or grant; and a majority of 28.6 percent of them had a family income range of \$50,000–\$74,999.

Data Collection

A thirty-two item self-reporting survey instrument designed by the researchers was used to collect data for the study. The items selected for inclusion in the questionnaire were supported from research findings in the literature. The items seek responses to questions about thirty-two variables that exhibit demographic, attitudinal, involvement, and philanthropic characteristics. Prior research indicated that some of the variables were found to be significantly related to giving, while the evidence was inconclusive for others. This inconclusiveness was a consequence of the results of previous studies in which certain variables were found to be either significantly related to giving in a direct or inverse way, or were not related at all. Also, these findings were arrived at in settings different from that of a public, Research I university. Hence, this study deemed it fit to include these variables. Table 1 includes all the thirty-two variables used in the study, along with their sources. While some items were adapted versions of the original items found in prior research, others retained an unmodified structure. Though the items were gleaned from many different studies conducted earlier, they all contributed to the development of a more comprehensive survey instrument that can help provide much needed information on donor behavior.

The dependent variables included donor and nondonor alumni groups. Donors were those graduates who made financial contributions during 1980–1992, inclusive, and nondonors were those who did not make contributions during the same period. Also, the donors were grouped into high- and low-donor categories. High donors were those whose contribution total was among the highest 20 percent when compared with all alumni donors in the sample during 1980–1992. Low donors were those whose contribution total was among the lowest 20 percent of the sample.

Data Analyses

The discriminant function analysis, using the SPSS-X subprogram DISCRIMINANT, was used as the primary statistical method to predict group membership of donors and nondonors and the prediction of membership in the low-donor and high-donor levels.

The discriminant function analysis was applied to the data to determine if group membership for donor status (donor or nondonor) and group membership for donor level (low donor and high donor), could be predicted. Discriminant analysis is used when the criterion variable (giving) is the classification of the sample into two or more discrete groups (donor versus nondonor, low- versus high-donor levels). The categories have already been defined (donor status and donor level) and each subject (alumnus/a) categorized into a group. The discriminant analysis equation provides an estimate of the contributions of the predictors (attitudinal, demographic, involvement, and philanthropic characteristics) to correct classification of the individuals (alumni) into the groups (donor, nondonor, low or high donor). "The researcher can conclude whether or not the collection of predictors correctly classifies individuals into groups and which of the variables contribute significantly to the prediction of group membership" (Smith and Glass, 1987, p. 217).

RESULTS

The findings included six of the selected variables as discriminators between the donor and nondonor groups (Table 2). One of the attitudinal variables had discriminating power between the donor and nondonor groups ("perceived need for financial support"). Two of the demographic variables were shown to have discriminating powers between the donor and nondonor groups ("family income" and "subsequent enrollment for graduate work"). Three involvement variables discriminated between the donor groups ("reading alumni publication," "special-interest group," and "involvement with university as an alumnus/a"). None of the philanthropic variables discriminated between the donor

TABLE 2. Canonical Discriminant Function for Donor and Nondonor Status

Total Cases = 371	Donor Group = 210	Nondonor Group = 161
Canonical Correlation 0.3433421	Wilks' Lambda 0.8821162	Chi-Square 45.908*
Variable Order of Entry	Standardized Canonical Coefficient	
Family income	-0.47184	
Perceived need for financial support	0.43873	
Reading alumni publications	0.38821	
Subsequent enrollment for graduate work	-0.33117	
Special-interest group	0.30999	
Involvement with university as an alumnus/a	0.29235	

*Significant at the .05 level.

and nondonor groups. Group membership as donors or nondonors was predicted using the standardized canonical coefficients of the selected variables as criteria.

In this study, 65 percent ($N=242$) of the cases were correctly classified by group. That is, 70 percent ($N=113$) of the actual nondonor cases were correctly classified, while 61 percent ($N=129$) of the actual donors were predicted correctly (Table 3). This study compares favorably with similar studies for different alumni populations. For example, the correct classification rates of the donors and nondonors in other studies are Shadoian (1989) at 69 percent; Grill (1988) at 81 percent; and Beeler (1982) with 64 percent.

The second research question examined the ability of selected attitudinal, demographic, involvement, and philanthropic variables to discriminate alumni high donors from low donors (Table 4). Seven of the selected variables discriminated between the high-donor and low-donor groups. One of the attitudinal

TABLE 3. Classification Results for Donor and Nondonor Status

Actual Group		Predicted Group Membership			
		Nondonors		Donors	
		<i>N</i>	%	<i>N</i>	%
Nondonors	($N = 161$)	113	70.2	48	29.8
Donors	($N = 210$)	81	38.6	129	61.4
Grouped Cases Correctly Classified by Donor Status					65.23%

TABLE 4. Canonical Discriminant Function for High and Low Donors

Total Cases = 82	High-Donor Group = 43	Low-Donor Group = 39
Canonical Correlation 0.7427073	Wilks' Lambda 0.4483858	Chi-Square 61.361*
Variable Order of Entry	Standardized Canonical Coefficient	
Subsequent enrollment for graduate work	-0.67032	
Family income	-0.66295	
Perceived need for financial support	0.53398	
Involvement with university as an alumnus/a	0.52019	
Greek system	0.39744	
Departmental club or organization	0.39046	
Religious preference	-0.27068	

*Significant at the .05 level.

variables discriminated between the high-donor and low-donor groups ("perceived need for financial support"). Three of the demographic variables discriminated between the high-donor and low-donor groups ("family income," "subsequent enrollment for graduate work," and "religious preference"). Three of the involvement variables discriminated between the high-donor and low-donor groups ("involvement with university as an alumnus/a," "departmental club or organization," and "Greek system"). None of the philanthropic variables discriminated between high-donor and low-donor alumni. Group membership as high donors or low donors was predicted using the standardized canonical coefficients of the selected variables as criteria.

In this study, 87 percent ($N = 71$) of the cases were classified correctly by group using the standardized canonical coefficients as criteria. The program predicted membership for the alumni high-donor and low-donor cases as 86 percent ($N = 37$) of the actual high-donor cases and 87 percent ($N = 34$) of the actual low-donor cases were classified correctly (Table 5). The classification results also compare favorably to previous research on donor level with different populations. The percentage of correct classifications of membership in the high-donor or low-donor groups were as follows: Shadoian (1989) at 69 percent; Grill (1988) at 68 percent; and Beeler (1982) at 75 percent for the classification analysis.

The findings support predictability of donor status and donor level based on selected attitudinal, demographic, involvement, and philanthropic characteristics. The moderate to high result of 65 percent ($N = 242$) in predicting group membership for donor status and the extremely high result of 87 percent

TABLE 5. Classification Results for High Donors and Low Donors

		Predicted Group Membership			
		Low Donors		High Donors	
Actual Group		<i>N</i>	%	<i>N</i>	%
Low Donors	(<i>N</i> = 39)	34	87.2	5	12.8
High Donors	(<i>N</i> = 43)	6	14.0	37	86.0
Grouped Cases Correctly Classified by Donor Level				86.59%	

(*N* = 71) in predicting group membership for donor level indicate the benefit to be gained from expanding the knowledge of all alumni. This increased knowledge about alumni donors will guide the development of strategies necessary to increase the number of alumni donors by reducing the number of nondonor alumni. Consequently, the next step will be to increase the level of giving by the donor group. The success of the classification analysis in this study reinforces the importance of knowing more about the alumni to an extent that improves the likelihood of donors increasing the level of their giving to the university.

Donor Status

The attitudinal variable "perceived need for financial support" was retained in the discriminant function for donor status. Of the donors, 39 percent indicated that the university has a strong need for financial support from alumni.

Two of the demographic characteristics included in this study discriminated alumni donors from nondonors of the study university. "Family income" was the most powerful predictor of donor status, with 28 percent of the donors and 29 percent of the nondonors indicating that their family income was in the \$50,000–\$74,999 range. The second most powerful discriminator of donor behavior was the variable "subsequent enrollment for graduate work," where the majority of nondonors (57%) indicated that they had continued their graduate work after receiving a degree from the university.

Three involvement characteristics entered the discriminant function as predictors of donors' status. The most powerful predictor out of the involvement characteristics was "reading alumni publications," and 38 percent of the donors indicated a regular reading of the alumni material sent to them. The second involvement characteristic to enter the discriminant function was the variable "special-interest group," with 29 percent of the donors indicating participation in an activity of this nature. The third involvement characteristic retained as a predictor of donor status was "involvement with university as an alumnus/a,"

TABLE 6. Comparison with Important Predictors of Donor Status from Prior Research

Variable	Agree with findings from	Disagree with findings from
Family income	Miracle (1977)—U. Georgia; McKinney (1978)—private univ.; McNally (1985); Burt (1989)—SE Missouri State Univ.; Oglesby (1991)—private univ.	Gardner (1975), Deitz (1985), House (1987), Grill (1988), Bruch (1988)
Perceived need for financial support	McKee (1975), Miracle (1977), House (1987)—public inst.	—
Reading alumni publications	MacIsaac (1973), McKee (1975), Miracle (1977), Carlson (1978)—private inst.; Aug (1987), Grill (1988)—public inst.; Shadoian (1989)—public inst.	Bragg (1971)
Subsequent enrollment for graduate work	Koole (1981)—private inst.; Beeler (1982)—private inst.	Shadoian (1989)
Special-interest group involvement with university as alumnus/a	—	—
	Caruthers (1973), McKee (1975), McNulty (1976), Miracle (1977), Markoff (1978), Korvas (1984)—private inst.; Grill (1988), Springer (1991)—public inst.	Oglesby (1991)

with 16 percent of the donors indicating some type of involvement in alumni activities.

None of the philanthropic characteristics entered the discriminant function as predictors of donor status. Table 6 provides information about the findings of this study in relation to prior studies on donor status.

Donor Level

Only one of the attitudinal characteristics entered the discriminant function as a discriminator between high donors and low donors. "Perceived need for fi-

nancial support" was retained as a predictor of donor level, with 61 percent of the high donors indicating that the university has a strong need for financial support from alumni.

Three of the alumni demographic characteristics entered the discriminant function as predictors of donor level. The most powerful predictor was "subsequent enrollment for graduate work," with 54 percent of the low donors responding affirmatively to the question of additional graduate work at another university. The second most powerful predictor was "family income," with 14 percent of the high donors indicating both the \$50,000–\$74,999 range and the \$100,000–\$124,999 range. The variable "religious preference" was the third predictor retained in the discriminant function and 58 percent of the high donors identified themselves as Protestant.

Three of the involvement characteristics entered the discriminant function. The most powerful involvement predictor of donor level was the variable "involvement with university as an alumnus/a," with 30 percent of the high donors indicating some type of involvement in alumni events. The second most powerful involvement characteristic was "Greek system," with 23 percent of the high donors indicating membership in a fraternity or sorority. The third most powerful predictor of donor level was "departmental club or organization," with 30 percent of the high donors indicating such involvement in this activity.

None of the philanthropic characteristics discriminated high donors from low donors in this study. Table 7 provides information about the findings of this study in relation to prior studies on donor level.

TABLE 7. Comparison with Important Predictors of Donor Level from Prior Research

Variable	Agree with findings from	Disagree with findings from
Subsequent enrollment for graduate work	Shadoian (1989)—public inst.	—
Family income	Korvas (1984)—private inst.; Grill (1988)—public inst.	Dietz (1985), House (1987), Bruch (1988)
Perceived need for financial support	—	—
Involvement with university as an alumnus/a	Simpson and Hirsch (1968)—Stanford U.; Haddad (1986), Oglesby (1991)—private inst.	—
Department club or organization	—	—
Religious preference	—	—

SUMMARY

Donor or nondonor status for alumni at one Research I, public university was predicted with a moderate-to-high degree of accuracy. The most powerful discriminating variables between alumni donors and nondonors within the population examined were "family income," "perceived need for financial support," "reading alumni publication," "subsequent enrollment for graduate work," "special-interest group," and "involvement with university as an alumnus/a." The most powerful discriminating variables between high and low donors within the population examined were "subsequent enrollment for graduate work," "family income," "perceived need for financial support," "involvement with university as an alumnus/a," "Greek system," "departmental club or organization," and "religious preference."

Professionals in college and university development offices should consider the feasibility of collecting information on alumni to predict more accurately donor status and donor level. The overall cost of data collection must be weighed against the potential increase in not only the percentage of alumni who contribute, but also the size or frequency of the contribution. Development offices should consider organizing an institutional research function to help identify information needs, define data collection procedures, and conduct analysis for planning and decision making which improve the number of donors and amount of giving. University development and alumni offices should work collaboratively in inviting alumni to participate in events that parallel activities reflective of alumni interests during their time as students. By addressing alumni interests, past and present, the level of alumni involvement with the university will increase. While student development professionals can play a major role in helping build a long-term relationship between the institution and its future alumni, the overriding purpose of student development should not be lost to that of institutional development.

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REFERENCES

- Anderson, Gerald L. (1981). Self-esteem and altruism perceived as motivational factors for alumni giving, and their relationships to various donor characteristics (Doctoral Dissertation, Western Michigan University).
- Aug, Mary Ann C. (1987). Applying marketing principals to institutional advancement in higher education (Doctoral Dissertation, University of Pittsburgh).
- Beeler, Karl Joseph (1982). A study of predictors on alumni philanthropy in private universities (Doctoral Dissertation, University of Connecticut).
- Bragg, Charles M. (1971). A study of the relationship of selected variables and the

- financial support provided to a university by the graduate (Doctoral Dissertation, Ball State University).
- Bristol, Ralph B. (Summer, 1990). The life cycle of alumni donations. *The Review of Higher Education* 13(4): 503–518.
- Broms, Peter A., and Davis, Kenneth L. (1966). A study of the characteristics of consistent alumni givers and non-givers (Master's Thesis, University of Colorado).
- Bruch, Daniel Charles (1988). A study to identify and evaluate selected variables related to donor giving patterns: an analysis with implications for adult education (Doctoral Dissertation, University of Wisconsin–Madison).
- Burt, Woodrow Watkins, Jr. (1989). Alumni donors and non-donors of Southeast Missouri State University according to institutional involvement, educational satisfaction and demographic characteristics (Doctoral Dissertation, University of Missouri, Columbia).
- Carlson, Joann (1978). The role of alumni in the financial survival of independent education (Doctoral Dissertation, University of California, Los Angeles).
- Caruthers, Flora Ann Spencer (1973). A study of certain characteristics of alumni who provide financial support and alumni who provide no financial support for their alma mater (Doctoral Dissertation, Oklahoma State University).
- Chewning, Paul B. (1984). The attitudes of alumni non-donors, donors, and consecutive donors toward Drake University (Doctoral Dissertation, Drake University).
- Council for Financial Aid to Education (1989). *Voluntary Support of Education, 1987–1988*. New York: Council for Financial Aid to Education.
- Dahl, Randall Wilson. (1981). Early predictors of alumni giving: an empirical study of selected pre-enrollment characteristics and collegiate career experiences in the giving behavior of alumni of a public university (Doctoral Dissertation, University of Kentucky).
- Davis, Paul H. (March, 1969). Donor needs. *Journal of Higher Education* 40: 231–234.
- Dietz, Larry H. (1985). Iowa State University alumni contributions: an analysis of alumni giving patterns by selected class years—1974 and 1979 (Doctoral Dissertation, Iowa State University).
- Eldridge, Donald A. (October, 1964). Developing financial resources. *Junior College Journal* 5(2): 28–31.
- Gardner, Paul Mills (1975). A study of the attitudes of Harding College alumni with an emphasis on donor and non-donor characteristics (Doctoral Dissertation, Ohio University).
- Grill, Alan John (1988). An analysis of the relationships of selected variables to financial support provided by alumni of a public university (Doctoral Dissertation, The Pennsylvania State University).
- Haddad, Freddie Duke, Jr. (1986). An analysis of the characteristics of alumni donors and non-donors at Butler University. (Doctoral Dissertation, West Virginia University).
- Hall, Jackson O. (1967). A survey of the attitudes of Cornell alumni toward their alma mater (Doctoral Dissertation, Cornell University).
- House, Michael L. (1987). Annual fund raising in public higher education: the development and validation of a prediction equation (Doctoral Dissertation, University of Florida).
- Keller, Mary Jeanetta Corbett (1982). An analysis of alumni donor and non-donor characteristics at the University of Montevallo (Doctoral Dissertation, University of Alabama).
- Koole, Richard Steven (1981). A study of financially supportive and financially non-

- supportive alumni of Los Angeles Baptist College (Doctoral Dissertation, Western Michigan University).
- Korvas, Ronald James (1984). The relationship of selected alumni characteristics and attitudes to alumni financial support at a private college (Doctoral Dissertation, University of Missouri-Kansas City).
- Leslie, Larry L., and Ramey, Garey (March/April, 1988). Donor behavior and voluntary support for higher education institutions. *Journal of Higher Education* 59(2): 115-132.
- Loessin, Bruce A., Duronio, Margaret A., and Borton, Georgina L. (Fall, 1986). Measuring and expanding sources of private funding. In John A. Dunn (ed.), *Enhancing the Management of Fund Raising*. San Francisco: Jossey-Bass.
- MacIsaac, Charles Roderick (1973). Attitudes of donors at selected institutions of higher education (Doctoral Dissertation, Iowa State University).
- Markoff, Richard Michael (1978). An analysis of the relationship of alumni giving and level of participation in voluntary organizations: a case study (Doctoral Dissertation, The University of Toledo).
- McKee, Dale F. (1975). An analysis of factors which affect alumni participation and support (Doctoral Dissertation, Indiana University).
- McKinney, Ricardo John (1978). Factors among select donors and non-donors related to major gifts to a private university (Doctoral Dissertation, University of Miami).
- McNally, Frederick Edgar (1985). An analysis of alumni philanthropy related to personal, academic, and social characteristics (Doctoral Dissertation, University of San Francisco).
- McNulty, John William (1976). Alumni and giving: a study of student personnel services and alumni philanthropy (Doctoral Dissertation, Loyola University of Chicago).
- Melchiori, Gerlinda (ed.) (Winter, 1988). Applying alumni research to fund raising. *Alumni Research: Methods and Applications*. San Francisco: Jossey-Bass, pp. 51-65.
- Miracle, William Dunavent (1977). Differences between givers and non-givers to the University of Georgia annual fund (Doctoral Dissertation, University of Georgia).
- Morris, Donald Arthur Adams (1970). An analysis of donors of \$10,000 or more to the \$55 million program at the University of Michigan (Doctoral Dissertation, University of Michigan).
- Nelson, W. Thomas, Jr. (1984). A comparison of selected undergraduate experiences of alumni who financially support their alma mater (Doctoral Dissertation, Indiana University).
- O'Connor, William James (1961). A study of certain factors characteristic of alumni who provide financial support and alumni who provide no financial support for their college (Doctoral Dissertation, University of Buffalo).
- Oglesby, Rodney Allen (1991). Age, student involvement, and other characteristics of alumni donors and alumni non-donors of Southwest Baptist University. (Doctoral Dissertation, University of Missouri).
- Pickett, William Lee (1977). An assessment of the effectiveness of fund raising policies of private undergraduate colleges (Doctoral Dissertation, University of Denver).
- Pray, Francis C., and Frantzreb, Arthur C. (February, 1971). Navigating the old ship through fund raising shoals. *College Management* 6(2): 7-8.
- Ryan, Patricia Colleen (1990). A cross-cultural study of philanthropic attitudes of graduate students: a case study (Doctoral Dissertation, The Pennsylvania State University).
- Seymour, Harold J. (1966). *Designs for Fund Raising*. New York: McGraw-Hill.
- Shadoian, Holly Lynn (1989). A study of predictors of alumni in public colleges (Doctoral Dissertation, University of Connecticut).

- Simpson, A., and Hirsch, J. (1968). *Evaluation of the Effect of Involvement in Stanford Activities on the Gift Habits of Alumni*. Stanford: Stanford University.
- Smith, Mary Lee, and Gláss, Gene V. (1987). *Research and Evaluation in Education and the Social Sciences*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Spaeth, Joe L., and Greeley, Andrew M. (1970). *Recent Alumni and Higher Education: A Survey of College Graduates*. New York: McGraw Hill.
- Springer, Leonard (1991). Validating the predictive ability of ranking alumni prospects with statistical models (Master's Thesis, Vanderbilt University).