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# A Cross-National Investigation of Psychological Factors of Donor Behavior: The Case of University Endowment Funds

## Abstract

**Purpose:** State funding is being reduced for higher education institutes (HEIs) is linked to several checks such as performance-based incentives (Hagood, 2019). This forces HEIs to look for other options for funding. Endowment funds are now becoming the main source of revenue for HEIs (Sörlin, 2007), largely provided by alumni. Thus, this study aims to examine the factors that lead to donor behavior in terms of university endowment funds.

**Methodology:** Based on a sample of 627 participants in the survey from public universities in the Kingdom of Saudi Arabia (KSA) and 625 from public/private universities of the United States of America (USA), we conducted a cross-sectional survey-based analysis. Hypotheses were tested with regression analysis.

**Findings:** The results revealed that, in the USA, donors with substantial prestige within the institution are more likely to contribute to the endowment fund; however, in KSA, this relationship was insignificant. Additionally, this study found that participation, brand interpretation, and satisfaction positively impact identification with an organization, leading to donor behavior.

**Research Limitations/Implications:** This research has successfully identified psychological factors for endowment funding; however, mediating or moderating variables affecting donor behavior should also be considered. Further, this study considers only two countries, KSA and the USA; therefore, a larger cross-cultural context warrants more investigation.

**Practical Implications:** Overall results revealed several means through which the administrators and practitioners may efficiently manage and increase university endowment funds flow. This study's novelty is to conduct a cross-national investigation and identify the psychological factors of donation behavior toward university endowment funds, providing an opportunity for HEIs to understand the psychological factors in detail and motivate their alumni to be one of the important sources of funding even in developing countries.

**Originality/Value:** Many psychological factors underlie alumni's engagement in volunteerism and donation activities, especially in cross-national settings. Following social identity theory, this study explored identity-based donor behavior in terms of supporting universities through endowment funding.

**Keywords:** Endowment Fund, Donor Behavior, Participation, Satisfaction, Prestige, Identification

## Introduction

Paradigm shifts are being observed in the funding of higher education institutes (HEIs) (Weiler, 2000). These fundamental shifts were the result of state budget cuts for HEIs (Hagood, 2019). Therefore, new models for generating finance are being explored, including public-private partnership, performance-based contracts, competitive funds and vouchers, personal investment resources, and endowment funding (Abankina, 2019). Endowment funds are widely used by universities in developed countries. Thus, researchers have been interested in investigating endowment funding and donor behavior from a different perspective. Several studies have been conducted to address the topic specifically as follows. Leslie and Ramey (1988) studied donor behavior and voluntary support for HEIs. Conley (2017) researched securing donor support for unrestricted endowments for higher education, while Harrison (2018) tried to understand donor experiences by applying stewardship theory to higher education donors. Moreover, Ahmad et al. (2019) [have considered endowment funding as an option while diversifying revenue streams for HEIs.](#)

The relationship between donor behavior and endowment funding was further investigated from different dimensions as follows: organization accountability and fundraising efforts (Rose-Ackerman, 1987); voluntary support for HEIs and donor behavior (Leslie & Ramey, 1988); donor and managerial interests (Hansmann, 1990); excessive endowment and endowment for own use (such as staff salaries) (Core et al., 2006); donor adverse reactions to endowment (Oster, 2003); citizenship behavior and financial giving of alumni (Raheja & Khatri, 2018); organization–public relationship and higher education donor experience (Harrison, 2018). Securing endowment donations, which were found to be a valued source of revenue in the studies mentioned above, is still a significant challenge due to complex donor-related factors that require more attention on the part of the universities (Koehn & Uitto, 2017). Therefore, further investigation into the relationship between donors and HEIs is required. Besides, a structure is needed to understand the importance of endowment fund contributions and identify the factors affecting donors' behavior. Prior studies have found that organizational identification has a positive impact on donor behavior and have developed different models to examine the donor's behavior including choice, amount, and frequency of donations based on various theoretical perspectives (Fazli-Salehi et al., 2019; Stephenson & Yerger, 2014).

[On the basis of academic research and government push for funding, universities have started depending on endowments in the last few decades and found it to be a viable source of revenue](#) (Brown et al., 2014). Although the characteristics of emerging and developed markets are different (Ashraf et al., 2019), developed countries play a pivotal role in introducing new business modes; for example, the United States of America (USA) depends on endowment funds for universities (Chabotar, 2010). The Harvard 2018-2019 report disclosed that the university uses more than 13,000 individual endowment funds, amounting to \$1.9 billion, contributing 35% of the annual operating budget (Harvard, 2019). Universities in developing countries have also followed

endowment practices, considering their respective government Strategic Development Goals (SDGs) (Khan & Hassan, 2019). Abdullah (2018) conducted research targeting Muslim countries and endowment practices and found that 17 SDGs in different Muslim countries push for endowment funding. Bangladesh, in its SDGs, has encouraged endowment funds for socioeconomic development (Khan & Hassan, 2019). According to “Saudi Vision 2030,” which takes center stage in every sphere of Saudi Arabian life, there will be increasing pressure on state-funded institutions to tap into alternative sources of self-generated funds (Vision2030, 2020). In the academic world of universities, this pressure will demand that some components of the university’s expenses be covered by their self-generated funds.

In developed nations, large sums of fund donations were gathered and a huge amount of research was conducted on the perspective of the individual donor; however, an important aspect was missing from studies conducted, that is, social identity and donor behavior especially concerning universities endowment funds. The social identity perspective focuses on organizational identification that asserts participation, satisfaction, interpretation of the brand, and prestige positively influence identification, which in turn has a significantly positive impact on crowdfunding (Kromidha & Robson, 2016).

Researchers have found a significant gap in addressing challenges related to complex donor behavior and the role of universities in understanding social identity as an aspect of alumni funding that eventually affects donor behavior in terms of university endowment funds. Further, studies conducted have only focused on the dynamics of HEIs in a single country. Specifically, cross-national studies of endowment fund practice and programs to start endowments are needed to offer a comparative picture of donor behavior. USA is an endowment funding–practicing country, whereas fully funded HEIs in KSA are now pushed to follow the same steps. Thus, this study selected the public universities in the Kingdom of Saudi Arabia (KSA) and the public/private universities in Illinois, USA.

This research article first discusses the shifts in HEIs funding sources and the importance of endowment funds for universities and [research conducted](#); then, literature is reviewed to understand social identity and donor behavior to develop a hypothesis. Based on the literature review, a conceptual model is generated. The subsequent sections of this research article are methodology, data analysis, and general discussion of the study results with conclusion and limitation of the research.

## **Literature Review and Hypotheses Development**

The available literature on endowment funding and alumni behavior has certain limitations in understanding psychological factors that motivate an alumnus to donate. Prior studies either have mixed student and institutional level factors in their models or have only investigated a single student-/alumni-related factor. For example, Harrison et al. (1995), who studied a set of different

factors, demonstrated that student participation in fraternities and sororities (student-level factor) and annual university bequests (institutional factor) and developmental spending (institutional factor) have a positive impact on donations. On the other hand, in a study with a limited treatment of the subject, Cunningham and Cochi-Ficano (2002) demonstrated that students' achievements after graduation significantly impact their donation behavior. Furthermore, some studies addressed donor behavior; however, these studies mostly focused on financial challenges to management, the effect of donor groups on collecting endowment funds, and donor behavior of alumni of a HEI like Law Schools (Conley, 2017; Grunig, 1993; Leslie & Ramey, 1988).

Psychological factors are very important to understand the monetary donor behavior (Green & Webb, 1997), and previous studies in this area have focused exclusively or partially on psychological factors, but they have not treated the subject matter comprehensively. A common problem in such work is that an integrated view of the dynamics remains missing. For example, Weerts and Ronca (2007) found age, student employment status, and value system to be instrumental in affecting donation behavior; however, they missed earlier findings of Okunade and Berl (1997) who reported the importance of the connection between alumni and their network and the alma mater (e.g., family ties with the institute and donor friends in the social circle). Similarly, Kuwabara and Pillemer (2010) found positive experiences during students' life at the university to be instrumental in acquiring future donations from them; however, they did not build on earlier findings to develop a comprehensive view of endowment donors' psychological profile. In such situations, the psychological factors that are important and necessitate active management and those of only marginal significance remain unclear to the university.

It is important to note that the literature on charitable donations cannot be used to understand the dynamics of endowment funds because of the critical differences between contexts. The motivation behind charitable donations is the individual's desire to help those who are usually living under challenging circumstances and are needy (Ranganathan & Henley, 2008). On the contrary, university endowment differs in the sense that it is more about giving back to your alma mater for its future development and growth rather than helping someone struggling with living conditions in the present. Moreover, the psychological factors that play a role in charitable donations likely differ from those affecting endowment donor behavior. For example, one's sense of morality, i.e., moral identity (Aquino & Reed II, 2002; Winterich et al., 2009) will be more pronounced in situations involving charitable donations; however, in the case of endowment funds, it may not be a question of morality but that of how closely the university is/was embedded in the life of an alumnus, i.e., social identity. The above studies disclosed different donor behaviors with reference to social identity. These studies also manifested that donor behavior differs according to the settings. Hence, understanding the endowment donor behavior further is needed with respect to social identity theory and cross-cultural settings.

## Social Identity Theory

Social identity theory was originally introduced in the 1970s to understand intergroup relations and was properly developed at the start of the 1980s by discussing the nature and processes of social groups (Hogg, 2016). The essential aspect of the social identity theory is that individuals recognize themselves as a part of a specific social group (Bhatti et al., 2020; Ellemers et al., 1999; Khan et al., 2019). One of these social groups is the alumni, which are connected to educational institutes and work toward achieving university excellence (Onukwuba, 2018). Therefore, alumni contribute or create endowment funds to help a specific group of individuals affiliated with the same institute from where they graduated (D'Souza & Johnson, 2019).

Marique et al. (2013) demonstrated that organizational identification mediates the relationship between organizational goals and an individual, and Dutton et al. (1994) found that the individuals' sense of organizational identification stimulates their interest and group loyalty. Based on the above literature findings, we developed the following hypotheses considering social identity in terms of donor psychological factors and endowment funding.

## Hypothesis Development

### Participation and Identification

Participation refers to student's active involvement in campus-related activities. Participation develops a "more salient identity related to the university." This relationship cannot be viewed in isolation. Moreover, university activities help develop strong contact with the students and offer positive experiences that encourage alumni to participate in endowment funding (Arnett et al., 2003). Bhattacharya et al. (1995) and Porter et al. (2011) documented that frequent contact with the university creates individuals' propensity to categorize themselves as members of the group, which develops alumni identification with the HEIs. In the light of the above-cited literature, the study hypothesizes the following:

**H<sub>1a</sub>:** Participation is positively associated with identification among KSA students.

**H<sub>1b</sub>:** Participation is positively associated with identification among USA students.

### Satisfaction and Identification

Satisfaction is achieved when expectations are fulfilled, and it is an important element to build relationships. Moreover, it is measured in many dimensions. Specifically, according to our objectives, satisfaction is defined as emotional and cognitive responses when students' expectations are confirmed in terms of social interaction and resources; institutions have reported that satisfaction and identification are positively associated (Bhattacharya et al., 1995; Kuenzel & Halliday, 2008). In our donor volunteer behavior study, this relationship can be established

because of a previous connection with HEIs, i.e., developing satisfactory connections during the student's study period, or previous donation utilization by HEIs where alumni made a donation. Previous studies have evaluated this relationship as follows. Mael and Ashforth (1992) found that satisfaction positively impacts the identification of alumni in endowment funding. Kuenzel and Halliday (2008) and Arnett et al. (2003) empirically examined and supported this relationship; hence, we concluded that social identity results in higher supportive behavior. In line with these arguments, this study hypothesized the following:

**H<sub>2a</sub>:** Satisfaction is positively associated with identification among KSA students.

**H<sub>2b</sub>:** Satisfaction is positively associated with identification among USA students.

### **Brand Interpretation and Identification**

In the case of educational institutions, brand refers to institutional attractiveness and distinctiveness in the mind of the students (Goi et al., 2014). Dutton et al. (1994) developed the theoretical foundation, and Ahearne et al. (2005) empirically tested that the essential motive for identification is an organization's attractiveness. Moreover, Newbold et al. (2010) and Powell et al. (2007) confirmed that organizational attractiveness is the key driver of identification. On this account, once educational institutions are more attractive and distinctive, students feel a strong level of identification. In line with these arguments, this study hypothesized the following:

**H<sub>3a</sub>:** Brand interpretation is positively associated with identification among KSA students.

**H<sub>3b</sub>:** Brand interpretation is positively associated with identification among USA students.

### **Prestige and Identification**

Researchers discussed that prestige may augment students' sense of social identity with the educational institutes (Dutton, 1990; Dutton et al., 1994; Smidts et al., 2001). In this context, alumni would want to enhance their self-esteem and status in society by establishing a good connection with a prestigious university (El-Fekey & Mohamad, 2018; Stahl & McDonald, 2019). Similar to attractiveness, prestige is the perception of the brand held by others. Once institutions are assumed prestigious, everyone would want to be associated with the institution (Ahearne et al., 2005; Porter et al., 2011; Powell et al., 2007). Therefore, this study posits that students experienced a strong identification level when they perceived their institutions to be prestigious. In line with these arguments, this study hypothesized the following:

**H<sub>4a</sub>:** Prestige is positively associated with identification among KSA students.

**H<sub>4b</sub>:** Prestige is positively associated with identification among USA students.

## Identification and Endowment Fund Behavior

Identification is all about belonging to a group and developing a strong emotional association with that institution. It is a belief within a person that their fate is "intertwined with the fate of the group" (Ashforth & Mael, 1989). The success and failure of the institution may influence the individual self-identity due to emotional attachment and the readiness and commitment of individuals to achieve organizational goals (Bhattacharya et al., 1995). Mael and Ashforth (1992) examined identification in higher education and found that alumni make efforts on behalf of institutions to achieve the goals and help others toward success, concluding that identification is positively associated with giving among students. In the same line, Arnett et al. (2003), Kim et al. (2010), Porter et al. (2011), and Stephenson and Yerger (2014) confirmed the association between identification and donation behavior. In line with these arguments, this study hypothesized the following:

**H5a:** Brand identification will be positively associated with the likelihood of donating to endowment funds among KSA students.

**H5b:** Brand identification will be positively associated with the likelihood of donating to endowment funds among USA students.

## Conceptual Framework

Figure 1 shows the conceptual framework of the study based upon the hypotheses proposed in the previous discussion.

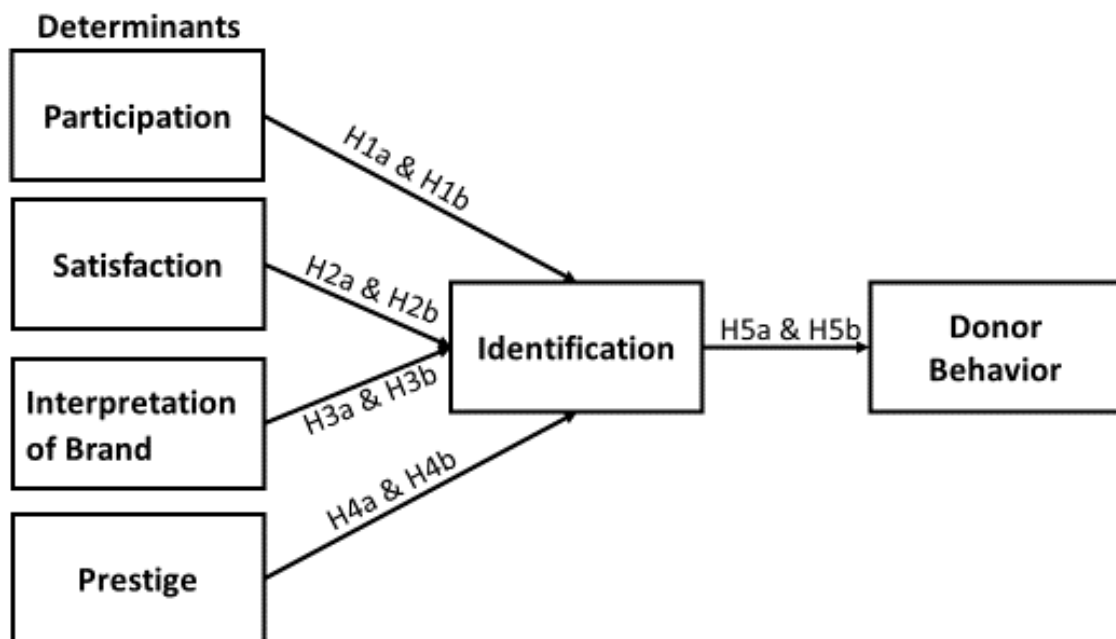


Figure 1: Conceptual Framework



# Methodology

## Research Design and Sample Details

To understand the antecedents of donor behavior, we selected samples from students at public universities of KSA and universities in Illinois, USA. A structured questionnaire is used to obtain data with the help of data collection agencies and email-based instruments. A total of 1000 questionnaires were distributed among the alumni in each country. Overall, 712 respondents from KSA and 700 from the USA returned the survey questionnaire. After removing the missing values and incomplete and unclear responses, the final sample consisted of 627 respondents (62.7%) for KSA and 625 (62.5%) for USA.

## Measures

Identification was measured using a six-item five-point Likert scale (1 = strongly agree; 5 = strongly disagree) developed by Mael and Ashforth (1992). The organizational identification sample items were as follows: “when someone criticizes (name of school/university), it feels like personal interest”; “if a story in the media criticized the school, I would feel embarrassed.” Participation was measured using a three-item seven-point Likert scale (1 = not active at all; 7 = very active), as proposed by Arnett et al. (2003), focusing on “how actively they participated in the activities,” [which is a better measure of social connectedness if the persona still attends the institution](#). Satisfaction is measured using an eight-item five-point Likert scale from (1 = very dissatisfied; 5 = very satisfied) developed by Stephenson and Yerger (2014) and these items cover both academic and resource aspects of satisfaction. The satisfaction sample items are as follows: “quality of the social aspects of your experience” and “technology resources.”

Brand interpretation was measured using an eight-item five-point Likert scale (1 = strongly agree; 5 = strongly disagree) developed by Stephenson and Yerger (2014). The brand interpretation sample items are as follows: “the university is recognizably distinct from other universities”; “my experience at the university is an important part of who I am.” Prestige was measured using an eight-item, five-point Likert scale from 1 (strongly agree) to 5 (strongly disagree) developed by Mael and Ashforth (1992). The perceived organizational prestige sample items are as follows: “people in my community think highly of (name of school/university)”; “alumni of (school/university) would be proud to have their children attend (name of school/university).” Finally, the outcome variable endowment fund (a proxy of donation) that includes cash or in-kind contribution [was evaluated using “Yes/No” categorical variables](#).

[The literature suggests that the respondent's gender and age can influence the variables under study \(Riketta, 2005; Stephenson & Yerger, 2014\). This study considered the same; therefore, gender and age were incorporated as control variables along with the university location, the participation of endowment, and kind of contribution.](#)

## Data Analysis and Results

### Descriptive Statistics

Table 1 shows the country-wise respondent details of both samples. Overall, the results disclosed that alumni from both countries are inclined to participate in the study and are involved in endowment funding with their institutes. In both countries, the number of females who responded to the questionnaire was less than males, and the highest number of respondents lied in the age group of 18–25 years. Most students contribute to endowment funds through cash; however, they also use other miscellaneous approaches.

**Table 1** Country-Wise Respondent Characteristics

	Profile	KSA (n=627)		USA (n=625)	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	513	82	450	72
	Female	114	18	175	28
Age	18-25	295	47	325	52
	26-40	189	30	175	28
	Above 40	143	23	125	20
University Location Hometown	Yes	390	62	415	66
	No	237	38	210	34
Have you ever made endowment/ Financial Contribution to your University/educational institution?	Yes	415	66	398	64
	No	212	34	227	36
What kind of endowment/ financial contribution?	Cash Contribution	275	67	208	53
	In-Kind	140	33	190	47

Tables 2a and 2b include the mean, standard deviation, reliability, and construct validities. Cronbach's alpha of all constructs in both countries' analyses is more than .70 and less than .90, indicating that the scales are reliable. Relationships between variables are significant at 10%, 5%, and 1%, as mentioned in both tables. Further, all constructs are found to be discriminant and the minimum Average Variance Extracted (AVE) value is .50, showing that constructs are different from each other. Both tables provide the details of AVE values listed diagonally.

**Table 2a** Descriptive and Correlation Matrix of Variables-KSA

	$\alpha$ -value	Mean	SD	1	2	3	4	5	6
1. Participation	0.76	4.82	1.73	.55					
2. Satisfaction	0.81	4.85	0.95	0.30*	.52				
4. Interpretation of Brand	0.85	4.65	0.77	0.36*	0.39*	0.35	.58		
5. Prestige	0.81	4.28	0.11	0.12*	0.45*	0.11	0.31	.52	
6. Identification	0.82	4.61	0.85	0.28*	0.17***	0.27***	0.53**	0.23**	.60

Note: N=627, \*, \*\*, \*\*\* Indicate statistically significant at the 10%, 5% and 1% level of significance

**Table 2b** Descriptive Statistics and Correlation of Variables-USA

	$\alpha$ -value	Mean	SD	1	2	3	4	5	6
1. Participation	0.78	4.35	1.07	.50					
2. Satisfaction	0.85	4.88	1.33	0.30*	.56				
4. Interpretation of Brand	0.84	4.71	0.19	0.39**	0.29*	0.01*	.53		
5. Prestige	0.84	4.66	0.89	0.55**	0.47*	0.48*	0.51**	.59	
6. Identification	0.86	4.32	0.26	0.33*	0.38*	0.27**	0.46**	0.57**	.66

Note: N=625, \*, \*\*, \*\*\* Indicate statistically significant at the 10%, 5% and 1% level of significance

## Hypotheses Testing and Discussion

To test the above-stated hypotheses, we used ordinary least square (OLS) regression for H1 to H4 that measures the impact of participation, satisfaction, interpretation of the brand, and prestige [simultaneously](#) on identification. For the fifth hypothesis, logistic regression was used to measure individuals' likelihood of making a donation to the endowment fund.

Table 3 presents the results of the antecedent variables of identification for both KSA and the USA. Prestige has a significant positive effect on identification in the USA ( $\beta = 1.88$ ;  $SE = 1.12$ ;  $p = 0.00$ ), which is in line with (Arnett et al., 2003), whereas its effect is insignificant in the KSA sample. This relationship explains the cultural differences between the two countries, known as “soft power” (Joseph, 2006) that is derived from cultural sources and ideas (Powell et al., 2007). Irrespective of prestige, participation has a positive and significant impact on identification in USA and KSA ( $\beta = 0.78$ ,  $SE = 0.15$ ,  $p = 0.000$ ;  $\beta = 1.4$ ,  $SE = 0.31$ ,  $p = 0.00$ , resp.), reflecting the intentions of alumni donations (Clotfelter, 2001; Monks, 2003; Pinar et al., 2011; Stephenson & Yerger, 2014; Tsao & Coll, 2004).

Satisfaction and interpretation of brand have a significantly positive impact on identification in both KSA and USA; details of results can be seen in Tables 3 and 4. These results agree with those of prior research studies (Kuenzel & Halliday, 2008; Newbold et al., 2010). Demographic variables show interesting results, and age is highly significant in both the KSA and USA context, which shows the intent to donate (Tsao & Coll, 2004) and the likelihood of donating (Weerts & Ronca, 2007), whereas gender has an insignificant impact on identification in the USA context, consistent with the findings of Monks (2003) and Okunade and Berl (1997). On the other hand, in KSA, gender has a significantly positive impact on identification, building on the findings of Belfield & Beney (2000) who reported that females are more likely to donate. The results revealed that satisfaction and prestige of the institution are key to identification and contribution to endowment funds. When a student feels a great sense of satisfaction and gets more resources from the institution, it is more likely that the student becomes more identified with institution, which eventually leads to making a contribution to the university endowment fund.

**Table 3** Identification as Dependent Variable

	KSA (n=627)				USA (n=625)			
	$\beta$	SE	t-value	p	B	SE	t-value	p
Participation	1.4	0.31	4.53	***	0.78	0.15	5.21	***
Satisfaction	0.88	0.11	5.25	***	0.55	0.07	6.23	***
Interpretation of Brand	1.12	0.45	2.49	**	0.32	0.08	4.03	***
Prestige	1.13	1.72	0.67	n.s.	1.96	1.06	1.92	**
Age	0.49	0.19	2.58	***	0.80	0.63	1.28	**
Gender	1.89	0.15	12.60	***	0.10	0.14	0.69	n.s.
Adj. R-Square	0.43				0.49			

**Note:** \*, \*\*, \*\*\* Indicate statistically significant at the 10%, 5% and 1% level of significance

Table 4 shows that identification is significantly associated with the students' likelihood of donating in an endowment fund to their institutions in both KSA and the USA, consistent with the results of previous studies (Clotfelter, 2001; Tsao & Coll, 2004). The results revealed that KSA participants are slightly more willing to contribute to endowment funds than USA participants. Demographic variables also play a significant role in making a contribution in endowment funds in both the KSA and USA contexts, consistent with previous findings (Belfield & Beney, 2000) that reported a significant difference in donation behaviors between males and females. The conclusive results of this cross-national investigation between KSA and USA indicate that donor behavior, present identification, and age (young alumni) significantly contribute to the university endowment fund.

**Table 4** Donor Behavior (Endowment Fund) as Dependent Variable

	KSA (n=627)				USA (n=625)			
	B	SE	t-value	P	$\beta$	SE	t-value	p
Identification	0.41	0.16	2.61	**	0.36	0.04	9.48	***
Age	0.37	0.50	0.74	n.s	0.62	0.34	1.83	*
Gender	0.97	0.09	10.80	***	0.67	0.13	5.09	***
Constant	0.47	0.56	0.83	n.s	0.57	0.86	0.67	n.s
Pseudo R-Square	0.21				0.19			

Note: \*, \*\*, \*\*\* Indicate statistically significant at the 10%, 5% and 1% level of significance

## General Discussion

This cross-national investigation empirically examines psychological factors of donor behaviors toward university endowment funds between KSA and USA. Primarily, the objective of this study is to identify **donor psychological** factors that significantly influence donations behavior of alumni. Several studies analyzed a similar relationship with “donation” as an outcome variable (Stephenson & Bell, 2014). However, **donor psychological factors affect the endowment behavior, which was not proven in previous studies** based on social identity theory; therefore, this study contributes to the existing literature by examining the university endowment fund as an outcome variable.

The results of this study expand the role of brand identification in higher education and indicate that when alumni experience self-association with their institutions, identification yields positive results. The results showed that alumni of prestigious institutions are more likely to donate in endowment funds in the USA context (Palmer et al., 2016), whereas this relationship was insignificant in the KSA, which depicts the cultural difference (Joseph, 2006). On the other hand, participation, satisfaction, and brand interpretation commonly significantly affect donor behavior toward endowment funds in both countries.

Consistent with the literature, this study reports that participation and satisfaction are positively associated with identification (Rubio et al., 2015). The demographic results of this study are aligned with those of the literature; for example, age is expected to be a strong predictor of endowment fund (donation) contribution behavior. Bingham et al. (2003) and Weerts and Ronca (2007) reported that the older alumni contribute more than younger ones. **This study provided a comparative picture between a well-reputed country that frequently uses endowment funds and a new entrant country. This research revealed that prestige is a significant factor that impacts donors' behavior in the USA context, whereas it is insignificant in the KSA context.** These results reflect that improvements in policies and practices should be implemented to strengthen the relationship between alumni and their institutions, leading to more contributions to the institutions' endowment funds. However, in both countries, participation, satisfaction, and the brand's interpretation are significantly related to identification and eventually impact donation behavior.

## **Practical Implication**

This study's results have important implications for academicians, policymakers, and senior HEIs managers generally and for Saudi Arabia particularly. First, this study has explored and identified the psychological factors that affect donor behavior considering social identity theory, providing academicians an opportunity to further comprehend this relationship by applying and bridging three different fields of study, psychology, sociology, and marketing.

Second, the results have shown that HEIs in a country utilizing endowment funds depend on alumni donations and their alumni feel a sense of prestige being a part of the university community and are willing to donate. Alumni of the KSA HEIs are satisfied with their universities and contribute donations; however, developing a prestigious relationship with their institutes will provide an opportunity to obtain more donation funds (same as in countries frequently using endowment funds). Thus, managers or marketing departments of the universities must work hard to make their institutes prestigious in the eye of alumni by recruiting prominent faculty, publicizing achievements and placement success, naming academic blocks, and having monuments, songs, colors, and rituals; building strong relationships will even further strengthen identification of alumni with HEIs.

Further, this study also suggests that, based on the overall results, policymakers should consider alumni endowment funds a part of their revenue streams and appropriate responsibility should be assigned to some departments to increase the donations. These findings will also help policymakers implement the Saudi Vision 2030 SDGs and other aspiring nations that follow the practicing countries' footsteps by developing the best practices for generating revenues to bring financial sustainability to government universities apart from government funding. This study also suggests that HEIs educate students beyond classrooms and build a culture of sharing and helping society that results in volunteerism. Universities have an opportunity to increase volunteer behavior with brand interpretation that helps in developing alumni's sense of identity.

## **Limitations and Future Directions**

This study has some limitations that should be considered in future studies. First, this research has successfully identified psychological factors affecting endowment funds; however, some mediating or moderating factors could affect the donor behavior, which need to be investigated in future research. Second, this study considers only two countries, KSA and USA; thus, studying these factors in a further cross-cultural context is required. Creating some clusters and studying the country's effect in detail are warranted. Third, endowment fund campaigns should be launched to motivate alumni to donate.

This study has not been able to distinguish HEIs that use marketing tools that may influence positively or negatively donor behavior. Lastly, a future study may explore the effects of high- and low-rank universities, which could also provide more insights into donor behavior.

## Statement of Conflict of Interest

There is no conflict of interest among co-authors.

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