Beyond Giving: Political Advocacy and Volunteer Behaviors of Public University Alumni

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Abstract   College and university leaders have paid an enormous level of attention to one domain of alumni involvement: charitable giving. In light of the decline of state support for higher education and the shrinking ability of families to pay for college, such emphasis is understandable. However, this emphasis has blinded scholars and practitioners to understanding the important non-monetary support roles played by college alumni. Drawing on data from a research extensive university, this study employs a sequential mixed method design (focus groups and confirmatory factor analysis) to demonstrate that non-monetary support behaviors are best understood through the distinct, but interrelated domains of political advocacy and volunteerism. Political advocacy behaviors include contacting legislators, the governor's office, local politicians and serving on a political action team, while volunteer behaviors include mentoring new alumni, recruiting students, and participating in special events. The study breaks ground for future research on alumni support for higher education, including strategies to recruit alumni volunteers and advocates.

Keywords   Alumni · Volunteerism · Advocacy · Philanthropy · Lobbying · Confirmatory factor analysis

College and university alumni play important roles in supporting higher education. This support is most visible in the area of charitable giving. In 2007, U.S. colleges and universities raised an estimated $29 billion in private gifts, and approximately 28% of this total came from alumni (Council for Aid to Education 2008). Charitable giving for higher education is increasingly important as the share of state support for public colleges and universities continues to decline. Due to the pressure to increase philanthropic support for

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higher education, research on alumni has focused almost exclusively on giving (Burke 1988; Caboni and Proper 2008).

However, alumni play broader roles in supporting colleges and universities beyond writing a check. For example, alumni who help secure taxpayer support for their alma maters have become key players in the lobbying process (Koral 1998). Over the last several years, lobbying efforts involving alumni have become more prevalent and aggressive (Potter 2003). In addition, through college advisory boards, prominent alumni are lending their experiences and expertise to help higher education leaders formulate strategic directions for their institutions (Weerts 1998). In other cases, veteran alums may serve as mentors to young alumni who are moving to a new town and/or establishing their careers and job prospects. And when it comes to recruiting students, experts claim that dollar for dollar, nurturing an alumni recruitment program is a better investment than placing an advertisement (Fogg 2008). When taken together, the multiplicity of alumni support roles is critical in the increasingly competitive marketplace of higher education (Cabrera et al. 2005; Weerts and Ronca 2008).

As illustrated above, alumni relations programs have become a top priority for institutions across the county. As a result, institutions, both public and private, spend significant resources on cultivating alumni involvement. In 2003, for example, UVA spent over $8.7 million on alumni relations activities which involved the equivalent of 81 full-time personnel (Alumni Relations Task Force 2004). Recently, at the University of Minnesota, campus leaders have made explicit the objective to enlist alumni volunteers to help the institution become one of the top three public universities in the world. Reaching this ambitious goal will require significant investment in alumni programs.

Despite the growing emphasis on leveraging alumni support for higher education, the topic of alumni involvement in colleges and universities remains largely understudied. Institutions spend millions of dollars engaging alumni with the hope that they will become more active in supporting their alma maters. But, in many cases, campus leaders know very little about the impact of these efforts, the types of alumni most likely to serve the institution, and the range of ways that alumni support the institution. A central problem is that no foundational studies have been conducted to help scholars and practitioners conceptualize the different roles alumni play in supporting their alma maters. The purpose of this study is to fill this gap.

Purpose and Significance of this Study

The purpose of this study is twofold. First, our analysis documents the range and most common alumni support behaviors, beyond charitable giving, that higher education graduates exhibit on behalf of their alma maters. Second, using Confirmatory Factor Analysis (CFA), this study examines whether these behaviors can be grouped into one or more dimensions or constructs. Our study is important for two primary reasons.

First, our analysis helps college and university leaders evaluate whether current efforts to encourage alumni support are effective. Specifically, our analysis sheds light on the ways in which alumni are responding (or not responding) to institutional solicitations for involvement. Second, and most important, our work paves the way for future scholars to start building models that examine attributes of alumni who are most likely to engage in various support behaviors. This is significant because practitioners will be able to use this knowledge to better match alumni with support opportunities, increase the efficiency and quality of alumni recruiting efforts, and achieve better advancement outcomes.

Our study falls into the same genre of studies that have used CFA to launch new fields of inquiry through the development of constructs, scales, and instrumentation. For example, Bell-Ellison and Dedrick (2008) recently employed CFA to evaluate scales related to student-faculty mentorship. Their work is important in advancing scholarship on what doctoral students value in a mentor. In another study, Nora and Cabrera (1993) documented the construct validity of institutional commitment. Finding that indicators of institutional quality were the only significant predictor of commitment, their work helped to expanding the literature on student persistence (Pascarella and Terenzini 2005). The aforementioned studies are two of many that have focused on improving and validating instruments for future research (see Allen and Nora 1995; Vogt et al. 2007; Langhout et al. 2007; Ruban and McCoach 2005). In the same way, our analysis focuses on construct validation as a critical first step to improving scholarship and practice in the field of alumni relations and institutional advancement.

Literature Review

As indicated in the introduction, there is little literature that adequately frames our understanding about multiple ways in which alumni support their alma maters beyond giving. Most of the work on this subject is largely anecdotal and reflect individual practitioner experiences. Recently, Weerts and Ronca (2008) shed light on factors distinguishing between alumni volunteers and non-volunteers at a major research university. However, their study did not address questions about kinds of volunteer activity, and whether volunteer roles might be distinguished from one another.

Recognizing the limitations of past research, our literature review is assembled into two parts. First, we begin by reviewing general literature on how individuals begin to form their ideas about supporting non-profit organizations. This review helps us develop a theory about various pathways alumni may take in support of higher education organizations. Second, we introduce three theories (social exchange, expectancy, and investment) to explain why individuals gravitate to supporting certain *kinds* of organizations, in this case, colleges and universities. Together, these two literatures guide our investigation.

Volunteer and Political Behavior on Behalf of Non-Profit Organizations

The fields of political science, sociology, and social psychology provide valuable perspectives on factors that motivate and shape an individual's involvement in supporting non-profit organizations. Overall, research spanning multiple disciplines suggests that civic involvement is shaped by formative experiences from youth to adulthood. Furthermore, this literature makes the distinction that individuals may follow various paths which may lead them to become engaged in political advocacy, volunteer service or both sets of activities. The following paragraphs describe these distinct but interrelated pathways.

Political Advocacy

Political participation is comprised of multiple behaviors including voting, contacting officials at the federal or local level, giving campaign money, conducting campaign volunteer work, protesting or demonstrating, signing a petition, or persuading family or

friends to vote on an issue (Miller 2008; Brady et al. 1995). Whether an individual participates in the political process depends on a number of factors including past political experiences, capacity (ability) to participate, rewards, and proximity to networks that mobilize their participation.

A wealth of literature suggests that one's likelihood of becoming politically active relates to family background and formative political experiences as a youth (e.g., Hanks and Eckland 1978; Milbrath and Goel 1977; Otto 1976; Verba et al. 1995; Glanville 1999). A recent study conducted by Kelly (2006) found that parents' voting behaviors were strongly correlated to youth civic behaviors including likelihood of voting and political volunteering. In short, parents are critical to shaping the civic behaviors of their children.

School experiences also influence whether youth will become politically involved later in life, particularly at the high school level. Specifically, a variety of studies have shown that participating in high school government is positively associated with political participation in adulthood (Hanks and Eckland 1978; Otto 1976; Verba et al. 1995; Glanville 1999). Overall, studies suggest that formative civic experiences for young people are enduring, and ultimately lead to politically active citizens who vote at high rates, and are ready to lead other citizens to take a stand on issues (Fendrich 1993; McAdam 1988).

The aforementioned studies suggest that one's inclination for political advocacy are formed early in life. These early experiences, when coupled with passionate political interests, may be a strong predictor of adult political behavior. Overall, it is known that individuals who develop political interests surrounding specific issues are likely to become activists or work on campaigns in the long term (Milbrath and Goel 1977). For example, black college students' participation in the civil rights movement in the south during the 1950s and 1960s predicted their political interest and activism 10–25 years later (Fendrich 1993). Similarly, white civil rights participants remained distinguishable from nonparticipants in their political and civic behavior 25 years later (DeMartini 1983). In short, formidable political experiences early in one's life may shape political behaviors over a lifetime.

Thus far we have discussed factors associated with developing one's inclination to be politically active. But equally important is one's capacity to participate in political activities. Capacity to participate relates to the availability of one's time, resources, and skills (Brady et al. 1995). For example, as people age, they increase their ability to become politically active since older adults have more free time, disposable income (Verba et al. 1995), political knowledge, and political skills (Rosenstone and Hansen 1993). Capacity also relates to race and social stratification. For example, Miller (2008) cites research that Caucasians and men are more likely to be politically active (Rosenstone and Hansen 1993; Verba and Nie 1972) because they have financial advantages over non-Caucasians and females (Verba et al. 1995). These predictors of political participation are grounded in socio-economic models (see Miller 2008), and suggest that powerful political advocates are most likely to be wealthy, older Caucasian males.

Volunteerism

Volunteer behaviors are similar, yet distinct from political behavior. Penner (2002) defines volunteerism as long-term, non-obligatory, planned pro-social behaviors that benefit strangers and usually occur in an organizational setting. Past studies have conceptualized volunteerism as acts of charitable service to religious organizations, schools or other

educational institutions, labor unions and trade organizations, senior citizen groups, and other national or local organizations (see Wilson and Musick 1997; Weerts and Ronca 2008) Volunteerism is often linked to religiosity since faith-based organizations provide many formal mechanisms by which to volunteer (Penner 2002).

Clary and Snyder (1999) offer a functional approach to volunteer motivation which differs somewhat from political advocacy. The authors suggest that, among other things, volunteer service satisfies the need to learn more about the world, grow and develop psychologically, strengthen social relationships, and develop contacts to enhance professional opportunities.

Like studies on political activism, past research on volunteering points to early life experiences in shaping adult volunteer behaviors. Studies show that many volunteers have parents who are civically engaged, acted as role models for engagement, and participated in volunteer activities with their children (Dunham and Bengston 1992; Zaff et al. 2003). Closely related to parental background is socio-economic status. Past studies show that those who volunteer in adulthood are likely to come from a higher socio-economic background and have had previous community service and volunteering experience (Youniss et al. 1999).

The literature also acknowledges that important cultural dimensions may predict the likelihood of adopting civic behaviors (Ladewig and Thomas 1987; Markus and Kitayama 1991; Serow and Dreyden 1990). Specifically, some societies may promote individualistic values whereas others may emphasize collective values—values which most clearly align with civic behaviors. How an individual is socialized influences how one views his or her role in contributing to society (Markus and Kitayama 1991). These cultural issues may also be rooted in faith systems that promote service activity in the community. Studies, for example, have shown that participation in religious activity is associated with greater likelihood of participating in community service (Serow and Dreyden 1990).

Like the literature on determinants of political behavior, studies on volunteerism single out an important relationship between youth experiences and volunteerism as an adult. For example, one study showed that participating in 4-H and other organizations during youth predicts membership and leadership in community organizations well into adulthood (Ladewig and Thomas 1987). Another study found that positive relationships with peers as early as middle school predicted civic behaviors, although the long-term effects of such relationships are unknown (Wentzel and McNamara 1999).

Further along in the educational pathway, Astin et al. (1999) found that individuals who volunteered frequently in high school were more than twice as likely to devote at least some time to volunteer/community service work nine years later. This study mirrors other research suggesting that volunteering in high school predicts a greater likelihood of volunteerism in young adulthood (Glanville 1999; Zaff et al. 2003).

Past literature also sheds light on the impact of college on later life volunteer behavior. For example, Astin et al. (1999) found that spending six or more hours engaged in volunteer work in college nearly doubled the chances that the individual would be involved in volunteer work years after college. Another study showed levels of college completion to be associated with various volunteer behaviors. Specifically, Brown and Ferris (2007) found that those who complete some college have 3.4 more instances of volunteering per year compared to those who did not attend college. Furthermore, college graduates completed 4.9 more annual volunteer instances compared to those with no college experience. Finally, there is evidence that these experiences and outcomes hold among racial and ethnic groups. A separate analysis showed that participating in community service during

college is a strong predictor for volunteer behavior after college, regardless of race (Vogelgesang 2004).

The literature on volunteerism suggests that such behavior may also be linked to quality of personal experiences with an organization for which he or she volunteers, or self interests in affiliating with such an organization. Specifically, people choose to volunteer for an organization do so based on the reputation and experiences with that organization. The more satisfied one is with an organization, the more likely he is to volunteer on its behalf (Grube and Piliavin 2000). In addition, volunteerism may be linked by self interest motives to enhance one's career, establish professional contacts, and improve self esteem (Mowen and Sujan 2005).

Like the literature on political engagement, studies on volunteerism show that likelihood of participation relates to capacity and demographic characteristics. National statistics for example, show that women volunteer at a higher rate than men across age groups, education levels, and other major characteristics (Bureau of Labor Statistics 2004). And wives who volunteer have the effect of pulling their husbands into volunteer activity (Rotolo and Wilson 2006).

Finally, age and life cycle have important implications for volunteerism. Among the different age groups, persons age 35–44 are most likely to volunteer. On the other hand, volunteer rates were lowest among persons in their early twenties (20.0%) and those age 65 and over (24.6%). In addition, parents with children under age 18 are more likely to volunteer than persons without children of that age. People who are employed volunteer at a higher rate than those who were unemployed or not in the labor force, and whites volunteer more than Blacks and Asians (Bureau of Labor Statistics 2004).

As we close this section, we acknowledge that volunteer and political behavior have some distinctions but are also deeply interrelated. A wealth of literature has documented the close association between voluntary associations and political involvement, which may blur distinctions between the two behaviors (Verba et al. 1995; Olsen 1982; Verba and Nie 1972; Sallach et al. 1972). It may be for this reason that studies have typically lumped these behaviors together as one construct without distinguishing between the two.

Guided by this past literature, we suggest that political and volunteer behavior are on different branches of the same tree, and share a common root system. The roots of civic behavior are formed early in one's social development. In their study of civic development among adolescents, Reinders and Youniss (2006) found that youth who directly interacted with people in need increased self-awareness and helping behavior, which later led to increased likelihood of volunteering, service, and political advocacy. Simply put, those inclined to become involved with both volunteering and political activities have a common level of social consciousness that may develop at a young age. But for various reasons, individuals may choose to express their civic values through different venues (i.e., political or volunteer venues).

Volunteer and Political Behavior on Behalf of One's Alma Mater

The preceding review of literature suggests that alumni may develop patterns related to political advocacy and volunteerism even prior to attending college. In other words, the venues in which they will eventually support their alma maters (i.e., political advocacy and/or volunteerism) may be shaped by their family background, youth/school experiences and activities, peer relationships, and culture or values of origin (collectivist values, faith-based, etc.).

In addition to the aforementioned factors, we suggest that there are unique factors that may fuel the desire of alumni to become engaged in political advocacy and/or volunteerism on behalf of their alma maters. Drawing on past work by Weerts and Ronca (2008), we suggest that social exchange theory, expectancy, and investment shape help explain why and how an alum will choose to get involved with supporting his or her alma mater.

First, social exchange theory suggests that relationships are "give and take" and sometimes have uneven balance among partners. This theory suggests that relationships are thought about in economic terms and that costs and benefits are weighed to determine whether the relationship will continue (Chadwick-Jones 1976). Applied to alumni support for higher education, social exchange theory suggests that the costs of serving (e.g., volunteer time, political advocacy) are weighed against the benefits the alum has received from the university in the past or present (quality of education, career gains, social connections and prestige, etc.). The alum will make a decision about whether to "give back" to an institution based on an analysis of this exchange.

This theory is supported by a number of studies concluding that alumni support is predicted, in part, by the alum's perceptions of the quality of his or her current and past experiences with the institution. Indicators such as quality of undergraduate education, extent to which the institution prepared them for a career, and the degree to which faculty members exerted a positive influence, are factors that would predict whether alumni deem the institution worthy of their support (Leslie and Ramey 1988; Brittingham and Pezzullo 1990; Taylor and Martin 1995). Based on literature discussed earlier in this paper, we suggest that alumni are likely to give back in a way that is most closely aligned with past civic engagement experiences.

Second, expectancy theory suggests that alumni create expectations about future events and therefore tailor their involvement around these expectations. Alumni service in this case is based on whether the alum feels that he or she can make a difference to the organization and will be successful in their volunteer role. Drawing on Vroom's (1964) classic work, an alum's motivation to support his or her alma mater can be understood along three dimensions: (1) Valence: the value of the perceived outcome or the personal stakes attached to volunteering/political advocacy, (2) Instrumentality: the belief that volunteering/political advocacy will help one's alma mater achieve a certain outcome, (3) Expectancy: an alum's appraisal of whether he or she feels capable of successfully completing the service activity.

Expectancy theory would suggest that alumni choose their "style" of support based on what mode of support is most aligned with their abilities and will meet their desired outcome. For example, some alums may perceive that their time and talents are best used to get a law passed in support of higher education (political advocacy). Others may see their contribution as being more "people" focused. In this case, such alums may choose to direct their support toward recruiting students, mentoring new alumni, or hosting events (volunteerism).

Finally, alumni donor motivation to advocate or volunteer may also be explained by their past investment in the university. The investment model suggests that motivation and type of alumni volunteerism depends on the satisfaction level with the balance of rewards and costs in the relationship, and the extent that alum has already invested in the relationship (Rusbult 1980). This theory would suggest that alumni may choose a particular unit to support with the university based on the depth and quality of their history with that particular unit. For example, an alum who had a positive experience as a varsity athlete may direct her volunteer activities to coordinate a golf charity to support the athletic department. Similarly, a successful alum from the institution's College of Music may use

his volunteer time to help raise the profile of the College across the state. In both cases, these alums have unique investments in particular aspects their alma mater which motivates their level and type of service involvement.

Finally, we conclude that those alumni who support their alma mater through volunteer service and political advocacy are likely to possess some shared attributes. For example, research by Weerts and Ronca (2008) showed that supportive alumni are most likely to be women who live in the home state of their alma mater, are active in a number of non-profit organizations, and were significantly engaged in academic activities while in college. In addition, such alums were likely to hold multiple degrees from their alma mater and hold the belief that alumni have a responsibility to volunteer at the institution (Weerts and Ronca 2008).

In sum, our review of the two literatures in this study suggests that a number of factors both shape and motivate alumni support behaviors on behalf of their alma maters. Specifically, how and why alumni get involved in supporting higher education may relate to civic experiences and skills developed from youth to adulthood. These skills and experiences create inclination and capacity for involvement in supporting their alma mater. In addition, the unique relationship between the alum and the institution shapes alumni service behaviors. Alumni get involved, in part, based on whether they have a positive impression of the institution (past and present), believe that their service will make a difference, and feel a connection to that institution over time. These factors also shape the type of service activities that alumni will undertake.

Methodology

Many scholars including Eisner (1981), Firestone (1987), and Howe (1988) point out the virtues of using a variety of methods—both quantitative and qualitative—to gain an understanding about various phenomenon. These scholars argue that the diversity of approaches allows one to better know and understand different things about the world (Glesne and Peshkin 1992). Recognizing the legitimacy of using multiple approaches, the methods of this study are founded on the sequential mixed method design as defined by Tashakkori and Teddlie (1998). The sequential mixed methods approach involves employing both quantitative and qualitative in two distinct phases of a study: a qualitative phase and then a quantitative phase, or vice versa. One purpose of the sequential method is to use the results from the first method to inform the second (Greene et al. 1989).

Guided by this methodological approach, we employ both qualitative and quantitative methodology in two phases to accomplish the purposes of our study. In phase one, we use qualitative methods (focus groups) to help identify non-monetary support behaviors of alumni from a large doctoral/research extensive university (Carnegie Foundation for the Advancement of Teaching 2002). This institution is referred to as Research Extensive University (REU) for the remainder of this article.

Findings from our focus groups are used to construct a survey instrument to capture data from a broader field of REU alumni. In phase two, data from this survey is used to develop construct validity for alumni support behaviors.

Given the scope of our mixed methods study, we have decided to introduce the methodology and findings from phase one of our study in the appendix. Appendix 1 provides a full description about the methods and findings from REU focus groups and how they inform our development of our quantitative analysis. The main body of this article

will discuss our methodology, findings, and conclusions from phase two of our study, confirmatory factor analysis.

Quantitative Design

As discussed in Appendix 1, the findings from the focus groups were used to design a multi-purpose survey aimed to understand factors associated with alumni support for REU. In designing this survey, we developed constructs representing various behaviors that focus group participants told us were representative of how they support the university. The population of interest is the 169,773 undergraduate alumni from that institution between the ages of 30 and 70 residing within the United States. The alumni survey was sent to 2,400 REU alumni in this age range. Names and addresses were provided by the REU alumni association and represent a cross-section of respondents who appeared on rosters of various REU volunteer/political advocacy groups or had no service affiliation with the university. Of the 2,400 alumni surveyed, 1,441 responded (60% response rate).

The data for this study were limited to include only 514 alumni who reported having engaged in service-oriented behaviors on behalf of REU. We limited our sample to this group because the intent of our study is to examine behaviors of a small, but highly committed group of alumni who support their alma mater. Similarly, our study does not include the larger sample of charitable alumni donors, since previous studies have focused exclusively on this group. Our overall objective is to contribute to the literature in a unique way by looking solely at service-oriented support of alumni.

Range and Grouping of Alumni Support Activities

Reviewing the purposes of our study, our aim is to (1) document the range and most common alumni support behaviors, beyond charitable giving, that higher education graduates exhibit on behalf of their alma mater, and (2) examine whether these behaviors can be grouped into one or more dimensions or constructs. Appendix 1 provides documentation about the diverse ways that alumni support REU, and Table 1 illustrates the most common groupings of support behaviors as reported by survey participants. Table 1 describes 8 behaviors associated to each type of alumni involvement.[1] Informed by the literature and focus group findings, we group these behaviors into the two constructs of political advocacy and volunteerism.

Examining the findings from Table 1 yields several interesting observations. First, alumni are engaged in a range of behaviors on behalf of their alma mater, and such behaviors seem to vary within each of the two dimensions examined in this study. In the political domain, alumni seem to be most likely to engage in advocacy behaviors with state-level officials, and these behaviors may be independent of formal programs to facilitate this behavior. We make this observation because many more alums reported contacting state officials than serving as members of the REU political action network. Considering this finding, the good news for alumni associations is that there may be more alumni engaged in these behaviors than is known (happening outside of formal political action networks). However, a question remains about whether the messages from political

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[1] Respondents were asked to indicate the level of involvement in each behavior ranging from 0 (not at all) to 4 (very involved). Answers to all these items were bipolar skewed. Consequently, we collapsed the answers into two categories to signify whether or not the alumni engaged in the behavior under consideration (1, yes, 0 otherwise).

Table 1 Dimensions of alumni support and corresponding behaviors

Construct	Specific behavior	Percentage of alumni engaged in the behavior
Political advocacy	Contacting legislators on behalf of REU	28.0
	Contacting Governor's office on behalf of REU	20.5
	Contacting local officials (e.g., mayor) on behalf of REU	16.5
	Serving on a REU political action team (i.e., designated group contact public officials on behalf of REU issues or legislation)	14.7
Volunteerism	Hosting or volunteering for REU Foundation events	10.4
	Participating in REU special events (fun run volunteer, etc.)	31.4
	Recruiting potential students to attend REU	40.8
	Mentoring new alumni (e.g., career volunteer, provide networking opportunities)	18.1

advocates outside this network are in line with those promoted by the institution. Those outside the formal network would not receive the same level or quality of information about the institution's state relations plans. Thus, leaders may ask the question: Where are these out-of-network alumni getting their information, and is it consistent with the strategic priorities of the institution? Addressing questions such as this are important for institutional leaders as they consider how their alumni are representing the institution in the political domain.

Similarly, we note some important findings related to the construct of volunteerism.

Overwhelming, alumni reported recruiting potential students as a key behavior representing their volunteer efforts. Since REU is a large decentralized institution, one might suggest that these efforts are particular to certain program areas (e.g., graduates of professional programs). However, it is also likely that alumni play important roles in representing the university more broadly to a large cadre of students who apply for undergraduate admission. Again, alumni associations and admissions offices would likely welcome the news that graduates are acting as ambassadors in recruiting new students to the university. But these administrators may also inquire about the degree to which these graduates are helping the institution attract students they desire to meet strategic goals. For example, to what extent are REU alumni helping their alma mater attract a diverse body of students as articulated in its plans for diversity?

In addition, our findings show that many alumni volunteers are engaged in special events related to supporting campus programs (via fun runs, golf outings, etc.). These programs are important to keeping alumni active in the life of the campus and provide broad opportunities for alumni to stay connected with the university. More exclusive opportunities for involvement relate to volunteer activities on behalf of the REU Foundation (e.g., hosting or volunteering for REU Foundation events). Not surprisingly, far fewer alums reported these behaviors since such opportunities are typically reserved for alumni who are, or have the potential to be, major donors for the university. The volunteer construct reported in this paper shows that the large majority of alumni who are volunteers play a variety of other roles not directly related to university advancement efforts.

Finally, we reiterate that our findings apply only to a unique group of supporters who are the strongest supporters of the university. Our findings should not be interpreted that volunteer and political advocacy behaviors are common among the general population of

alumni. As a percentage, alumni who are active in these ways represent a small proportion of college graduates.

Confirmatory Factor Analysis

Throughout this article we have provided evidence based on literature and focus groups that alumni support is multidimensional along two distinct, but interrelated lines of political advocacy and volunteerism. In this section, we employ Confirmatory Factor Analysis (CFA) to test the hypothesis that alumni support underscores the two latent factors of political advocacy and volunteerism.

We choose CFA over exploratory factor analysis for two reasons. First, it allows the researcher to formulate and test hypotheses about the nature and composition of the latent factors comprising alumni support. Second, it allows the researcher to test alternative conceptualizations of alumni support (see Byrne 2006; Hom and Griffeth 1991). In view of the dichotomous nature of the 8 alumni behaviors under consideration, we used EQS version 6.1 procedures for computing polychoric correlations among categorical variables (Bentler 2005). This new version of EQS overcomes the restriction of requiring large sample sizes in conducting CFA analysis with categorical data (Bentler 2005; Byrne 2006). We estimated all statistics using the Maximum Likelihood (ML) procedure followed by Robust methodologies. According to Bentler (2005), the ML Robust approach produces accurate approximations of standard errors and goodness of fit statistics even when departures of the multivariate normality assumption takes place when examining categorical variables.[2] Prior to the analyses, we screened the data in search of cases contributing to violations to the assumption of multivariate kurtosis. We found no outliers.

For the assessment of confirmatory factor models, we relied on four robust measures of fit: the Satorra-Bentler Maximum Likelihood estimate of chi-square (S-Bχ^2), the S-Bχ^2/df ratio, the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). The CFI assess the extent to which the model provides a reasonable fit to the data in relation to a model assuming independence among the variables. CFI values close to 0.95 signify a good fit. The RMSEA indexes the extent to which the model reproduces the correlation matrix. Values ranging from 0 to 0.05 are considered good fit, while values ranging from 0.08 to 0.10 represent a poor or mediocre fit (Byrne 2006). We also examined changes in S-Bχ^2 and CFI to judge the extent alternative models of alumni support were tenable. These tests were based on the corrected Satorra-Bentler Scaled Chi-Square test (S-Bχ^2) procedures as explained in Byrne (2006). We also estimated the reliability of the latent factors using the Coefficient-H (Hancock and Mulller 2001) which takes into account the loadings comprising each factor.

Results of CFA

In testing for alternative conceptualization of alumni support, we fixed the variance of the construct to one. This method allowed us to freely estimate the extent to which each alumni behavior had large and significant loadings with the corresponding construct (Kline 2005). The first model tested the conventional perspective that alumni support underlines one

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[2] We verified our EQS-based CFA analyses using PRELIS procedures for handling categorical variables contained in LISREL version 8.8 (Joreskog and Sorbom 2006). LISREL estimates closely resembled EQS findings.

single factor (i.e., political advocacy and volunteerism as a single construct). The second model addresses our hypotheses: *alumni support is comprised by two domains; namely, political advocacy and volunteerism*. In this model, we set the correlation among the two latent factors underscoring alumni support to be freely estimated. Support for our conceptualization of alumni involvement should come from two sources: the fit of the model and whether this model provides a better representation of the data vis-à-vis the mono latent model. Table 2 summarizes the results of our examination of these two alternative conceptualizations of alumni support on behalf of their alma mater.

The first model tested the hypothesis that alumni support is defined by one single construct comprised of 8 behaviors. We found little support for this mono latent approach to alumni support (see Table 2). While the model has a CFI value close to 0.95, the model has a Satorra-Bentler Scaled Chi-Square in relation to its degrees of freedom (S-Bχ^2/ df = 3.5) ratio above 3.0. The RMESA for the model is 0.07, or two decimal points above the threshold. Moreover, the RMSEA range of values under a 90% confidence interval (CI$_{90}$) falls within the mediocre fit range (0.05, 0.09).

The second model tested the hypothesis that alumni support follows two latent factors, each represented by 4 unique behaviors. All goodness of fit statistics lend support for this model. The model has a Satorra-Bentler Scaled Chi-Square in relation to its degrees of freedom value well below the 3.0 threshold (S-Bχ^2/df = 1.24). The model yielded a CFI index of 0.996, a value well above the threshold of 0.95. Likewise, the RMSEA value was 0.02, well below the 0.05 threshold and with a 90% confidence interval falling within the acceptable range of goodness of fit-value (0, 0.05). Moreover, next to the one-factor model, the two factor model factor model fits the data better as well as shown by a significant decline in the Satorra-Bentler Scaled Chi-Square test (ΔS-Bχ^2 = 28.9, $p < 0.05$) and an increase of 5 decimal points in the CFI index.

A close examination of the measurement properties for each item revealed that all but one of the alumni behaviors could be regarded as clear manifestations of the constructs they sought to measure. Volunteering to host special events for the REU Foundation, however, displayed a loading below the recommended 0.50 threshold (see Kline 2005); about 80% of the variance in this alumni behavior could not be explained by the construct it sought to represent.

Accordingly, we dropped this behavior as an indicator of volunteerism and tested a reduced CFA. The revised two factor model factor model fits the data better than the original model as appraised by the significant change in χ^2 (ΔS-Bχ^2 = 19.09, $p < 0.05$). All measures of goodness of fit for this model are adequate, if not excellent: S-Bχ^2/ df = 0.63, CFI = 1.0 and RMSEA = 0.0. The measurement and structural results are displayed in Fig. 1.

The results from the confirmatory factor analysis support our hypothesis that alumni support is multidimensional. Specifically, alumni support underscores two distinct latent factors: political advocacy and volunteerism. These two dimensions alumni support are also positively and moderately associated (phi = 0.36). Alumni who are politically advocating on behalf of their institutions are also likely to serve as volunteers.

The two dimensions of alumni support are also well defined by their corresponding behaviors. The reliability of the construct political advocacy is 0.987, while that of volunteerism is 0.793. In other words, the amount of error in measuring each of these constructs is rather small. Moreover, all corresponding alumni behaviors significantly load in the corresponding construct. The loadings are well above 0.50 indicating that most of their variance is explained by the factor they seek to measure. Political advocacy seems to be defined by three behaviors: contacting legislators, governor's office and local politicians.

Table 2 Goodness of fit indices for alternative models of alumni support

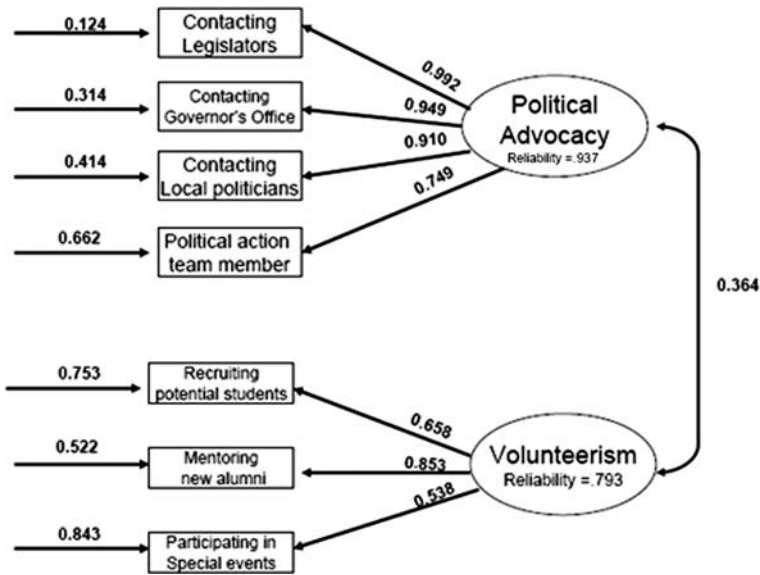| Model	$ML\chi^2$	Robust measures of goodness of fit						Changes in robust measures of fit			
		$S\text{-}B\chi^2$	df	$S\text{-}B\chi^2/df$	CFI	RMSEA	CI_{90}	$\Delta S\text{-}B\chi^2$	p-value	Δdf	ΔCFI
1. One construct	715.20	69.47	20	3.46	0.948	0.07	(0.05, 0.09)	–	–	–	–
2. Two interdependent constructs	287.33	23.25	19	1.24	0.996	0.02	(0, 0.05)	28.90	<0.05	1	0.048
3. Two constructs reduced	114.45	8.25	13	0.63	1.000	0	(0, 0.03)	19.09	<0.05	6	0.004

Fig. 1 Dimensions of alumni support: structural and measurement model

Most of their unexplained variance is rather trivial. Volunteerism seems to be captured the most by mentoring new alumni. This item has a high loading of 0.853.

Discussion

Findings from our mixed method study provide important perspectives on both a practical and a theoretical level. First, we note that the most important measures of volunteerism in our model—recruiting students, mentoring alumni and participating in special events—are typically the most informal and least high profile set of activities performed by alumni supporters. Unlike serving on a board, acting as a club officer, or hosting REU Foundation events, these volunteer activities may happen largely under the radar of university leaders. This finding has important implications for alumni relations professionals. Universities can easily keep track of their boards, officers, and volunteers in leadership roles, and provide training for these alumni as they take on these roles. Yet, alumni affairs officers may not be aware of the fact that a group of alumni are also engaged in mentoring, student recruiting, and other activities that are often less structured, and may take place independent of institutional guidance. Because our research shows that alumni volunteer support is best understood through these distinct behaviors, it would be wise for alumni relations professionals to investigate the practices that alumni employ in recruiting students and mentoring new graduates, and whether these practices reflect the values and strategic initiatives of the campus. We suggest that alumni mentoring programs or student recruiting programs that currently exist on many campuses become more formalized and expanded to reach out to those alums who may be involved with such efforts.

Second, we make a similar recommendation when considering political advocacy behaviors of alumni on behalf of their alma mater. A surprising number of alumni reported being active in lobbying on behalf of REU outside of the formal network designed to

promote these activities. Again, it would be prudent for alumni association officers to investigate whether there is alignment between state relations messages articulated by the institution and those of alumni. It is logical to suggest that alumni are getting their lobbying talking points from various newsletters outlining initiatives that require state funding or new policies. Thus, we support the notion that alumni communications strategies are vitally important and must be carefully designed to articulate the values and priorities of the institution at the state level.

Our research has a third important contribution. Both the qualitative and quantitative elements of this study reject the conception that non-monetary alumni support can be understood through just a single domain. Instead, our study supports the notion that alumni support for one's alma mater is complex and that graduates engage in at least two distinct, but interrelated support roles: political advocacy and volunteerism. Prior to this study, it could not be substantiated that alumni service roles were multidimensional. For this reason, alumni relations professionals have historically categorized supportive alumni as either "donors" and/or "volunteers." Our research suggests that a third category, "political advocates" must be added and treated as a distinct, but interrelated support role. Overall, our work broadens understandings about alumni support and challenges past assumptions about alumni service as being one-dimensional.

Fourth, few tools exist today to help alumni relations professionals identify alumni who are most likely to engage in service activities on behalf of their alma mater. As such, decisions about who to recruit for service opportunities rely on blunt assumptions about who to enlist as generic "volunteers." Our work suggests that, with more research, these assumptions can be reconstructed based on what matters most in predicting whether an alumnus would be more inclined to serve in political venues, volunteer venues, or both. The theories of social exchange, expectancy, and investment identified in our literature review could be further employed to understand this process. Relying on these new sets of assumptions, alumni officers could eventually match unique service opportunities (political and volunteer) with those graduates most likely to serve in these roles.

Before these practical steps are made, many important research questions must be addressed. First and foremost, what are the attributes of alumni who may be inclined to take on political advocacy roles, volunteer roles, or assume both roles? What experiences did these alumni have prior to college (parental background, youth experiences, high school preparation) in college (student engagement, academic preparation) and after college (employment status, marital status, household income, occupational choice) that may explain their propensity to serve in one or more of these capacities?

With these important questions in mind, our study provides the foundation for a research agenda on attributes of alumni who are likely to engage in volunteer and political advocacy on behalf of their alma mater. Because our work has made a difference in defining those items that are the best measures of the dependent variable of non-monetary alumni support, future studies could employ these variables as reliable measures of ways in which alumni are involved in supporting their alma mater. Again, this work could help practitioners and scholars create more sophisticated instruments to profile alumni most likely to participate in these unique support behaviors.

We conclude by acknowledging that our study has limits in that it relies on data from a single institution. We suggest that our items tested in this analysis be expanded to include a dataset representing multiple institutions with a diverse set of missions. For example, one may argue that volunteer behaviors among alumni who are graduates of community colleges may vary from those who graduate from large research institutions. Similarly,

graduates of public universities may report more active involvement in various domains as compared to their colleagues who graduated from private liberal arts colleges (especially in the political advocacy category). In short, we suggest that our measures are most generalizable to major public research universities from which the data from our study was drawn, and thus is most applied to this unique sector of higher education.

Appendix 1: Phase 1 Qualitative Analysis

Methods

During the summer of 2003, Chamberlain Research Consultants, Inc. (CRC) conducted a series of focus groups with REU alumni with three clear objectives: (1) to understand alumni perceptions of REU, (2) to identify the variety of ways in which they support the university, and (3) to solicit advice about how to best rally alumni support for the university. Participants in the focus groups were recruited from REU alumni association records of graduates who were strong supporters of the institution via charitable giving and service activities. These lists included active members of the REU alumni association, members of college and departmental advisory boards, and volunteers from various service clubs and advocacy groups. A total of 7 focus groups were conducted with REU alumni in 3 distinct regions in the home state of REU.

Findings

The results of these focus groups shed light on the complex variety of ways that alumni are involved in supporting the university, and illustrate how such behaviors fall into the broad categories of political advocacy, volunteerism, or both. Some alumni supporters indicated that their primary way to support the institution was through political action. For example, one alumnus reported that he was a captain for a senatorial district for the REU political action network—a formal group of political advocates who lobby for legislative and gubernatorial support on behalf of the university. The purpose of the REU political action network is to advocate on behalf of the university on various policy issues of importance to REU. For example, advocacy members are provided opportunities to meet with legislators and encouraged to complete petitions regarding REU annual appropriations, research funding and/or policies, and student tuition policies. Some REU alumni reported not being affiliated with this network; however, they still indicated that they wrote letters to their legislator or local officials on behalf of the university. Other alums indicated that their political participation was less formal. For example, one graduate was a personal friend of his local legislator with whom he regularly discussed policy issues on behalf of the university.

Other REU alumni reported being engaged in a number of volunteer activities that were non-political. Many of these activities were specific to the school/college or department from which the alumnus earned a degree. For example, one participant, a graduate of the French department, explained that she volunteered to host a French Independence Day party each year to connect alumni with students. This alum's participation supports the

investment model introduced in the literature review, suggesting that alumni will support their alma mater in ways that reflect their historic connections to the campus. Similarly, many others indicated that they served in formal roles as members of the dean's or chair's advisory council—forums that provide alumni a platform to share their perspectives on curriculum and other issues. This practice was especially common among those alumni affiliated with the professional schools (e.g., pharmacy, medical, law).

It is important to note that many of these volunteer experiences were not tied exclusively to support academic units, but more broadly for campus programs or non-profit organizations representing university interests. For example, some participants serve as alumni representatives for the REU student union while others are board members for various athletic booster clubs. Still, others served as officers in local or national chapter of the REU alumni association, or on committees directed by the REU Foundation. Roles in these organizations vary significantly. Some alumni assumed significant leadership positions as chairs of the board for the alumni association or as officers in their local alumni club. Still, others carried out the work of the organization. For example, these alums reported helping organize a golf outing fundraiser or fun run to support a particular program.

An important finding from the focus groups is that alumni are involved in various volunteer behaviors not typically captured by formal alumni organizations and alumni surveys. For example, many alumni reported that they have a personal interest in recruiting students to attend REU. In addition, some reported serving as mentors to young alumni in their area (e.g., assist with career networking opportunities), or to current students attending the university. One alumnus reported that his special interest was taking historically underrepresented students to visit the campus, with the goal of helping these individuals see colleges as a realistic part of their future. Again, these experiences were often less structured, and thus, institutional leaders may or may not be aware of the degree to which alumni are involved with these activities.

Our analysis of focus groups also suggests that categories of alumni support are not mutually exclusive. That is, some alumni participating in the focus groups were likely to be involved in both political behaviors and volunteer behaviors. In fact, REU gives an annual "sparkplug" award that recognizes those alumni who are active in a full range of alumni support activities (political and volunteer). Overall, the results of the focus group study provide evidence that alumni support categories are distinctive in some ways, but highly interrelated.

Developing the Survey Instrument

The first author on this paper used the results of the focus groups to develop a survey instrument called the Alumni Connections Survey. Specifically, the survey included a range of support behaviors that focus group participants indicated that they had participated in as supportive REU alums. Furthermore, the instrument gauged their level of involvement in service related activities using a four-point scale: (1) Not at all involved, (2) Not very involved, (3) Somewhat involved, (4) Very involved. Details about the specific items and measurement appear in Table 3. Finally, the instrument was piloted by 8 alumni and friends of REU as a means to test the clarity and utility of questionnaire. This survey was then placed into a larger field of alumni as explained in the body of the text.

Table 3 Items from Alumni Connections Survey

For each type of activity listed below, indicate your current level of involvement in that activity

	Not at all involved	Not very involved	Somewhat involved	Very involved
Host or volunteer for REU Foundation events in your area				
Volunteer to help with special REU events				
Recruit students to attend REU				
Mentor new REU alumni (e.g., career volunteer, provide networking opportunities)				
Contact your legislator to support REU programs				
Contact the Governor's Office to support REU programs				
Contact local politicians (mayor, etc.) to support REU programs				
Serve on REU Political Action Network				

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