

Weak Ties and Strong Allies:

Improving Alumni Engagement through Critical Social Network Analysis

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Dedication

To the little girl I once was and who lives inside my mind still...
We made it through. We are well and safe. And we are more than enough.

Acknowledgements

My brother, Allan –

Thank you for pulling me back from the edge whenever I lose the thread, and for always making sure I remember who I really am. We've been at this crazy life journey together for a long time, and I am so glad to still have you here for the rest of it.

My partner, Michael –

Thank you for being you, for always supporting my wild ideas (like starting a doctoral program during a global pandemic), and for building a life together that we can be proud of.

P.S. See you in the car ;)

My extremely long list of incredible, supportive, and irreplaceable FRAMILY –

From the Eastside to Jones to the BGA to late-night stats and beyond... how on Earth did I get so lucky over the years to have so many authentic, compassionate, and loyal people in my corner? While I try to figure that one out, I will also (now) have time to return all your texts and emails! Thank you for loving me as I am and not as you might wish I would be... and for never making me feel unworthy of your love and support.

My nieces and nephews –

Auntie Am loves you all so very much. I will always be around to listen carefully when you tell/show me who you are. You all have made my life so much brighter just by existing in it. Thank you for reminding me to laugh and not be so serious all the time... but loving me fiercely anyway when Sadness inevitably takes over my control panel <3

The LLO Program (Faculty, Staff, and my 2 Cohorts) –

Thank you all for sticking with me despite my untimely medical diagnosis in Fall 2020, and the myriad issues that stemmed from it. A new disability is not an easy thing to navigate while pursuing a doctorate, but I think we made it work. The journey wasn't always pretty, but it was real. I am grateful for all your patience, kindness, and insight.

'Barley' University –

Thank you for believing in me almost 20 years ago and for believing in me again for this project. I hope I have made you proud. To 'Barley' Be True!

Abstract

'Barley' (a pseudonym) is a U.S. Top 20, small, private research university in Texas. As of Fall 2023, undergraduate enrollment was 4,562 (30% identify as Asian, 26% as White, 16% as Hispanic or Latino and 8% as Black, with 16.8% Pell Grant-eligible). The development department deploys annual fund staff and alumni volunteers each year to raise unrestricted funds for student scholarships and other areas. The alumni volunteers are recruited by graduation cohort in their key reunion years and is typically limited to prior donors which is not as inclusive as the changing student demographics indicate will be necessary for the future. In that vein, I asked the following:

RQ1. How do characteristics of volunteer alumni giving committee members compare to the total population of alumni across reunion campaign years?

RQ2. How does recruitment, selection, and organization of alumni giving committees shape alumni giving outcomes?

RQ3. What are the motivations, observations and experiences of alumni giving committee volunteers during reunion campaign years?

RQ4. What are the motivations, observations, and experiences of Annual Fund (AF) staff regarding their work with volunteer alumni giving committees?

I employed a mixed methods approach to conduct descriptive, non-parametric and social network analyses on alumni demographic and giving data from the 2023 reunion campaign, and interviews to assess organizational affinity, group dynamic and social connections. I found:

1. Alumni committee members are more Caucasian, female and Texas-based than non-committee member alumni.
2. Asian-American alumni choose not to donate at the highest rates but are the fastest growing admitted student population at Barley.
3. Capturing peer connection data has potential to help identify (beyond giving status alone) additional volunteers for committees - those who have diverse connections.
4. Annual Fund has high staff turnover that has negative impact on staff and alumni.

Drawing on findings and knowledge of the school's context, I recommended that the Annual Fund increase usage of peer connection software to map networks, formalize their relationship with Alumni Relations and reboot a senior committee like one from the 90s that was very effective at staying in contact with their cohort.

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Introduction

College campuses offer students a dedicated time to meet people different from themselves and build connections that will carry them through their adult and professional lives. As such, the higher education space has the potential to shape an individual's peer networks greatly, both while in school and after graduation as an alum. Unfortunately, these peer networks often replicate the existing divisions in our society.

University staff in Annual Fund offices have a unique opportunity to help bridge these divides within peer networks by applying critical social network analysis in a proactive manner. Doing so would prove an unlikely starting arena for development to engage in, but with the help of alumni relations, the work could be beneficial to all parties – including and most importantly, the students/alumni. Alumni engagement is more than just donating to a campus... it establishes relationships among alumni and between alumni and their alma maters that grant access to social capital many non-traditional and First-Generation college students would not have contact with otherwise. A more well-connected alumni base is a one that could eventually give more back to the school that helped them attain such success.

However, high staff turnover and uneven job training, lack of research on non-monetary engagement modes, and the over-standardization of practice can entrench an overly limited approach to alumni outreach that does not suit rapidly changing alumni population dynamics (Jackson, 2021). Using social network analysis to look at peer connection trends and interviews with active alumni volunteer fundraisers, this project seeks to provide insight into alumni social networks via the alumni engagement experience – from recent alumni happy hours to “old college buddy” stories all the way to Golden 50th Reunions and beyond.

Organizational Context

'Barley' (a pseudonym) is a small, private research university in Texas. The school consistently ranks as a top 20 university, as reported by the US News and World Report ("The 2024 best colleges", 2023). As of Fall 2023, undergraduate enrollment was 4,562, and there were 3,909 degree-seeking graduate students, for a total enrollment of 8,471. Of the 2023 undergraduate enrollment, 30% identify as Asian, 26% as White, 16% as Hispanic or Latino and 8% as Black, with 16.8% of the total undergraduate degree-seeking student body classified as federal Pell Grant-eligible ("Institutional research report", 2023). These select demographic numbers reflect one aspect of a university that has evolved greatly since it opened its doors to students in the early 1900s. Alumni from a broad range of graduation years are included in this inquiry, so it is important to contextualize certain germane historical facts related to student life over the years ("At a glance", 2023):

- Barley has admitted both women and men since its founding, although women to a much lesser degree, and women were not permitted to live on campus for decades.
- The residential college system consists of all-classification level dorms that are randomly assigned to a student before matriculation. The students reside/interact with most formal university structures through their assigned residential college through graduation. The Barley college system began in 1957. Shortly after, women were allowed to reside on campus as well, although there were only two women's initially colleges built to complement the original four men's colleges.
- Until 1964, Barley did not allow the admittance of Black students. In fact, the original school charter explicitly stated that Barley was intended for the free education of white

residents. Only a few Black students were admitted those first few years after the lone graduate student in 1964. Interestingly, the university started charging tuition in 1969.

- Residential colleges began to “go co-ed” between 1973 and 1987, with two of the four original men’s colleges “integrating” first until eventually co-ed was the expectation for all new colleges beyond the original six. By 2006, the entire campus – including the odd single sex floor hold outs spread out among a few colleges – was residentially co-educational.
- Average admitted class size has dramatically increased over the years under the guidance of several different university presidents’ and their leadership agendas. Composition of these admitted classes have also changed on indicators such as gender and race/ethnicity, mostly following the historical timeline outlined here.

Table 1: 2023 Reunion Giving Campaign Graduation Year Class Sizes

Reunion Year	Graduation Year	Alumni Count
50th	1973	532
45th	1978	562
40th	1983	532
35th	1988	551
30th	1993	589
25th	1998	643
20th	2003	654
15th	2008	679
10th	2013	891

Development and Alumni Relations (DAR)

Although housed under the same (newly hired) Vice President, referred to together as “DAR”, and listed as a close sibling in a university-wide organization chart; functionally, Barley’s alumni relations and development offices are separate. Alumni relations is likely the most logical engagement point for alumni with their alma maters, and I imagine this is also true with Barley. I do not currently have access to information on alumni relations’ engagement strategies, their average rates of engagement or how/if they measure engagement at all.

There are several avenues for alumni to engage with Barley via the development wing of DAR. One office is currently called the Annual Fund (AF). AF is primarily focused on current-use, unrestricted funds raised through philanthropy from students, parents, faculty, staff, and Barley alumni. DAR and AF operationalize alumni engagement as donating to the university or for some metrics, volunteering to serve on giving committee(s). AF allows supporters to designate specific on-campus area(s) for their donations, to make gifts to the university’s unrestricted fund generally or as of recently, contribute directly to The Barley Investment (see details on this program in the next sub-section).

The most important function of AF is its sustained connection to and deployment of already engaged alumni. To date, AF has organized annual reunion fundraising campaigns by alumni reunion year (fifth, tenth, fifteenth, twentieth, twenty-fifth, thirtieth, thirty-fifth, fortieth, forty-fifth and fiftieth – or “Golden”). Every calendar year, AF staff recruit and build alumni volunteer committees for each graduation class “in reunion”. Committees and AF class managers set fundraising and participation goals and strategize ways to garner donations and multi-year pledges that are pooled as “reunion gifts” to Barley during Homecoming/Alumni

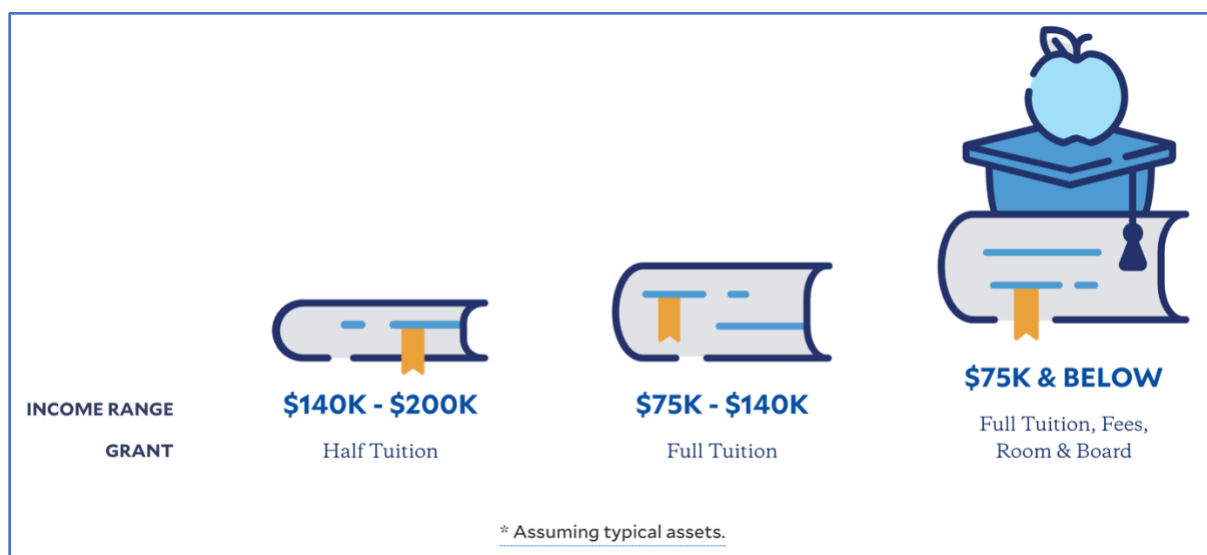
Weekend each Fall. During the outreach process, many committees also try to encourage attendance of their class at Homecoming/Alumni Weekend (AF Staff Member, personal communication, 2023). Reunion years compete beside each other and against records of past campaigns to meet their fundraising and participation goals. Records are kept for posterity and as references for setting future fundraising goals, but also for bragging rights across the rather small cumulative, living alumni population. Both staff and alumni observations, as well as my own experience with AF, have noted a high turnover rate among AF class managers. While this is not entirely uncommon for the development/annual fund field of work, it does provide some guidance on what to probe for more information on later in the inquiry.

The 'Barley' Investment (TBI)

The 'Barley' Investment (TBI) is a financial aid program undertaken at the university level beginning in 2019-20 to raise \$150 million in endowment funds that will ensure in perpetuity enough need-based scholarships and other non-tuition, need-based financial support so that every admitted undergraduate and their families can graduate loan-free. They aim to raise the full endowment by June 2025, and currently report being 58% of the way to their goal. In December 2021, Barley expanded TBI to include more middle-income families ("The 'Barley' investment", 2023). Please see the expanded comparison guide of income range to grant in *Figure 1* below. According to AF's website and general communications with alumni donors, AF is commissioned to bridge the gap between what the university has available to fund TBI and what it still needs to raise for the endowment fund. Money donated to AF can be allocated directly to TBI as it is currently structured, similarly to how it has been allocated to undergraduate scholarships before TBI.

TBI does have some clear limitations, such as the fact that neither international nor graduate students qualify. It is unclear from the publicly available information whether these limitations are considered temporary or if they are a permanent feature of the design. The focus of this inquiry is undergraduate alumni and that does include some international student enrollment, but context and further information was not readily accessible at the time of this work. I will note this for further exploration and consideration in the recommendations.

Figure 1: The 'Barley' Investment (The 'Barley' investment, 2023)



TBI itself is the codification of a long-held tradition of meeting full need for admitted students with the highest levels of financial need, as indicated by the lowest amounts on Estimated Family Contribution (EFC) calculation from the Free Application for Federal Student Aid (FAFSA). What makes TBI distinct is it: 1) Seeks to raise an endowment solely for this purpose, 2) Seeks to expand access and include middle-class families who may not have low EFCs, but also cannot afford to pay for college outright, and 3) Seeks to expand the “kinds” of financial aid available by adding grants for books, travel costs and passports, professional attire

purchases, etc. TBI stands to re-shape the landscape of Barley student demographics and potentially student identity overall as they move from matriculation to graduation. Although currently beyond the scope of this inquiry to outline these potential changes and explore their potential impacts, it is important to note that there is change afoot to the structure of incoming cohorts who ultimately become alumni. It should prove fascinating to witness, as it is happening in conjunction with an overall shift in the undergraduate student body nation-wide.

Project Stakeholders and Future Decisions

The most apparent stakeholders of this project are AF staff, Barley alumni volunteers, the Barley alumni base more broadly, current, and prospective students, and the university itself. Since the Fall 2022 investiture of a new university president, there have been many organizational shifts and restructuring efforts campus wide. The president's office also commissioned a survey of all alumni, faculty, and staff regarding various elements of Barley operations. The final report is due out later in 2024, but it is expected to be very focused on improving diversity, equity, and inclusion (DEI) on campus and in the broader Barley community (AF Staff Member, personal communication, 2024). Meanwhile, DAR is preparing to re-configure its organizational charts and job descriptions over the coming semesters to reflect the survey's learnings as well as the new president's initiatives overall. The extent of these shifts and any other across the university is beyond the scope of this Annual Fund inquiry, but it is worth noting to be in alignment with contemporary, campus wide change efforts. Additionally, recommendations provided through this project will hopefully inform and reinforce departmental re-organization efforts and operational best practices.

Problem of Practice

The issue I seek to better understand over the course of this quality improvement (QI) project revolves around alumni reunion volunteer giving committees at Annual Fund (AF). They appear similar in composition year after year and do not seem to adequately reflect the demographics of their respective graduating cohorts. Tacit theoretical reflection on this situation conveys concern that such limited representation in group membership may narrow committees' social influence in the Barley alumni peer community as time goes on and more cohorts with diverse bases enter the alumni ranks (Ravitch & Carl, 2021). Restricted reach puts likely preventable constraints on the results of future reunion giving campaigns, namely: increased monetary gifts for Barley and a higher overall alumni engagement rate.

When AF staff recruit alumni volunteers for reunion committees, they rely on past engagement and giving records (AF Staff Member, personal communication, 2023). This limits the composition of the committees to alumni that have previously served on them or, in some cases, alumni that have at least engaged/donated before. My current tacit understanding of social networking theory leads me to predict an alumni volunteer committee's composition greatly impacts the peer connections activated and who is ultimately tapped for and/or responds to donation appeals (Ravitch & Carl, 2021). Essentially, narrow committee recruitment strategy can lead to limited alumni donor impact. The current literature on alumni engagement does not wholly reflect this interpretation of events to date, but I believe new consideration is necessary as graduation cohorts become more diverse over time across various demographic indicators.

Barley has increased its focus on diversity, equity, and inclusion (DEI) practices over the last several years, and under the new university presidency, this intentionality is expected to expand to more areas and with deeper consideration (AF Staff Member, personal communication, 2024). To their credit, AF staff informally acknowledge the lack of representation on alumni committees and among their staff, but they do not seem to have access to actionable plans to address these issues. Further, I could not locate evidence of existing training beyond basic DEI workplace interaction guidelines and best hiring practices. Members of diverse populations have lived experiences that are heavily influenced by how an organization operationalizes DEI into its environment, if there is effort to do so at all (Lewis & Shah, 2021). A cursory effort at inclusion is noticed and acted upon accordingly by many diverse populations, usually by not choosing to participate in that space. It is also likely that chronic understaffing and high turnover rates in the field of development could contribute to the shortage of dedicated attention to DEI best practice.

Ideally, the AF staff would recruit alumni committees more representative of their graduation cohorts and made up of key influential members of distinct, diverse social groups while they attended Barley. If so, when these committee members conduct outreach annually for donations to class reunion gifts, they could more easily and naturally include contacts from different areas of the alumni base. Engagement as defined by average degree-holding undergraduate alumni that donate in a year was used as a proxy for alumni satisfaction and factored in the U.S. News and World Report methodology for overall national university rankings until just last school year ("The 2024 best colleges", 2023). Whether these numbers "count" or not anymore, Barley has consistently exhibited solid, upper-tier participation rates

compared to similar schools, and doesn't appear to have intentions to remove participation rates from its list of alumni engagement priorities.

Despite good participation rates, there is always room for improvement. Especially so at Barley, where university-wide DEI implementation goals extend beyond donation totals and school rankings. The university's website outlines how it "...it ['Barley'] seeks to fulfill [this] mission by cultivating a diverse community of learning and discovery that produces leaders across the spectrum of human endeavor ("Mission-values", 2023)." This study's purpose is to interrogate the alumni reunion committee volunteer recruitment system currently in place in order to help DAR and AF understand their baseline impact, its patterns, and its blind spots. After this joint examination, I will outline areas for improvement with more critically informed interventions than may have been considered to date (Bhattacharya, 2017). I believe the will and passion for systemic change exists at Barley – and AF specifically - as they already do a consistently effective job at engaging alumni, demonstrate a desire to reach more alumni, AND independently recognize that changes in cohort composition are coming – necessitating a shift in best practices now.

Literature Review

For this project, I reviewed current research literature on undergraduate university alumni engagement, how it is defined, operationalized, and staffed, and what factors impact it. To adequately contextualize the problem of practice, it was also key to understand the history of fundraising in higher education, the use of alumni volunteers as fundraisers for campaigns, the professionalization of the field overall, and how these elements together led to current trends. Digging into the sociological and psychological foundations of social network theory facilitated a profound appreciation for the multi-faceted landscape of human motivation and connection. Social Network Analysis, specifically as performed with a critical lens, provided a promising path for future work to understand the deeper mechanisms driving dynamic alumni social ties. Diversity, Equity, and Inclusion (DEI) practice was reviewed as it is most applied in higher education spaces, including a basic history, most commonly used strategies, implications of sub-standard implementation, and pushback against the purpose of DEI.

Researcher Note: DEI builds foundationally on a broad and evolving collection of critical sociocultural theories that cultivate understanding of experiences belonging to specific minority groups and/or people or groups who live at the intersection of marginalized identities. Due to space and project scope constraints, these critical sociocultural theories and contextual enrichments would be better served as reference material, located in the Appendix. Appendix K is a non-exhaustive list of possible (seemingly) unobserved, unmeasured, and unexamined social and cultural lived experiences that could impact any given marginalized individual or group's inclination to engage as alum/ni. It is intended as a starting point for deeper analysis.

Alumni Engagement

Operationally, alumni engagement can mean different things to different institutions in different contexts, but broadly it is a term used to describe how higher education institutions maintain relationships with previous graduates. In recent guidance literature put out by a prominent fundraising professional organization called the Council for Advancement and Support of Education (CASE), alumni engagement is conceptualized with four modes. The first is the most identified and most often tracked: philanthropic engagement. The other three modes don't directly pertain to monetary donations and instead have to do with forms of connection. The second mode is volunteer engagement. The third is experiential engagement, meaning alumni showing up to alumni or institution-sponsored events and/or paying dues (if the institution has an alumni association that charges dues). The fourth mode is communication engagement, and examples include interacting on social media posts, clicking through emails, opening emails, registering for events, etc. (Kaplan, 2022). CASE works with other professional organizations in fundraising to set these standards for member support purposes, but they have also begun a process to track them across member institutions. The guidance on how and what to track is invaluable for data reliability, and it will be exciting to see what new learnings emerge as their database grows (Skinner, 2019; Gunsalus, 2005). Currently, any studies that mention non-giving modes of engagement ultimately do so to predict future monetary donation. It appears to be common understanding in the field that non-monetary modes of engagement reliably lead to donations... eventually (Kaplan, 2022).

Organizational Elements - Past and Present

Alumni engagement, as defined in Skinner (2019), is part of a larger collective of services referred to as institutional advancement. Institutional advancement consists of alumni services, public relations, and development; and these three areas together are responsible for raising institutional funds via private sources. Over the last 150 years or so, private fundraising in higher education evolved from solely a university president's responsibility to other academic departments being held responsible to raise money for themselves, to alumni relations taking it over (Holmes, 2010). Eventually, people in power realized that trained "fundraisers" were needed for this work, and ultimately, the field grew to be distinguishable from both alumni relations and public relations, even though tensions and overlapping responsibilities can still present issues in certain contexts (Skinner, 2019). In many institutions, academic departments may still have their own fundraising arms, along with athletics departments and graduate schools. There are some standard private fundraising practices, but the intricate institutional advancement system operates differently at just about every institution.

One consistent element is the distinction of annual giving from other aspects of development, like major gifts. Annual giving is an alumni-driven fundraising wing and has been around since fundraising in higher education began, but it wasn't clearly identified and acknowledged as separate from major gifts - which were "for new buildings, increased endowment, or other capital purposes (p.123)" - until the American Alumni Council Fund Survey began in the late 1930s (Stewart, 1955). Annual giving and annual fund are both terms used for the annual solicitation of nearly all an institution's alumni. Annual giving is usually

allocated for unrestricted funds, loan servicing and/or operating expenses, but the proportions for each allocation can vary over time and by institution (Ehrenberg & Smith, 2003).

Annual giving has also been separated from the alumni relations arm of institutional advancement, where it was once housed for most institutions (Skinner, 2019). However, some institutions, usually the ones that also charge dues for alumni association membership, may keep annual giving and alumni relations together. There are conflicting opinions on the efficacy of either strategy. Studies that do attempt to add to the knowledge base start with the assumption that alumni association membership dues and annual giving are driven by the same mechanism among alumni members/donors, but this assumption has not yet been adequately studied to be able to make such assertions (Newman & Petrosko, 2011; Haruvy, et al., 2020). For that reason, I am reluctant to say much more about alumni relations, alumni associations and dues, and how they relate to annual giving departments, staff or alumni fundraising volunteers.

The Fundraiser Role

In more austere times, universities will employ “lean” management policies with regards to staffing some departments, especially areas where other solutions might be available, like volunteers. Annual fund/giving departments can and do utilize volunteer alumni to help with fundraising campaigns perhaps partially to fill this staffing need, but also because in the case of annual giving “paid and unpaid staff are not perfect substitutes, but are often complementary, [meaning] both are needed (Cordery, et al., 2023, p.3-4).” Studies on why alumni choose to volunteer with their alma maters are unclear, but they continue to do so and with great efficacy and enthusiasm (Weerts & Ronca, 2008). Further, the fundraiser’s conundrum of perceived high

institutional fundraising expenditures leading to lower giving rates overall means that fundraising departments must keep an eye on their overhead so as not to seem extravagant or irresponsible with funds – gifted or not (Baade & Sundberg, 1996; Sargeant, et al., 2006).

Fundraising consists of a wide set of skills that are not well understood or defined, let alone taught in a standard, cohesive way (Counts & Jones, 2019). There is not a set pathway to becoming a fundraiser, and many people report “falling into the profession (Farwell, et al., 2020, p. 487).” Counts and Jones (2019) found that 72% of the 47 U.S. programs they studied were certification programs of varying length and mode of instruction. It also seems like the field is overlooked, both in training and consideration as a ‘real’ profession (which, skill-wise, it should very much be considered as such). Breeze (2023) posits a theory that there is a preference for believing that generosity (giving) is an innate characteristic that does not need to be solicited. This is clearly a very rosy view of the reality where potential donors must be shown the needs that speak to their empathic sides, provided a trusted process for responding to those needs, and a feedback loop to feel justified in that contribution. And that is what fundraisers do, despite their spotty training (Breeze, 2023). The field itself is also not diverse, with people of color representing only 16% of employees, and it doesn’t have clear strategies in place to address that need or the need to deploy Diversity, Equity and Inclusion (DEI) practices that are embedded in their work with donors (Shaker, et al., 2022).

According to records kept by CASE, while fundraisers have historically always been in high demand, they have also suffered from high turnover rates (Jordan & Quynn, 1994; Nicklin, 1998). Salaries vary by career and organization type, with the median salary hovering around \$73,000 in 2016 (CASE, 2022). For higher education institutions, that amount has been

generally larger (around \$97,000), but that depends on the management strategies and priorities of the institution in question, as alluded to earlier with “lean” management techniques (Shaker & Nathan, 2017).

Higher education institutions are an employment draw for first-time fundraisers, because they provide rare, high-quality, ongoing training and are better places to ‘learn the ropes’ in general (Swatek, et al., 2022). Higher education is often the place where experienced fundraisers who desire to stay, do. However, when career advancement opportunities are inevitably slim or unavailable in-house, the well-trained novices leave for more lucrative opportunities in other fundraising disciplines like marketing, public relations, etc., and the high turnover cycle continues.

Professionalization of Fundraising in Higher Education

CASE and other professional organizations like it have had a lot of influence on the professionalization of fundraising in higher education. They help member institutions take the ways they do things and systematize them into routines, which are shared broadly and become standard practice (Colyvas & Powell, 2006). Recognition from these same professional organizations legitimizes such practices and make them more likely to be duplicated at different sites, but the key is that the professional organizations choose which practices are spread, not the institutions. The organizations’ selections may be positive or negative for the profession overall, depending on context and what criteria the decisions are based on. When this happens in a given field, routines/practices are more and more affected by the norms coming out of professional organizations than by site-level specific organizational practices (Gunsalus, 2005), perhaps losing some of their own institutional context in the process (Dobbin & Kelly, 2007).

Philanthropic Engagement - What We “Know”

Bekkers and Wiepking (2011) in a 500 study meta-analysis of philanthropy across disciplines, established that charitable giving has eight driving mechanisms: awareness of need, solicitation, costs and benefits, altruism, reputation, psychological benefits, values, and efficacy. Weerts and Ronca (2009) compressed those eight mechanisms into four categories before applying a utility maximization framework to discuss what they refer to as ‘categories of donor motivation’ (awareness of need and efficacy; solicitation; costs and benefits; and ‘impure’ altruism). Considering these two frameworks and their slightly different interpretations of the base concepts together, charitable giving is more likely to occur in the following circumstances primarily because donors derive utility from the act of giving: 1) when the donor is aware there is a need and/or believes that need is legitimate; 2) when the donor is asked to donate - as long as it is not too often and the ask has the correct tone (and that tone differs across donor groups); 3) when the donor has weighed the costs and benefits of donating and believe them fair to their personal situation; and 4) from feeling what Weerts and Ronca (2009) consider “impure” altruism - a sense of needing to “provide collective goods and services to society (p.98).” There are innumerable studies and summaries of findings on what leads donors to give/give more across all areas of philanthropy. Even narrowing the scope to higher education would still exceed the limits of this project, so I will represent the most salient examples of study results related to alumni giving rates in the table below, using another four-part framework of predictive giving variable categories conceptualized by Newman & Petrosko (2011) in their study on alumni association membership. These four giving variable categories are: alumni involvement, student experiences, institutional characteristics, and alumni

characteristics. *Researcher note: light blue shaded cells indicate conflicting findings across studies on a given characteristic or variable.*

Table 2: Alumni Involvement

More likely to donate and/or donate more		Less likely to donate	
Variable/Characteristic	Source(s)	Variable	Source(s)
Family ties & involvement with university activities	(Clotfelter, 2003a); (Holmes, 2008); (Okunade & Berl, 1997); (Wunnava & Lauze, 2001)		
Involvement in/at university reunions	(Grant & Lindauer, 1986); (Hanson, 2000); (Holmes, 2008); (Olsen et al., 1989); (Willemain et al., 1994); (Wunnava & Lauze, 2001)		
Loyalty & emotional attachment to university	(Beeler 1982)		
Willing to recommend the alma mater to others	(Okunade & Berl, 1997)		
Reading alumni publications	(Taylor & Martin, 1995)		
Knowledge of other donors	(Okunade & Berl, 1997)		
Seeking information about fellow alumni	(Beeler, 1982)		
Past giving, <i>more likely the more frequent/recent the gifts</i>	(Lindahl & Winship, 1994); (Okunade & Berl, 1997)		
Reunion years, <i>“milestone” years, especially 25th and 50th</i>	(Grant & Lindauer, 1986); (Willemain, et al., 1994); (Bristol, 1991)		
Alumni who think their alma mater has need	(Diamond & Kashyap, 1997); (Weerts & Ronca, 2007)		

According to *Table 2*, there seems to be a lot known about alumni who donate, and not a lot known about those who don't. This falls in line with the research we know is more likely to be conducted in this field. The apparent assumption in many of these studies is that each counterpart of the dichotomous or indicator variable studied must occupy the opposite giving status. Clotfelter (2001) does acknowledge the processes at play might be more complicated, mentioning that “any observed difference in behavior could be the result of one or more of four

effects: composition, cohort, life cycle, or income (p.123).” Beyond this, most of the studies are not appropriately representative on race/ethnicity or gender indicators, and don’t include adequate moderating or mediating factors. In general, many of the findings read as a list of random criteria and not a cohesive picture of engagement.

Table 3: Student Experiences

More likely to donate and/or donate more		Less likely to donate	
Variable	Source(s)	Variable	Source(s)
Need-based scholarship or grant award recipient as an undergraduate	(Beeler, 1982); (Marr, et al., 2005)	Need-based loan recipients gave less than alumni without student loans.	Clotfelter (2003a); Monks (2003)
<i>No relationship found btwn non-need-based scholarships & alumni giving (Cunningham & Cochi-Ficano, 2002)</i>			
Positive undergraduate student experiences led to greater alumni giving	(Beeler, 1982); (Belfield & Beney, 2000); (Bruggink & Siddiqui, 1995); (Clotfelter, 2003b); (Hanson, 2000); (Mael & Ashforth, 1992); (Monks, 2003); (Stutler & Calvario, 1996)		
<i>No relationship found btwn undergraduate student experiences & alumni giving (Weerts & Ronca, 2008)</i>			
Nonacademic campus group participation while an undergraduate	(Bruggink & Siddiqui, 1995); (Clotfelter, 2003b); (Haddad, 1986); (Harrison, 1995); (Holmes, 2008); (Keller, 1982); (Marr, et al., 2005); (Harrison, et al., 2006); (Monks, 2003); (Wunnava & Lauze, 2001)	“Affinity” group participation while an undergraduate	Holmes (2008)

Table 3 (above) is in conflict at every predictor variable presented. The reviewed studies seem to acknowledge there is a lot of variability in the student experience that can lead to variations in alumni engagement, but fail to tell a story, again, of who these alumni are and what parts of their past student experience might persist in their present feelings towards their alma maters. Clearly, different people experience different elements of undergraduate college

life in very different ways, and we can see that in the wide variety of alumni engagement outcomes from seemingly alike constituent groups (Ronca & Weerts, 2009).

Table 4: Institutional Characteristics

More likely/donate more (to)		Less likely/not donate (to)	
Variable	Source(s)	Variable	Source(s)
Greater perceived institutional quality and prestige	(Baade & Sundberg, 1996); (Belfield & Beney, 2000); (Clotfelter, 2003b); (Hanson, 2000); (Leslie & Ramey, 1988); (Mael & Ashforth, 1992)	Lesser perceived institutional quality	Holmes (2008)
University expenditures on alumni activities - including events and communication	(Harrison, 1995) (Baade & Sundberg, 1996a, 1996b; Harrison, Mitchell, & Peterson, 1995).	Too much spending on fundraising costs and overhead	(Bekkers, 2006a); (Sargeant, et al., 2006)
		High % of students receiving Pell Grants	(Terry & Macy, 2007)
		Institutions with high debt rates per student	(Terry & Macy, 2007)
		Asking larger parts of the alumni base	(Leslie & Ramey, 1988)
		Asking for donations more often	(VanDiepen, et al., 2009).
		Physical obstacles	(Smith & McSweeney, 2007)

Table 4 (above) outlines institutional characteristics and from first glance, it appears that institutions have more negative impact than positive, and even the positive impact on engagement shows up more as mixed than clearly positive. It is important to highlight the fundraisers' conundrum discussed earlier in the role of the fundraiser section and represented in the second row of *Table 4*. Alumni enjoy personalized communications and having money spent on them while they engage with their alma mater, but don't respond well (via giving rates) when fundraising departments appear to have a lot of overhead expenditures.

Table 5: Alumni Characteristics

More likely/donate more		Less likely/donate less	
Variable	Source(s)	Variable	Source(s)
Older or more years since graduation	(Beeler, 1982); (Bruggink & Siddiqui, 1995); (Haddad, 1986); (Hanson, 2000); (Holmes, 2008); (Keller, 1982); (Okunade & Berl, 1997); (Olsen et al., 1989); (Wunnava & Lauze, 2001); (Yankelovich, 1987); (Belfield & Beney, 2000); (Grant & Lindauer, 1986); (Kaplan, 2022)		
Higher income levels	(Bruggink & Siddiqui, 1995); (Clotfelter, 2003b); (Hanson, 2000); (Holmes, 2008); (Lindahl & Winship, 1994); (Okunade & Berl, 1997)		
Type of degree or college major -- social science fields more likely than arts	(Haddad, 1986); (Holmes, 2008); (Hueston, 1992); (Marr, et al., 2005); (Monks, 2003); (Okunade & Berl, 1997)		
Married, especially if married to a fellow alumna or alumnus	(Holmes, 2008); (Okunade & Berl, 1997)	Unmarried	(Belfield & Beney, 2000); (Bruggink & Siddiqui, 1995); (Monks, 2003)
Lives closer to alma mater	(Bruggink & Siddiqui, 1995); (Hueston, 1992); (Lindahl & Winship, 1994)		
Caucasians	Monks (2003); Okunade (1996)		
U.S. Citizens	(Monks, 2003)		
Men – more often	(Lindahl & Winship, 1994);		
Men – give more	(Clotfelter, 2003a)		
Women – more often	(Bruggink & Siddiqui 1995); (Belfield & Beney, 2000); Holmes (2008)	Women - give less	(Belfield & Beney, 2000); Holmes (2008)
Women – give more	(Okunade et al., 1994)		
<i>No difference in frequency of giving or average amount given by gender (Clotfelter, 2003b); (Marr, et al., 2005); (Monks, 2003); (Okunade, 1996); (Wunnava & Lauze, 2001)</i>			

Some of the alumni characteristics in *Table 5* (above) are based on data made available from the individual's time as a student, so it is understandable to have some level of contradiction. After all, people are dynamic entities. Across these studies, many demographic factors' results swing from one end of the engagement spectrum to the other. As a reviewer, one must wonder if moderating and/or mediating variables were properly applied in context. In attempting to construct a comprehensive and updated alumni engagement profile, there seems to be more to the research conversation.

Philanthropic Engagement: "Best" Practices, Trends & Areas of Further Study

Taking into consideration the inconsistent donor/institution characteristics studied in these tables, Annual Fund campaigns must still make decisions with whom and when to engage. Best outreach practice to date is based on a fundraising interpretation of the Pareto principle (the 80/20 "rule") that a small number of known donors make up most of the gifted funds (Weerts & Ronca, 2007). This guides fundraisers' choices to reach out almost exclusively to recent donors for what they perceive as maximum impact (Clotfelter, 2001). Further, Thompson (2004) found that perennial, moderate levels of annual giving is the best predictor of major gifts later, with 21-29% of annual fund donors who give around \$1000/year for 5 or more years eventually signing on for a major gift. Institutions strive for more major gift donors, so this strategy is also standard practice with annual giving departments.

In contrast to the best practices mentioned above, CASE has collected strong evidence that the average amount of time lapsed after graduation and before an alum initiates engagement with alumni organizations is eleven years (Kaplan, 2022). If this subset of alumni aren't at least low-level active donors during those 11 years, then best practice tells us they aren't likely to receive outreach at all during this time. They are most likely excluded overall. Twenge and colleagues (2007) found that people who encounter social exclusion - or even just feeling like they have been excluded - often have decreased levels of empathy for causes and beneficiaries later, potentially eliminating future giving or greatly limiting its level. Weerts and Ronca (2009) also address this phenomenon, pointing out that an important difference between alumni donors and non-donors is whether and how well they kept in touch with their institution. In their grounded theory opus aptly named "Pots of Water," Fleming (2019) outlines

the intricacies of alumni engagement as “...the coalescence of beliefs, thoughts, actions, and emotions about and towards their alma mater, and an individual’s level of engagement is the degree to which they come together (p.103-104).”

Beyond individual characteristics, there are group level factors at play that impact alumni engagement. Willemain and colleagues (1994) found in their longitudinal analysis of three colleges’ giving data that “...for whatever reasons, each class has its own characteristic level of generosity that persists year after year, reunion after reunion (p. 615).” There is much less work available on cohort-driven trends, which presents a large gap in the knowledge base.

Social Network Analysis (SNA)

Emerging mainly from sociology, social psychology and social anthropology, network analysis has also swept through studies in many other areas of science, but the spread has led to more conflict than consensus on what exactly social network analysis (SNA) is and how it is best operationalized to study different phenomena (Buch-Hansen, 2014). Some camps represent SNA as a theory, some as an approach or strategy to use and some apply it as a paradigm itself (Prell, 2012; Scott, 2011; Singh, 2020). Essentially, as Kadushin (2012) explains, a network is a group of relations between entities, and those entities can be individuals, organizations, companies, schools, a box of stuff, a list of materials, etc. Network analysis is a way to arrange visual aids, ideas, assumptions and analysis about these relations and their entities. A benefit of SNA is that it allows thoughtful movement between individual and environmental levels of analysis (Yang, et al., 2017), using a developing shared vocabulary and set of standards for relational analysis, but never having to commit to any one underlying social theory or structure (Scott, 2017). A researcher can gain understanding of the interactions between an individual's lived experiences and related systemic factors simultaneously, considering deeper underpinnings and bigger pictures at the same time.

Theoretical Assumptions

While the many areas of research that have adopted SNA have contributed to lack of broad consensus on standard practice, the different fields have influenced SNA practitioners to be able to hold seemingly incompatible assumptions simultaneously. Three main assumptions sit at the top of the proverbial SNA checklist, important for all engaging with it to consider at the outset. First, structural relations are usually more educative than personal or demographic

attributes when explaining observed behaviors. Second, structural mechanisms are socially constructed by relations among entities (Singh, 2020). As Yang and colleagues (2017) describe, “findings depend on the context (p.19).” Third, structural relations are dynamic and must be studied with flexible, wide-reaching methods that acknowledge this fact. Customary methodological structures assume that parts of a system are independent of each other, and that any possible explanation of events will likely be a correlation (Durland & Fredericks, 2005). SNA allows researchers to study relationships within social situations and, different from most other interaction-related theories, is not concerned with the choices those actors make, but rather the context and behavior of the relations themselves. Results from these studies are often very complex and unable to be fully captured or explained clearly using one statistic (Durland & Fredericks, 2005). Additionally, Singh (2020) points out how many network analysts tend to assume commonsense is observable in social relations and is what ultimately drives them. But Singh disagrees, positing that “visible” commonsense in social relations is the product of multiple invisible social forces interacting. As an area of study, SNA is constantly being interrogated by its own practitioners, and the wide variety of their fields and expertise lead to a rich body of knowledge that is full of tensions and multiple ways to represent new ideas (Buch-Hansen, 2014).

Basic Structural Terminology

Before you can analyze a social network, it is necessary to identify some basic elements—some of which you might have to adjust later in the work since the practice is not always consistent throughout its process. There are several types of networks that each lead to different sets of choices during analysis: directed/undirected, binary/valued or bipartite/one-

mode networks (Scott, 2017). Directed networks are *directional* relationships that may or may not be mutual between two entities, and undirected networks don't indicate either way the relation might be pointed, they are treated as neutral and mutual. Binary networks demonstrate simply whether a relationship exists or not, and valued networks use ordinal scales to represent relational intensity between entities. Bipartite networks have two levels/sets of entities that they track at the same time in the same context, and one-mode networks have one level/set of entities where they are all considered to be the same "kind" of actor (Yang, et al., 2017).

Concurrent with choosing a network type, deciding which level(s) of analysis is also crucial to setting up a successful SNA. Network theory begins with individual entities called nodes – or egos, actors, vertices - and relations that connect these individual entities – also called ties, links, arcs, edges, alters (Yang, et al., 2017). The different naming conventions are a side-effect of a new paradigm being constructed across multiple areas of science at the same time. Borgatti and colleagues (2022) discuss different relational states and events that make up the ways that dyads (pairs of nodes) connect to each other. Some relational states are based on relational roles and cognition, some are based on similarities, but the key takeaway is that according to SNA, they are all mutable. Even with relational roles more often considered permanent like brother/sister, the relation is assumed to be able to wither away if the interlocutors don't adhere to expectations set out for each other either explicitly or implicitly.

Connected nodes are called dyads and represent the simplest network level. Small groups are the next level of analysis, and there are many different iterations with precise definitions for each. Triads, specifically, represent the building blocks of network analysis in that

they may only contain three nodes, but represent up to 16 possible permutations of relations between those three nodes (Kadushin, 2012). Other varieties of small group level analysis occur in cliques (all nodes connected to each other directionally with no out-degree relations) and different kinds of cluster groupings. Whole networks are the largest level of analysis, representing entities like society at-large, an environment, etc. Reaching back to the information on types of networks, any of these network levels can be directed/undirected, binary/valued and/or bipartite/one-mode.

Sociological Concepts of Connection in SNA

SNA's origins in sociology shine through with core concepts that much of the theory is based on. First, propinquity is when an entity is more likely to be connected to another simply because they are geographically close. There are two sub-concepts: 1) co-location – they happen to live near; and 2) co-presence – they are both physically near and have a social relationship (Kadushin, 2012). Next, homophily is when an entity is more likely to be connected to entities most like them – as well as the reverse – they're more likely to be similar to those they are close/connected to. Two factors are assumed to contribute to homophily: common norms pulling actors with common attributes together and “the availability of similar attributes [is a] function of social structure (Kadushin, 2012, p. 20).”

What Kadushin (2012) refers to as mutuality, and Yang and colleagues (2017) call reciprocity is very difficult to measure or track on an individual level and is greatly impacted by surrounding cultural and social structures. Mutuality/reciprocity occurs when a dyad has connections from each node that “claim” the other node as a connection, i.e., they both “know” each other. They are difficult to measure individually because individuals often have

unreliable memories and/or abilities to perceive when their connections are mutual. The last of the four relevant sociological concepts is also referred to differently across different texts. Kadushin (2012) uses the term balance, and Yang and colleagues (2017) call it transitivity. Colloquially, it can be explained as *the friend of my friend is my friend, but the enemy of my enemy is not necessarily my enemy*. As mentioned earlier, network analysis truly emerges at the triad level, even though we begin observing homophily within dyads. Adding a third node 'brings the drama,' because that third node can either align with the other two equally or they can serve as what SNA refers to as a 'broker' for their own ends, potentially pitting triad-mates against each other. A triad is vastly more complex because of this issue of balance/transitivity, and therefore muddles clear comprehension of the larger networks they are building blocks for.

SNA Descriptive Methods

SNA is studied most efficiently through connection data represented in matrices (or edgelists in the case of simple, directed networks) (Borgatti, et al., 2022). Graph theory helps make the complexity of matrix algebra much more accessible, and these are available together through statistical analysis software programs that transform the behind-the-scenes mathematical analysis cleanly into digestible visual aids called sociograms. A sociogram is a type of graph because it uses information about lines and points but doesn't feel like a typical graph since it is not in the familiar *XY* axis format (Scott, 2017). SNA descriptive methods are very similar to typical descriptive methods, where the goals are to understand the parameters and trends of the data using measures of central tendency, etc.

There are conflicting approaches to how many types of network boundaries exist to be studied, and even the extent to which one can assign a single type of network boundary to any

one network (Scott, 2017). Ego-centric networks or ego-nets have boundaries around one actor/node/ego, and open/whole networks do not have boundaries clearly defined. Socio-centric networks are somewhere in the middle, bounded by a naturally occurring event or timeframe. College could be considered a socio-centric network. Much of social network analysis' methods are only applied to binary, undirected networks, with some additional possibilities for binary, directed networks (Yang, et al., 2017). Symmetry is a requirement for nodes to be able to demonstrate connections to more than one other node and is ideal for triads to form, which (as discussed earlier) are the building blocks of network analysis. Failing to achieve triadic closure prevents application of certain descriptive network measures (Yang, et al., 2017).

Density is calculated by finding the ratio of the actual number of edges present to the most *possible* number of edges (Wasserman & Faust, 1994). For purposes related to language friendly to insufficient data on ties/edges, Yang and colleagues (2017) also define density as the number of actual dyadic ties in a network divided by possible number of dyadic ties. It is the simplest network measure in SNA.

Centrality is measured in many ways, with slightly different information to be gleaned from each process. It is measured at the node level, but the distribution of that measure among the other actors in the network is represented in a network characteristic referred to as centralization. The greater the centralization of a network, the larger the difference between the different actors'/nodes' centrality measures (Yang, et al., 2017). The first way to measure centrality is called degree centrality. It is considered the number of connections or ties a node has and must be normalized when comparing nodes across networks, because it is sensitive to

network size. It is expressed as a number between 0 and 1, with a value closer to 1 meaning a higher degree of connectivity/centrality for that node. Betweenness centrality, also considered the basis for Burt (1992)'s structural holes/brokerage theory, is measured as the number of times a node sits on the shortest path between nodes in a network. It demonstrates the node's ability to control what comes through dyadic pairs (info, goods, etc.) to other pairs they connect in the network. It is calculated similar to degree centrality, and when centralized/normalized has a value between 0 and 1 with values nearer to 1 indicating a more hierarchical network and closer to zero more egalitarian (Yang, et al., 2017). Closeness centrality measures how quickly a node can reach other nodes in a network. It is calculated in a way that makes it impossible to have zero in the denominator, i.e., it cannot apply to isolated nodes in a network. There are many caveats to its usefulness, and it thus a lesser applied metric.

SNA Inferential Methods

Descriptive methods in SNA allow us to draw conclusions on specific networks at hand, but when we move to include significance tests such as Chi Square, F-ratio, t-tests or z-tests there emerges a contradiction in assumptions. These tests presume a certain level of independence between variables that is not always present or possible in network analysis. To solve this problem, statisticians use strategies like permutation or the QAP (quadratic assignment procedure). Further, there are SNA specific methods to replicate correlation and regression models (Yang, et al., 2017). Inferential methods are out of scope for this project but could prove useful with future work.

Psychological Foundations Driving SNA

Two essential psychological concepts undergird SNA as a form of behavioral study through interaction, describing the driving forces of motivation inherent in people: to stay safe through connection and to reach out for connection. Notoriously under-studied in the existing literature, these two basic elements and their third counterpart, status seeking connection, do map well against many other SNA pieces. Safety could drive density, effectance (reaching out) is necessary to understand betweenness and brokerage, and status is at its core a measure of closeness and prestige (Kadushin, 2012). The important piece to remember is that safety must exist before effectance can happen, and while both of these may be in place, status could still never take hold. There is a cognitive limit to an individual's network size, usually agreed upon to be around 150 connections.

Social capital is value from the connection inherent in social networks (Kadushin, 2012). Ronald Burt (2000) connects social networks and social capital using three main points: 1) The field will be better served and more cohesive if studies kept focused on network elements leading to social capital; 2) even though there are exceptions to consider, social capital is more about brokerage and structural holes than closure of a network; and 3) these two concepts can be explained together in a framework that enriches both and the study of social capital. Burt (2000) further asserts that even though there are a litany of explanatory frameworks circling regarding social capital, "they agree on a social capital metaphor in which social structure is a kind of capital that can create for certain individuals or groups a competitive advantage in pursuing their ends. Better connected people enjoy higher returns (p.348)."

One manner of being well connected stems from Granovetter's (1973) work on the strength of weak ties as part of the structural holes/brokerage theory in network analysis. Weak ties are located where structural holes allow a savvy broker holding these ties to control the flow of information and favors/goods passing through them. No one on the other side of the weak tie/broker can get access to what is on the other side of the hole without the permission and blessing of the broker. This is a powerful position with many elements of control and opportunity (Burt, 2000). Reaching back to the discussion of psychological foundations in SNA, a brokerage position is best represented by effectance, but can move into status seeking easily, given the right conditions. Safety remains a prerequisite for both, as the groups on either side of the structural hole occupied by the broker must have at least some measures of trust and safety with that broker to be tied to them in the first place, however weakly (Kadushin, 2012).

Critical Social Network Analysis (CSNA)

As a person with a strong critical theory lens, reviewing so many social network analysis foundational studies left me wondering if there were any researchers since the inception of this field that have started to think about critical factors or applications. As it turns out, there are. It is still early stages, but exciting to see happening. There are also subtle clues in earlier works that hint at the propensity for social network analysts to be quick converts to critical theory. For instance, while explaining homophily, Kadushin (2012) states that as a concept, homophily is evidence that SNA must include cultural values, nationality, gender, class, and other sociological issues. Scott (2017) comments while defining density that "the actual number of lines (edges) in a graph (network) is a direct reflection of its inclusiveness (p.81)." According to

Keane (2009), relational aspects of underrepresented students' experiences in higher education are lacking and those that do exist point to conflict with both internal and external relationships and social experiences. Critical theory shines in the simple idea that someone decided not all ties are positive in nature, and therefore now we study negative ties (Rubineau, et al., 2019).

This is not an exhaustive list of current CSNA ideas, but rather a collection of excerpts and notes taken while reading mostly non-critical literature. As it stands, Brieger (2021) seems to understand that CSNA is a gift, and it should "... focus on studies of the reproduction of societal inequalities (p. 75)"

Diversity, Equity, and Inclusion (DEI)

In 1968, a group called the National Advisory Commission on Civil Disorders (known later as the Kerner Commission), assembled by President Lyndon B. Johnson, began our modern-day conversation regarding diversity. The Kerner Commission excluded many groups we would currently consider part of the DEI atmosphere, but it did recommend that institutions across the United States move beyond Jim Crow to include African Americans (Newkirk, 2020). Affirmative action, legalized in 1978, was a federal mandate that sought to increase parity of gender and racial representation in schools and businesses by encouraging gender and race-conscious practices that pushed against the many ways white male supremacy has impacted marginalized populations (Jayakumar, 2021). Unfairly characterized by opponents as an unconstitutional quota system, affirmative action has since been overturned in the Supreme Court, in favor of “race-neutral” policies that many studies’ findings clearly demonstrate as contributing to increased inequality (Hoey, 2023).

The DEI movement has grown and shifted over time, but it has consistently been overly focused on the “D” of DEI (Diversity) and often monitors DEI guidance via adherence to representation quotas in hiring or admission (Wilson, et al., 2012) or tracking attendance at diversity trainings (Li, et al., 2023). These top-down strategies have little impact on improving individual attitudes towards diversity or moving the proverbial needle with regards to collective behaviors that would improve equity efforts overall.

DEI in Higher Education

Regardless of whether affirmative action is in place or not, universities that understand the benefits of a diverse student body find ways to work towards equity. The issue remains,

however, that conversations and strategies that come out of those conversations still seem to fall back on diversity as the main lever for change. It is easy to measure and see, yielding quick wins. This 'checked box' quota approach to DEI is not effective at eliciting the benefits of diversity on campus or fair to admitted minority students (Bunce, et al., 2021).

Inclusion and equity are not automatic by-products of increased campus diversity as measured by perfectly balanced percentages of named sub-groups or attendance at recommended diversity trainings (Russen & Dawson, 2024). The myriad advantages of diverse student bodies can only be unlocked when leadership and staff pursue deliberate strategies that actively promote inclusion and equity as well (Tienda, 2013). DEI helps an organization get more out of its people, and different people mean different points of view which ultimately leads to more success (Li, et al., 2023)

Outcomes to Date

As we well know, the work of DEI is never complete and has made widely variable progress over the last 60 years. Interestingly and perhaps not surprisingly, the assessment of DEI progress matters most on who is making the determination of what success looks like. Many white people in the workplace will say that there is a lot of success and that we've come a long way, but this sentiment is often not echoed behind closed doors among minority and marginalized populations (Weeks, et al., 2024). In fact, minority peers are known to exhibit deep acting or "masking" in the workplace to make interactions less frictional and to hide their genuine emotions about treatment, status, interactions, etc. (Wang, et al., 2011). Such actions are rooted in the emotional labor that minority groups take on for the comfort of white colleagues (Harlow, 2003; Lewis & Shah, 2021). Painfully, it is often white people who benefit

the most from DEI initiatives as they are most typically tackled, because they are likely to gain a wider world view and the ability to think more critically overall (Martin, 2014). White students and colleagues achieve this great learning at the expense of minority students and colleagues in their midst, committing microaggressions and – perhaps unwittingly, but still injuriously - demanding emotional labor from their peers as they go (Wang, et al., 2011).

Consequences of Implementation Issues

Systems work as they are designed, so it follows that there must be something amiss with DEI strategic plans that fail to achieve their stated goals and/or cause harm to minority populations in the process. Unfortunately, it is these minority populations that pay the greatest price when DEI plans fail. Zheng (2023) discusses several areas that are negatively affected, but most salient in our case is the issue of trust being lost. Once someone perceives that a climate is hostile or not truly open to DEI improvements, their well-being and academic progress is negatively impacted (C. E. Garcia, 2020; Lange et al., 2019).

Current DEI Environment

During what has been referred to by the mainstream media as the “racial reckoning” of 2020, DEI concerns were collectively raised, and attempts were made to address them in workplaces and schools across the country (Russen & Dawson, 2024). Many white people who may have considered the United States a post-racial society, given their own context, were faced with complex constructs that highlighted egregious treatment of minority populations at the hands and for the benefit of the white majority over the years. Never before considering the racial underpinnings of their world, there were many white people that genuinely joined in the effort to learn and unlearn, but there were also factions of people strongly opposed to the

shift towards true equity. Many more people stayed in the middle, supporting when prompted, but not doing much inner work beyond what was asked in their – still overutilized - diversity trainings. What we are experiencing now, a few years later, feels like a disproportionately violent backlash to the 2020 initiatives. Federal, state, and local efforts are being undertaken to undo much of the progress made and firmly re-center whiteness in the public narrative (Jayakumar, 2021).

Conceptual Framing

Conceptual frameworks are “superstructures” that clearly connect and reinforce smaller arguments based on “...personal interests and goals, identity and positionality, topical research, and theoretical frameworks” (Ravitch & Riggan, 2012, p. 9). Designed and IRB approved as a quality improvement project, I understand that there is no formal expectation to outline my positionality for this project (Itri, et al., 2017). However, Darwin Holmes (2020) discusses three areas where a researcher must locate themselves in relation to their work: the location of the work, the participants, and the research context/process. The connection among the elements of this project would be compromised if I don’t apply critical reflexivity to my positionality and design choices, as well as calling out the “proximity to power” I am privileged by with Barley as a project site (Esposito & Evans-Winters, 2022, p.17).

Positionality

I attended Barley as an undergraduate student and that was provided for by full tuition grants for all four years. Annual Fund made these grants possible, and I would not have been able to attend college without them. As an alumna, I have volunteered on class reunion giving committees, so I am somewhat familiar with the process prior to this inquiry. I have my own opinions and preconceptions from those experiences that shape how I understand the elements that make up the work at hand (Darwin Holmes, 2020). For example, during the several years after graduation where I lived paycheck to paycheck teaching elementary school, I didn’t receive any direct overtures from class giving committees – for donations or volunteer hours. This shifted abruptly once I got married and moved to a new zip code. While not necessarily upset about the change in communication, it did feel like Barley assumed because

my socioeconomic situation changed, I must have received magical immediate access to buckets of social capital related to the philanthropy space. However, the truth about what I bring to a committee table is not exclusively monetary, philanthropically related, or easily captured in the demographic data I so diligently update for the alumni database. Having maintained relatively close ties across all manner of social groups from my time at Barley also pushes me harder to interrogate why some of these social groups are perennially absent from volunteer committees and alumni relations activities overall. Coming out of my experience as a committee co-chair for our 15th Reunion Campaign in late 2022, I pondered why many of the unspoken strictures about which alumni to engage were still so strong, even as a school I viewed as progressive and welcoming like Barley. Hence, the kernel that led to the seedling that led to the starter plant of an intriguing, timely, and important inquiry began to germinate.

I come to quality improvement work with AF a self-ascribed critical theorist, with an ontological lens that vacillates between bounded relativism and critical realism, depending on the context and where I am situated in it. Deeply, I understand the concept of appearing one way in systems of empirical measurement, but having many more driving, conflicting, causal factors underneath the surface that impact how I truly experience the world. It is a fascinating position to occupy and affords a strangely natural proclivity for interrogating stereotypes, real versus perceived availability of social capital and the corresponding actions for various individuals and groups (Harré, 2012).

Theoretical Framework

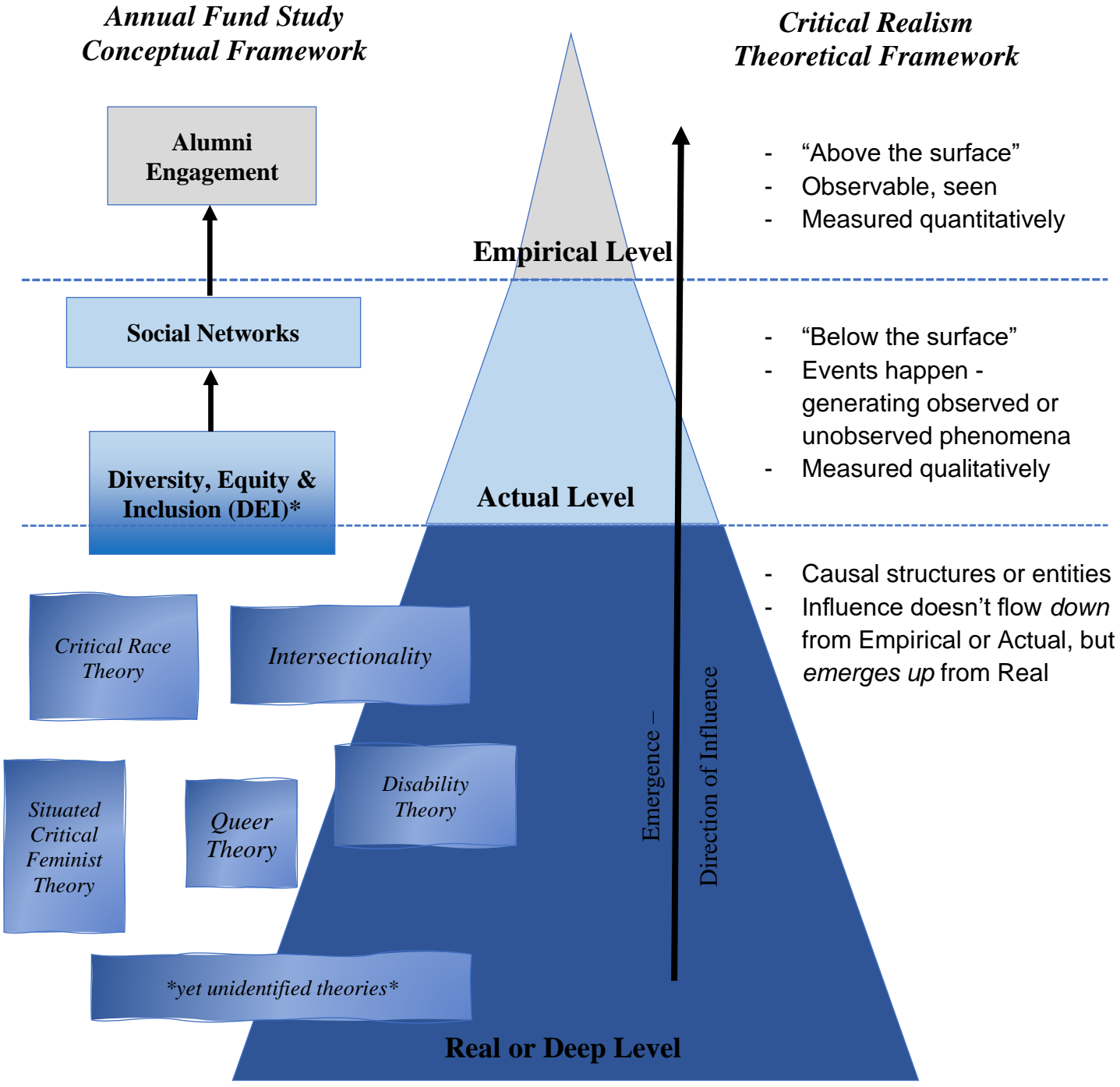
Critical realism is a paradigm that builds on realist ontology through relativist epistemology (Stutchbury, 2022). I am absorbed by the intricate play between what is

visible/able to be measured (empirical level), what events and people connect us to observations that wink at what may be (actual level), and the puppet strings that exist beneath the joint veneer of American professionalism and the ivory tower of academia (real or “deep” level) (Haigh, et al., 2019; Cassell, et al., 2018; Stutchbury, 2022). This paradigm disrupts the harsh dichotomies and forced dualism that exist in countless ontological/epistemological research discussions by acknowledging that the world is knowable (“intransitive”), but the *act* of knowing is subjective (“transitive”). It constantly shifts with socially constructed ebbs and flows, as people convene and disperse, and we all try to make sense of the world around us (Cassell, et al., 2018; Haigh, et al., 2019). I ultimately chose this paradigm for mapping the Annual Fund conceptual framework because of its shift to the subjective and critical, while not losing its connection to realist fundamentals. We can have a million reasons why something happens, but there is still a “happening” to consider.

The Annual Fund’s goal of increasing alumni engagement by operationalizing alumni volunteers and their social networks is empirically measurable via giving and participation rates, as well as volunteer logs. Social networks exist in critical realism’s “actual” realm, where we may not measure “it” directly (no one walks around with little strings tied to all their social connections), but still need to capture from alumni where their networks are and how deeply they relate to them. Barley does this through a new-to-them software called GiveCampus. Embedded in any work that involves social interaction is the presence (or lack) of diversity, equity, and inclusion (DEI) best practices. I believe, here at the outset, that DEI occupies a space between realms - straddling actual and real in this paradigm. We can ask participants their thoughts on and experiences with DEI as a practice, but if they and/or their interlocutors are

not tuned in – through purposeful self-reflection or with instinctually inclusive-leaning mindsets – to the deeper sociocultural and critical theories that DEI bases its guidance on then our assessment cannot be valid, and our inquiry remains incomplete. A more purposefully designed, vigorous study would be necessary to find that deeper through-line from theory to practice – from real to empirical. I still chose to include the “real” level throughout this quality improvement project, more to highlight what is available to dive into later. *Figure 2* outlines how each framework measures against each other and provides Annual Fund a map to guide inquiry for the next project, should they choose to embark on that journey.

Figure 2: AF Conceptual Framework aligned with Critical Realism Theoretical Framework



Research Questions

Knowing I intended to conduct a mixed methods study to address the problem of practice through a critical realism framework (more on that in the next section), I wrote the initial three research questions with quantitative and qualitative data collection/analysis in mind. Research questions 1 and 2 are focused on establishing the project setting using existing measurement tools and data systems. Research question 3 was constructed to better understand the lived experience of alumni volunteers. Bhattacharya (2017) warns aspiring researchers that conducting qualitative research is nonlinear, while Esposito and Evans-Winters (2022) say that qualitative research follows an emergent design. You must be willing to change or adapt your design depending on what happens along the way, and that is exactly what happened as I conducted interviews formally with alumni, then more informally with staff. I realized that I had so many wonderings about the staff experience on its own, so I added research question 4 about halfway through the data collection phase and went back to the staff to include more formal interview sessions.

- (1) How do characteristics of volunteer alumni giving committee members compare to the total population of alumni across reunion campaign years?**
- (2) How does recruitment, selection, and organization of alumni giving committees shape alumni giving outcomes?**
- (3) What are the motivations, observations and experiences of alumni giving committee volunteers during reunion campaign years?**
- (4) What are the motivations, observations, and experiences of AF staff regarding their work with volunteer alumni giving committees?**

Study Design

Critical realism paints the foundational parts of its paradigm with a wide brush, insisting that the point of research is to gather “tendencies” in the phenomena studied, so whatever method is needed to do so for whichever phenomena is essentially acceptable (Haigh, et al., 2019). This aligned well with wanting to explore some advanced quantitative analyses while remaining a user-centered quality improvement project driven by ethnographic-based interviews (Bryk, et al., 2015). When paired with the concept of emergence in design as discussed by Dr. John W. Creswell (2022) in a lecture on critical realism, I felt agency to try new-to-me methods in pursuit of where to find deeper connections at the “real” level of alumni engagement/social networks (University of Michigan Family Medicine, 2022).

Critical realism posits a critique of the epistemological assumption that social science exists only in open systems, and therefore can never achieve the closed conditions necessary for predictive experimental design. Bhaskar (1989) – the “founder” of critical realism – contends that 1) the assumption that all empirical, experimental tests are predictive is false and, 2) one can employ a “battery of statistical techniques as a more or less fully adequate surrogate for experimental closure (p. 186).” As mentioned above, critical realism is accessible to a wide variety of methods to achieve the goal of uncovering causal structures/entities driving our sociocultural experiences. The most employed qualitative methodology for critical realists is grounded theory. A full-scale grounded theory endeavor is beyond scope here, but I will dig as much as possible within these study boundaries so that later work may be able to drive closer to revealing causal structures and uncover more potentially impactful interventions.

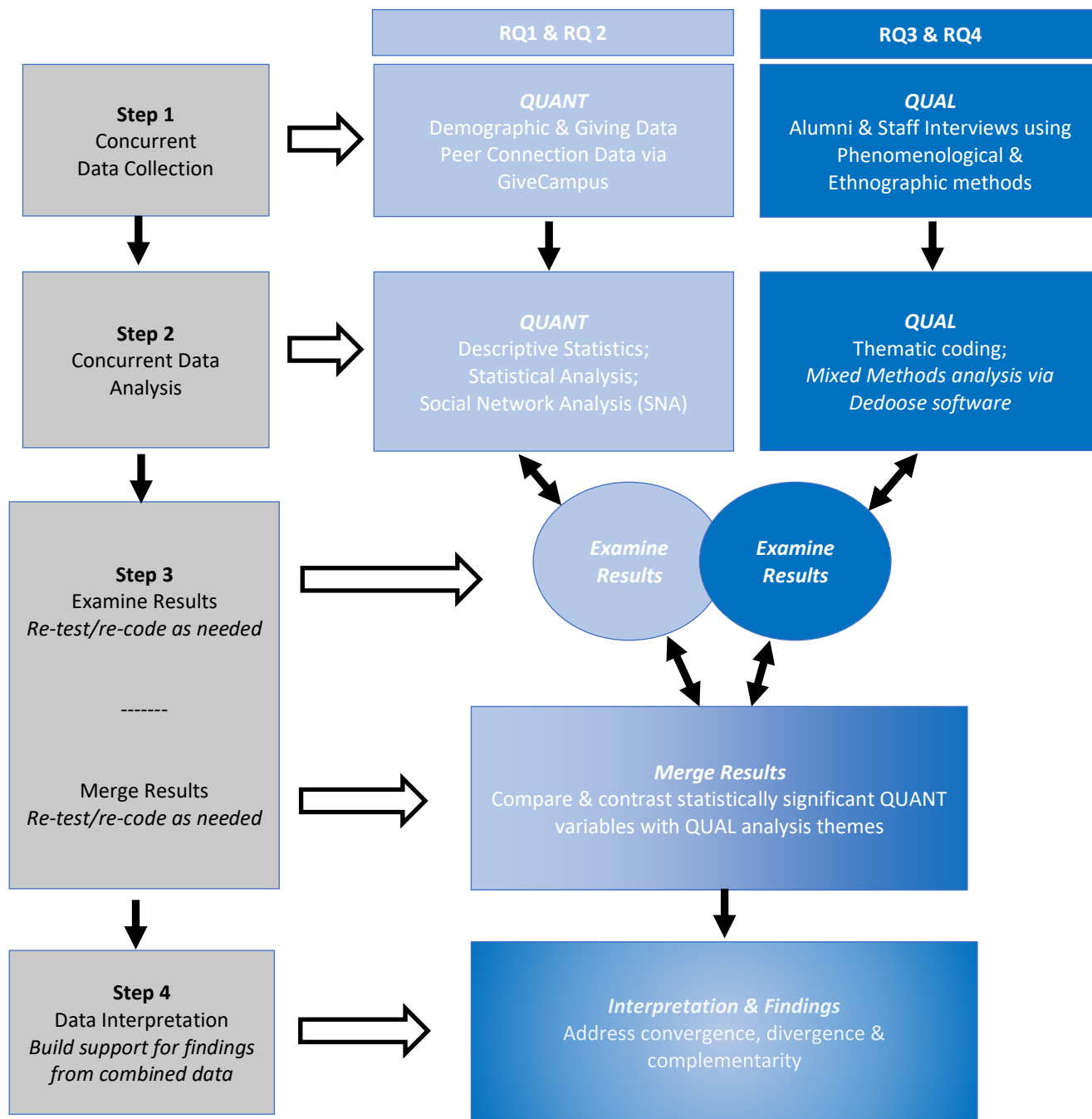
Methodology

Despite seeming like an ontological and epistemological mismatch, critical realism simply refuses to impose a hierarchy on data collection method or methodology (Cassell, et al., 2018). Known as methodological pragmatists (Haigh, et al., 2019; Johnson & Onwuegbuzie, 2004), critical realists assert “(t)he practical demands of the problem are primary (Greene, et al., 1989, p.257).” For this reason, a mixed methods study is an ideal way to meet measurement needs at all levels of design. Mixed methods can be explained with a sports commentator analogy: Sports media pair “color” commentators for inside track/experiential insight with more concrete “numbers guy” counterparts. Taken together, these pairs make for richer understanding of the games at hand. Similarly, quantitative data is often available to researchers in excess and those researchers tend to be more comfortable with conclusions drawn via that quantitative data, but to understand *why* certain trends might exist or some items/constructs are missing may not always be evident and need a qualitative touch to be more fully interpreted (Sage, 2013).

Another crucial tenet of critical realism discussed by Creswell (2022) in a recent topical lecture series is emergence (University of Michigan Family Medicine, 2022). This is the idea that concepts get more complex at higher levels of a structure, given that so many factors contribute as one moves up the chain. Considering I am balancing two methodologies, the iterative nature of inquiry, and the fact that new concepts/understandings/musings might emerge as I move along influenced the ultimate decision to use a mixed methods convergent parallel design for this project. Additionally, I chose to do an adapted parallel-databases version

of the convergent design (see *Figure 3*) because although I needed to conduct interviews for the qualitative data side myself, most of the raw quantitative data already existed.

Figure 3: Convergent Parallel-Databases (Edmonds & Kennedy, 2017; De Cock Buning, et al., 2020)



Concurrent Data Collection

This section helps put into perspective the wealth of data available. *Table 6* ascribes what analyses which data were intended for and how they were gathered, arranged by research question and corresponding theoretical frames. The narrative following is organized by method. The quantitative section explains the main demographic dataset, peer connection data and alumni-level giving totals relevant to the 2023 reunion campaign and uses descriptive statistics to get to know more about indicators of interest to the analyses. The qualitative section details interview structure, participant sampling and recruitment by stakeholder group.

Table 6: Data collection matrix

RQ #	Research Question	Frames/Theories	Method	Participant Sampling	Recruitment
1	How do characteristics of volunteer alumni giving committee members compare to the total population of alumni across reunion campaign years?	Alumni Engagement DEI	<i>Quantitative:</i> Cohort records (demographic & annual giving data)	Theoretical & Critical Case Sampling	AF provides data
2	How does recruitment, selection, and organization of alumni giving committees shape alumni giving outcomes?	Alumni Engagement Social Networks DEI	<i>Quantitative:</i> GiveCampus peer connection data	Theoretical & Critical Case Sampling	AF provides data
3	What are the motivations, observations and experiences of alumni giving committee volunteers during reunion campaign years?	Alumni Engagement Social Networks DEI	<i>Qualitative:</i> Semi-Structured Interviews	Theoretical & Critical Case Sampling	Email request from Researcher
4	What are the motivations, observations, and experiences of IF staff regarding their work with volunteer alumni giving committees?	Alumni Engagement DEI		Purposeful & Snowball Sampling	

Quantitative Methods

Research questions 1 and 2 were addressed using Excel and csv data from alumni demographic information, and annual giving totals organized both at the alum level and by graduation cohort/year. I used peer connection data produced by alumni giving committee members for their graduation cohorts during the 2023 reunion campaign to conduct a social network analysis using R/R Studio software. I also attempted to link the demographic and giving databases to the peer connection data/social network analysis to yield more detailed, statistically tested snapshots of what each alumni committee's social reach and giving impact was for the 2023 campaign.

Demographic Data Overview

The main demographic dataset represents information for all 5,633 living and degree holding Barley alumni who graduated in years ending in 3s and 8s, as organized by Annual Fund staff. The years included are 1973 through 2013 (10th through 50th Reunions). *Table 1* from the Organizational Context section outlined alumni counts across these graduation years. The 5th Reunion (class of 2018 graduation cohort) was not included in this project because 5th Reunions were being held at a different event in the Spring of 2024, and thus, outside of the scope. Even though only five of the nine graduation cohorts/reunion years were selected for alumni interview sampling, I chose to include all nine graduation cohorts/reunion years in the quantitative analyses since the committee member data was available as a variable in the Excel data. The only exception for inclusion in all elements of quantitative analysis was the 50th reunion (class of 1973 graduation cohort), which is not included in those analyses involving peer

connections or 2023 giving totals. The 50th has a special process for their reunion campaign fundraising that includes estate planning, bequests, etc., they didn't use GiveCampus to select peer connections, and their timeline is also different for including gifts in the campaign totals.

Peer Connection ("Ties") Data Overview

Committee members from each reunion year, excluding the Golden Reunion (50th) selected classmates they were friends with and/or felt comfortable reaching out to for donations towards the reunion campaign. AF used a fundraising software called Give Campus for these peer connections ("ties"), and committee members could only select a classmate once. The data was exported via csv with unique identifiers for both the connector and the connected node. I arranged these into edgewise lists by graduation year for analysis in R/RStudio. Only having committee members making ties, combined with a node (classmate) only being able to be selected once both put limitations on the network complexity and corresponding analysis that was available. I applied proxy measures from traditional descriptive statistics for SNA measures not available in the R/RStudio analysis due to insufficient tie information.

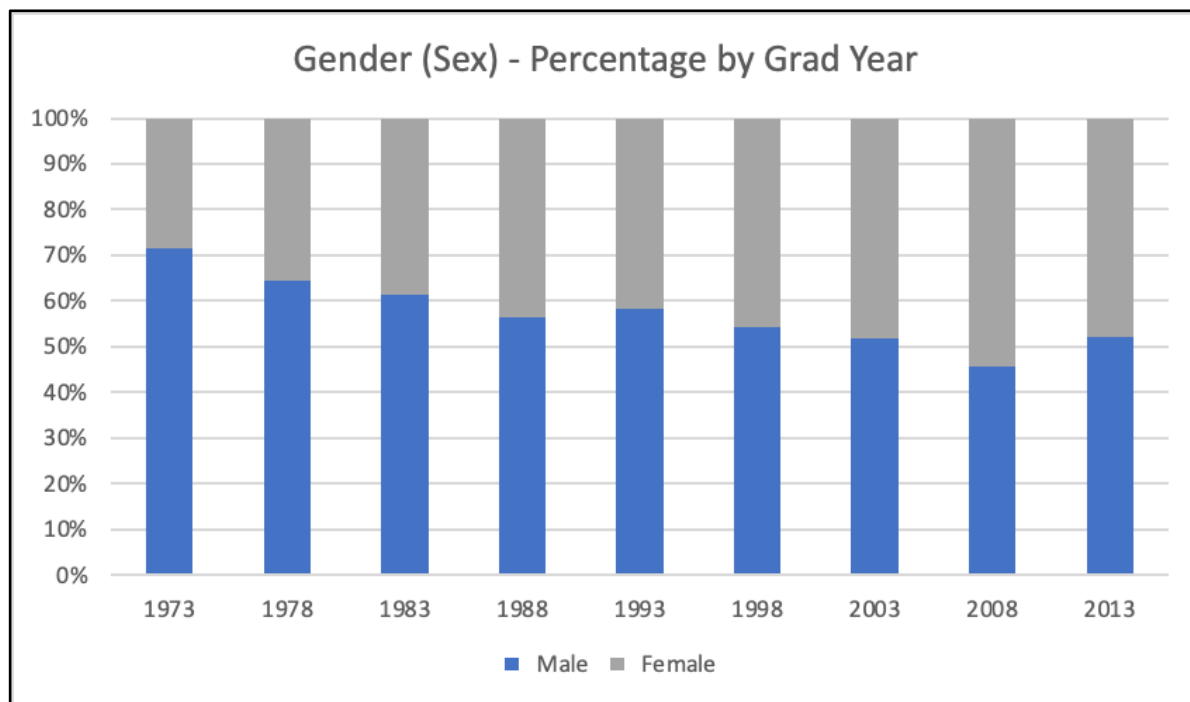
Descriptive Statistics for Select Variables

Gender

As women's residential colleges were added to campus over the years and the campus residential system changed to co-educational living arrangements within all colleges, you can

see an increase in the percentage of women in each cohort. At this point, current cohorts tend to be slightly majority women.

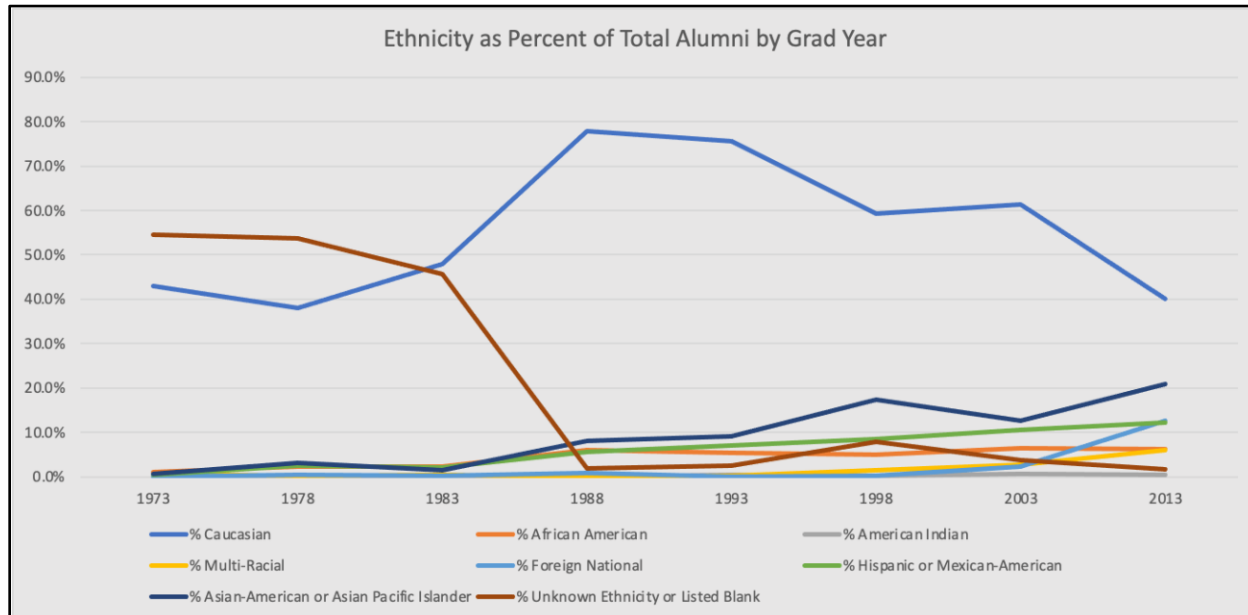
Figure 4: Gender Variable Descriptives



Ethnicity

Ethnicity markers were not available for 55% of 1973, 54% of 1978 and 46% of 1983. These were left as “unknown” here and any other analysis in the project. The drop-off in unknowns is clear after 1988, when more consistent record keeping began. From 1988 to 2013, there is a steady decrease in Caucasian population. Between 1998 and 2013, Asian-American, Foreign National, Hispanic or Mexican American and to a lesser extent, multi-racial ethnicities show a clear net uptick in population, relative to their previous proportions in each graduation year.

Figure 5: Ethnicity Variable Descriptives

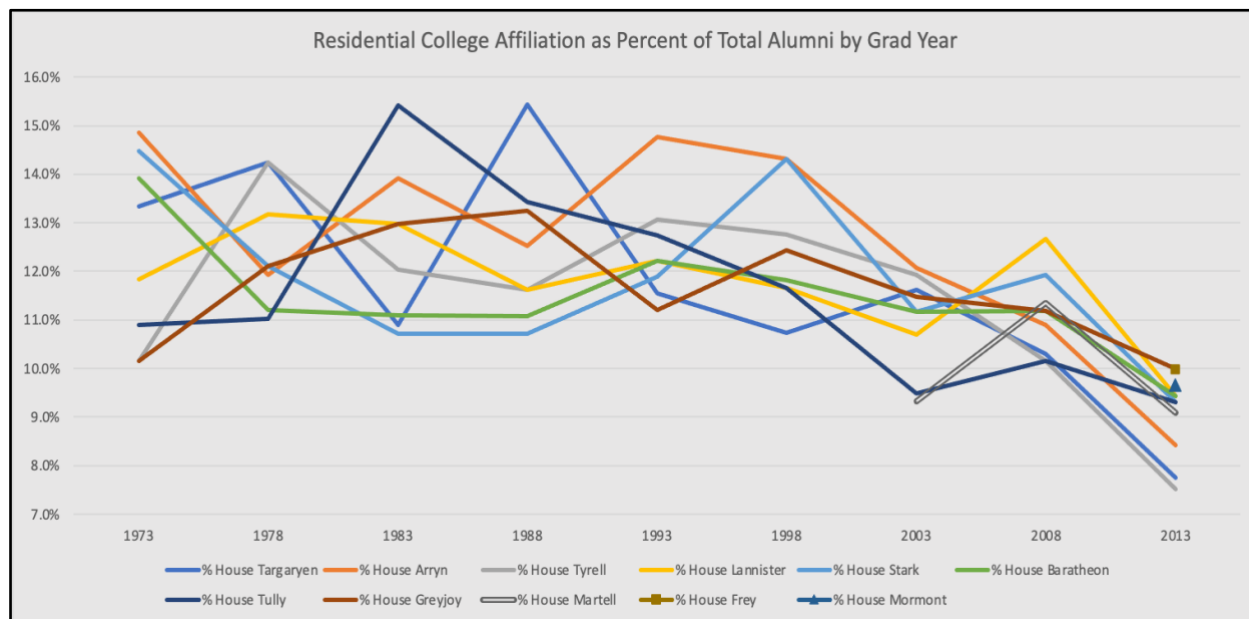


Residential College

New residential colleges have been built at various times in throughout Barley's history, beyond the first four present at its founding. During the timeframe spanned by the alumni reunions in this project, the three newest colleges were (finally) old enough to have one or two reunion cohorts represented, joining the long-standing clique of eight "real" colleges. As you can see in *Figure 6* below, after the addition of Houses Martell, Frey and Mormont, the proportion of alumni from each college decreased. This follows the understanding that all matriculating Barley students are randomly and evenly assigned to residential colleges according to their admitted areas of study (natural science, music, architecture, humanities, etc.) and other demographic details (athlete status, ethnicity, high school, gender, etc.). The y-axis range was manipulated to interpret each line and the marks for Frey and Mormont more clearly, so the differences within each graduation cohort from year to year may appear

somewhat exaggerated. They are similar year to year, trending lower at a comparable rate across residential colleges as more are opened and welcoming new students/graduating alumni cohorts.

Figure 6: Residential College Variable Descriptives



Giving Segment

Although the US News and World Report no longer considers alumni participation in its ranking methodology, it is still a predictor of interest. I felt this was also relevant to explore, even though I do know that it is best practice at AF to recruit committee members from alumni who have donated recently (AF Staff Member, personal communication, 2024). One notices that NEVER-GIVER and LONG-LAPSED populations are growing in number at greater rates than SYBUNT, while LYBUNT numbers decrease.

Figure 7: Giving Segment Variable Descriptives

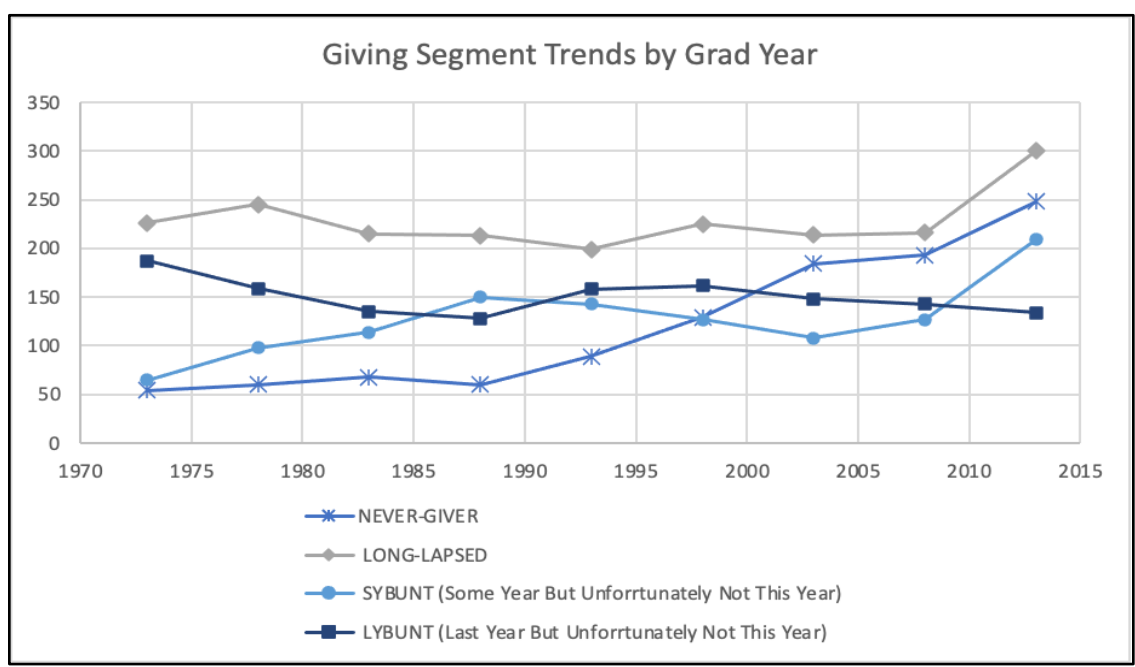
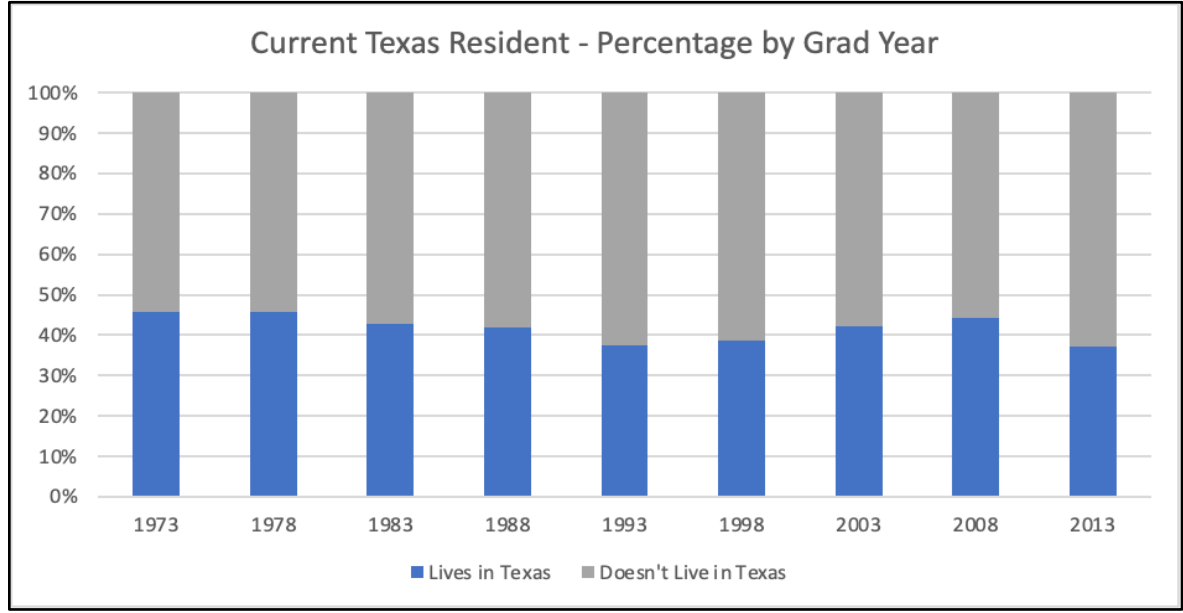


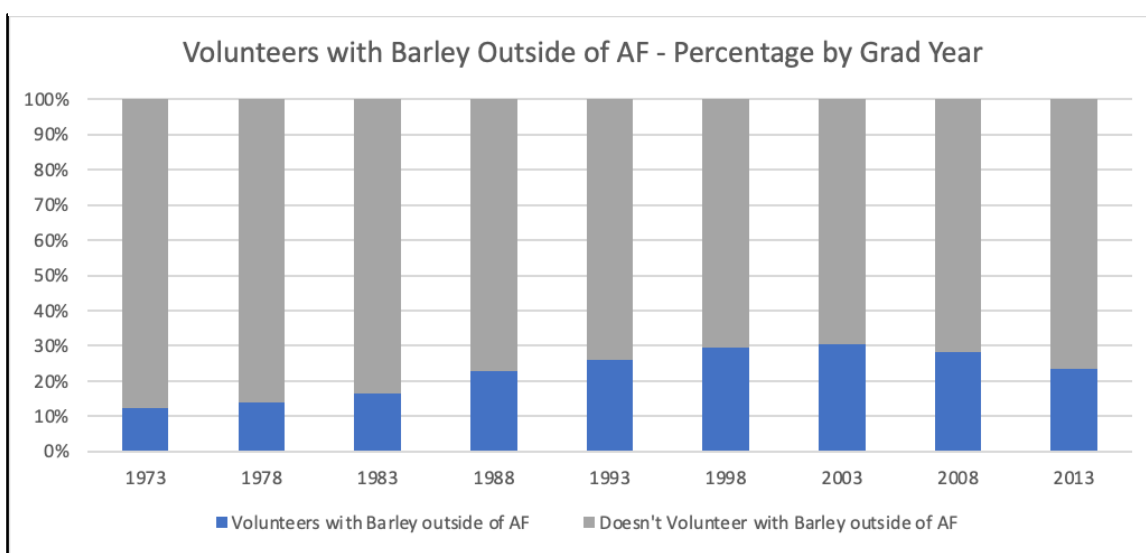
Figure 8: Current Texas Resident Variable Descriptives



Current Texas Resident

Barley has expanded its reach outside of Texas in recent years, but there are many graduation years represented that did not have many non-Texas resident-students or alumni. The rationale here is that maybe this could have an impact on committee selection, due both to the numbers and the logistics of serving on committees pre-Zoom proliferation. Alumni-wise, the SNA concept of propinquity could drive locals to be more involved than non-locals (Kadushin, 2012). There does seem to be some difference across groups to investigate.

Figure 9: Volunteer Variable Descriptives



Volunteers with Barley outside of AF

This is an indicator mentioned in higher education fundraising literature as a different mode of alumni engagement, so it felt necessary to test out. Also, if an individual has several different groups within Barley to interface with, they might occupy a brokerage role which would prove beneficial to committee work. Regarding the data, there appears to be some differentiation.

2023 Alumni Giving Totals – by Grad Year/Reunion

Large donations skew the distribution of this data to the right, with the mean gift greater than the median gift in each reunion year. Older graduation years have bigger large donations, making their distributions more right skewed. Older cohorts also had higher participation rates.

Table 7: 2023 Reunion Campaign Alumni Giving – Participation & Totals

2023 Reunion Campaign Alumni Giving – Participation & Totals							
Grad Year	Total # Alumni	# Alumni who gave	% Alumni who gave	Mean alumni gift \$	Median alumni gift \$	% of alumni 4th Quartile (# of alumni)	Alumni Giving Total \$
1978	562	167	29.7%	25,515.27	500.00	10% (56)	4,261,050.70
1983	532	137	25.8%	3,365.32	300.00	6.4% (34)	461,048.27
1988	551	145	26.3%	1,500.57	250.00	5.6% (31)	217,581.95
1993	589	172	29.2%	2,248.80	335.00	5.9% (35)	386,793.72
1998	643	178	27.7%	3,377.40	500.00	8.4% (54)	601,178.08
2003	654	152	23.2%	2,063.41	275.00	4.7% (31)	313,638.63
2008	679	135	19.9%	1,062.47	110.00	4.3% (29)	143,433.30
2013	891	145	16.3%	1,349.51	100.00	1.2% (11)	195,678.92
Totals	5101	1231	24.1%	5,345.58	250.00	5.5% (281)	6,580,403.57

Peer Connections (“Ties”) – by Grad Year/Reunion & Committee/CM

There was variable usage of Give Campus across graduation years. This was the first year Give Campus was implemented over the former system of distributing Excel class rosters to capture potential relationships. Alumni interviews revealed that several committee members did not feel adequately trained to use the new platform.

Table 8: 2023 Reunion Campaign Committee Ties via GiveCampus

2023 Reunion Campaign Committee Ties via GiveCampus					
Grad Year	Total # CMs	# CMs who made ties	Total # of ties made	Mean # Ties per CM who made ties	Median # Ties per CM who made ties
1978	19	16	298	18.6	15.5
1983	6	4	83	21	18
1988	9	2	34	17	17
1993	12	10	298	30	29
1998	16	14	299	21.4	16
2003	20	18	325	18.1	15
2008	11	7	186	26.6	21
2013	9	5	582	100.2	28
Totals	102	76	2105	27.7	17.5

Qualitative Methods

Research questions 3 and 4 were addressed via open-ended, semi-structured interviews with alumni committee volunteers and staff. Refer to Appendix B through Appendix E for interview protocols and question/theory alignment matrices that also served as in-vivo qualitative coding support.

Interview Participant Sampling and Recruitment

Alumni Giving Committee Members

During most of the data collection portion of this project, Annual Fund (AF) was working on the 2023 reunion campaigns for alumni graduation years ending in 3s and 8s. With such close access to alumni actively participating in committee work, interviewing was the clear methodological choice to both complement and deepen understanding of the volunteer alumni experience during reunion campaigns. However, interviewing everyone from every committee year in Reunion at the time seemed beyond the bounds of this inquiry, and focus groups would be difficult to schedule in an already packed set of calendars. Working with AF staff and using theoretical and critical case sampling logic, we decided to limit the scope of interviews to five of the listed cohorts which still spread the range out over four decades of alumni (Lareau, 2021). Those cohorts were graduation years 1978, 1983, 1993, 1998 and 2008. There was a deliberate effort to include the 1980s, since it was mentioned by AF leadership that 1980s cohorts seem to have lower engagement rates, and they would like to have the project uncover clues to why (DAR Admin, personal communication, 2023).

Interviews were solicited via email. AF staff members provided committee rosters for the five select reunion years, including email addresses for this communication to be possible. I set up an interview scheduler protocol using Zoom and Calendly to streamline the scheduling process and limit the burden on alumni committee members' time. The emails were sent to each committee separately in early December 2023. Several email responses and scheduled interviews via the scheduler protocol were received that same day. Most were scheduled and completed before the end of December 2023, with some spilling into early January 2024. Interviews were originally set for 30 minutes but were soon amended to be 40 minutes in length. Several alumni interviewed provided additional interviewee contact information from their graduation cohorts in case they were needed for snowball sampling (as part of a since omitted, extended version of the project where I included non-committee member/non-volunteer alumni). I also had an informational interview with one former member of a select committee. I did include their responses in the coded qualitative analysis, even though they weren't on the 2023 campaign, because they had been on several past campaigns and were referred by a current member as someone with good insights for background. They also represented the 1980s cohorts that are of particular interest to DAR leadership.

Table 9: 2023 Reunion Campaign Alumni Committee Interviews

2023 Reunion Campaign Alumni Interviews					
Grad Year	Committee			Interviewed	
	Members	Chairs	Totals <i>*former committee member included</i>	#	%
1978	12	7	19	4	21%
1983	4	2	7*	5*	71%
1993	8	4	12	4	33%
1998	11	5	16	5	31%
2008	8	3	11	3	27%
Totals	43	21	65	21	32%

The alumni demographic information was all I consulted at this stage in the process, as I made a deliberate choice not to do any exploration with alumni giving data before I interviewed alumni volunteers to shore up more reliability and validity confidence since I am independent capstone researcher. I didn't want to have my interview protocols or question construction influenced by which graduation year raised the most money or which alum was the biggest donor on their respective committee.

Barley Staff Members

I sampled for staff interviews using both purposive and snowball sampling (Babbie, 2017; Lareau, 2021). The AF staff that worked most closely with the five select reunion years included in this project were the people I chose to interview as AF staff members (purposeful). Beyond AF, I needed background information on other offices in and outside of the development department, so I added them to my interview wish list (snowball). Interview requests outside of AF went through my main point of contact for the project within AF, and

some of the interviews were not able to be completed in the timeframe available. While this additional situational context would have no doubt added value to the analysis, I still feel the data gathered via staff interviews was sufficient to answer the research question as it was written, as well as support additional analyses elsewhere in the project. To protect the identity of the very small staff that were interviewed, I do not include their departments with DAR or job titles in the table below. Instead, I outlined the timing of the different phased interviews for each staff member, listed by pseudonym. There were 4 informational interviews and 8 semi-structured interviews conducted total, spread amongst 7 different individuals.

Table 10: 2023-24 DAR Staff Interviews

DAR Staff Interviews				
Staff Pseudonym	Info Interview	Interview 1	Interview 2	COUNT
Blanche	--	1/25/24	3/7/24	2
Clayton	--	2/1/24		1
Dorothy	12/6/23	1/26/24	3/12/24	3
Lester	12/6/23	--		1
Rose	12/6/23	3/11/24		2
Sofia	12/6/23	3/13/24		2
Virginia	--	1/25/24		1
<i>*AR Rep*</i>				<i>N/A</i>
TOTAL				12

Concurrent Data Analysis

Earlier on in the methodology section, I brought up emergence in relation to critical theory, highlighting that it deals with how concepts get more complicated the higher they are in the structure of an ontological model (Creswell, 2022). Emergence is also conceptualized as the ability to create something new when mechanisms embedded in the structure come together under novel or previously unobserved contexts (Eastwood, et al., 2014). The most common forms of reasoning researchers employ to draw conclusions about these spaces are deductive (individual situations from universal laws) and inductive (universal from many individual observations). In a way, they move up and down the “line” of emergence, static in the conclusions that can be drawn at any place on the hierarchy, because they do not take into consideration the context at any given point (Mukumbang, et al., 2021; Eastwood, et al., 2014). Another criticism of this apparent inferential dichotomy is that it doesn’t allow the researcher to posit explanatory rationalizations for what is observed (Eastwood, et al., 2014; Cassell, et al., 2018). For these reasons, critical realists prefer to employ four modes of inference: deduction, induction, abduction and retroduction. The first two remain the same in practice, but by adding the complementary functions of abduction and retroduction, critical realists allow for the application of heuristics, interventions and/or mechanisms, depending on their study context. Modell (2009), as discussed in Eastwood (2014) says that abductive reasoning uses different conceptual frameworks and theories to understand more about the topic studied, using these as mediators to get to a more detailed explanation. Retroduction is essentially retracing the conditions and structures necessary for the proposed explanation to be most feasible. *Figure 10*

below superimposes the described four-mode inference structure on another commonly employed visual aid used to describe critical realism's three realms.

Figure 10: Different inferencing approaches to exploring ontological depth – retroductive theorizing (Mukumbang, et al., 2023)

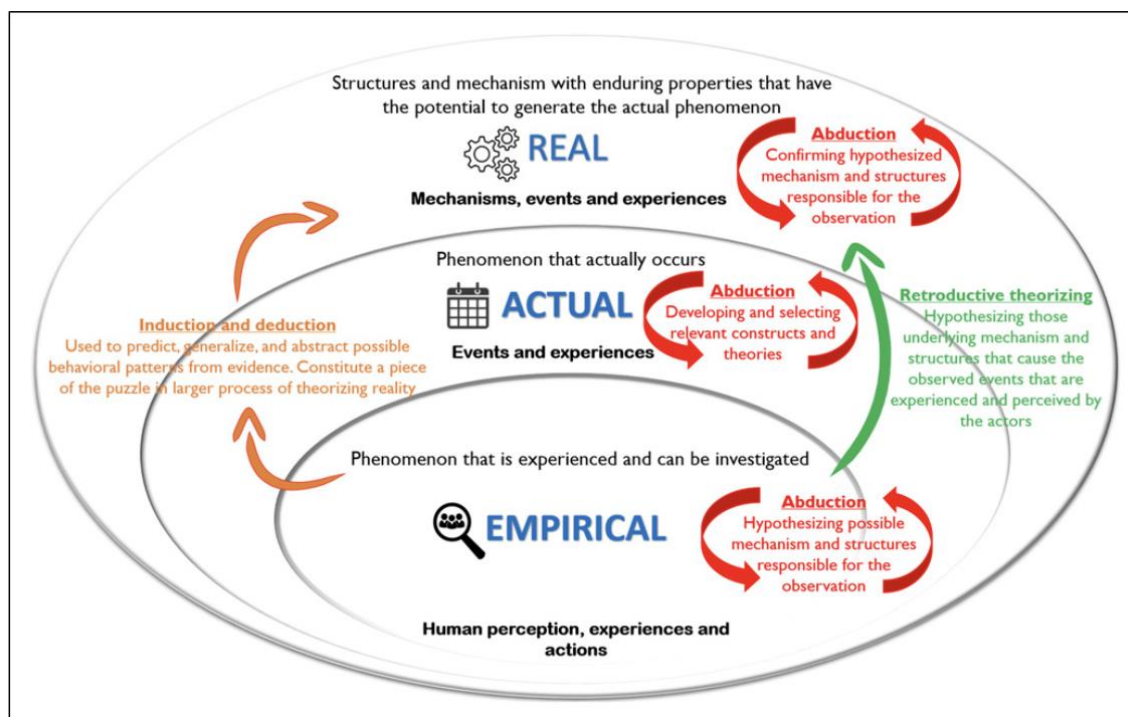
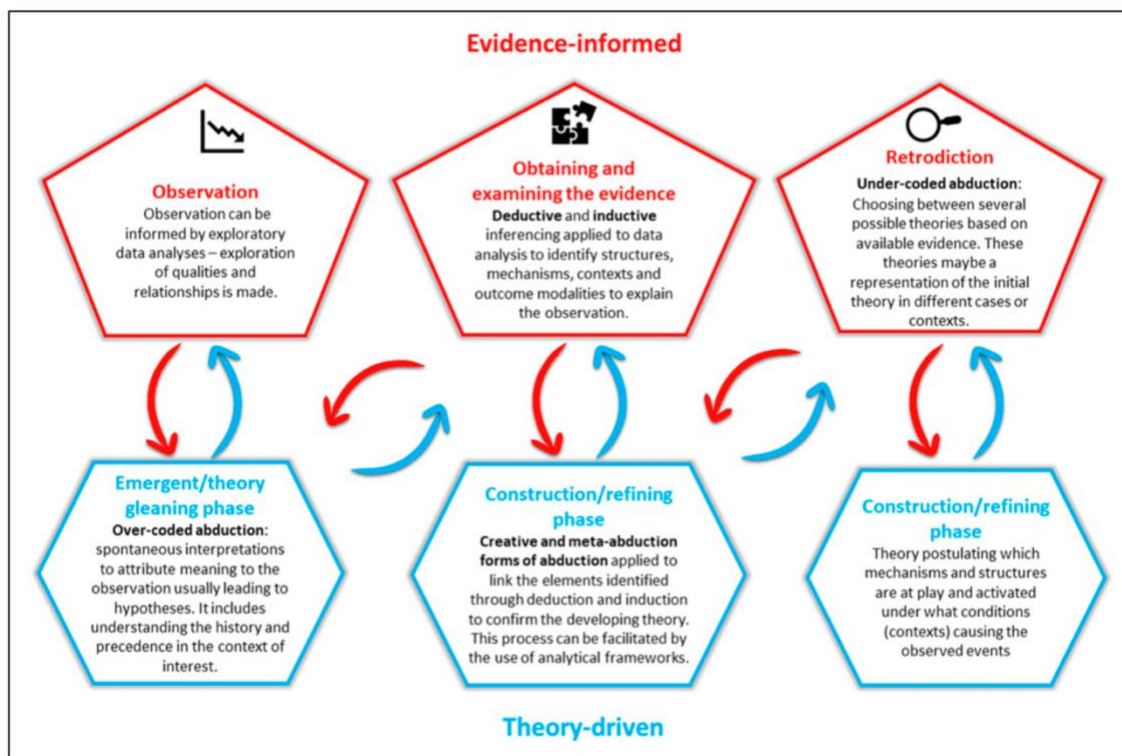


Figure 11 contains information that helps you understand how observations and thoughts move amid phases of mixed methods data analysis and identified frameworks to arrive at a more complete theoretical picture. Retroductive theorizing is another layer to add to the analysis process that will help contextualize not only the implications of the data gathered, but also how data from related structures and contexts could interact with and extend new learnings. It calls for moving between abduction and retroduction approaches to the data, serving as complements to each other and breaking apart the elements repeatedly to make sure they are in the most real format for explanation of theory (Glynos & Howarth 2019). The

first phase is Emergent/Theory Gleaning and is explained as when the researcher makes educated guesses about underlying mechanisms while conducting exploratory data analyses and summarizing the situation being studied through its data. Construction/Refining is the other phase in this process, and it has the researcher using analytical frameworks and searching for mechanisms to explain/confirm the burgeoning theory. Both are considered theory-driven, qualitative elements in contrast to an “evidence-formed side” related directly to quantitative methods, these are all depicted in *Figure 11* below.

Figure 11: Mixed methods retroductive theorizing (Mukumbang, et al., 2021)



I used these two phases, along with the four-mode inference model to approach data analysis for this project, knowing that the goal is to come to theoretically informed conclusions that are adequate to confidently guide potential changes to AF processes. Please find a

hybrid/composition model I constructed of the two data analysis plans featured in *Figures 10* and *11* in Appendix G to see how these analytical elements map out against each other, and Appendix H for a more narrative-style, step-by-step version of the same process. Seeing these complex concepts modeled out in different modalities helped me apply them with more fidelity, constantly checking my own biases and observational acuity. I hope these can serve in a future toolbox for analyzing data in similar studies of different graduation cohorts during their reunion campaigns. If this depth of analysis could expand by 9 cohorts each calendar year, eventually there will be a very deep, very comprehensive picture of where AF stands with respect to the alumni base.

Quantitative Analysis Strategy

RQ1: How do characteristics of volunteer alumni giving committee members compare to the total population of alumni across reunion campaign years?

I selected demographic characteristics and relevant data points from the main dataset tracked by the Annual Fund for both groups of interest – total volunteer alumni giving committee members and total alumni. To compare the proportions of alumni with each variable characteristic across groups of interest, I decided to use the Chi-square test of independence at $p < .01$ for most of these categorical and dichotomous variables but lowered the threshold to $p < .05$ for the Ethnicity variable because the data had several special considerations to be discussed further in Findings. Please see a list of the characteristics (and their variable type) included in this comparison below.

- Gender (dichotomous), $p < .01$
- *Ethnicity (categorical – nominal), $p < .05$
- Residential College (categorical – nominal), $p < .01$
- Giving Segment (categorical – ordinal), $p < .01$
- Currently Living in Texas (dichotomous), $p < .01$
- Volunteer elsewhere with Institution (dichotomous), $p < .01$

RQ2: How does recruitment, selection, and organization of alumni giving committees shape alumni giving outcomes?

Macro-Level – *Social Network Analysis by Graduation Year (via Committee Ties)*

I conducted as much of a formal social network analysis (SNA) as possible, given that peer connection data was not robust enough to move beyond dyadic measures (i.e., not enough node/tie information to achieve triadic closure). When the SNA descriptive measure of interest was not possible, I assigned proxy measures from descriptive statistics. Below are the SNA descriptive methods included in the literature review and the descriptive statistics proxy used, if applicable:

- **Density** → able to use SNA measure of density
- **(Degree) Centrality** → Measures of central tendency for # of Ties Made per CM
- *(Betweenness) Centrality* → not possible with only committee member ties
- *(Closeness) Centrality* → not possible with only committee member ties

As would be expected from the limited descriptive SNA methods conducted, inferential SNA methods were not available, but proxies in the form of non-parametric Chi-square tests for select parts of this RQ were conducted in an attempt to fill that role.

Meso-Level – *Is there a relationship between giving segment status and ethnicity (If RQ1 shows significance at both variables)?*

If there is a relationship between both giving segment status and committee status AND ethnicity and committee status, then I would conduct another Chi-square test at $p < .01$ to see if there is a relationship between ethnicity and never-giver status, as well as ethnicity and long-lapsed status. Given that we have trends on current enrollment by ethnicity that show growing populations of non-white groups, it is a good idea to understand if/how often those graduating cohort sub-groups are choosing to engage with Barley.

Micro-Level – *Is there a relationship between having a committee tie and 2023 donation status?*

I conducted a Chi-square test at $p < .01$ to see if there is a relationship between the number of alumni donors with committee member ties and the number of alumni overall with committee member ties (non-donors included). Some graduation years did not have enough alumni in a contingency to run Chi-square, so I opted for an overall test to summarize the “3s and 8s” 2023 reunion campaign data overall (not including the 50th reunion).

Micro-Level – *Is there a relationship between having a committee tie, giving segment status and 2023 donation status?*

After reviewing other findings, I decided to add this analysis to see if the never-givers and long-lapsed alumni chosen as ties by the committees ended up donating in 2023.

Qualitative Analysis Strategy

RQ3: What are the motivations, observations and experiences of alumni giving committee volunteers during reunion campaign years?

and

RQ4: What are the motivations, observations, and experiences of AF staff regarding their work with volunteer alumni giving committees?

For both RQ3 and RQ4, which are identical except for the participants being interviewed, I chose a variety of coding methods that would align well with the foundational concepts involved across alumni engagement, social networks, and DEI, while also considering which methods served each part of the critical realism (CR) framework best. *Table 11* represents those methods, their aligned CR realms, and thematic cues for interview responses since I employed a more latent approach while reviewing and coding transcripts. In addition to in vivo coding while conducting interviews, I used a priori coding while cleaning and preparing the transcripts for upload to Dedoose. These codes ultimately yielded a draft code-tree I referenced when applying the first cycle of codes (Saldaña, 2015). I compared the data from these coded results with a review of the literature to determine if there were any missing elements, added a few items to the code-tree and then went through an adapted second cycle

of coding. I cross tabulated those results with the alumni interviewees' descriptive information where it was appropriate and relevant to the questions at hand.

Researcher note: AF Staff are clients in this project, as well as employees of the administrators who may implement some of these recommendations, so I did not feel comfortable potentially violating the confidentiality I promised them by including ANY staff identifying information during qualitative analysis.

Table 11: Interview Coding Methods (selected before coding cycles)

Method	Critical Realism Realm	Potential Area(s) for Use
(Grammatical) Attribute, Sub coding, Simultaneous	<i>Empirical</i>	<i>Demographic information Related concepts Overlapping ideas</i>
(Grammatical) Magnitude	<i>Empirical</i>	<i>Strength of feelings Opinions on process/thing Participation levels - events</i>
(Affective) Emotions EMO	Actual	Feelings about interactions Feelings about processes
(Affective) Values VAB	Actual	DEI (all three, using MAG)
(Affective) Versus VS	Actual	Tensions, contentiousness
(Elemental) Concept CT	Actual/ Real	'Giving back', 'in the loop', etc.
(Thematic) Categorical CAT	Real	Balcony/basements for the 3 main theory categories
(Exploratory) Eclectic EC	Real	Ad hoc, as needed

Reliability & Validity

Creswell & Creswell (2018) outline reliability and validity concerns with mixed methods convergent design and provide recommendations (see *Table 12*). It is my hope that by outlining very deliberately how I analyzed and compared results across and within methods, connecting that process to the same research paradigm used in the initial project framework, any questions of reliability and validity can be assuaged.

Table 12: Reliability and Validity Concerns

Type of Concern	Description of concern Big Questions of concern	How was it addressed/ How to address it
Reliability	Single researcher bias	<ul style="list-style-type: none"> - Structured order of analysis to prevent biases from developing and/or deepening - Researcher positionality section to outline areas of possible bias for the reader/client/site - Triangulation - Multiple representations of data
Internal validity (qualitative)	Will the researcher address the problem of practice as it is represented at the site and not how they see fit?	<ul style="list-style-type: none"> - Member checking (checkpoints with site contact to share intermediate analyses and discuss progress) - Triangulation in the analysis process - Multiple representations of data
External validity	Are the findings generalizable outside the site?	<ul style="list-style-type: none"> - As it designed, this quality improvement project isn't "supposed" to be generalizable, but in case others see a need for a similar QI, detailed procedural records have been kept
Construct validity (quantitative)	Does the project measure/address what it was designed to address?	<ul style="list-style-type: none"> - Built both sides of the design (qual and quant) using the same concepts and constructs

Limitations

Study design limitations

- Convergent mixed methods design requires that the researcher have sufficient skills in both methodologies to be able to keep both streams of work going at the same time. It is a lot of work at once, especially for one person. Also, this design can fail when results don't mesh with each other enough to be able to draw even contrasting conclusions.
- Sample sizes for small populations make for challenges with qualitative studies, even though it allows us to hear their voices and feel their emotions regarding the topic at hand better than quantitative data (Creswell & Creswell, 2018).

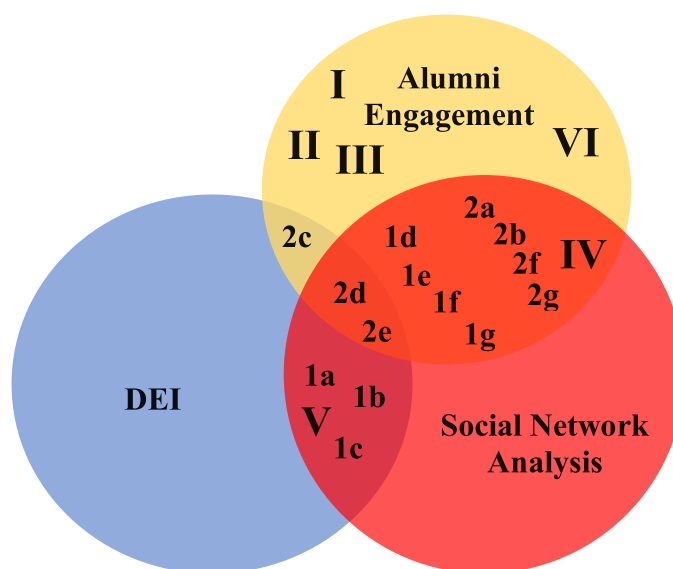
Data limitations

- Ethnicity data was not consistently gathered for graduates until the 1990s. As such, the ethnicity data for 1978 and 1983 are not complete, with 54% and 46% of those respective cohorts' ethnicity data listed as either "Unknown" or left blank.
- Peer connection data provided contained peer selections made only by committee members, and committee members were only able to choose any given classmate once. Not having selection data from non-committee member classmates prevented any completed triads on which to build more sophisticated analyses of each graduation cohort's social network. There may not be a way to capture this information for older cohorts, but perhaps for graduating classes, it could be possible.

Findings & Themes

For this section, RQ1 and RQ2 are addressed by outlining Findings, since they are more quantitatively based. RQ3 and RQ4 are described using themes from thematic interview analyses and combined because the same set of codes were applied to both. Regarding RQ1 Findings, many variables show significance with all graduation years combined, so a deeper dive into graduation year level analysis, even with descriptive data only, helps contextualize the findings. It might be expected that the ethnicity groups underrepresented in the alumni population would also be underrepresented in committee status, but the groups that are growing in admitted cohort representation seem to also be underrepresented on committees. Obviously, increasing representation across all ethnicities is ideal, but it is beyond the scope of AF and DAR to change admission decisions. They can, however, take note of this emerging trend. RQ2 Findings will help provide a window into the trend mentioned above with a bivariate giving segment status inquiry, as well as a social network analysis for the committee ties.

Figure 12: Concept Map of Findings & Themes



RQ1 Findings

Table 13: Committee Level Totals vs Cohort Level Totals at Variables of interest

Grad Year	1978		1983		1993		1998		2008	
	CMs	Total Alumni	CMs	Total Alumni	CMs	Total Alumni	CMs	Total Alumni	CMs	Total Alumni
TOTALS	19 (100%)	562 (100%)	6 (100%)	532 (100%)	12 (100%)	589 (100%)	16 (100%)	643 (100%)	11 (100%)	679 (100%)
Gender (Sex)										
Male	12 (63%)	362 (64%)	4 (67%)	327 (61%)	6 (50%)	343 (58%)	4 (25%)	349 (54%)	5 (45%)	309 (46%)
Female	7 (37%)	200 (36%)	2 (33%)	205 (39%)	6 (50%)	246 (42%)	12 (75%)	294 (46%)	6 (55%)	370 (54%)
Ethnicity										
Caucasian	14 (74%)	213 (38%)	5 (83%)	255 (48%)	10 (83%)	445 (76%)	9 (56%)	381 (59%)	10 (91%)	411 (61%)
African American	1 (5.3%)	13 (2.3%)	0 (0.0%)	12 (2.3%)	0 (0.0%)	32 (5.4%)	1 (6.3%)	32 (5.0%)	1 (9.1%)	34 (5.0%)
American Indian	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (0.5%)	0 (0.0%)	2 (0.3%)	0 (0.0%)	3 (0.4%)
Multi-Racial	0 (0.0%)	1 (0.2%)	0 (0.0%)	2 (0.4%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	9 (1.4%)	0 (0.0%)	19 (2.8%)
Foreign National	0 (0.0%)	2 (0.4%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.3%)	0 (0.0%)	10 (1.5%)
Hispanic or Mexican-American	1 (5.3%)	14 (2.5%)	0 (0.0%)	11 (2.1%)	1 (8.3%)	41 (7.0%)	0 (0.0%)	55 (8.6%)	0 (0.0%)	61 (9.0%)
Asian-American or Asian Pacific Islander	0 (0.0%)	17 (3.0%)	0 (0.0%)	8 (1.5%)	0 (0.0%)	53 (9.0%)	4 (25%)	111 (17.3%)	0 (0.0%)	111 (16.3%)
Unknown	3 (16%)	302 (54%)	1 (17%)	243 (46%)	1 (8.3%)	14 (2.4%)	2 (13%)	51 (7.9%)	0 (0.0%)	30 (4.4%)
Residential College										
Targaryen	6 (32%)	80 (14%)	2 (33%)	58 (11%)	0 (0.0%)	68 (12%)	3 (19%)	69 (11%)	0 (0.0%)	70 (10%)
Arryn	2 (11%)	67 (12%)	1 (17%)	74 (14%)	3 (25%)	87 (15%)	2 (13%)	92 (14%)	0 (0.0%)	74 (11%)
Tyrell	1 (5%)	80 (14%)	0 (0.0%)	64 (12%)	0 (0.0%)	77 (13%)	2 (13%)	82 (13%)	0 (0.0%)	69 (10%)
Lannister	1 (5%)	74 (13%)	0 (0.0%)	69 (13%)	2 (17%)	72 (12%)	3 (19%)	75 (12%)	1 (9%)	86 (13%)
Stark	4 (21%)	68 (12%)	1 (17%)	57 (11%)	2 (17%)	70 (12%)	3 (19%)	92 (14%)	2 (18%)	81 (12%)
Baratheon	1 (5%)	63 (11%)	0 (0.0%)	59 (11%)	1 (8%)	72 (12%)	2 (13%)	76 (12%)	2 (18%)	76 (11%)
Tully	3 (16%)	62 (11%)	0 (0.0%)	82 (15%)	4 (33%)	75 (13%)	1 (6%)	75 (12%)	2 (18%)	69 (10%)
Greyjoy	1 (5%)	68 (12%)	2 (33%)	69 (13%)	0 (0.0%)	66 (11%)	0 (0.0%)	80 (12%)	3 (27%)	76 (11%)
Martell									1 (9%)	77 (11%)
Frey										
Mormont										
None or Unknown	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.3%)	0 (0.0%)	2 (0.3%)	0 (0.0%)	1 (0.1%)
Giving Segment										
NEVER-GIVER	0 (0.0%)	60 (11%)	0 (0.0%)	68 (13%)	0 (0.0%)	89 (15%)	0 (0.0%)	129 (20%)	0 (0.0%)	193 (28%)
LONG-LAPSED	1 (5%)	245 (44%)	0 (0.0%)	215 (40%)	0 (0.0%)	199 (34%)	0 (0.0%)	225 (35%)	0 (0.0%)	216 (32%)
SYBUNT	2 (11%)	98 (17%)	0 (0.0%)	114 (21%)	0 (0.0%)	143 (24%)	2 (13%)	127 (20%)	1 (9%)	127 (19%)
LYBUNT	16 (84%)	159 (28%)	6 (100%)	135 (25%)	12 (100%)	158 (27%)	14 (88%)	162 (25%)	10 (91%)	143 (21%)
Lives in Texas?										
Yes	11 (58%)	257 (46%)	4 (67%)	249 (47%)	9 (75%)	220 (37%)	9 (56%)	249 (39%)	5 (45%)	301 (44%)
No	8 (42%)	305 (54%)	2 (33%)	394 (74%)	3 (25%)	369 (63%)	7 (44%)	394 (61%)	6 (55%)	378 (56%)
Volunteers Elsewhere with Barley?										
Yes	12 (63%)	79 (14%)	6 (100%)	87 (16%)	10 (83%)	154 (26%)	12 (75%)	190 (30%)	10 (91%)	192 (28%)
No	7 (37%)	483 (86%)	0 (0.0%)	445 (84%)	2 (17%)	435 (74%)	4 (25%)	453 (70%)	1 (9%)	487 (72%)

Table 14: Results from Chi Square tests on variables of interest based on committee status

		Chi Square Table for Committee v Total Alumni comparisons				
		Committee Members		Grad Cohorts		Chi Square (p value)
		N	%	N	%	**p<0.01, *p<0.05
	Gender (Sex)					
	Male	56	45.2%	3183	56.5%	6.6916 (0.0096**)
	Female	68	54.8%	2447	43.4%	
	Ethnicity					
	Caucasian	86	69.4%	3120	55.4%	12.383 (0.0299*)
	African American	7	5.6%	260	4.6%	
	American Indian	0	0.0%	15	0.3%	
	Multi-Racial	2	1.6%	106	1.9%	
	Foreign National	1	0.8%	146	2.6%	
	Hispanic or Mexican-American	8	6.5%	393	7.0%	
	Asian-American or Asian Pacific Islander	7	5.6%	615	10.9%	
	Unknown	13	10.5%	978	17.4%	
	Totals	124		5633		

		Chi Square Table for Committee v Total Alumni comparisons				
		Committee Members		Grad Cohorts		Chi Square (p value)
		N	%	N	%	**p<0.01, *p<0.05
	Giving Segment					
	NEVER-GIVER	0	0.0%	1085	19.3%	326.28 (<0.0001**)
	LONG-LAPSED	1	0.8%	2053	36.4%	
	SYBUNT	8	6.5%	1141	20.3%	
	LYBUNT	115	92.7%	1354	24.0%	
	Lives in Texas?					
	Yes	82	66.1%	2333	41.4%	29.927 (<0.0001**)
	No	42	33.9%	3300	58.6%	
	Volunteers Elsewhere w Barley					
	Yes	94	75.8%	3149	55.9%	192.22 (<0.0001**)
	No	30	24.2%	4332	76.9%	

- **Finding 1a: Committees are more female than the alumni population, but the picture may not be that simple due to widely varying female/male proportions across graduation years. There is a significant relationship between committee membership**

and gender, rejecting the null hypothesis that committee membership and gender are independent of each other. Committee members are more likely than non-Committee members to be female, $X^2(1, N = 5633) = 6.69, p < .01$. Over the graduation years however, if you refer to *Figure 4* in Data Collection, the enrollment disparity between female and male students was large for most of the nine years studied here. Parity did not appear to occur until 2008, so these varying proportions could be masking a much more recently stabilized equity situation, maybe even one that is “being solved.”

- Finding 1b: There is a relationship between committee membership and ethnicity, and committees are more Caucasian than the alumni population, but it is difficult to discern which other ethnicities might be more impacted.*** Rejecting the null hypothesis that committee membership and ethnicity are independent of each other, committee members are more likely than non-Committee members to be Caucasian, $X^2(5, N = 5633) = 12.38, p < .05$. Additional support for this finding derives from alumni interviews across five participating reunion graduation cohorts, where the prevalence of Caucasian members was verbally confirmed by >95% of the 20 current 2023 committee members who were interviewed. While still significant, the $p < .05$ rejection threshold is deliberately not as strong as the other variables, because I had to remove three ethnicities from the Chi Square analysis due to their low or non-existent numbers in the frequency table. The ethnicities removed did not have enough representation in committee status to run the test. They were American Indian (0 members), multi-racial (2 members) and Foreign National (1 member). This fact could stand on its own as a finding, given that while they are remarkably underrepresented in the total alumni

population across these nine cohorts, Foreign Nationals and Multi-Racial groups are currently the fastest growing populations in recent admitted student cohorts.

- Finding 1c: Alumni from Asian-American/Asian Pacific Islander and Hispanic or Mexican American ethnicity groups are both underrepresented in committee membership, as compared to their proportion of the total alumni population.*** Asian-Americans are 10.9% of the overall alumni population studied, but only seven individual alumni (5.6%) of the 2023 reunion committee members were Asian-American. Hispanic or Mexican American are 7.0% of the overall population studied, but only eight individual alumni (6.5%) of the 2023 reunion committee members were Hispanic or Mexican American.
- Finding 1d: Committee members are more likely to be recent donors and non-committee members are more likely to be never-givers,*** rejecting the null hypothesis that committee membership and giving segment are independent of each other, $\chi^2 (3, N = 5633) = 326.28, p < .001$. This is an expected finding, due to interviews and conversations with AF Staff that mention they recruit committee members mainly from past donor lists.
- Finding 1e: Committee members are more likely to be living in Texas than non-committee members,*** rejecting the null hypothesis that committee membership and location of residence are independent of each other, $\chi^2 (1, N = 5633) = 29.93, p < .001$. While not entirely expected, it does makes sense and follows along with data that reports older cohorts being made up of more Texan residents than more recent

graduates. The spread of the graduation years could influence this trend, as well as people following the social network theory of propinquity.

- ***Finding 1f: Committee members are more likely to volunteer in other ways with Barley – on campus or remotely***, rejecting the null hypothesis that committee membership and volunteer status elsewhere with Barley are independent of each other, $\chi^2 (1, N = 5633) = 192.22, p < .001$. This finding is also not surprising. In a similar way that committee members are solicited from past donors, I have heard from AF staff that they also consult volunteer lists as the next recruitment strategy tool after donor lists.
- ***(non-)Finding: There is no relationship between Residential College and committee membership in the alumni cohorts studied.*** For brevity and space concerns, the results were excluded from the Chi Square results tables. Not finding significance here supports the AF standard recruitment approach to committee construction that prioritizes inclusive residential college representation as a proxy for diversity on the committee. Excerpts from alumni interviews show that committee members considered recruiting equally across colleges as such:

“We made a very strong push to get all 9 of the college presidents and the SA President to at least sign on to sending an email from themselves personally to the alumni class.

We made sure to have one, if not 2 members of every college on the committee.”

(Tutuola, Alumni Interview)

While staff members generally viewed this strategy as one of many they employ as a matter of best practice in their field:

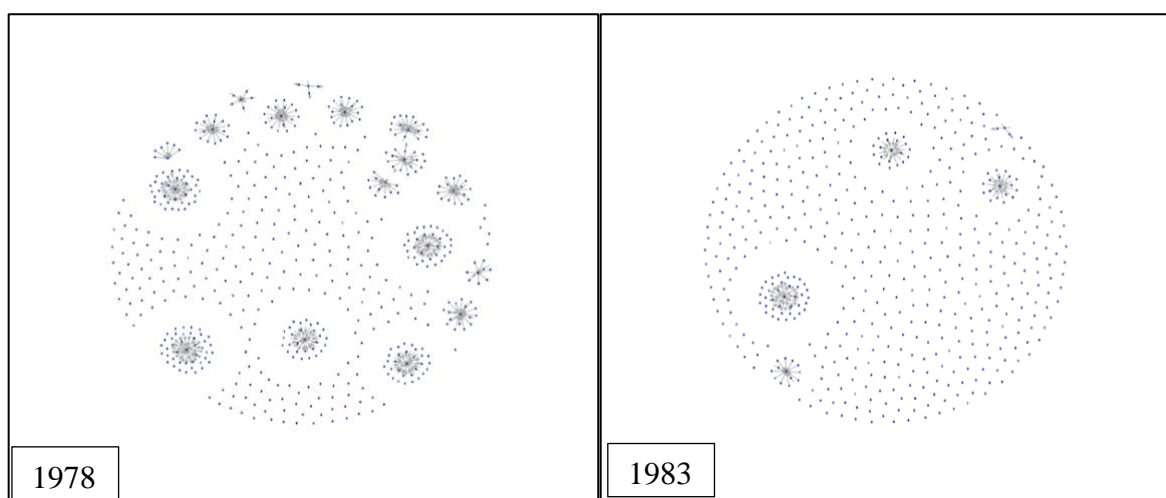
“Get at least one to two people from each college, because then your reach is larger. They will have friends within their colleges that other people on the committee won't necessarily have access to.” (Blanche, Staff Interview)

RQ2 Findings

Macro-Level – Social Network Analysis by Graduation Year (via Committee Ties)

The sociograms for each graduation year capture some of the density clustered around committee members who made ties in 2023. More tie information from more actors (beyond committee members) would help fill in information about each cluster, identify the structural holes in dense groupings and help expose individuals that sit in high value broker positions. For now, they're mostly interesting to look at and, if you're a member of these committees, try to figure out who is where. Compare the sociogram to its corresponding density percentage in *Table 15* below *Figure 12*.

Figure 13: Sociograms for each reunion year, labeled by graduation year.



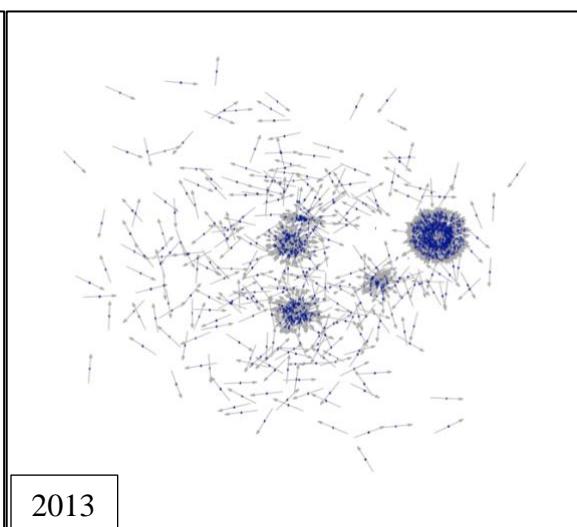
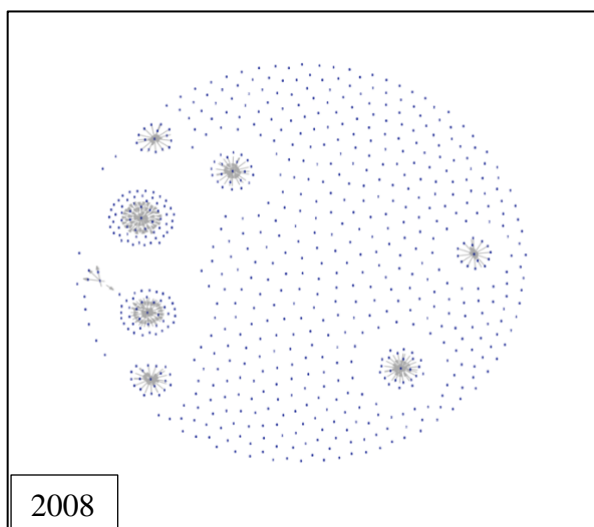
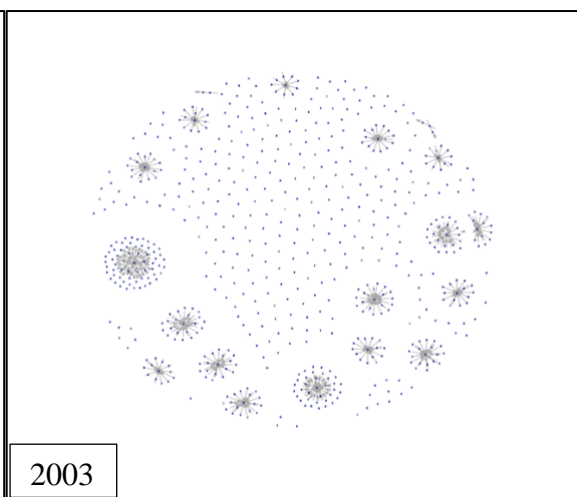
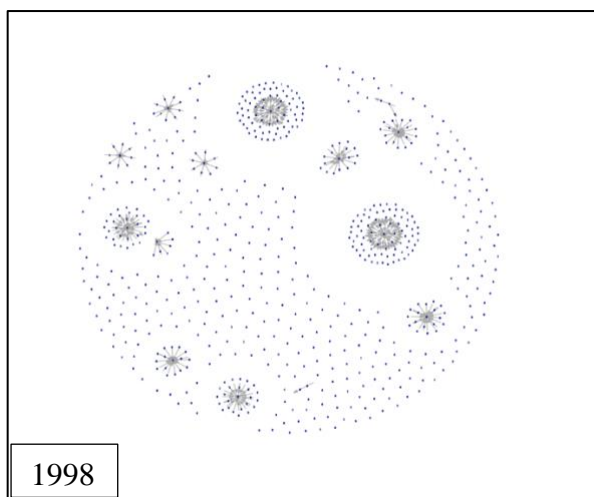
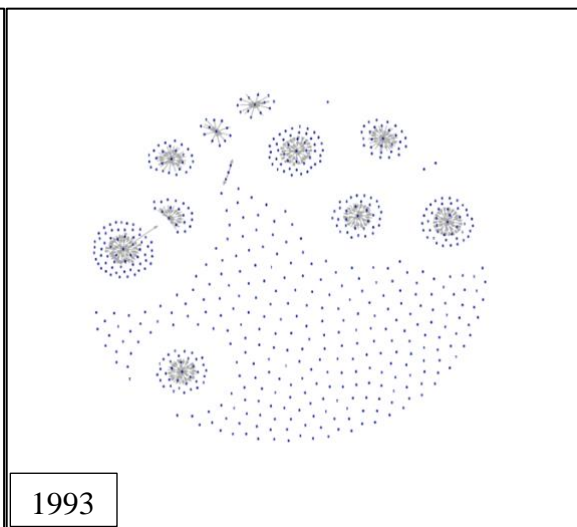
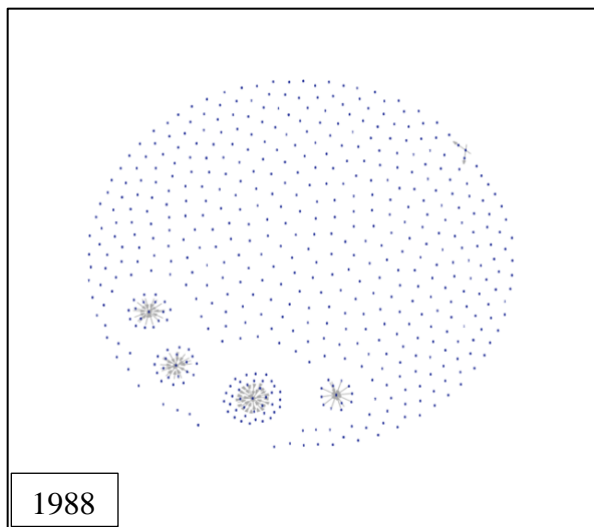


Table 15: Social Network Analysis by Graduation Year – Descriptive and Proxy Methods

SNA by Graduation Year – Descriptive and Proxy Methods					
Grad Year	Cohort Size	Density	Degree Centrality (via Measures of Central Tendency)		
			Total # of Ties	Mean # Ties per CM	Median # Ties per CM
1978	562	.0946%	298	18.6	15.5
1983	532	.0310%	83	21	18
1988	551	.0310%	34	17	17
1993	589	.0859%	298	30	29
1998	643	.0698%	299	21.4	16
2003	654	.0763%	325	18.1	15
2008	679	.0415%	186	26.6	21
2013	891	.0436%	582	100.2	28
Totals	5101	n/a	2105	27.7	17.5

- Finding 2a: There is something amiss with the 80s cohorts.** As noted by AF Staff and with participation numbers broadly, the 1980s cohorts have the lowest SNA network density. This adds context to help AF staff understand what is different about the 80s cohorts and perhaps be able to probe alumni volunteers more directly to figure out strategies to improve their engagement. Lower density than other cohorts demonstrates that there are more isolated nodes with no committee ties in the network. During the 2023 campaign, the 80s cohorts had very small committees and those members selected much fewer ties than other cohorts.
- Finding 2b: There is something special about 1978's committee and cohort.** This data, along with qualitative findings from committee member interviews, tells us that they have a remarkable ability to make and maintain ties with each other. They have good systems in place and members that are quick to embrace new technologies and ideas.

Meso-Level – Is there a relationship between giving segment status and ethnicity?

Figure 14: Ethnicity Variable Descriptives

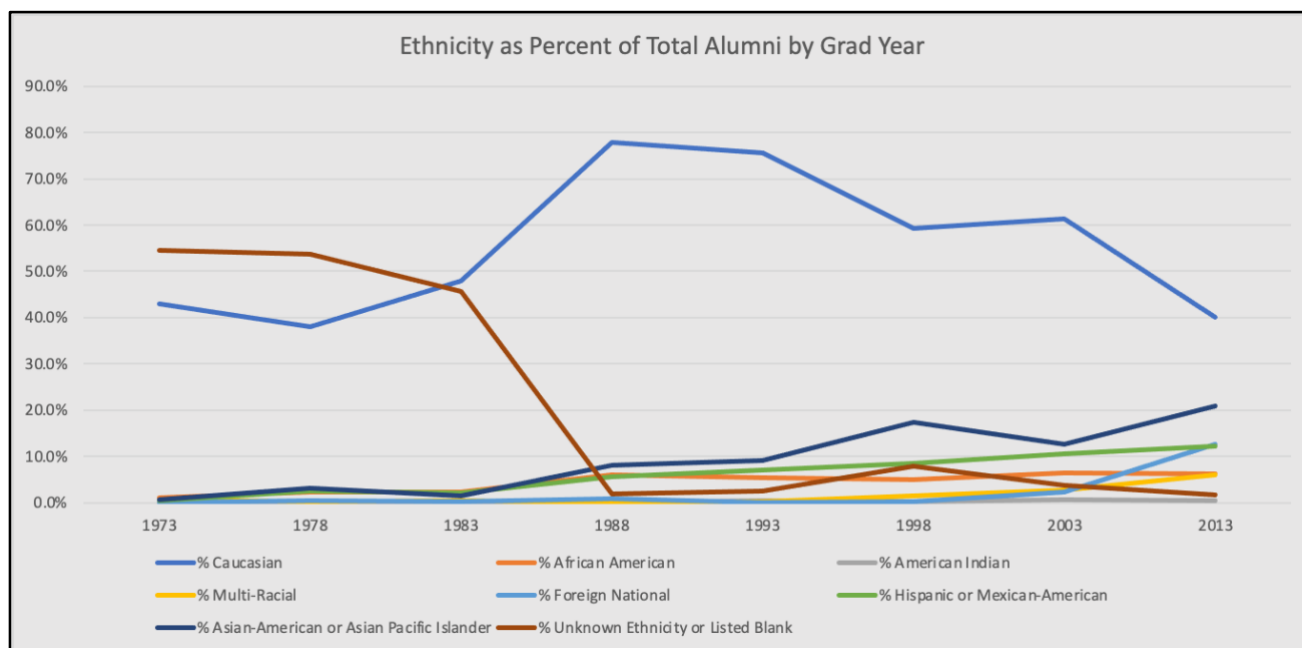


Table 16: Giving Segment and Ethnicity

Giving Segment and Ethnicity					
	NEVER-GIVERS	LONG LAPSED	SYBUNT	LYBUNT	Chi square (p value)
					*p <.05 **p <.01 ***p <.001
Caucasian	506	1101	677	836	159.52 (<.001)***
African American	73	85	48	54	
American Indian	7	5	2	1	
Multi-Racial	23	38	27	18	
Foreign National	62	46	22	16	
Hispanic or Mexican American	62	46	22	16	
Asian-American or Asian Pacific Islander	87	125	86	95	
Unknown	173	439	157	209	

- Finding 2c: There is a relationship between giving segment status and ethnicity,** rejecting the null hypothesis that giving segment status and ethnicity are independent of each other, $\chi^2 (21, N = 5633) = 159.52, p < .001$. I chose this question after noticing the significance of the variables in the RQ1 Findings.

Table 17: NEVER GIVER and Ethnicity Breakdown by Grad Year

Table 18: LONG LAPSED and Ethnicity Breakdown by Grad Year

Total Population				LONG-LAPSED							
Grad Year	Total Current Alumni	Total # LONG-LAPSED	% LONG LAPSED of Total Current Alumni	% Caucasian	% African American	% American Indian	% Multi-Racial	% Foreign National	% Hispanic or Mexican-American	% Asian-American or Asian Pacific Islander	% Unknown Ethnicity or Listed Blank
1973	532	226	42.48%	33.63%	0.88%	0.00%	0.44%	0.00%	0.88%	1.33%	62.83%
1978	562	245	43.59%	36.73%	0.41%	0.00%	0.00%	0.00%	2.45%	2.86%	57.55%
1983	532	215	40.41%	46.05%	2.79%	0.00%	0.00%	0.47%	2.33%	1.40%	46.98%
1988	551	213	38.66%	77.00%	6.57%	0.00%	0.00%	0.47%	4.23%	9.39%	2.35%
1993	589	199	33.79%	77.39%	4.52%	0.50%	0.00%	0.00%	6.03%	8.04%	3.52%
1998	643	225	34.99%	59.56%	4.44%	0.44%	1.78%	0.44%	7.11%	16.89%	9.33%
2003	654	214	32.72%	62.62%	5.61%	0.47%	2.34%	3.27%	10.28%	11.68%	3.74%
2008	679	216	31.81%	62.04%	4.17%	0.93%	2.31%	0.93%	8.80%	17.59%	3.24%
2013	891	300	33.67%	38.67%	7.33%	0.00%	7.67%	11.33%	11.33%	21.33%	2.33%
TOTALS	5633	2053	36.45%	53.63%	4.14%	0.24%	1.85%	2.24%	6.09%	10.42%	21.38%

- Finding 2d: Building on earlier findings, Asian American and Foreign National alumni** are more likely to be considered NEVER-GIVERS to Barley, considering their relatively smaller proportions in the total population than the proportions represented in the NEVER-GIVER segment. Asian-Americans only represent 10.9% of the total alumni population studied but are 14.2% are considered NEVER-GIVERS to the Institution. The NEVER-GIVER numbers appear to get worse as Asian Americans' representation grows in

the total population, which is very concerning since there is also an underrepresentation of Asian Americans on giving committees.

- ***Finding 2e: The Hispanic or Mexican American alumni population is *underrepresented* in the NEVER-GIVERS group, meaning they tend to give at higher rates than they occupy in the alumni population.***

Micro-Level – Is there a relationship between committee tie and 2023 donation status?

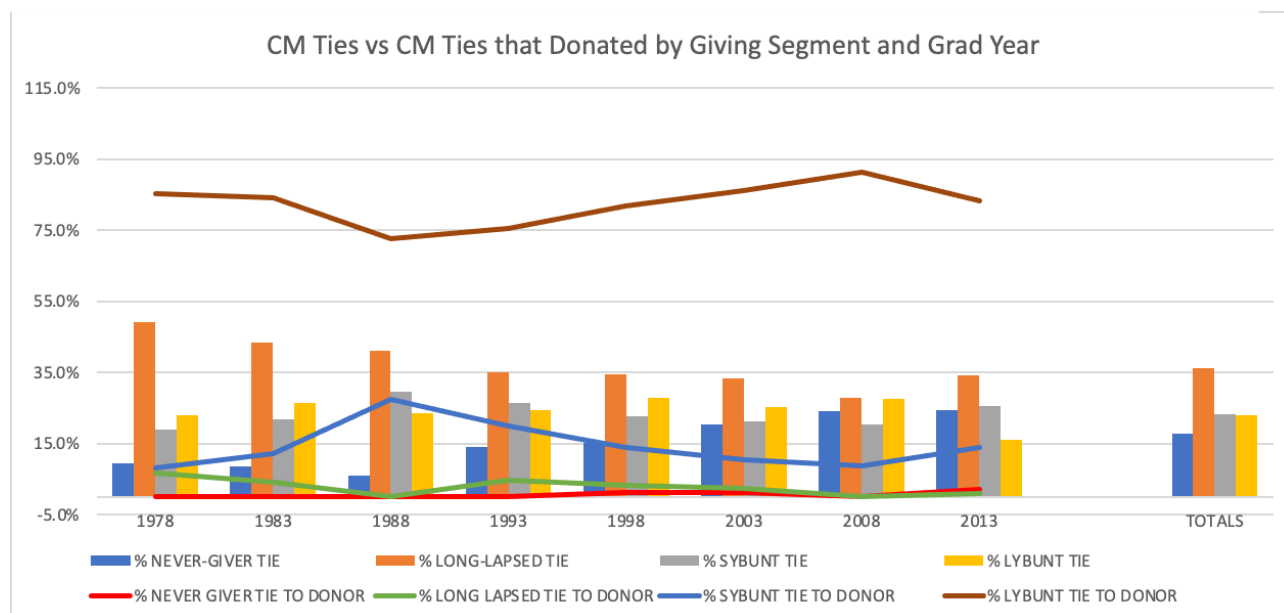
Table 19: Committee Members (CM) Ties and 2023 Alumni Donor Status

Committee Members (CM) Ties and 2023 Alumni Donor Status						
	# Alumni	# NEVER-GIVERS before 2023 (%)	# that gave in 2023 (%)	Chi square (p value)	Mean gift size in 2023	Median gift size in 2023
				*p <.05 **p <.01 ***p <.001		
Alumni with CM Ties	2105	376 (17.8%)	523 (24.8%)	20.299 (<.001)***	\$896.63	\$200.00
Alumni without CM Ties	2925	655 (21.9%)	630 (21.5%)		\$8,027.11	\$300.00
CMs	124	0.0%	95 (76.6%)		\$10,450.96	\$1110.00

- **Finding 2f: Committee members and Alumni with Committee Ties are more likely to donate to Barley**, rejecting the null hypothesis that committee tie status and donor status are independent of each other, $X^2(1, N = 5101) = 20.299, p < .001$.

Micro-Level – Is there a relationship between having a committee tie, giving segment status and 2023 donation status?

Figure 15: Committee Ties, Giving Segment and 2023 Donor Status



- Finding 2g: Committee members are selecting a variety of ties at the giving segment marker, but some giving segments are donating at much higher rates than others.***

Committee members selected NEVER GIVERS as 17.9% of their ties, but only 0.8% of those NEVER GIVER CM Ties ended up donating for the 2023 Reunion Campaign. While it is a generally good indication that committee members are choosing ties across giving segments, the fact those NEVER-GIVER ties are still not choosing to give/not responding to the outreach with a donation is curious. I would like to probe deeper to see if the NEVER-GIVERS with CM Ties did any other kind of engagement or answered their CM connection's emails at all. Maybe a different committee member or a different kind of outreach, in addition to GiveCampus form email pushes, is needed in these cases.

RQ3 & RQ4 Themes

Theme 1: Alumni Engagement as Giving versus Participation

- ***91% of Committee Members (CMs) interviewed believe that participation-based alumni engagement is at least as much or more important than philanthropic engagement.***

91% (19/21) of CMs exhibited both nostalgic feelings and loyalty coded markers in their interview and these were the two most co-assigned codes. Loyalty to Barley was a category code assigned to represent a view that alumni engagement is more than only philanthropic engagement.

“One of the reasons I participate in the alumni efforts is I really feel like Barley made me who I am today.” (Cragen, Alumni Interview)

“(in reference to other alma maters competing for alumni attention) I don't need to do the same things for STATE SCHOOL that I'm willing to do for Barley. I'll be honest with you, my life changed at Barley. It's not that my life didn't change at the STATE SCHOOL, it did. But my commitment to Barley is different than my commitment to the STATE SCHOOL. I'm very in touch with how I feel and my loyalties.” (Stabler, Alumni Interview)

81% of CMs exhibiting both nostalgic feelings & giving versus participation tension in their interviews, the second two most co-assigned codes.

“It makes you feel good to be involved. It. It's encouraging to promote something you believe in.” (Stabler, Alumni Interview)

“I was very happy to get involved, because I don't have a ton of money to give, especially at the time, but I knew how to fundraise, and so I was very willing to get on the phone to volunteer to talk to classmates.” (Cabot, Alumni Interview)

- **Staff also independently mentioned the merits of different forms of alumni engagement during their interviews.**

“Volunteering time is equally, if not more, important to me. Because if you're willing to give your time, you will eventually be willing to give your dollars, right?”

(Blanche, Staff Interview)

Theme 2: Alumni Relations versus Annual Fund

- ***The Annual Fund versus Alumni Relations relationship is mostly unclear or opaque.***

“In my mind it's almost like a blob out there. There's this office, and they do different things and such... I'm not sure the silos, I'm not sure the organization of it.”

(Marsden, Alumni Interview)

“I sometimes think, you know, there could be more in the intersection [of that Venn diagram] to common purpose and common benefit. Then I sometimes feel like the things that are on the outside of that intersection can be at cross purposes.”

(Jeffries, Alumni Interview)

“I don't know that an individual has ever really talked us through that distinction.”

(Stabler, Alumni Interview)

- ***AF staff express a need to align efforts with Alumni Relations.***

100% of staff interviews raised a topic that was coded as highlighting the tension between Annual Fund and Alumni Relations. I am only including a single excerpt here, because I want to protect the staff from any retaliation brought on by their candor.

“I invited alumni relations to be a part of the (seniors’) event for the first time. Evidently, they’d never been invited.” (Blanche, Staff Interview)

Theme 3: Staff Turnover Issues

- ***Negative impact of AF staff turnover.***

The high AF staff turnover rate over the years has been noticed and assessed as an issue that contributes negatively to the alumni volunteer committee member experience...

“There hasn’t always been much consistency of who is our go to for a given class within the annual fund office. And so, I think that results on a few things...One is, I’m like Joe Schmo who doesn’t necessarily know who to reach out to, or how to answer their questions. Or process payments. Two is that we were just assigned a liaison this reunion who was brand new to the annual fund office, and so didn’t know what was going on. On at least one or 2 occasions, I asked a question, and I got a response that I knew to be patently wrong.” (Tutuola, Alumni Interview)

...even though nearly interviewee had praise for AF staff as individuals. There were many of these sorts of complementary statements targeted at their contact, even the alum that had issue with the new class manager’s knowledge base above.

“_____ was very supportive of what we were doing as a group.”

(Benson, Alumni Interview)

... and generally, appreciated the importance of the AF Staff...

“If they have the right people in those positions, it makes our job really easy.”

(Cassidy, Alumni Interview)

... except for one interviewee who felt that the turnover issue may begin with what kind of employees are being hired, specifically what skillsets they arrive with.

“The rest of the Development Office usually hires professional fundraisers to raise money, but the annual fund is usually hiring and training volunteer managers, and I don't think that they have done a good job of that.”

(Tucker, Alumni Interview)

- ***Turnover is negatively impacting staff's perception of the quality of their work.***

92% of interviews were co-coded as having emotionally regretful and frustrated feelings while also mentioning the turnover rate and trouble dealing with it internally.

Staff also brought up the negative impact turnover has on some of the alumni committees.

“It's such a loss for the alumni experience when we have turnover. As someone that took on Reunion years midway through the cycle, it was so hard to gain their trust. I don't think I ever recovered with one of those classes, they turned over so much. I think I was their third person in one year.” (Blanche, Staff Interview)

Theme 4: GiveCampus Software Experience

- ***Mixed feelings about outreach via new peer connection software.***

CMs are split on their appreciation for AF's new networking/peer connection software (GiveCampus), and the tone overall was reluctant, even when positive. There was no clear consensus across graduation years or a pattern within any demographic groupings. Common positive feedback included: efficiency of the email feature and time saved using the software, as well as the perceived benefits of information provided to AF by the software.

"The online tool was really helpful because it allowed you to create email templates and then send it to the people that were on your list and stuff."

(Dodds, Alumni Interview)

The negative feedback expressed disappointment at the impersonal feel of the platform, not being able to select certain classmates for unknown reasons (and wonderings about what those reasons might be), trouble with and not having a clear idea of what the new platform's purpose was over the former system.

"Personally, I found the platform to be sort of a disincentivizing experience."

(Cabot, Alumni Interview)

Theme 5: DEI Awareness

- ***Among alumni volunteers, appreciation for and understanding of DEI practice is inconsistent, but not overtly contentious.***

CMs demonstrate widely varying sentiments toward the importance/relevance of DEI practice in a Barley alumni volunteer role. There was no clear consensus across graduation years or pattern within demographic indicators that one group had more appreciation than another. As individuals, they exhibited a range of command regarding what diversity is/isn't and how it relates to equity and inclusion.

“Multiple genders, multiple sexualities, multiple religions, multiple socioeconomic statuses. We have multiple states, I think, at least after Texas. So, I think that it was a fairly diverse group.” (Tucker, Alumni Interview)

“So, I will say, I've never really seen any racial diversity. There's always more women than men, which is an interesting diversity, considering our class was 60% male identifying and 40% female identifying.” (Lewis, Alumni Interview)

“But again, I don't think it's critical. I mean at Barley, I don't think people look at people that way [racially].” (Munch, Alumni Interview)

“(Response to question about diversity on their committee) I would say, no, I would say no, but they're really nice people.” (Rollins, Alumni Interview)

- **Staff demonstrate consistent sentiment that DEI is important to their work with Barley alumni and current students, and express openness to increasing those efforts.**

“I know it's a part of a pledge that we sign annually. I think we have had presentations periodically about it, but I don't think it's anything at all beyond just maybe an annual renewal of the promise to be inclusive. And I would say there's probably not anybody on staff who has an issue with it.” (Sofia, Staff Interview)

"I'm not really sure, but I would do whatever the numbers say is the best way to do it, and I think anybody else on this team would be willing to do that, too. I think that an important need to be communicated is the need for and importance of having a diverse committee. It is how you have a diverse population showing up to reunion, right? I do think that it needs to be a component that's written into our process."

(Blanche, Staff Interview)

Theme 6: Employee Satisfaction

- ***Staff enjoy their work at Barley, despite the high turnover rates.*** The staff that were interviewed had tenures longer than were alluded to for most staff departures over the last few years. No one could give me a concrete attrition statistic because they have changed directors several times, so I took them at their personal assessments of the situation. This indicates to me that during the timeframe I interviewed, AF had their most likely to be retained employees on staff, people who have witnessed a lot of turnover among their former colleagues. Only one interviewee was a newer employee (under a year). Despite this uncertainty, 92% of staff interviews mentioned work experiences co-coded as emotionally content and as having affinity for Barley.

"I really love working for Barley. I'm proud to work there & love the people I work with."

(Dorothy, Staff Interview)

"She's such a great boss. I really appreciate her because she really trusts her employees.

Like if they have an idea, to really pursue it and do what needs to be done to be successful. With AF, there are things you can pull from and tools that are in our archives

that people have used for years, but not because they have to, because they're really good and they've been perfected. So, like if you have a new idea, you can like add to the archives and people are like it's great. It's amazing. We love it. That's fantastic."

(Virginia, Staff Interview)

Recommendations

Table 20: Recommendation Support Matrix

Rec #	Short Description	RQ(s) Covered	Supporting Finding(s) & Theme(s)	Overt Theory Connections
0	<i>Embed Inclusion & Build Propensity for Allyship</i>	RQ 1,2 RQ 3,4	Findings 1a, 1b, 1c Findings 2c, 2d, 2e Theme 5	DEI, SNA, AE
1	Invest In & Tailor GiveCampus	RQ 2 RQ 3,4	Findings 2a, 2b, 2f, 2g Theme 4	SNA, AE
2	Reboot Senior Giving Committee	RQ 1,2 RQ 3,4	Finding 1f Findings 2a, 2b, 2c, 2d, 2e Themes 1, 2, 3	DEI, SNA, AE
3	Differentiate Committee Roles	RQ 2 RQ 3,4	Findings 1e, 1f Findings 2a, 2b, 2f, 2g Themes 1, 2	DEI, SNA, AE
4	Re-align Work with Alumni Relations	RQ 3,4	Findings 1e, 1f Findings 2a, 2b Themes 2, 3, 4	SNA, AE
5	Triage for Effects of High Staff Attrition	RQ 3,4	Findings 1d, 1f Themes 3, 6	AE

0* *Embed Inclusion & Build Propensity for Allyship

This recommendation is listed as zero because I believe it comes before any of the others and must be included in the strategic planning for any of the other recommendations.

- a. Encourage existing committee members and alumni in general to be more deliberate allies to marginalized groups. It is possible to approach this from a social network lens: Brokers are key to diffusion and influence in a network, and homophily keeps people in their dense, similar groupings. So, to identify much needed brokers from marginalized/minority groups to serve on committees, we must ensure there is enough psychological safety to encourage more brokerage among these populations.

- b. Inclusion looks different in every situation, but if any change is to happen to the status quo before it's too late, this difficult work must be done. Not all alumni or staff will be aligned with these changes or goals. Some will be aligned in name only, with little action to be seen. For those that find the cause at hand – rapidly changing cohorts of more diverse alumni being systemically excluded from traditional and beneficial alumni spaces – important and just, then inclusion is the way. It's the way to achieve equity and become a truly diverse community of peers.
 - c. “If you want to become an effective DEI practitioner or advocate, you *must* gain negative expertise and understand how to apply it in practice (Zheng, 2023, p.58).” The path is not easy, but embedding practices and norms of inclusion is the place to start. You don't have to have Diversity Day-type trainings, simply run your daily work with an eye on inclusion at every step.
1. **Invest In & Tailor GiveCampus** to meet the needs of Annual Fund.
 - a. Beyond alumni committees, explore the use of GiveCampus with senior committees (see Recommendation 2).
 - b. If the data is sufficiently symmetrical, it can help identify “brokers” ideal for committee membership in each graduation year with the newer cohorts as they graduate and help older cohorts identify gaps they might be able to tackle together.
 - c. Sociograms are helpful for explaining social network theories and can help staff train committee volunteers and new hires faster about concepts like density (not necessarily a good thing), structural holes, and centrality/prestige.

2. **Reboot Senior Giving Committee** circa the 1998 graduation cohort.
 - a. Sending new cohorts of alumni out into the wide world with solid knowledge of alumni relations, alumni volunteering, and the benefits of alumni engagement for all parties is a huge step forward and could help avoid that 11-year gap in alumni participation post-graduation that is reported in the literature.
 - b. Build in more opportunities to help dense residential college peer networks to identify and train their “brokers” for later deployment in their broader graduation year networks.
 - c. Build more graduation year/class affinity while still on campus, where residential college loyalty and affinity rule, but can be hard to translate into class-based reunion campaign enthusiasm post-graduation.

3. **Differentiate Committee Roles.** Identify and allow committee members to select different roles within volunteer committees, beyond chairs and non-chairs.
 - a. Some CMs identified feeling regretful that they weren’t able to be as personal in their outreach using the GiveCampus software, and there is the possibility that NEVER GIVERS need more high-touch outreach than an average CM is able to give with the more impersonal platform.
 - b. Perhaps those CMs that wish to engage more deeply could be guided to choose more NEVER GIVERS in their selection process and be allowed to work outside the platform.

4. **Re-align Work with Alumni Relations.** Make it so the arrangement works for both parties. Both committee members and staff expressed concern over this tenuous and murky relationship.
 - a. More study/observation of Alumni Relations' processes would be needed to provide clearer recommendations, but the effort would be worth it.
 - b. Use this new working relationship to bring attention to the growing Asian American population on campus and the reported lack of Asian American Alumni affinity groups associated with Alumni Relations. There is much work to be done to address these growing shifts, and both groups will need to work together for maximum impact.

5. **Triage for Effects of High Staff Attrition** Encourage efforts to improve staff retention first, but also work on "continuity of care" strategies for handling alumni reunion committees in anticipation of high turnover as status quo.
 - a. While fully staffed or in a lull of the fundraising year, it would be beneficial to brainstorm how to build systems more uniformly to provide easier onboarding of and consistency with AF best practices.
 - b. More work on the day-to-day actions of class managers would be needed to help build out what this looks like, so as not to add more work to any one employee's plate. Perhaps a work study intern or outside consultant could provide these services that are more mired in the minutiae.

- c. Poll active alumni volunteers for ideas on how to improve the hand off new class managers. Many alumni are experienced professionals that could lend their expertise as a form of engagement.

Conclusion

Alumni are changing, their cohort make-ups and the social relationships that evolve from those differences are changing, and times/norms overall are changing. Institutional advancement, more specifically alumni engagement and annual fund teams must find a foothold, work on understanding the new normal, and adopt a paradigm to respond to the changes before they render themselves obsolete. Social network theory applied with relevant critical lenses provides a way to reach more people using network analysis and inclusion as complementary foundational practices. By mapping out peer connections and examining their patterns early on, while the cohort is still attending undergrad, Annual Fund – with help from Alumni Relations – can identify and work to fill gaps in authentic class committee representation. This yields benefits for all parties, ensuring in the near term that social capital related to the benefits of alumni connections is equitably shared across graduation cohorts and, down the line, alumni are more likely to feel affinity for and safety within their alumni networks that will likely lead to higher philanthropic engagement.

References

- Baade, R. A., & Sundberg, J. O. (1996). What determines alumni generosity? *Economics of Education Review*, 15, 75–81.
- Babbie, E. R. (2017). *The basics of social research* (7th ed.). Wadsworth Publishing.
- Barnett, R. (2020). Leading with meaning: Why diversity, equity, and inclusion matters in U. S. higher education. *Perspectives in Education*, 38(2), 20–35.
<https://doi.org/10.18820/2519593X/pie.v38.i2.02>
- Beeler, K. J. (1982). A study of predictors of alumni philanthropy in private universities. Doctoral dissertation. Available from ProQuest Dissertations and Theses database. (UMI No. 8216403)
- Bekkers, R. (2006a, September 13-14, 2006). Keeping the faith: Origins of confidence in charitable organizations and its consequences for philanthropy. Paper presented at the the NCVO/ VSSN Researching the Voluntary Sector Conference 2006, Warwick University, UK.
- Bekkers, R., & Wiepking, P. (2011). A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving. *Nonprofit and Voluntary Sector Quarterly*, 40(5), 924–973. <https://doi.org/10.1177/0899764010380927>
- Belfield, C. R., & Beney, A. P. (2000). What determines alumni generosity? Evidence for the UK. *Education Economics*, 8(1), 65–81.
- Bentrim, E. M., & Henning, G. W. (2022). *The impact of a sense of belonging in college: Implications for student persistence, retention, and success*. Stylus Publishing, LLC.

- Bhaskar, R. (1989) *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy*. Verso, London.
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. New York: Routledge.
- Borgatti, S. P., Everett, M. G., Johnson, J. C., & Agneessens, F. (2022). *Analyzing Social Networks Using R*. SAGE Publications Ltd.
- Boslaugh, S. (2012). *Statistics in a nutshell (Second edition.)*. O'Reilly Media.
- Breeze, B. (2023). What is fundraising and why does it matter? In B. Breeze, D. Day Lafferty, & P. Wiepking, *The Fundraising Reader (1st ed., pp. 13–17)*. Routledge.
<https://doi.org/10.4324/9781003145936-4>
- Breiger, R. L. (2021). A concluding comment: Toward a critical social network analysis. *Social Networks*, 67, 74–75. <https://doi.org/10.1016/j.socnet.2020.12.004>
- Bristol, R. (1991). "How much will alumni give in the future?" *Planning for Higher Education*, 20, 2, pp. 1–12.
- Bruggink, T. H., & Siddiqui, K. (1995). An econometric model of alumni giving: A case study for a liberal arts college. *The American Economics*, 39(2), 53–59.
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Harvard Education Press.
- Buch-Hansen, H. (2014). Social Network Analysis and Critical Realism. *Journal for the Theory of Social Behaviour*, 44(3), 306–325. <https://doi.org/10.1111/jtsb.12044>
- Bunce, L., King, N., Saran, S., & Talib, N. (2021). Experiences of black and minority ethnic (BME) students in higher education: Applying self-determination theory to understand the

BME attainment gap. *Studies in Higher Education*, 46(3), 534–547.

<https://doi.org/10.1080/03075079.2019.1643305>.

Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Harvard University Press. <http://www.jstor.org/stable/j.ctv1kz4h78>

Burt, R. S. (2000). The Network Structure Of Social Capital. *Research in Organizational Behavior*, 22, 345–423. [https://doi.org/10.1016/S0191-3085\(00\)22009-1](https://doi.org/10.1016/S0191-3085(00)22009-1)

Cassell, C., Cunliffe, A., & Grandy, G. (2018). *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526430212>

Class profile. (2023, August 21). Office of Admissions. Retrieved March 15, 2024, from <https://admission.BLANK.edu/apply/class-profile>

Clotfelter, C. T. (2001). Who Are the Alumni Donors? Giving by Two Generations of Alumni from Selective Colleges. *Nonprofit Management and Leadership*, 12(2), 119–138. <https://doi.org/10.1002/nml.12201>

Clotfelter, C. T. (2003a). Alumni giving to elite private colleges and universities. *Economics of Education Review*, 22, 109–120.

Clotfelter, C. T. (2003b). Who are the alumni donors? *Nonprofit Management and Leadership*, 12(2), 119–138.

Colyvas, J., & Powell, W. (2006). Roads to institutionalization: The remaking of boundaries between public and private science. *Research in Organizational Behavior*, 27, 305–353.

- Cordery, C. J., Smith, K. A., & Berger, H. (2023). What will fundraising look like in 2045? In B. Breeze, D. Day Lafferty, & P. Wiepking, *The Fundraising Reader* (1st ed., pp. 566–571). Routledge. <https://doi.org/10.4324/9781003145936-123>
- Counts, T. S., & Jones, J. A. (2019). Fundraiser Education in the United States: Analysis of Existing University-Based Programs and Unique Training Needs. *Journal of Nonprofit Education and Leadership*, 9(4), 344–359. <https://doi.org/10.18666/JNEL-2019-V9-I4-9000>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design* (5th ed.). SAGE Publications.
- Cunningham, B. M., & Cochi-Ficano, C. K. (2002). The determinants of donative revenue flows from alumni of higher education. *The Journal of Human Resources*, 37(3), 540–569.
- Darwin Holmes, A. G. (2020). Researcher Positionality—A Consideration of Its Influence and Place in Qualitative Research—A New Researcher Guide. *Shanlax International Journal of Education*, 8(4), 1–10. <https://doi.org/10.34293/education.v8i4.3232>
- De Cock Buning, T., Etana, D., Snelder, D., & Wesenbeeck, L. (2020). Dynamics of Smallholder Farmers' Livelihood Adaptation Decision-Making in Central Ethiopia. *Sustainability*, 12, 4526. [10.3390/su12114526](https://doi.org/10.3390/su12114526)
- DeCuir-Gunby, J.T., Chapman, T.K., & Schutz, P.A. (Eds.). (2018). *Understanding Critical Race Research Methods and Methodologies: Lessons from the Field* (1st ed.). Routledge. <https://doi.org/10.4324/9781315100944>
- Diamond, W. D., & Kashyap, R. K. (1997). Extending models of prosocial behavior to explain university alumni contributions. *Journal of Applied Social Psychology*, 27, 915–928.

- Dobbin, F., & Kelly, E. (2007). How to stop harassment: The professional construction of legal compliance in organizations. *American Journal of Sociology*, 112(4), 1203–1243.
- Durland, M. & Fredericks, K. (2005). An Introduction to Social Network Analysis. *New Directions for Evaluation: A Publication of the American Evaluation Association.*, 2005(107), 5–13.
<https://doi.org/info:doi/>
- Eastwood, J.G., Jalaludin, B.B. & Kemp, L.A. (2014). Realist explanatory theory building method for social epidemiology: a protocol for a mixed method multilevel study of neighbourhood context and postnatal depression. *SpringerPlus* 3, 12.
<https://doi.org/10.1186/2193-1801-3-12>
- Edmonds, W. A., & Kennedy, T. D. (2017). *An Applied Guide to Research Designs: Quantitative, Qualitative, and Mixed Methods*. SAGE Publications, Inc.
<https://doi.org/10.4135/9781071802779>
- Ehrenberg, R. G., & Smith, C. L. (2003). The sources and uses of annual giving at selective private research universities and liberal arts colleges. *Economics of Education Review*, 22(3), 223–235. [https://doi.org/10.1016/S0272-7757\(02\)00073-0](https://doi.org/10.1016/S0272-7757(02)00073-0)
- Esposito, J., & Evans-Winters, V. E. (2022). *Introduction to intersectional qualitative research*. Thousand Oaks, California: SAGE Publications, Inc.
- Farwell, M. M., Gaughan, M., & Handy, F. (2020). How did we get here? The career paths of higher education fundraisers. *Nonprofit Management and Leadership*, 30(3), 487–507.
<https://doi.org/10.1002/nml.21397>

- Fleming, K. (2019). The “Pots of Water” Emerging Framework for Alumni Engagement: Examining How Alumni Make Sense of Their Relationships with their Alma Maters. *Philanthropy & Education*, 3(1), 103–129. <https://doi.org/10.2979/phileduc.3.1.05>
- Fogarty, B. J. (2023). *Quantitative social science data with R: an introduction* (2nd edition). SAGE.
- Freire, P. (2000). *Pedagogy of the oppressed*. Bloomsbury.
- Garcia, C. E. (2020). Climates for ethnic and racial diversity: Latina/o sorority and fraternity member perspectives. *Journal of Student Affairs Research and Practice*, 57(3), 237-252. <https://doi.org/10.1080/19496591.2019.1631836>
- Gasman, M., & Bowman III, N. (2013). *Engaging diverse college alumni: The essential guide to fundraising*. Routledge.
- Glynos, J., & Howarth, D. (2019). The retroductive cycle: The research process in poststructuralist discourse analysis. In T. Marttila (Ed.), *Discourse, culture, and organization: Inquiries into relational structures of power* (pp. 105–125). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-94123-3_5
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360–1380.
- Grant, J., & Lindauer, D. (1986). The economics of charity life-cycle pattern of alumnae contributions. *Eastern Economic Journal*, 12(2), 129–141.
- Grawe, N. D. (2021). *The agile college: How institutions successfully navigate demographic changes*. Johns Hopkins University Press.

- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs.
- Gunsalus, R. (2005). The Relationship of Institutional Characteristics and Giving Participation Rates of Alumni. *International Journal of Educational Advancement*, 5(2), 162–170. <https://doi.org/10.1057/palgrave.ijea.2140214>
- Haddad, F. D. (1986). An analysis of the characteristics of alumni donors and nondonors at Butler University. Doctoral dissertation. Available from ProQuest Dissertations and Theses database. (UMI No. 8627728)
- Haigh, F., Kemp, L., & Bazeley, P. (2019). Developing a critical realist informed framework to explain how the human rights and social determinants of health relationship works. *BMC Public Health* 19, 1571. <https://doi.org/10.1186/s12889-019-7760-7>
- Hanson, S. K. (2000). Alumni characteristics that predict promoting and donating to alma mater: Implications for alumni relations. Doctoral dissertation. Available from ProQuest Dissertations and Theses database. (UMI No. 9970424)
- Harlow, R. (2003). "Race doesn't matter, but...": The effect of race on professors' experiences and emotion management in the undergraduate college classroom. *Social Psychology Quarterly*, 66(4), 348–363. <https://www.jstor.org/stable/1519834>
- Harrison, W. B. (1995). College relations and fund-raising expenditures: Influencing the probability of alumni giving to higher education. *Economics of Education Review*, 14(1), 73–84.

- Harrison, W. B., Mitchell, S. K., & Peterson, S. P. (2006). Alumni donations and colleges' development expenditures: Does spending matter? *The American Journal of Economic and Sociology*, 54(4), 397–412.
- Haruvy, E., Popkowski-Leszczyc, P., Allenby, G., Belk, R., Eckel, C., Fisher, R., Li, S. X., List, J. A., Ma, Y., & Wang, Y. (2020). Fundraising design: Key issues, unifying framework, and open puzzles. *Marketing Letters*, 31(4), 371–380. <https://doi.org/10.1007/s11002-020-09534-8>
- Holmes, J. (2008). Prestige, charitable deductions, and other determinants of alumni giving: Evidence from a highly selective liberal arts college. *Economics of Education Review*, 22, 1–11.
- Holmes, R. J. (2010). The challenge of funding fundraising. *New Directions for Higher Education*, 2010(149), 27–37. <https://doi.org/10.1002/he.378>
- Hrabowski III, F. A. (2024). *The resilient university: How purpose and inclusion drive student success*. Johns Hopkins University Press.
- Hueston, F. R. (1992). Predicting alumni giving: A donor analysis test. *Fund Raising Management*, XX, 18–23.
- Itri, J. N., Bakow, E., Probyn, L., Kadom, N., Duong, P.-A. T., Gettle, L. M., Mendiratta-Lala, M., Scali, E. P., Winokur, R. S., Zygmunt, M. E., Kung, J. W., & Rosenkrantz, A. B. (2017). The Science of Quality Improvement. *Academic Radiology*, 24(3), 253–262. <https://doi.org/10.1016/j.acra.2016.05.010>
- Jackson, C. (2021). *The march towards change: critical conversation with institutional advancement managers about social justice*. Dissertation, Arizona State University.

- Jayakumar, U. M., Adamian, A. S., Grummert, S. E., Schmidt-Temple, C. T., & Arroyo, A. T. (2021). Why Are All the White Kids Sitting Together in the Cafeteria?: Toward Challenging Constructions of a Persecuted White Collective. *Education Sciences*, 11(11), 679. <https://doi.org/10.3390/educsci11110679>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- Jordan, R. R., & Quynn, K.L. (1994, March). The new planned giving officer. *Currents*, 20(3), 20–25.
- Kadushin, C. (2012). *Understanding social networks [electronic resource]: theories, concepts, and findings*. Oxford University Press.
- Kaplan, A. E. (2022). CASE Insights on alumni engagement. Council for Advancement and Support of Education. <https://www.case.org/research/surveys/case-insights-alumni-engagement>
- Keane, E. (2009). 'Frictional' relationships ... tension in the camp: Focusing on the relational in under-represented students' experiences in higher education. *Irish Educational Studies*, 28(1), 85–102. <https://doi.org/10.1080/03323310802597358>
- Keller, M. J. C. (1982). *An analysis of alumni donor and nondonor characteristics at the University of Montevallo (Alabama)*. Doctoral dissertation. Available from ProQuest Dissertations and Theses database. (UMI No. 8314037)

- Lange, A. C., Duran, A., & Jackson, R. (2019). The state of LGBT and queer research in higher education revisited: Current academic houses and future possibilities. *Journal of College Student Development*, 60(5), 511-526. <https://doi.org/10.1353/csd.2019.0047>
- Lareau, A. (2021). *Listening to people: a practical guide to interviewing, participant observation, data analysis, and writing it all up*. Chicago: University of Chicago Press.
DOI:10.7208/chicago/9780226806600.001.0001
- LeBlanc, P. (2021). *Students first: Equity, access, and opportunity in higher education*. Harvard Education Press.
- Leslie, L. L., & Ramey, G. (1988). Donor behavior and voluntary support for higher education institutions. *The Journal of Higher Education*, 59(2), 115–132.
- Lewis, K. R., & Shah, P. P. (2021). Black students' narratives of diversity and inclusion initiatives and the campus racial climate: An interest-convergence analysis. *Journal of Diversity in Higher Education*, 14(2), 189–202. <https://doi.org/10.1037/dhe0000147>
- Li, Y. L., Evans, K., & Bond, M. A. (2023). Allies as organizational change agents to promote equity and inclusion: A case study. *Equality, Diversity, and Inclusion: An International Journal*, 42(1), 135–156. <https://doi.org/10.1108/EDI-12-2021-0308>
- Lindahl, W. E., & Winship, C. (1994). A logit model with interactions for predicting major gift donors. *Research in Higher Education*, 35(6), 729–743.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103–123.

- Marr, K. A., Mullin, C. H., & Siegfried, J. J. (2005). Undergraduate financial aid and subsequent alumni giving behavior. *The Quarterly Review of Economics and Finance*, 45, 123–143.
- Martin, D. 2014. Good education for all? Student race and identity development in the multicultural classroom. *International Journal of Intercultural Relations*, 39: 110–123.
<https://doi.org/10.1016/j.ijintrel.2013.10.005>.
- Monks, J. (2003). Patterns of giving to one's alma mater among young graduates from selective institutions. *Economics of Education Review*, 22(2), 121–130.
- Mukumbang, F. C. (2023). Retroductive Theorizing: A Contribution of Critical Realism to Mixed Methods Research. *Journal of Mixed Methods Research*, 17(1), 93–114.
<https://doi.org/10.1177/15586898211049847>
- Mukumbang, F. C., Kabongo, E. M., & Eastwood, J. G. (2021). Examining the Application of Retroductive Theorizing in Realist-Informed Studies. *International Journal of Qualitative Methods*, 20, 160940692110535. <https://doi.org/10.1177/16094069211053516>
- Newkirk, P. (2020). *Diversity, Inc.: The fight for racial equality in the workplace*. Bold Type Books.
- Newman, M. D., & Petrosko, J. M. (2011). Predictors of Alumni Association Membership. *Research in Higher Education*, 52(7), 738–759. <https://doi.org/10.1007/s11162-011-9213-8>
- Nicklin, J. L. (1998). Revolving Doors in Development Offices. *The Chronicle of Higher Education*.
- Okunade, A. A. (1996). Graduate school donations to academic funds: Micro-data evidence. *American Journal of Economics and Sociology*, 55(2), 213–229.

- Okunade, A. A., & Berl, R. L. (1997). Determinants of charitable giving of business school alumni. *Research in Higher Education*, 38(2), 201–214.
- Okunade, A. A., P. V. Wunnave, and R. Walsh (1994), "Charitable giving of alumni: microdata from a large public university," *American Journal of Economics and Sociology*, 53, pp. 73-84.
- Olsen, K., Smith, A. L., & Wunnava, P. V. (1989). An empirical study of the life-cycle hypothesis with respect to alumni donations. *American Economist*, 33(2), 60–63.
- Prell, C. (2012). *Social network analysis*. London: Sage.
- Ravitch, S. M. & Carl, N. M. (2021). *Qualitative research: Bridging the conceptual, theoretical, and methodological* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Ravitch, S. M., & Riggan, M. (2012). *Reason & rigor: How conceptual frameworks guide research*. Sage Publications.
- Rosenberg, B. (2023). "Whatever it is, I'm against it": Resistance to change in higher education. Harvard Education Press.
- Rubineau, B., Lim, Y., & Neblo, M. (2019). Low status rejection: How status hierarchies influence negative tie formation. *Social Networks*, 56, 33–44.
<https://doi.org/10.1016/j.socnet.2018.08.005>
- Russen, M., & Dawson, M. (2024). Which should come first? Examining diversity, equity and inclusion. *International Journal of Contemporary Hospitality Management*, 36(1), 25–40.
<https://doi.org/10.1108/IJCHM-09-2022-1184>

Sage. (2013, March 1). Telling a complete story with qualitative and mixed methods research – Dr. John W. Creswell. [Video]. YouTube.

https://youtu.be/l5e7kVzMIfs?si=BfhkkMeKNn_baACTI

Saldaña, J. M. (2015). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.

Sargeant, A., Ford, J. B., & West, D. C. (2006). Perceptual determinants of nonprofit giving behavior. *Journal of Business Research*, 59, 155-165.

Scott, J. (2011). "Social network analysis: developments, advances, and prospects." *Social Network Analysis and Mining*, 1, 21–26.

Scott, J. (2017). *Social network analysis*. (4th edition). SAGE Publications Ltd.

Shaker, G. C., & Nathan, S. K. (2017). Understanding higher education fundraisers in the United States. *International Journal of Nonprofit and Voluntary Sector Marketing*, 22(4).
<https://doi.org/10.1002/nvsm.1604>

Shaker, G. G., Rooney, P. M., Nathan, S. K., Bergdoll, J. J., & Tempel, E. R. (2022). Turnover intention and job tenure of US fundraisers. *Journal of Philanthropy and Marketing*, 27(4), e1742. <https://doi.org/10.1002/nvsm.1742>

Singh, S. (2020). To rely or not to rely on common sense? Introducing critical Realism's insights to social network analysis. *Journal for the Theory of Social Behaviour*, 50(2), 203–222.
<https://doi.org/10.1111/jtsb.12241>

Skinner, N.A. (2019). The Rise and Professionalization of the American Fundraising Model in Higher Education. *Philanthropy & Education*, 3(1), 23.
<https://doi.org/10.2979/phileduc.3.1.02>

- Smith, J. R., & McSweeney, A. (2007). Charitable giving: The effectiveness of a revised theory of planned behaviour model in predicting donating intentions and behaviour. *Journal of Community & Applied Social Psychology*, 17, 363-386.
- Solórzano, D. G., & Huber, L. P. (2020). *Racial microaggressions: Using critical race theory to respond to everyday racism*. Teachers College Press.
- Stewart, E. T. (1955). Alumni Support and Annual Giving. *The ANNALS of the American Academy of Political and Social Science*, 301(1), 123–138.
<https://doi.org/10.1177/000271625530100118>
- Stutchbury, K. (2022). Critical realism: an explanatory framework for small-scale qualitative studies or an ‘unhelpful edifice’?. *International Journal of Research & Method in Education*, 45:2, 113-128, DOI: 10.1080/1743727X.2021.1966623
- Stutler, D., & Calvario, D. (1996). In alumni support, satisfaction matters. *Fund Raising Management*, 27(9), 12–14.
- Swatek, C. M., Lindsey, A. B., & Jones, J. A. (2022). Fundraiser turnover in higher education capital campaigns: Employment fluctuations by campaign phase. *Journal of Philanthropy and Marketing*, 27(2), e1727. <https://doi.org/10.1002/nvsm.1727>
- Taylor, A. L., & Martin, J. C. (1995). Characteristics of alumni donors and nondonors at a research I, public university. *Research in Higher Education*, 36(3), 283–302.
- Terry, N., & Macy, A. (2007). Determinants of alumni giving rates. *Journal of Economics and Economic Education Research*, 8-3, 4-17.
- The ‘barley’ investment. (2023, March 30). BARLEY Giving | BARLEY University. Retrieved March 15, 2024, from “Barley link”

- Thompson, J. (2004). Annual Fund Analysis to Predict Likelihood of Major Gift Commitments. Study conducted by Thompson, J. while employed at Washington University, St. Louis, MD.
- Tienda, M. (2013). Diversity ≠ Inclusion: Promoting Integration in Higher Education. *Educational Researcher*, 42(9), 467–475. <https://doi.org/10.3102/0013189X13516164>
- Twenge, J. M., Ciarocco, N. J., Baumeister, R. F., Dewfall, C. N., & Bartels, J. M. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology*, 92(1), 56-66.
- University of Michigan Family Medicine. (2022, January 20). 4. Basic mixed methods research designs | John W. Creswell | University of Michigan. [Video]. YouTube. <https://youtu.be/mBC9zdmoSzI?si=D1MleaBEjgZ1jaQ4>
- Van Diepen, M., Donkers, B., & Franses, P. H. (2009). Does irritation induced by charitable direct mailings reduce donations? *International Journal of Research in Marketing*, 26, 180-188.
- Wang, G., Seibert, S. E., & Boles, T. L. (2011). Synthesizing what we know and looking ahead: A meta-analytical review of 30 years of emotional labor research. *Research on Emotion in Organizations*, 7, 15–43.
- Wasserman, S., and Faust, K. (1994). *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.
- Weeks, K. P., Taylor, N., Hall, A. V., Bell, M. P., Nottingham, A., & Evans, L. (2024). “They Say They Support Diversity Initiatives, But They Don’t Demonstrate It”: The Impact of DEI Paradigms on the Emotional Labor of HR&DEI Professionals. *Journal of Business and Psychology*, 39(2), 411–433. <https://doi.org/10.1007/s10869-023-09886-8>

- Weerts, D. J., & Ronca, J. M. (2007). Profiles of supportive alumni: Donors, volunteers, and those who “do it all.” *International Journal of Educational Advancement*, 7(1), 20-34.
- Weerts, D. J., & Ronca, J. M. (2008). Characteristics of Alumni Donors Who Volunteer at their Alma Mater. *Research in Higher Education*, 49(3), 274–292.
<https://doi.org/10.1007/s11162-007-9077-0>
- Weerts, D. J., & Ronca, J. M. (2009). Using classification trees to predict alumni giving for higher education. *Education Economics*, 17(1), 95–122.
<https://doi.org/10.1080/09645290801976985>
- Wickham, H., & Grolemund, G. (2016). *R for data science : import, tidy, transform, visualize, and model data* (First edition.). O’Reilly Media.
- Willemain, T. R., Goyal, A., Van Deven, M., & Thukral, I. S. (1994). Alumni giving: The influences of reunion, class, and year. *Research in Higher Education*, 35(5), 609–629.
- Wilson, J. L., Meyer, K. A., & McNeal, L. (2012). Mission and diversity statements: What they do and do not say. *Innovative Higher Education*, 37(2), 125-139.
- Wilson, K. (2023). *Diversity, equity & inclusion in the workplace: Developing DEI solutions*.
- Wolf, K. F. (1981, September). Special “how to hire” guide: Fund raiser. *Currents*, 8(8), 22–23.
- Wunnava, P. V., & Lauze, M. A. (2001). Alumni giving at a small liberal arts college: Evidence from consistent and occasional donors. *Economics of Education Review*, 20, 533–543.
- Yang, S., Keller, F., & Zheng, L. (2017). *Social network analysis: methods and examples*. SAGE Publications, Inc.
- Yankelovich, D. (1987). Bridging the gap. *Currents*, 13(9), 24–27.

Zheng, L. (2023). DEI deconstructed: Your no-nonsense guide to doing the work and doing it right (1st ed.). Berrett-Koehler Publishers, Inc.

Appendix A: Excerpt from 'Barley' 2023 Admissions Class Profile

ENROLLED STUDENTS BY GENDER

GENDER	NUMBER	PERCENT OF CLASS
Female	563	50%
Male	562	50%

ENROLLED STUDENTS BY GEOGRAPHY

GEOGRAPHIC LOCATION	% OF ENROLLED STUDENTS
International	13%
Outside of Texas	52%
In Texas	35%

ENROLLED DOMESTIC STUDENTS BY ETHNICITY (BASED ON FEDERAL DEFINITIONS)

ETHNICITY	% OF ENROLLED DOMESTIC STUDENTS
Asian American	34%
Caucasian	27%
Hispanic or Latino	21%
African American or Black	9%
Multiracial	7%
Other	2%

ENROLLED DOMESTIC STUDENTS BY ETHNICITY (BASED ON ALL SELF-IDENTIFIED RACE/ETHNICITY DATA)*

ETHNICITY	% OF ENROLLED DOMESTIC STUDENTS
Asian American	41%
Caucasian or White	49%
Hispanic or Latino	21%
African American or Black	12%
American Indian or Alaskan Native	2%
Native Hawaiian or Other PI	1%

*Students indicating more than one race/ethnicity are counted in each of their self-identified race/ethnic categories. The percentages add up to more than 100.

Source: Class profile (2023)

Appendix B: Alumni Interview Protocol

Introduction Script (2 min MAX)

Thank you for taking time to participate in this interview! My name is Amber and I use she/her pronouns. How would you like for me to refer to you today?

As I mentioned in my email, I am currently a doctoral student at Vanderbilt.

I was a grateful beneficiary of four full tuition grants made possible by an Annual Fund (AF), and I have always been interested in learning more about their work beyond volunteering for my reunion committee, but more from an organizational/academic perspective.

Over time, with staff and leadership's shared curiosity, this has developed into a pretty ideal capstone. My goal is to help Annual Fund discover more about their alumni volunteer committee practice – the experiences of the alumni, the average reach they have in each graduating class and by the end, I hope to provide some recommendations for improving/expanding on their process. I will interview alumni from various reunion years – committee members and hopefully some non-committee members, as well as AF staff.

Before we get too far, and in the interest of time, I want to discuss confidentiality. This recording and its transcript will be destroyed once I have submitted my project for graduation. I will be the only person with digital access and will not share with anyone at AF who was interviewed. In my final product, _____ itself and every interviewee's identity will be masked. I will hold the only "key" of pseudonyms for reference during the writing process.

Do you feel like you have a good handle on the confidentiality with this project? Do you have any questions or concerns? Do you give verbal consent for me to record this interview?

- Yes (continue to interview questions and prompts)
- No? Ok, thank you for being honest with me about your concerns. If you want to interview anyway, but not be recorded, I might need a little more time to take written notes during our interview and we might not get through as many of the questions, but I do want to understand your experience and I appreciate your time.

Interview Questions and Prompts

- 1) Have you volunteered on past reunion campaigns?
 - a. How many (1, 2-3, every time!)?
 - b. Did you get involved immediately after graduation or was there a lag?
 - c. How did you come to be involved?
- 2) High level and from your perspective, how does the Alumni Giving/Reunion Committee process operate?

- a. Do you feel like you have a good working understanding of who handles what elements of a reunion year's happenings - between Annual Fund and Alumni Relations?
 - b. If you needed to answer a question for a classmate, would you know where to go/where to send them?
 - c. Can you explain the basic composition of the committee?
 - d. What emphasis, if any, is placed on getting a variety of committee members?
 - i. What does "variety" mean to you?
 - ii. Do you think that "diversity" and "variety" mean similar or different things in this context?
- 3) Share any positive experiences/take aways from your committee experience itself (beyond process, more socially) – (can be this year and/or in past years).
- a. Do you know anyone on your committee?
 - b. Do you have many close friends on your committee?
 - c. Did you know your committee member friends from undergrad or meet them as an alum?
- 4) What do you see as the goal of the alumni committee?**
- a. To what extent do you think your committee is successful in that goal?**
 - b. Why or why not?**
- 5) *Share any pain-points or challenges about your committee experience (process or socially).*
- a. When do these challenges tend to happen?*
 - b. What qualities do the actors in these challenges tend to exhibit?*
 - c. What sorts of resolutions (if any) occur?*
- 6) What supports or changes are needed, in your opinion, to help make alumni volunteer committees work better?
- a. What does "better" mean to you?
 - b. What lever would be the best for this change? Who should be in charge?

Conclusion Script

I think that is all we have time for today, and I want to say thank you so much again for taking time to talk to me. As I move to the analysis portion of my project, if I need to clarify something we talked about or have an additional question that comes up from later interviews that I want to ask you as well, is it ok to contact you directly? You already have my email address, but I will also send a follow up thank you email in case. If you have any wonderings or questions that come up about this project, please do not hesitate to send me a note and I will do my best to address any questions or concerns I can. Have a good holiday!

Appendix C: Staff Interview Protocol

Introduction Script (2 min MAX)

Thank you for taking time to participate in this interview! I know we have connected a couple times informally, so there might be a couple questions that I already “know” the answers to, but I am purposely asking again to “record” the answers here to be formally analyzed.

The purpose of this project is to help Annual Fund (AF) discover more about the alumni volunteer committee practice – the experiences of the alumni, the average reach they have in each graduating class and by the end, I hope to provide some recommendations for improving/expanding on that practice. I have been interviewing alumni from various reunion years, will interview staff like yourself and have a few more informational interviews with other departments at ____ that are close to the work AF does.

Before we get too far, and in the interest of time, I want to discuss confidentiality. This recording and its transcript will be destroyed once I have submitted my project for graduation. I will be the only person with digital access until then. In my final product, _____ itself and every interviewee’s identity will be masked. I will hold the only “key” of pseudonyms for reference during the writing process.

Do you feel like you have a good handle on the confidentiality with this project? Do you have any questions or concerns? Do you give verbal consent for me to record this interview?

- Yes (continue to questions and prompts)
- No? Ok, thank you for being honest with me about your concerns. If you want to interview anyway, but not be recorded, I might need a little more time to take written notes during our interview and we might not get through as many of the questions, but I do want to understand your experience and I appreciate your time.

Interview Questions and Prompts

- 1) Please describe your role/work with AF.
 - a. How does this work converge or diverge...
 - i. ...with your education background?
 - ii. ...with your work history?
 - b. How does your work with AF fit into where you see your career in the future?
- 2) Every job has an element of employee turnover... can you help me understand, from your perspective, what that is like at AF?
- 3) Who/what kind of employee is more likely to stay at AF longer?
- 4) Explain the interaction/shared responsibilities of AF and Alumni Relations.
 - a. Explain the interaction/relationship between AF and Major Gifts.

- b. Are there any other departments/offices at _____ that AF interfaces with regularly?
- 5) What is the “goal” or “goals” of a reunion giving alumni volunteer committee?
 - a. To what extent do you think “your” committees are successful?
 - b. What are some indicators that you are “doing a good job”?
 - 6) What skill sets/traits do you think are most useful/necessary to do your work well?
 - 7) Can you explain the basic composition of a volunteer alumni committee?
 - a. What emphasis, if any, is placed on getting a variety of committee members?
 - i. What does “variety” mean to you?
 - ii. Do you think that “diversity” and “variety” mean similar or different things in this context?
 - 8) What sort of trainings or expectations are in place regarding DEI at AF/____?
 - a. What are some of the main takeaways of these trainings?
 - b. Do you feel adequately supported to enact/adhere/expand these DEI strategies?
 - 9) Describe the BEST part about working with volunteer alumni committees.
 - 10) Describe the most challenging part about working with volunteer alumni committees.
 - 11) What supports or changes are needed, in your opinion, to help make alumni volunteer committees work better?
 - a. What does “better” mean to you?
 - b. What lever would be the best for this change? Who should be in charge?
 - c. Do you feel RAF has the resources to enact these changes?

*****Questions added after Alumni interviews all wrapped:**

-- **Anyone ever heard of Senior Committees? Who runs this?**

-- **Who “does” data for y’all? For all of _____?**

Conclusion Script

I think that is all we have time for today, and I want to say thank you so much again for taking time to talk to me. As I move to the analysis portion of my project, if I need to clarify something we talked about or have an additional question that comes up from later interviews that I want to ask you as well, is it ok to contact you directly? You already have my email address, but I will also send a follow up thank you email in case. If you have any wonderings or questions that come up about this project, please do not hesitate to send me a note and I will do my best to address any questions or concerns I can.

Appendix D: Alumni Interview Question Alignment and Coding Form

Key: AE (Alumni Engagement), SNA (Social Networks), DEI (Diversity, Equity & Inclusion), SCT (Socio-critical Theories)

#	Semi-Structured Interview Questions with Sub-Questions	Frames/ Theories	RQs	In vivo codes – post interview
1	Have you volunteered on past reunion campaigns?	AE	1,2; 3	
1a	<i>How many (1, 2-3, every time!)?</i>	AE	1,2; 3	
1b	<i>Did you get involved after graduation or was there a lag?</i>	SNA	2; 3	
1c	<i>How did you come to be involved?</i>	SNA	2; 3	
2	High level and from your perspective, how does the Alumni Giving/Reunion Committee process operate?	AE, SNA	1,2; 3	
2a	<i>Do you feel like you have a good working understanding of who handles what elements of a reunion year's happenings - between Annual Fund and Alumni Relations?</i>	SNA	3	
2b	<i>If you needed to answer a question for a classmate, would you know where to go/where to send them?</i>	AE, SNA	1,2; 3	
2c	<i>Can you explain the basic composition of the committee?</i>	AE, SNA, DEI	1,2; 3	
2d	<i>What emphasis, if any, is placed on getting a variety of committee members? -What does "variety" mean to you? -Do you think that "diversity" and "variety" mean similar or different things in this context?</i>	SNA, DEI, SCT	1,2; 3	
3	Share any positive experiences/take aways from your committee experience itself (beyond process, more socially) – (can be this year and/or in past years).	SNA, DEI	3	
3a	<i>Do you know anyone on your committee?</i>	SNA, DEI	1,2; 3	
3b	<i>Do you have many close friends on your committee?</i>	SNA, DEI	1,2; 3	
3c	<i>Did you know your committee member friends from undergrad or meet them as an alum?</i>	SNA, DEI	1,2; 3	
4	What do you see as the goal of the alumni committee?	AE, DEI, SNA	2; 3	
4a	<i>To what extent do you think your committee is successful in reaching that goal?</i>	AE	2; 3	
4b	<i>Why or why not?</i>	DEI, SCT	1,2; 3	
5	Share any pain-points or challenges about your committee experience (process or socially).	**AFTER 2-3 INTERVIEWS, THIS QUESTION BECAME LESS AND LESS RELATED TO THE EMERGING SCOPE SHIFT, SO I PULLED THIS ONE, ADDED Q#4 AND FOCUSED HEAVILY ON COMMITTEE RECRUITMENT, COMPOSITION, AND PROCESSES**		
5a	<i>When do these challenges tend to happen?</i>			
5b	<i>What qualities do the actors in these challenges tend to exhibit?</i>			
5c	<i>What sorts of resolutions (if any) occur?</i>			
6	What supports or changes are needed, in your opinion, to help make alumni volunteer committees work better?	AE, SCT	3	
6a	<i>What does "better" mean to you?</i>	AE, SCT	3	
6b	<i>What lever would be the best for this change? Who should be in charge?</i>	AE, SNA	1,2; 3	

Appendix E: Staff Interview Question Alignment and Coding Form

Key: AE (Alumni Engagement), SNA (Social Networks), DEI (Diversity, Equity & Inclusion), SCT (Socio-critical Theories)

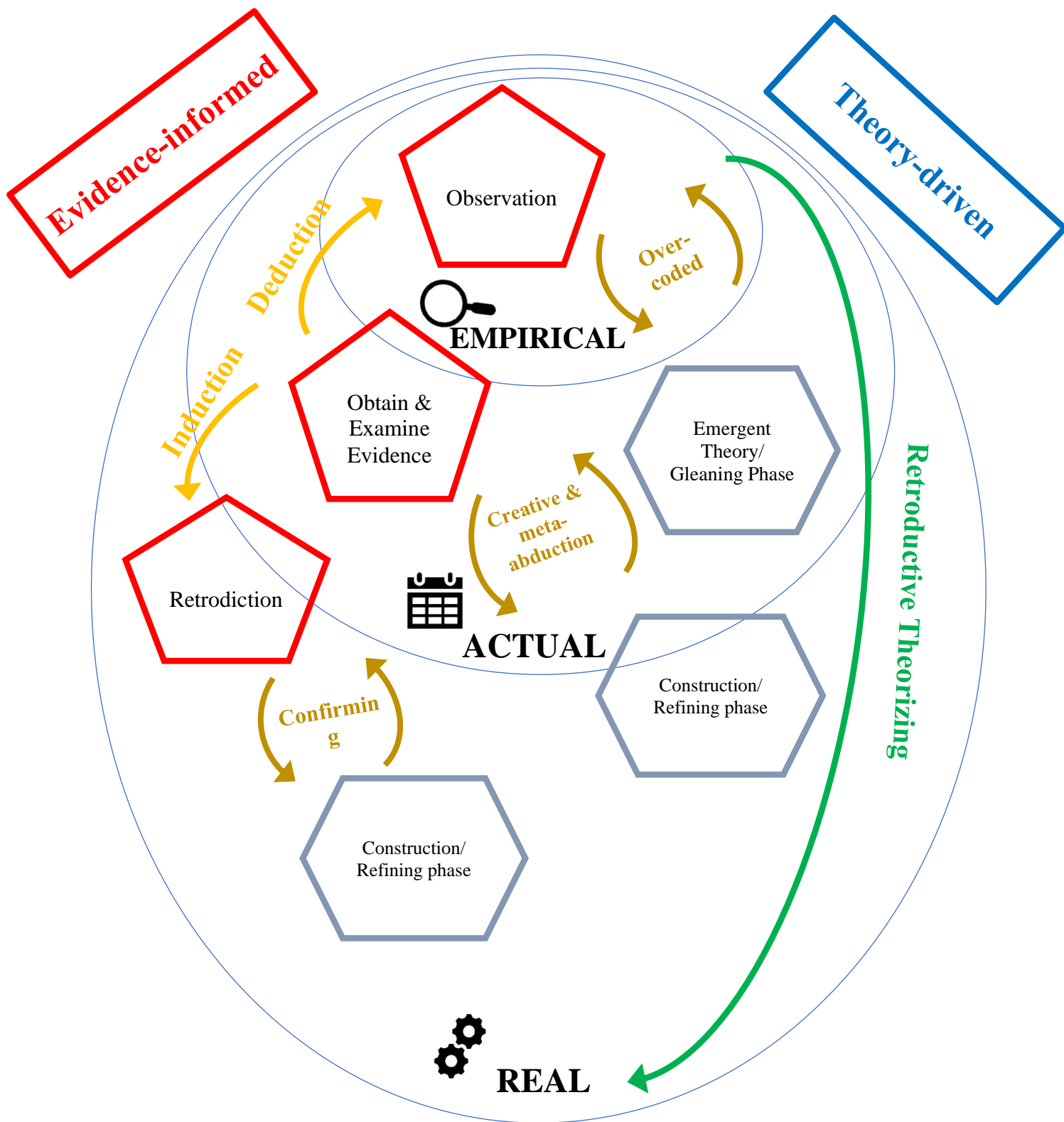
#	Semi-Structured Interview Questions with Sub-Questions	Frames/ Theories	RQs	In vivo codes - post interview
1	Describe your role/work with DAR/AF.	AE	2; 4	
1a	<i>How does this work converge or diverge...</i>		4	
1b	<i>... with your education history?</i>	AE, DEI	4	
1c	<i>... with your work history?</i>	AE, DEI	4	
1d	<i>How does your work with AF fit into where you see your career in the future?</i>	AE, SNA	2; 4	
2	Every job has an element of employee turnover. Can you help me understand what that is like for AF?	AE, DEI, SCT	2,3; 4	
3	What kind of employee is more likely to stay at AF longer?	AE, SNA, DEI	4	
4	Explain the interaction/shared responsibilities of AF and...			
4a	<i>...Alumni Relations?</i>	AE, SNA	2,3; 4	
4b	<i>...Major Gifts?</i>	AE, SNA, DEI	2,3; 4	
4c	<i>Are there any other departments that AF interfaces with regularly?</i>			
5	What do you see as the goal(s) of alumni reunion committees?	AE, SNA, DEI, SCT	1; 4	
5a	<i>To what extent do you think your committees are successful in reaching that goal?</i>	AE, SNA, DEI, SCT	1,2; 4	
5b	<i>Why or why not? What are some indicators?</i>	SNA, DEI		
6	What skill sets or traits are most needed to do your job well?	AE, DEI	4	
7	Can you explain the basic composition of an alumni reunion committee?	AE, SNA, DEI	1,3; 4	
7a	<i>What emphasis, if any, is placed on getting a variety of members?</i>	AE, SNA, DEI, SCT	1,3; 4	
7b	<i>... What does "variety" mean to you?</i>	SNA, DEI, SCT	4	
7c	<i>... Do you think that "diversity" and "variety" mean the same or different things in this context?</i>	DEI, SCT	4	
8	What sort of trainings or expectations are in place regarding DEI at AF/ _____?	DEI, SCT	4	
8a	<i>What are some of the takeaways of these trainings?</i>	DEI, SCT	4	
8b	<i>Do you feel adequately supported to enact/adhere/extend these practices?</i>	AE, DEI, SCT	4	
9	Describe the BEST part about working with alumni volunteer committees.	AE, SNA, DEI	3; 4	

#	Semi-Structured Interview Questions <i>with Sub-Questions</i>	Frames/ Theories	RQs	In vivo codes - <i>post interview</i>
10	Describe the most challenging part about working with alumni volunteer committees.	AE, SNA, DEI, SCT	3; 4	
11	What supports or changes are needed, in your opinion, to help make alumni volunteer committees work better?	AE, DEI	4	
11a	<i>What does "better" mean to you?</i>	AE	4	
11b	<i>What lever would be the best for this change? Who should be in charge?</i>	AE	4	
11c	<i>Do you feel like AF has the resources to enact these changes?</i>	AE	4	

Appendix F: Qualitative (Interview) Analysis Coding Scheme Detail

Method	CR Realm	Description	Potential Area for Use
(Grammatical) Attribute, Sub coding, Simultaneous	<i>Empirical</i>	Dedoose does these once you set them up: Tangible observable items Practical management of the codes Also does <i>magnitude</i> but need to detail...	Demographic information Related concepts Overlapping ideas
(Grammatical) Magnitude	<i>Empirical</i>	Adds a level of values, good for quantizing qualitative concepts	Strength of feelings Opinions on process/thing Participation levels - events
(Affective) Emotions EMO	Actual	Labels the emotions either mentioned by the interviewee or inferred by the interviewer about the interviewee's experience. An emotion is a feeling, the thoughts that come and go with it, and any propensity to act because of the emotion. "... reveals not just the inner workings of an individual, but...the underlying mood or tone of a society—its ethos (Saldaña, 2015, p. 160)."	Build first set from in vivo codes. Add as needed while reviewing
(Affective) Values VAB	Actual	Reflects amalgamation of the interviewee's: -Values: morals, norms, principles -Attitudes: how we think about ourselves or others, learned not innate -Beliefs: includes the above but adds knowledge, experiences, opinions... Good for critical ethnography	DEI "Real" CR realm themes
(Affective) Versus VS	Actual	Labels a dichotomous set of phenomena/systems/concepts/processes that are in conflict for the interviewee – whether they are aware of it or not Works with critical theory or ethnography	Tensions highlighted in informational interviews; Add as needed while reviewing
(Elemental) Concept CT	Actual/ Real	Gives meso or macro meaning via a symbolic word or phrase, something beyond the tangible (ex. "time" instead of "clock"). Works well with critical theory "Concepts become richer if you employ creative phrases rather than static nouns or simple gerunds (Saldaña, 2015, p. 155)."	Concepts driving main elements in lit review categories
(Thematic) Categorical CAT	Real	Provides categorical descriptive detail on the theme of the data. Uses a long phrase or sentence instead of a word or two	Lit review categories
(Exploratory) Eclectic EC	Real	Allows for collecting different but complementary coding methods concurrent analytical memo writing as ongoing synthesis	As needed, from in vivo codes

Appendix G: Data Analysis Plan – Hybrid/Combination Model



Appendix H: Data Analysis and Triangulation Roadmap

Critical Realism Realm	Evidence-informed	Theory-driven	Design Step(s)	QUANT Methods	Model(s) of Inference	Input ... (Output)	QUAL methods	Model(s) of Inference	Input ... (Output)
Empirical	Observation	Emergent Theory/Cleaning Phase	1	Data Exploration	Induction, Retrodeduction	Raw demographic, giving, and peer connection databases; Excel software ... (What areas need more rigorous stat analysis) (What needs additional conceptual support from literature review) (What data could inform which RQs)	Prep for Critical Ethnographic-informed process Informational Interviews and Conversations with Staff	Over-Coded Abduction, Retrodeduction	Memos and Recordings ... (What areas need more rigorous stat analysis) (What needs additional conceptual support from literature review) (What data could inform which RQs)
			1,2	Descriptive & Univariate Stats; Bar Plots, Scatterplots	Induction, Retrodeduction	Clean, tidy alumni databases; RStudio software ... (Select visuals for Data Collection section) (What additional technical skills are needed to conduct analyses)			Revisit Literature Research any missing or lacking areas <i>Meta abduction; Retrodeduction</i>
Actual	Obtain & Examine Evidence	Construction/ Refining Phase	1,2		Revisit Literature Research any missing or lacking areas <i>Retrodeduction</i>		Semi-Structured Alumni Interviews	Over-Coded & Meta Abduction, Retrodeduction	A priori codes from data exploration & staff conversations for question construction ... (Eclectic, in vivo codes) (What needs additional conceptual support from literature review)
			2	Basic Social Network Analysis (SNA1)	Induction, Retrodeduction	RStudio software, peer connections database ... (Edgewise csv → SNA2) (SNA1 stats & visuals) (Support for RQ1) (How SNA2 → RQ2)	Semi-Structured Staff Interviews	Over-Coded & Meta Abduction, Deduction	A priori codes from data exploration & alumni interviews for question construction ... (Eclectic, in vivo codes) (What needs additional conceptual support from literature review)
			2	Non-parametric (t-stats tests (Chi-square))	Induction, Deduction, Retrodeduction	RStudio software, alumni databases, RQ1 hypotheses ... (Support for RQ1)	First Cycle Coding for All Interviews	Creative Abduction, Deduction, Retrodeduction	Coding Scheme Table, Code Tree ... (Coded counts, Excerpts & Memos in Dedoose)
Real	Retrodeduction	Merge and Interpret by Research Question	2, 3a	Parametric (t-tests) & non-parametric (Chi square) tests	Induction, Deduction	RStudio software, alumni databases, RQ2 hypotheses ... (Support for RQ2)	Second Cycle Coding for All Interviews	Meta Abduction, Retrodeduction	Coding Scheme Table, Code Tree ... (Coded counts, Excerpts & Memos in Dedoose)
			3a, 3b	Critical Social Network Analysis (SNA2)**	Induction, Deduction, Under-coded Abduction, Retrodeduction	RStudio software, edgewise csv docs, alumni databases, Second Cycle Codes & Cross Tabs; RQ 2 hypotheses ... (Support for RQ2)	Mixed Methods Examine Cross Tabs in Dedoose for RQ3 & RQ4	Induction, Deduction, Under-coded abduction	Coded counts, descriptive doc, RQ3 & RQ4 hypotheses ... (Support for RQ3&RQ4)
			3b, 4						
			4						Findings

Appendix I: Quantitative Analysis - R Codebook for Main Dataset

codebook name	"alumni_all" variable title (if relevant)	description	var type	values
id	id	id with leading number and dash		unique identifiers
id2	id2	tidy id - no dashes		unique identifiers
tie_maker_cm		ID of CM that made connections on givecampus		unique identifiers
got_gc	got_gc	got identified as a connection on givecampus	dichotomous	0=no, 1=yes
made_gc	made_gc	CM that made connections on givecampus	dichotomous	0=no, 1=yes, blanks
pseudonym	pseudonym	interview pseudonym		names or blanks
cm_any	cm_any	served as a committee member any year (CFY included)	dichotomous	0=no, 1=yes
comm_23	comm_23	on a 2023 committee	dichotomous	0=no, 1=yes
comm_23_detail		status on a 2023 committee	categorical - nominal	chair, member, unknown, blank
fc	fc	former committee member (CFY-1)	dichotomous	0=no, 1=yes
interview_status_23	interview_status_23		categorical - nominal	Completed, no show, blank
constituency	constituency	alumni or board of trustees (but they are all also alumni in this dataset)	categorical - nominal	alumni, bot-current, bot-emeritus
grad_yr	grad_yr	graduation year	discrete	years
college_num_nozeros		residential colleges listed as categorical variables but with founding order numbers	categorical - nominal	see pseudonym tab
college_num	college_num			
gender	gender	gender... forced binary due to lack of more info. 6 listed as unknown were changed to blank	dichotomous	0=male, 1=female, blank
eth_dist_num	eth_dist_num	num categories of ethnicity groups as distinct categories	categorical - nominal	see pseudonym tab
eth_comb_num_nozeros				
eth_comb_num	eth_comb_num	num categories of ethnicity groups as combined categories	categorical - nominal	see pseudonym tab
tx		binary living in texas variable	dichotomous	0=no, 1=yes
state	state	cleaned up list of states	categorical - nominal	states
country	country	cleaned up list of countries	categorical - nominal	countries
vol_other	vol_other	other volunteering at "Barley"	dichotomous	0=no, 1=yes
part_act	part_act	rice active spouse	dichotomous	0=no, 1=yes, blank
part_alum	part_alum	rice alumni spouse	dichotomous	0=no, 1=yes, blank
part_id	part_id	spouse id		unique identifiers
part_id2	part_id2	spouse id2 - tidy, no dashes		unique identifiers
part_constit	part_constit	spouse constituency	categorical - nominal	many
part_grad_yr	part_grad_yr	Spouse Year		
part_college_num	part_college_num	Spouse College	categorical - nominal	
part_gender	part_gender	Spouse Gender	categorical - nominal	0=male, 1=female, 99=unknown
b_soc	b_soc	baker society	dichotomous	0=no, 1=yes
comp_m	comp_m	company matching	dichotomous	0=no, 1=yes
part_m	part_m	spouse matching	dichotomous	0=no, 1=yes
cur_donor	cur_donor	current donor	dichotomous	0=no, 1=yes
major_1	major_1	1st major listed	categorical - nominal	
school	school	school of the first major listed	categorical - nominal	
major_mult	major_mult	more than one major listed	dichotomous	0=no, 1=yes
consec_yrs	consec_yrs	consecutive yrs donated to "Barley"	continuous	
bar_life_pl	bar_life_pl	"Barley" Lifetime Pledge Balance	continuous	
af_life_pl	af_life_pl	AF Lifetime Pledge Balance	continuous	
des_life_pl	des_life_pl	Designated Lifetime Pledge Balance	continuous	
af_gs	af_gs	AF Giving Society CFY-1 (Most Recent)	categorical - ordinal	see pseudonym tab 1 to 5 one is highest group, blanks
af_life_cash	af_life_cash	AF Lifetime Cash	continuous	
af_last_gift	af_last_gift	AF Last Gift Amount	continuous	
des_life_cash	des_life_cash	"Barley" DESIG Lifetime Cash	continuous	
des_last_gift	des_last_gift	Last Designated Gift Amount	continuous	
comb_life_cash		Total lifetime cash from af and desig	continuous	
af_seg	af_seg	AF Household Segment	categorical - ordinal	1to5, see pseudonyms
us_seg	us_seg	US News CFY-1 Giving Segment	categorical - ordinal	1to4, see pseudonyms
aflg	aflg	AFLG	dichotomous	0=no, 1=yes
cap	cap	Capacity	categorical - ordinal	1to11 low to high
bar_level	bar_level	"Barley" Inclination Level		
five_level	five_level	Five Year Inclination Level		
bar_loyal_ind	bar_loyal_ind	"Barley" Loyalty Index		
af_ind	af_ind	"Barley" AF Index		
mg_ind	mg_ind	"Barley" MG Index		
vol_value	vol_value	"Barley" Volunteer Value		
sys_id	sys_id	Constituent System ID		
total_gift_23		Final total of 2023 gift	continuous	
gave_23		binary indicator for donating in 2023	dichotomous	0=no, 1=yes

Appendix J: Qualitative Analysis – Dedoose Code Tree

id	parent id	depth	title	description	weighted	weight min	weight max	weight default
1		0	E- EMBARRASSED	EMO	FALSE			
2		0	E- FRUSTRATED	EMO	FALSE			
3		0	E- CONFUSED	EMO	FALSE			
4		0	E- NOSTALGIC	EMO	FALSE			
5		0	E- CONTENT	EMO	FALSE			
6		0	E- HOPEFUL	EMO	FALSE			
7		0	AR VS AF	VS	FALSE			
8		0	OLD VS NEW	VS	FALSE			
9		0	GIVING VS PARTICIPATION	VS	FALSE			
10		0	A-MAG: DIVERSITY	A-MAG: lower means less aware	TRUE	1	5	1
11		0	V-MAG: EQUITY	V-MAG: lower means less concerned	TRUE	1	5	1
12		0	B-MAG: INCLUSION	B-MAG: lower means less belief	TRUE	1	5	1
13		0	C: 'GIVING BACK'	C - giving back is a big motivation for participation on the committee	FALSE			
14		0	C: 'PAY IT FORWARD'	C - paying it forward is a big motivation for participation on the committee	FALSE			
15		0	C: 'IN THE LOOP'	C - staying in the loop with campus events/happenings is a big motivation for participation on the committee	FALSE			
16		0	C: 'I CAN BUY MYSELF FLOWERS'	C - feeling important is a big motivation for participation on the committee	FALSE			
17		0	CAT: " TO THE MOON"	CAT: donating as engagement	FALSE			
18		0	CAT: "TO... BE TRUE"	CAT: other modes/volunteering as engagement	FALSE			
19		0	CAT: "I KNOW THEM BUT I DON'T KNOW KNOW THEM"	CAT: weak social ties... "LinkedIn Friends"	FALSE			
20		0	CAT: "YOU CAN'T SIT WITH US!"	CAT: in-group/out-group tendencies - homophily and propinquity	FALSE			
21		0	CAT: "IT WAS JUST A DIFFERENT TIME"	CAT: Racism/homophobia/sexism... was just how it was back then/now. You can't really do anything about it yourself	FALSE			
22		0	CAT: "THE REVOLUTION WILL BE TELEVISED"	CAT: Inclusion and equity matter and we should work to make things better	FALSE			
added while coding								
		0	E-REGRETFUL	EMO	FALSE			
		0	lag time	time between graduation and getting involved with AF or alumni in general	FALSE			
		0	C-SECOND CHANCES	C - feeling a sense of needing closure or another chance to engage is a big motivation for committee participation	FALSE			
		0	E- SELF-CONSCIOUS	Mentions comparison among classmates as a negative	FALSE			
		0	givecampus	1 dont like, 3 - mid, see the point, 5 - love it	TRUE	1	5	1
		0	C- TIME	having time to volunteer, 1 - not enough, 5- too much	TRUE	1	5	1
		0	staff turnover	notices staff turnover	FALSE			
		0	C- SAFETY	prefers to stay in smaller, dense networks. Not a lot of different groups	FALSE			
		0	C- EFFECTANCE	a "broker" sitting in a structural hole, many different friend groups	FALSE			
		0	C- STATUS	social climber	FALSE			

Appendix K: Select Critical Sociocultural Theory List

- (1) Critical Race Theory (CRT)
- (2) Intersectionality
- (3) Situated Feminist Theory
- (4) Disability Theory
- (5) Queer Theory
- (6) First Generation College Students
- (7) Immigrant and Mixed Status Families
- (8) Low-SES Matriculating Students and their Families