ABSTRACT

Title of Document:	IDENTITY AND PHILANTHROPY: DESIGNING A SURVEY INSTRUMENT TO OPERATIONALIZE LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND QUEER ALUMNI GIVING.
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This study investigated philanthropic giving to higher education among lesbian, gay, bisexual, transgender, and queer (LGBTQ) alumni. The primary purpose was to create a multi-institutional survey instrument that operationalizes philanthropic involvement and motivation among LGBTQ alumni. Additional objectives included creating factors and items specific to philanthropic involvement and motivations of LGBTQ alumni, and ensuring validity and reliability of this instrument.

I used a variety of analyses to create the instrument and to ensure validity and reliability of constructs within the survey. I followed DeVellis' (2003) model for scale development, utilizing his eight steps to create and validate the survey for LGBTQ alumni giving. Before administration, expert reviewers checked for both content and construct validity, providing feedback regarding both the overall functioning of the survey and specific critiques within items and factors.

Surveying LGBTQ alumni from one institution, my sample yield was 21.89% (197 of approximately 900 potential participants). Following data collection, I conducted three different analyses to create a valid, reliable, and more parsimonious survey instrument: social desirability, construct validity, and principal components analysis (PCA).

The final instrument yielded five empirically and conceptually valid factors across 22 items. Results from all analyses and validations led to the conclusion that the final instrument and accompanying factors are useable in measuring LGBTQ alumni giving.

IDENTITY AND PHILANTHROPY: DESIGNING A SURVEY INSTRUMENT TO
OPERATIONALIZE LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND
QUEER ALUMNI GIVING

By

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Dedication

This work is dedicated to my parents, Paul and Jenny Garvey. Because of their unconditional love, support, and guidance, I am *where* I am and *who* I am today. They have both instilled in me the importance of giving back and making the world a better place. For this and many reasons more, I am eternally grateful.

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Without question, this work is a product of numerous voices and could not have been accomplished without the contributions of many. First and foremost, I thank my advisor, mentor, dissertation chair, and friend Noah Drezner. From a scholarly perspective, Noah has been formative in allowing me to envision a dissertation in philanthropic studies. He provided me with the opportunity to work directly with him on creating a study examining LGBTQ alumni, and I hope to continue this research with him for many years. Most centrally, though, he has been the strongest cheerleader and support throughout my academic career, and I owe so many of my career successes and opportunities to Noah. He is truly an exceptional faculty member and person.

Thank you also to my dissertation committee members. I am proud and honored to be among the many graduate students and professionals who have been mentored by Sue Rankin. She has willingly and enthusiastically supported me on my research pursuits and has been a shining model for excellence in bridging empirical studies with critical change and advocacy for LGBTQ people. She has laid the foundation for LGBTQ research in higher education, and I am humbly honored to continue her transformational work with my own line of research. Julie Park provided me with the opportunity to serve as her graduate teaching fellow for a master's thesis proposal writing class. Through this collaboration, I learned the importance of making research accessible, logical, and impactful. I am thankful for this experience and for her guidance throughout my dissertation. Bob Croninger and Matt Miller

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CHAPTER ONE: INTRODUCTION

In recent years, as personal wealth disappeared from college and university
portfolios, institutional endowments succumbed to the declining markets, and in
many states, support of education retreated as tax revenues fell. Today, personal
wealth has not fully returned, institutional endowments, while growing, have reached
their highs, and states' cuts to higher education are still annual realities. According to
the annual National Association of College and University Business Officers
(NACUBO, 2010, 2011) Endowment Study, the average endowment in fiscal year
2008 declined 3%. In fiscal year 2009, returns fell an additional 18.7%. The 2010 and
2011 study reported a marked improvement in past years, with average endowment
return at 11.9% in 2010 and 19.2% in 2011. However, returns were still below the
average inflation-adjusted spending rates of educational institutions, meaning that the
economic recession is still damaging endowments (NACUBO, 2012). The conditions
of the economic market have led to tuition increases, budget cuts, hiring freezes,
furloughs, and other substantial reductions in expenditures at many institutions,
regardless of being a public or private institution.

Philanthropy, once seen as means to a margin of excellence in American
higher education, is now central to the essential function of most colleges and
universities (Council for Financial Aid to Education [CFAE], 1973; Drezner, 2010;
Drezner, 2011; Hall, 1992; Leslie & Ramey, 1988; Walton, Gasman, Huehls, Wells,
& Drezner, 2008). Total voluntary contributions to colleges and universities fell
11.9% from 2008 to 2009, from $31.60 billion to $27.85 billion (Council for Aid to
Education [CAE], 2010). The 2009 decline is the steepest decline ever recorded for

giving to higher education (CAE, 2010). Ann E. Kaplan, director of the Voluntary Support of Education survey conducted by CAE, discussed that "2009 was a difficult year for colleges and universities and, indeed, also for the individuals and institutions that care about them" (CAE, 2010, p. 2). In 2010, charitable contributions to higher education increased a slight 0.5%, reaching $28 billion (CAE, 2011). Adjusting for inflation, however, giving declined 0.6%. As it stands, support to colleges and universities was eight percent lower in 2010 than it was in 2006. Based on the past two years, giving has slightly improved. However, a full recovery of charitable giving to higher education has not yet occurred. "We're still not out of the woods. Charitable contributions to education are recovering very slowly," (CAE, 2011, p. 3) remarked Kaplan on the 2010 economic findings.

College and university alumni contribute the largest percent of voluntary support to higher education, constituting 25.4% of total financial giving to higher education in 2010 (CAE, 2011). Much like other aspects of giving, alumni have voluntarily given less in recent years. Financial support from alumni declined from $8.7 billion to $7.10 billion from 2008 to 2010, an 18% decrease (CAE, 2010, 2011). Given the current financial landscape, administrators must garner alumni support more than ever to meet financial needs. As alumni contribute over one-fourth of total charitable giving, colleges and universities require new and innovative strategies for alumni engagement and giving.

Traditionally, development officers have been responsible for organizing campaigns for soliciting donations from their alumni. Officers usually base these efforts, however, on a fundamental understanding of donor behavior through the

experiences of traditional alumni with dominant social identities (e.g., White, middle class, heterosexual men; Drezner, 2011). Higher education advancement officers have had difficulty cultivating alumni donors from historically disenfranchised and marginalized groups (Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999). With declining support from alumni, advancement officers are developing strategies for recruiting and retaining alumni donors who they had previously ignored. However, the absence of a solid theoretical foundation for giving among diverse and historically underrepresented communities leaves practitioners vulnerable to ineffective practices. Newman (2002) discussed that, "An organization must create a development plan that is appropriate to the specific groups it wishes to approach…organizations must be willing to let go of standard operating practices and procedures and find new and exciting strategies" (p. 14).

Often, institutional advancement staff have had difficulty in creating meaningful connections and trust because these alumni have previously been ignored on their campuses (Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999). Over the past decade, researchers have begun exploring giving among diverse populations to better understand how to work successfully with these groups. Most studies have focused on the experiences of racial and ethnic minority groups (e.g., Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999). Although researchers have begun to gain an understanding of these racial and ethnic minority communities in regards to their philanthropy, groups with other marginalized identities have not received adequate attention.

Chapter One frames the importance of examining philanthropy among lesbian, gay, bisexual, transgender, and queer (LGBTQ) higher education alumni. Beginning the conversation with the relevance of fundraising within United States colleges and universities, I focused specifically on alumni as a viable source of contributions to higher education. Following this broader conversation, I examined giving among diverse communities of alumni as it relates to their experiences in higher education, noting the importance of creating and testing new strategies to recruit and retain minority alumni.

In the following paragraphs I define the problem with which the study is concerned, and outline the purpose and significance of the study. The chapter closes with my epistemology and positionality as a researcher and gay/queer alumnus, key terms and definitions, and an outline of the remaining chapters of the dissertation.

Purpose of Study

Scholarship and practice involving LGBTQ alumni is scarce. In order to cultivate new and active alumni, it is necessary to be cognizant of the behaviors and motivations that encourage giving (Gasman, 2008). Because many practitioners are unfamiliar with the patterns and traditions of LGBTQ giving, "serious attempts should be made by fundraisers to learn what differences exist in philanthropy and fundraising among the rich diversity of populations" (Wagner & Ryan, 2004, p. 68).

Research suggests that LGBTQ individuals are strong prospects for substantial philanthropic giving due to their discretionary income levels (DeLozier & Rodrigue, 1996). In her research on sexuality and gender issues in higher education, Sanlo (2002) discussed that most LGBTQ alumni had negative experiences during

their college experiences, thus decreasing their likelihood of giving to their alma mater in any significant way. Although her assumption likely has merit, there is little empirical research that validates this claim. Fundraising professionals need to have a greater understanding of LGBTQ philanthropy in order to develop more meaningful interactions with LGBTQ alumni. Through developing these relationships, practitioners will discover whether and how LGBTQ alumni differ in motivations for giving from those groups already known to the development profession. Although some traditional methods for fundraising professionals may yield the same results with LGBTQ alumni as with members of other marginalized groups, it is possible and likely that there will be distinct differences among LGBTQ communities. Although the phenomenon of philanthropy for LGBTQ alumni has begun to be explored (Drezner & Garvey, 2012; Garvey & Drezner, 2012), no research has approached the topic at a national level.

A solid foundation of empirically-proven practices and strategies for recruiting and retaining a vibrant LGBTQ alumni community will benefit staff and institutions, as well as advance the scholarship of fundraising as a whole. This study investigated the culture in LGBTQ communities of philanthropic participation, specifically to higher education and how universities are engaging with these alumni. There was one primary purpose in this study: to create a valid and reliable multi-institutional survey instrument that operationalizes philanthropic involvement and motivation among LGBTQ alumni. Additional objectives included creating factors and items specific to philanthropic involvement and motivations of LGBTQ alumni.

Significance of Study

The creation of a survey instrument that operationalizes philanthropic involvement and motivation among LGBTQ alumni is useful for numerous people and communities, namely researchers, administrators, and alumni themselves. Not only is the instrument creation beneficial, but the utilization of the instrument is useful as well. Sanlo (2002) wrote:

> Research in LGBT issues in education and higher education must be supported and valued by institutions and committees, primarily because, in the big picture of research, there is so little on LGBT issues in education and especially in higher education. (p. 176)

This study begins to address the scarcity of research for sexual and gender minority individuals which Sanlo referenced, with particular attention to alumni.

Researchers, specifically within higher education, student affairs, and philanthropic studies, can benefit from the creation of this instrument in several ways. First, the data from this survey instrument will create a national database of LGBTQ individuals. This database can be the foundation for research collaborations and novel studies about LGBTQ people and communities and their experiences of giving and fundraising. The instrument specifically benefits researchers interested in the college and alumni experience, but the factors and variables from this instrument can enable scholars to answer countless higher education and societal questions about LGBTQ individuals regarding the undergraduate experience and its relationship to fundraising. It enhances the body of research currently developing on the philanthropic activity of

diverse communities, filling the void of literature on the philanthropic activity of LGBTQ alumni.

Fundraising is often "thinly informed by research" (Brittingham & Pezzulo, 1990, p. 1), and most literature within higher education philanthropy is atheoretical (e.g., Burnett, 2002; Ciconte & Jacobs, 2001; Connors, 2001; Dove, 2001; Flanagan, 1999; Greenfield, 2001; Worth, 2002). Drezner (2011, 2013) discussed that though existing fundraising literature offers some guidance for practitioners, it is difficult to broaden implications because the research is not grounded in any theoretical or conceptual framework. As previously discussed, fundraising scholars have just begun empirically exploring diverse communities and their experiences of philanthropy in higher education. The W. K. Kellogg Foundation (2012) found that "…identity-based philanthropy is a growing movement…where 'community' is defined not by geography but by race, ethnicity, gender, or sexual orientation" (p. 2).

With the burgeoning research focus on identity-based philanthropy, this instrument is relevant to both LGBTQ populations and philanthropy scholarship in general. The instrument has yielded factors new to the field of philanthropy and diverse communities that have operationalized giving and influences on philanthropic behaviors. Through combining these factors with other measures (e.g., demographics, undergraduate student experiences, alumni experiences, giving behaviors), scholars and practitioners can develop a greater understanding of LGBTQ alumni.

Birkholz (2008) discussed that "The new tools of analytics, when combined with centuries of insights about private giving support and volunteering, open new possibilities to build upon the current practices of fundraising and to further the

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important work of philanthropy" (p. xv). Using data to better understand alumni enables practitioners to make solicitations more personal. However, misuse of data can severely limit effective outreach of advancement staff. Drezner (2011) discussed that oftentimes, advancement staff do not take into account cultural differences (e.g., gender and sexual identity, race/ethnicity) when utilizing data in fundraising and alumni relations. From this study, other philanthropy scholars can validate the developed factors to other marginalized alumni populations (e.g., alumni of color, alumni with disabilities, international alumni, religious minority alumni). Across all populations, these factors have the capability of transforming philanthropy and giving scholarship, shifting cultural sensitivities to incorporate potential donors' identities in prospect research, solicitation, and all other aspects of fundraising.

Further, this instrument has tested and validated innovative and critical ways of measuring demographic characteristics (e.g., sexual identity, gender identity, gender expression) of LGBTQ people and communities (Rankin, Blumenfeld, Weber, & Frazer, 2010). Having a survey instrument entirely devoted to LGBTQ people allows for creative and fluid ways of quantifying sexual and gender identities and gender expression beyond binary choices of heterosexual/homosexual, man/woman, and masculine/feminine. Future researchers can benefit from the implications and utility of these validated demographic measurements.

In utilizing this instrument, administrators may better understand the characteristics and experiences that motivate LGBTQ alumni to give to their alma maters, as well as college or university environmental influences that relate to philanthropic behavior in LGBTQ communities. Within this instrument, I collected

information on undergraduate student experiences, including factors for satisfaction, perception of campus climate, and harassment, and measures for student involvements, levels of outness, and use of LGBTQ resources, among others. Thus, this information holds the potential to create studies regarding the LGBTQ undergraduate experience that may aid in creating better experiences for LGBTQ students while they are in school.

Alumni relations officers may attract a more vibrant LGBTQ alumni community that can provide useful services to current students and other constituents, such as mentoring, consulting, hiring, and recruitment. Additionally, administrators can develop engagement and solicitation strategies that better resonate in LGBTQ communities, recognizing the unique factors that influence LGBTQ individuals. Such approaches might include developing alumni affinity groups or organizing affinity-based campus reunions (Masterson, 2009; Sanlo, 2002). Outside of philanthropy professionals, other student affairs practitioners can understand how to foster philanthropic giving and sense of community among current college students to cultivate giving-oriented alumni.

Lastly, and most importantly, an instrument that operationalizes LGBTQ philanthropic giving in higher education gives voice and recognition to an underrepresented population (Gasman & Bowman, 2012). Being a critical quantitative scholar involves asking questions that better describe the experiences of those who have not been adequately represented (Stage, 2007). Many marginalized alumni often feel disengaged from their alma maters due to prior experiences during their college years (Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith,

Shue, Vest, & Villarreal, 1999). Having an instrument validates their experiences and voices as LGBTQ individuals, leading to a more healthy and productive relationship with their alma maters. Through this instrument, institutions can demonstrate interest in recruiting and cultivating LGBTQ alumni as important facets of the university culture.

Epistemology

This study was guided by my critical and queer epistemology. In the following paragraphs, I explain how my critical worldview has informed my quantitative research, specifically regarding my motivations and intended outcomes for scholarly inquiry. Additionally, I describe how the tenets of queer theory guided my understanding of this research.

Critical Epistemology

Kincheloe and McLaren (2005) discussed that defining critical theory and research is decidedly difficult because critical theories are constantly changing and evolving. Nonetheless, there are specific commonalities between definitions of critical theory that provide a shared understanding. A critical theorist uses scholarship as a form of social or cultural criticism and accepts certain assumptions. First, all thought is mediated by social and historical power relations. Values and facts of these relations are inextricably linked together, and the relationship between concept and object is never stable and often mediated by social relations. Additionally, critical theorists view language as central to the formation of conscious and unconscious awareness. Certain societal groups hold privilege over others and oppression is maintained if subordinates accept their status as natural. Lastly, oppression has many

faces and all are interconnected, and mainstream research generally reproduces systems of oppression (Kincheloe & McLaren, 2005).

Often in higher education and student affairs research, scholars aim to bring attention to marginalized individuals, yet do not effectively examine systems of oppression through critical questions. In discussing racism and oppression in research, Harper (2012) wrote:

> I honestly believe that the overwhelming majority of higher education scholars…are authentically interested in narrowing racial gaps, diversifying college and university campuses, and doing research that informs the creation of environments that no longer marginalize persons of color. I am afraid, however, that these aims will not be achieved if we continue to study race without critically examining racism. (p. 25)

Bensimon and Bishop (2012) further substantiated this claim by noting that researchers seldom ask race-related questions critically, thus ignoring the systematic practices, traditions, values, and structures that perpetuate racial inequality in higher education. I purport that in the same vein, few scholars have asked LGBTQ-related questions critically. Renn (2010) wrote that "…colleges and universities have evolved to tolerate the generation of queer theory from within but have stalwartly resisted the queering of higher education itself" (p. 132). Consequently, systems of oppression that affect these communities are largely unexplored and/or misunderstood in current higher education scholarship.

A critical scholar, on the other hand, "calls into question models, assumptions, and measures traditionally made under the positivist perspective" (Stage, 2007, p. 9).

Tierney and Rhoads (1993) discussed that a critical theorist seeks to understand the experiences of groups or individuals with a consideration for cultural constraints and societal prescriptions, recognizing power and cultural differences as influential and evolving. Additionally, critical scholars attempt to extend theory into action to give voice to marginalized people and bring systemic change to oppressed groups.

Recently, scholars have demonstrated how critical quantitative research can challenge existing policies, theories, and measures and reexamine traditional questions for nontraditional populations (e.g., Baez, 2007; Carter & Hurtado, 2007; Perna, 2007). Stage (2007) aptly wrote that "as quantitative researchers we are uniquely able to find those contradictions and negative assumptions that exist in quantitative research frames" (p. 6). Whereas quantitative research was historically framed as utilizing post-positivist paradigms, quantitative criticalists examine phenomena with objectivity while also advocating for social justice and the reduction of oppression (Carter & Hurtado, 2007).

One major distinction among quantitative criticalists is the focus and intention of the research questions, not necessarily with methods used to answer them. "If we focus solely on research methods…we see little difference between the positivistic approach and the critical quantitative approach. However…the most interesting part, [*sic*] rests with the motivation for the research" (Stage, 2007, p. 9). As such, critical quantitative scholars have unique opportunities to question and modify pre-existing quantitative models, measures, and analytic methods to better represented marginalized groups and individuals.

Throughout my dissertation, I highlight how my critical epistemology guides my motivation for conducting research. Especially in framing my study, I describe how my intention for giving voice to and bringing light to LGBTQ alumni was my main motivation for this research.

Queer Theory

Similar to critical perspectives in research, queer theory is difficult to succinctly capture in one definition. Indeed, Sullivan (2003) asserted that "…attempting to define what queer is…would be a decidedly un-queer thing to do" (p. 43). Queer has neither a fundamental logic, nor a shared set of characteristics (Jagose, 1996). Consequently, queer theory consists of vague and indefinable practices and positions to challenge normative knowledge and identities (Sullivan, 2003).

Tierney and Dilley (1998) wrote that queer theory challenges assumptions of gender and sexual normalcy and deviancy that have historically privileged some and silenced others. Many scholars who use queer theory in their research do so by dismantling identity binaries. Queer theory suspends binary classifications of heterosexual/homosexual, masculine/feminine, and man/woman to encompass a more social, fluid, and multiple understanding of identity (Britzman, 1995). "If you look closer, most binaries look suspiciously like covert extensions of the series "good/bad," in which one term is always the defining one while the other is derivative" (Wilchins, 2004, p. 40).

Sharing qualities with critical epistemologies, queer theory also seeks to dismantle structural forces of oppression. Queer theorists seek to disrupt normalized

discourses, giving voice to marginalized individuals. As the lived experiences of LGBTQ people include heterosexism, homophobia, biphobia, cisgenderism, transphobia, and other forms of oppression, a critical queer perspective is an appropriate frame for a closer examination of LGBTQ alumni.

Though queer theory derived originally from colleges and universities, few scholars in postsecondary disciplines have utilized queer tenets in research. Recently, scholars have called for the increased use of queer theory as a lens to examine higher education and student affairs issues and individuals. Increasing the use of queer theory enhances the understanding of LGBTQ issues in higher education, perhaps even beyond the explicit study of LGBTQ topics and individuals. "The juxtaposition of queer theory with nonqueer higher education contexts casts new light on existing questions and problems, and indeed makes scholars question what is or might be a question to investigate" (Renn, 2010, p. 137). It is in this spirit that I incorporated queer theory into my examination of philanthropy and fundraising, bringing a critical understanding to a nonqueer higher education context.

Further, utilizing critical queer ideals in quantitative research adds to the depth of higher education and philanthropy scholarship, as well as advances the methods and ideals for LGBTQ research. In her seminal article examining queer theory uses in higher education and student affairs research, Renn (2010) wrote, "I call for increased use of queer theory and new research approaches at the same time that I call for continuation of large-scale studies" (p. 138). Synthesizing the need for critical quantitative research and large-scale queer studies, I used both bodies of theory to

produce items and latent factors that, when utilized, have the potential to create power-shifting implications for practice and research.

Researcher's Positionality

As a gay/queer alumnus, my sexual identity has had a profound influence on my career as a student and alumnus. Additionally, my understanding of the fluidity of gender expression and identity has greatly impacted my experiences and perceptions. Carter and Hurtado (2007) discussed that "In many ways, we study the underrepresented populations in higher education because of our own unique experiences in higher education" (p. 26). Such an assertion captures how my journey through higher education has sparked my interest in examining the experiences of LGBTQ alumni. In the following paragraphs, I highlight pivotal experiences during my time in higher education with the intent on connecting how these moments have impacted the ways in which I view my alma maters and support for these institutions, and consequently how I structured this study.

Like many LGBTQ college students, I questioned my identity during college. Unfortunately, I did not have many opportunities to explore such issues in curricular or co-curricular engagements. I never knew an LGBTQ faculty or staff person during my undergraduate tenure, nor did instructors attempt to incorporate or integrate my identity exploration into the curriculum. Although there were student services aimed at the LGBTQ student population, I did not actively identify with or relate to such opportunities. I felt my identity being lost and forgotten by faculty, staff, and me. As such, although I was longing for guidance in aligning my college experience with my

gay/queer identity, I did not avail myself of the opportunities, nor did faculty or staff facilitate my exploration of such opportunities.

To further compound the concern, I have experienced several unfortunate events that have discouraged me from relating my gay/queer identity to my learning experiences. I received my master's degree in School Psychology, and part of my degree requirement was to complete a concentration in a chosen discipline. I had an interest in exploring sexuality and gender scholarship for my concentration. Upon telling my advisor of my interests, she indirectly called me perverted and unrealistic. She did not see this research as authentic, commenting that my interests were self-centered and inappropriate. Further, she attested that such interests would limit future employment opportunities because primary and secondary schools would be less likely to employ an educator with a concentration in gender and sexuality. Such words still resonate with me, more than four years after this occurrence.

Later, during my master's program, I was assigned to shadow a professional for my practicum experience. During my second year, I worked in a local elementary school under the supervision of the school's psychologist. Feeling secure with myself, I came out to my supervisor and revealed my gay/queer identity. Through my disclosure, I hoped to receive advice and guidance from my supervisor as it related to my professional aspirations. Disappointingly, my supervisor discouraged me from telling other people in the school, noting that although he supported my decision and lifestyle, it was not appropriate when working with children. This experience was so traumatic and meaningful to me that I eventually decided to seek different career opportunities and new educational experiences. Combined, these two moments that

had a profound impact on my experience in my master's program created a great discord and disconnection with my graduate alma mater. To date, I feel much less connected to the spirit and mission of this institution, and have little motivation to contribute time or financial support to any aspect of this university.

During my doctoral course work, I took a course intended to teach educators how to facilitate dialogues across social identities. I was eager to engage in critical and self-reflective conversations about multiple and intersecting identities, but upon receiving the syllabus I noticed that sexual and gender minority issues were not included. I asked the instructor if he intended on incorporating LGBTQ topics, but he dismissed my concern, saying that such topics were not relevant. Recognizing his inflexibility, I consciously decided to incorporate my own experiences to encourage LGBTQ conversations. During one class, we were discussing masculinity and femininity and I commented that I understand these concepts largely through my gay/queer identity. Without hesitation or shame, the instructor explicitly asked if sexual penetration influenced my masculinity and femininity. I felt targeted and that he had essentialized my gay/queer identity to only sexual activity. Furthermore, I felt his inflexibility with gender expression and identity in that he rigidly defined romanticism as between a man and woman and sexual activity as an exchange between dominator and dominated. I disengaged from the conversation, realizing that his intolerance was too destructive to continue. The direct and overt discrimination I experienced has strengthened my resolve to volunteer my time in serving LGBTQ students at my current institution.

Recently, my undergraduate institution contacted me through their annual

campaign phone drive. Speaking with the student volunteer, I asked how I could

direct my gift towards LGBTQ-related initiatives. Not having an answer to my query,

she contacted her supervisor who said that there were no ways in which my donation

could go towards LGBTQ individuals. Disappointed, I asked for their annual

campaign director to contact me to discuss this issue further. Speaking with the

annual campaign director, she noted that there were currently no institution-led

initiatives for LGBTQ students, faculty, or staff. I commented that I was surprised

and frustrated with the lack of university support, and asked how I could become

involved as an alumnus to impact how the institution serves LGBTQ communities.

We are in the primary phases of discussing the creation of an LGBTQ alumni affinity

group, and I am eager to see how a collective of university staff and LGBTQ alumni

may improve the services and climate for current LGBTQ people.

As evidenced by my stories, my identity has impacted much of my

undergraduate and graduate experiences and has shaped how I relate to and support

my alma maters as an alumnus. Having my alma maters ignore and provide relatively

few resources to LGBTQ communities decreases my desire to connect with and

support these institutions. Conversely, seeing my prior institutions embrace LGBTQ-

related initiatives and individuals strengthens my faith in these universities. My

experiences as a student and alumnus likely resonate with many LGBTQ alumni

whose identities greatly impact their experiences and likelihood to support their alma

mater. As a researcher and practitioner working in the higher education arena, I

believe that engaging in LGBTQ alumni research and scholarship is a critical step to

reconnecting LGBTQ individuals to their alma maters in order to improve relationships and potentially impact philanthropic giving.

My experiences during my undergraduate and graduate years have also directly impacted my approach to the creation of this survey instrument. Particularly in conceptualizing a model of LGBTQ alumni giving, my student and alumni experiences influenced which variables to include. As a direct result of my experiences, I recognized the importance of specific undergraduate student experiences variables (e.g., level of outness as student, academic-related and co-curricular activities, LGBTQ faculty/staff known, perception of campus climate, LGBTQ-related participation, harassment as student), institution variables (e.g., LGBTQ resources, harassment as alumnus/na, LGBTQ affinity group), and philanthropy and giving variables (e.g., motivation for college/university giving, financial giving) into my model.

Key Terms and Definitions

Philanthropy and Giving

I recently served as a teaching assistant in a philanthropy and fundraising class with Dr. Noah Drezner. During one of the first class meetings, Dr. Drezner asked students to define philanthropy. Not surprisingly, among 25 class members, there were 25 different answers.

In this study, I took a broad approach to understanding philanthropy and considered it as giving of time (volunteering), treasure (financial giving), and talents (donating services; LeMay, 2009). Taking a large lens to philanthropy and giving is especially important in minority communities, where there might be culturally

different understandings of philanthropy (Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999).

Development, Alumni Relations, and Advancement

Traditionally, higher education development officers were seen as "fundraisers" and alumni relations staff were viewed as "friend-raisers." In other words, development staff largely raised money and were driven by maximizing financial contributions to colleges and universities, while alumni relations officers were responsible for creating, maintaining, and growing long-lasting relationships with alumni and their alma maters.

Recently, colleges and universities have adapted an advancement model towards giving, recognizing the shared and reciprocal relationship between the mission of development and alumni relations staff. As such, I frequently referred to staff in this field of higher education as advancement personnel. In such cases where there were divided offices in specific institutions or referenced in research studies, I differentiated by using development and alumni relations staff (Feudo, 2010).

Sexual Identity

Sexual identity is sometimes referred to as affection, orientation, or sexuality (UC Berkeley Gender Equity Resource Center, 2012). Common sexual identities include gay, lesbian, bisexual, queer, same gender loving, woman loving woman, man loving man, and pansexual, among many others. In recognizing the fluid and non-binary nature of sexual identity, I gave importance to the entire spectrum of sexual identities in this survey instrument.

Gender Identity

Gender identity refers to a person's inner sense of being a man, woman, both, or neither. The internal identity may or may not be expressed outwardly, and may or may not correspond to one's physical characteristics (UC Berkeley Gender Equity Resource Center, 2012). This survey allowed for participants to select the more frequent gender identities (e.g., man, woman, transgender), and also enabled individuals to self-identify gender when appropriate.

Gender Expression

Gender expression is the manner in which a person outwardly represents his/her/hir gender, regardless of the characteristics that might typically define the person as a man or woman (UC Berkeley Gender Equity Resource Center, 2012). From asking both gender identity and expression, I was able to understand not only how a person identifies internally, but how he/she/ze performs gender outwardly. Again, I allowed individuals to select traditional expressions of gender (e.g., feminine, masculine), but also indicated other varying gender expressions in the survey instrument.

Sexual and Gender Minority

As previously discussed, my critical/queer epistemology has enabled me to focus on the role of power and privilege in philanthropy and fundraising in order to give voice to those who have previously been ignored (Tierney & Dilley, 1998). Specifically for this study, I examined gender and sexual minorities as a group silenced by philanthropy scholars and practitioners. For this study, sexual minority referred to any person who does not identify as heterosexual (e.g., gay, lesbian,

bisexual, queer), and gender minority referred to anyone with a non-normative gender identity (transgender, gender queer) and/or whose gender expression does not match his/her/hir gender identity.

Outline of the Remainder of Study

Chapter Two serves as the theoretical foundation for the survey. I begin Chapter Two with an outline of DeVellis' (2003) model for scale development as a guide for my survey construction. Using DeVellis' first step, I articulate what I wanted to measure by providing an overview of the Model for LGBTQ Giving (Appendix A). With each variable and factor that I included in the model, I explain through prior research why it was relevant to philanthropy and fundraising among LGBTQ alumni.

In Chapter Three, I continue with DeVellis' model, outlining the methodological process for developing the scale instrument to measure LGBTQ alumni giving. First, I discuss item generation and the format for measuring the constructs in the model of LGBTQ giving. Next, I detail how I had the initial item pool reviewed by experts and the instrument validated. Following, I outline how and to whom I administered the survey instrument, specifying sample size and participant recruitment. The chapter ends with which quantitative methodologies I used to evaluate the instrument items, and decisions I made to optimize scale length.

Chapter Four details the steps I took to involve expert reviewers in checking content and construct validities. I provide summative suggestions from both content experts and potential respondents regarding the overall experience, appearance, and specific items and factors.

I begin Chapter Five with descriptive statistics for all variables in the pilot study. These data give a detailed perspective into the pilot study sample population. Following, I describe results from bivariate correlation coefficients between Reynolds' (1982) Short Form of the Marlowe-Crowne Social Desirability Scale and individual items within the survey instrument. Next, I outline findings from construct validity tests, both convergent and divergent, and principal components analysis (PCA) to reduce the number of items that represent each factor in the survey instrument. I close the chapter with results from internal-consistency reliability tests using Cronbach's (1990) coefficient alpha.

Ending the study, Chapter Six provides closing remarks on the survey creation process, including a summary of results and an explanation of findings. Following, I discuss how the survey contributes to the scholarship and practice of philanthropy and giving, in addition to LGBTQ identities and issues among higher education alumni. I also include proposed changes for future survey administrations, and describe limitations of the study. I close this chapter with my intentions to move forward with this research.

Summary

Chapter One outlined the importance of exploring philanthropy and fundraising among LGBTQ alumni within U.S. institutions of higher education. Specifically, I focused on alumni as a viable source for financial contributions, discussing differences and uniqueness among alumni from diverse and underrepresented communities. Following, I framed the problem examined in this study and defined the purpose and significance of this research. The chapter closed

with my critical/queer epistemology, personal positionality as a gay/queer alumnus,

key terms and definitions, and an outline of the remaining chapters of the dissertation.

CHAPTER TWO: LITERATURE REVIEW

Chapter Two details the theoretical foundation for this study. DeVellis' (2003) theory and application for scale development serves as the foundation for the instrument development. I begin by outlining DeVellis' (2003) model for scale development as a roadmap for survey construction, utilizing the first step of his model in this chapter. I then provide an overview of the theoretical model of LGBTQ giving, justifying the inclusion of each construct in the instrument through explaining its relevance and importance to understanding LGBTQ alumni philanthropy.

DeVellis' (2003) Model for Scale Development

DeVellis' guidelines for scale development assist researchers in creating valid and reliable scale measurements. Throughout this study, I used his eight steps to guide me in the process of developing an instrument for measuring LGBTQ alumni philanthropy to higher education. In this chapter, I highlight the theoretical decisions for scale development using the first step of DeVellis' model.

Step 1:   Determine Clearly What It Is You *Want* to Measure

Step 2:   Generate an Item Pool

Step 3:   Determine the Format for Measurement

Step 4:   Have the Initial Item Pool Reviewed by Experts

Step 5:   Consider Inclusion of Validation Items

Step 6:   Administer Items to a Development Sample

Step 7:   Evaluate the Items

Step 8:   Optimize Scale Length

Step 1: Determine Clearly What It Is You *Want* to Measure

Determining first what phenomenon a researcher wants to measure is essential in developing a scale instrument. Nunnally and Bernstein (1994) described measurement as a set of rules for assigning symbols to objects, giving quantities of attributes numeric value and classifying objects into discrete categories with respect to a given attribute. In this way, theories or models that represent a phenomenon of interest can illuminate and clarify the objects, or variables, to be measured (Ghiselli, Campbell, & Zedeck, 1981). Researchers must assess the theoretical constructs or models before assuming how much they correspond to the actual perceptions and attitudes of people.

Since a number of reports already exist that provide analyses and descriptive data on philanthropy and giving in higher education broadly (e.g., CAE, 2010, 2011; Giving USA, 2010, 2011), this study design concentrated solely on the giving behaviors and attitudes among LGBTQ alumni. Although a number of demographic variables (e.g., race, gender, age) are included in such large-scale reports, sexual and gender minority identities do not appear in the data collection or analyses of these studies.

A critical quantitative scholar often focuses analyses on specific groups. In doing so, researchers may be able to conduct complex analyses to understand within-group heterogeneity and examine how unique community-specific experiences and characteristics influence different sub-groups (Carter & Hurtado, 2007). Stage (2007) cautioned that when populations differ, researchers must resist "the temptation to make blanket comparisons across groups" (p. 99). Therefore, this survey instrument

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served the purpose of giving voice to alumni with LGBTQ identities and exploring convergent and divergent themes within the LGBTQ communities.

For this study, I created a new model for LGBTQ alumni giving (Appendix A), with key factors and variables for the instrument substantiated through prior research in related fields. In the following section, I introduce this model of LGBTQ alumni giving through outlining the major scholarly works that influenced the model. I first detail the precursor to this quantitative survey instrument study: a qualitative research project conducted that examines LGBTQ alumni giving (Drezner & Garvey, 2012; Garvey & Drezner, 2012).

Following, I detail the justification for each construct in the survey measuring LGBTQ alumni philanthropy. I relied heavily on philanthropy scholarship within other minority communities. Though there are markedly unique contexts within each minority group in regards to giving, these themes previously explored for other minority communities were relevant for LGBTQ communities as well. I further substantiated the model with scholarship in the fields of higher education, student affairs, and LGBTQ people. My critical/queer epistemology guided me to utilize varying bodies of literature in explaining and building my model. Through examining philanthropy and fundraising through the lens of LGBTQ individuals and theories, I brought together juxtaposed contexts and cast new light on existing questions and problems. The model contained five distinct categories: demographics, undergraduate student experiences, alumni experiences, institution variables, and philanthropy and giving.

Qualitative Research Project Examining LGBTQ Alumni Giving

In summer 2010, Dr. Noah Drezner and I conceptualized a multi-institutional qualitative research study to examine philanthropy and fundraising among LGBTQ higher education alumni. We have begun to disseminate findings from this study in scholarly presentations and publications. In the following section, I outline the decisions we made to guide our qualitative inquiry, including our epistemology, methodology, data collection and analysis, and trustworthiness.

Epistemology. For the qualitative research study, Dr. Drezner and I employed a constructivist epistemology. A constructivist worldview relies on participants' perspectives within bounded systems, understanding the context and experiences of both the institutions and individuals involved (Creswell, 2007). In constructivist research, there is a close relationship between researcher and participant, which facilitates a more intimate and reciprocal exchange during and beyond the study. Because there is little research on philanthropy in the LGBTQ communities, constructivist research was appropriate because it helped emerging ideas come to light as we viewed participants as knowledgeable and involved in identifying and analyzing the problem, while also proposing solutions. An additional benefit of constructivist research is that "involvement among participants cultivates a sense of ownership and encourages the implementation of suggested changes and implications," among advancement professionals who were interviewed (Gasman & Anderson-Thompkins, 2003, p. 9).

Methodology. We employed a multi-institutional case study methodology for our qualitative study on LGBTQ alumni giving. Examining particular cases enabled

us to reveal the intricacies behind the effectiveness of the diverse practices, policies, and materials at each institution. Within each institution, we relied heavily on institutional contacts serving as point people. These people helped us in recruiting and involving both staff and alumni. Contacting LGBTQ alumni largely occurred through LGBTQ alumni affinity groups and snowballing communication in the community.

Data collection. Data collection involved a two-tier approach. First, we interviewed advancement officers from both alumni relations and development positions. We involved staff across all job functions and position levels (e.g., data maintenance, communications, affinity group staff, major gifts officers, annual campaign staff, directors and high-level administrators). In addition to interviewing staff, we also conducted focus groups with LGBTQ alumni. We purposively recruited alumni across varying social identities (e.g., gender, race/ethnicity, socioeconomic class), involvement with their alma mater, and giving history to encompass a broad range of experiences. In both sets of focus groups, we asked questions to discover the goals, strategies, and policies around the cultivation of LGBTQ alumni for potential giving. Throughout the focus groups, we also inquired about motivations for higher education giving, including student experiences and institutional solicitations.

Analysis. We employed team-based analysis (MacQueen, McLellan, Kay, & Milstein, 1998), beginning our data analysis by (re)familiarizing ourselves with the cases. We read through transcripts at least once individually, taking notes on general impressions and themes that began presenting themselves both within an individual

case and across multiple cases. We consistently revisited our study questions throughout this phase to remind ourselves of the research foci.

After reading all of the study transcripts, we came together to compare notes and discuss overall impressions. We developed our theoretical propositions from these notes and conversations, prioritizing major themes and compelling narratives related to our research questions. Our theoretical propositions helped us bound the data collected for analysis, allowing us to focus our attention on certain data with rich themes. The propositions also assisted us in organizing themes across cases and identifying alternative themes for us to examine.

We developed theoretical propositions that were both inductive (emergent themes) and deductive (themes based in literature and prior experiences). We relied on our participants' ideas and language when constructing the theoretical propositions, maintaining the importance of participants' voices and shared meaning-making in our constructivist epistemology. When analyzing case studies, researchers should bring their expert knowledge to become more aware of current thinking and debates about the topic (Yin, 2003). As such, we considered our professional and scholarly experiences when developing the theoretical propositions.

Upon defining the theoretical propositions, Drezner and I used NVivo software to begin line-by-line coding of each case to find evidence that substantiated each theoretical proposition, as well as new emerging themes of each case. We developed a codebook in NVivo with master codes based on the original theoretical propositions. As there were multiple transcripts from each case, we consciously decided to code each institution wholly before moving onto the next. As we continued

analyzing each institution, new theoretical propositions and unique components of existing theoretical propositions emerged. In these instances, we created new master codes (and accompanying theoretical propositions) and sub-codes. In total, we created 13 theoretical propositions and 94 sub-codes.

Trustworthiness. Drezner and I coded all transcripts from every institution to confer trustworthiness. Upon completing coding for each institution, we reassembled to refine new master codes and sub-codes to maintain consistency across individual analyses.

We utilized data triangulation (Stake, 2000) to pull evidence from varying data sources, noting when the propositions were similar or different across multiple cases. Our analysis relied on all relevant data, seeking as much evidence as was available (Yin, 2003). Both of us evaluated the evidence for each theoretical proposition, providing feedback when there were inconsistencies across researcher analysis summaries. Since we used a constructivist approach, we often experienced tension between contrasting ideas that emerged in the data and our desire for consistency and transparency. In the event that there were alternative explanations to the findings, we made rival interpretations and substantiated with evidence (Yin, 2003). As another source of trustworthiness, we asked point people from each institution to review the theoretical proposition summaries and provide feedback regarding the accuracy of our analysis. When a point person did have disagreements with the analysis summaries, we reverted back to the original transcripts and our codes to reconcile the differences in perception.

This qualitative inquiry examining LGBTQ alumni philanthropy was the first introduction to this research focus. As such, findings from the study allowed me to conceptualize key aspects of the model for LGBTQ alumni giving. Throughout Chapter Two, I integrate insights from the qualitative multi-case study and highlight these findings in subsequent sections. In the following sections, I detail each variable or factor in the model, substantiating each construct with literature that justified its inclusion in the model for LGBTQ alumni giving.

Demographics

As I intend to use this instrument for research purposes, collecting demographic information was an important aspect for the scale instrument. Sanlo (2002) wrote, "I am concerned about the language we as professionals still use on our campuses…these words violate boundaries of race, gender, and sexual identity, and serve to perpetuate a climate of exclusion and marginalization" (p. 171). For this study, I explored research that embraced a more inclusive understanding of social identities and incorporated these strategies when devising ways to collect demographic information (e.g., Sanlo, Rankin, & Shoenberg, 2002; Soldner, Inkelas, & Szelényi, 2009). Sexual and gender minority identities were a key foundation to the model and development of this survey instrument. As this instrument included only LGBTQ alumni, I was purposeful in assessing and quantifying demographic information so that I embraced a more fluid understanding of sexual identity and gender identity/expression. Rather than categorizing sexuality as a binary of heterosexual and homosexual, I made efforts to embrace a continuum of understanding for sexual identity. Similarly, I collected gender identity and

expression for individuals based on a fluid continuum rather than binarily. This followed my queer epistemology, in which I sought to dismantle binary classifications of heterosexual/homosexual, masculine/feminine, and man/woman to acknowledge a more fluid and social identity understanding (Britzman, 1997). Specifically, and with permission, I used inspiration and demographic measures from the *2010 State of Higher Education for LGBT People* (Rankin, Blumenfeld, Weber, & Frazer).

Gender identity, gender expression, and sexual identity. When examining financial giving, scholars have mixed reviews in the differences in amounts given between men and women (Bekkers & Wiepking, 2007; Cox & Deck, 2006). In practice, many administrators conclude women are less generous than men (Capek, 2001). However, when controlling for other variables (e.g., age, income, number of dependents, and health), there are relatively small differences between men and women (Capek, 2001). With volunteerism, though, most research has demonstrated that women give their time more significantly than men (Einolf, 2006; Mesch, Rooney, Steinberg, & Denton, 2006; Musick & Wilson, 2007).

The only scholarly research that specifically examines LGBTQ identities and giving to higher education is the aforementioned qualitative multi-case study. One paper produced from this study concentrated on the role of LGBTQ identities on philanthropic activity (Drezner & Garvey, 2012). Interestingly, although most participants emphatically said that their identity does not impact their giving, subtle and unconscious influences came through during conversations.

For example, one gay male alumnus mentioned that he gave an endowed athletics scholarship gift to receive prime location season tickets to football and to support a gay male athlete. This participant did not feel that his sexual identity affected his motivations to give; yet, the purpose of his giving was to support and uplift his identified community.

Worth nothing is that there is little scholarship to substantiate the inclusion of gender identity/expression and sexual identity in a survey instrument to measure giving to higher education. Without saying, though, this is precisely why this instrument is so critical. LGBTQ identities are largely invisible in philanthropic scholarship and practice. This alone justified the inclusion of these items in the survey instrument.

Race/ethnicity. More often, racial/ethnic minority individuals are portrayed as beneficiaries of charity rather than donors and significantly less generous than White communities (Smith, Shue, Vest, & Villarreal, 1999). Recent scholarship on philanthropy in communities of color, however, dispels this myth. Works by Gasman and Anderson-Thompkins (2003) and Gasman, Drezner, Epstein, Freeman, and Avery (2011), among many others, demonstrate similar amounts of giving and volunteerism for communities of color, with unique motivations and practices of philanthropy that are often different from the White majority. Most investigations exploring giving in communities of color use qualitative methods to detail rich descriptions of motivations. Alumni of color often have unique histories with their alma maters, with some feeling marginalized and disengaged from their institutions as a result of prior experiences. These cultural dimensions create specific motivations of

giving in relation to families, communities, and religion as a form of obligation and

uplifting of community and self (Gasman, 2002; Gasman & Anderson-Thompkins,

2003; Gasman, Drezner, Epstein, Freeman, & Avery, 2011; Gow Pettey, 2002; Smith,

Shue, Vest, & Villarreal, 1999).

Understanding these differences, one may assume that quantitative

philanthropy scholars recognize and incorporate racial/ethnic identities into their

research to account for cultural differences in giving. However, current studies for

fundraising do not often include cultural differences such as race/ethnicity that might

impact philanthropic engagement, thus discrediting the importance of culturally

sensitive solicitations (Drezner, 2010, 2011). This White-washing of quantitative

philanthropy research erases the contributions and unique contexts of giving among

communities of color, thus lessening the effectiveness of cultivation and solicitation

of these alumni. Drezner (2011) discussed this majority-only perspective to

philanthropy and its potential impact on professional practice. "To reach the goals of

efficiency (minimizing fundraising costs) and effectiveness (maximizing growth in

giving), some might interpret the data so that they might not want to continue to

solicit and engage a certain segment of their database" (p. 76).

New quantitative models and instruments for higher education philanthropy

should incorporate and recognize cultural differences in fundraising. The instrument

for this study already included LGBTQ identities, but other social identities were

equally as important to capture a holistic picture of alumni. Further, including other

salient social identities will enable me to examine intersections of identity and their

influences on relevant outcomes. As such, I included race/ethnicity in this instrument

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to recognize the importance of such identities on giving attitudes, motivations, and behaviors.

Religious affiliation and saliency. Charity and philanthropy are the cornerstones of all religions (Gasman, Drezner, Epstein, Freeman, & Avery, 2011). Bentley (2002) noted that there are common religious beliefs that distinguish religious philanthropy from other types of giving, including viewing God as the ultimate authority, viewing oneself as a steward, discrete giving, giving to thank God, and giving a fair share. Judaism, Christianity, and Islam all distinguish that giving is an obligation (e.g., *tzedakah*, tithing, *zakat*), and charity is voluntarily encouraged (e.g., good works, *sadaquah*, Kahf, 1980). In the Jewish Oral Law Talmud, there are nine specific acts of biblical charity. Many religious parables have become a part of culture, including the Good Samaritan laws (Bentley, 2002). In Judeo-Christian cultures, compassion for individuals and concern for the impact of one's actions on others are values that guide beliefs and actions of philanthropic giving (Tempel & Nathan, 2011).

Religion continues to be an important facet of U.S. life. In 2007, over 80% of Americans expressed affiliation with a faith denomination (Pew Forum on Religious and Public Life, 2007). In regards to the relationship between religion and philanthropy, various scholars encourage researchers to examine patterns of charitable giving and measure belief systems to empirically test pre-existing assumptions about philanthropic motivations (Iannaccone, 1998; Showers, Showers, Beggs, & Cox, 2011). Seldom, though, have scholars examined the intersections of religious and spiritual identities with LGBTQ identities, particularly as it relates to

philanthropic giving and participation. Including these demographic variables allowed me to identify if and in what contexts religious identity and saliency impact giving for LGBTQ people.

Medical condition. The Americans with Disabilities Act of 1990 (as amended in 2008) noted that someone has a disability if he/she/ze has a physical or mental impairment that substantially limits one or more major life activities, has a record of such impairment, or is regarded as having such impairment. The three-pronged definition focuses on functional ability rather than specifically diagnosed medical conditions. Broadly, there are eight categories of disabilities: auditory, cognitive, developmental, environmental, medical, mobility, psychiatric, and speech.

Few scholars have examined disability identities and their impact on philanthropic giving. In his 2005 article, Drezner focused on fundraising campaigns at Gallaudet University, originally chartered as the Columbia Institute for the Deaf and Dumb and Blind in 1864. He noted that alumni participation at Gallaudet is markedly lower than the national average, with only 7.6% of Gallaudet alumni participation in 2004 compared to the national average of 21.2%. Additionally, he found that individuals viewed themselves as recipients of philanthropy rather than as empowered donors and philanthropists.

Also under the purview of medical conditions and its relevance to this study is a discussion of acquired immune deficiency syndrome (AIDS). AIDS is a disease affecting a person's immune system and is caused by the human immunodeficiency virus (HIV). Originally termed by the press in 1981 as gay-related immune deficiency (GRID), men who have sex with men continue to be a high-risk group affected by

HIV/AIDS. The Institute for Gay and Lesbian Strategic Studies (1998) examined

giving and volunteering by LGBTQ people to LGBTQ-related non-profit

organizations. Overall, about 14% of total financial contributions from donors in their

survey went to HIV/AIDS-related organizations, with similar patterns for

volunteering. Their study also found that HIV-positive people contribute less money

to LGBTQ organizations than do those who are HIV-negative. However, HIV-

positive people support HIV-related organizations more than HIV-negative people

both with time and money (Institute for Gay and Lesbian Strategic Studies, 1998).

Including medical conditions in this survey instrument was both exploratory,

as scholars know relatively little about its influence on philanthropy, and

confirmatory, given limited findings from prior research. Adhering to the Americans

with Disabilities Act of 1990 (as amended in 2008), I structured the question with the

eight broad functional categories, adding an additional category called

immunodeficiency to be able to examine the experiences of people diagnosed with

HIV/AIDS.

Age. Brown and Kou (2011) discussed that "As fundraisers look to the future

of giving and volunteering, perhaps no other factor is as important as a consideration

of the ways in which generational differences will affect the philanthropic landscape"

(p. 199). Although there are no distinct categories, Steinberg and Wilhelm (2003)

grouped generations with the following definitions: pre-war generation (born 1945 or

earlier), boomers (born 1946 – 1964), Generation X (born 1965 – 1979), and

Millennials (born 1980 – 2000). In their study, they found statistically significant

differences in annual giving to nonprofits by generation, revealing that each newer

generation is less generous than its predecessors, even after controlling for wealth and other differences. The pre-war generation annually gave $1,764 per person, baby boomers gave $1,254, and Generation X gave $1,100. Millennials were not included in this number because relatively little is known about this generation's giving behaviors due to their young age and life situations (Steinberg & Wilhem, 2003). In regards to their volunteering, an estimated 15.5 million youth (55% of youth) ages 12 to 18 participate in volunteer activities, nearly twice the adult volunteering rate (Corporation for National and Community Service, 2005).

Scholars have also demonstrated marked differences between younger and older generations in regards to their motivations for giving. Arsenault (2004) wrote that Generation X and Millennials "want leaders who challenge the system and create change [and] who are…perceived as change agents who challenged the status quo" (p. 137). These younger cohorts are keenly aware of the financial burdens of their generations (e.g., bills, debt, job market), which may likely impact their philanthropic behaviors.

Including age is an essential and necessary component to any survey instrument measuring philanthropy and giving. I included birth year in the demographic section of the survey instrument to measure a participant's exact age. From this, I am able to analyze the variable as continuous in analyses, or group by generational cohorts.

Citizenship. Many international residents have unique relationships with their homelands and the United States. They want to support their birth country, maintain relationships with their local communities, and retain a sense of community while at

the same time adjusting to life in the United States (Orozco & Garcia-Zanello, 2009). These communities of international residents in the United States often send significant amounts of money and goods to family, kin, and communities outside the United States (Smith, Shue, Vest, & Villarreal, 1999). This is particularly true among Mexican, Guatemalan, Salvadoran, Dominican Republican, Paraguayan, Ghanaian, Ethiopian, Filipino, Chinese, and Korean communities (Orozco & Garcia-Zanello, 2009; Smith, Shue, Vest, & Villarreal, 1999).

Similar to racial/ethnic philanthropy scholarship, most researchers have examined the influence of one's citizenship on giving with qualitative methods. I aimed to expand this knowledge base by including citizenship in my quantitative survey instrument. Being able to understand one's citizenship, particularly as it intersects with racial/ethnic and LGBTQ identities, opens countless possibilities to studies examining philanthropy in higher education.

Political views. In describing the market model of democracy, Douglas (1987) discussed that individual citizens hold distinctive preference for public services and support these preferences through voting. While public agencies support public services that gain support from a majority of constituents, those public services that are more controversial or preferred by only a minority are often provided by nonprofits. Scholars use this market model of democracy to explain patterns of public-private partnerships, using the preference of citizens to understand the development and services of nonprofit organizations.

Clemens (2006) posed the question, are philanthropy and charitable giving "effective and legitimate vehicles for political engagement?" (p. 208). Particularly for

minority communities, in which nonprofit organizations provide much needed services and advocacy, supporting nonprofit organizations likely resonates with political ideologies. Since I only surveyed LGBTQ individuals, a distinct minority group in the United States, I found it compelling and important to include political identity in the model for LGBTQ philanthropic giving.

Parents' education. In their research, Schervish and Havens (1997) found that with greater educational attainment, the likelihood of a person's philanthropic giving increases. However, few studies have examined parents' education as an influence on an individual's giving behaviors and attitudes. Using data on former students at private colleges and universities, Clotfelter (2008) examined patterns of alumni giving across three generations of cohorts. In doing so, he compared parents' education across generations, noting greater proportions of educational attainment for parents of children in more recent generations. He did not, however, analyze this variable's influence on alumni philanthropy. Insights from literature examining philanthropy within diverse communities have demonstrated a key importance of family support and relationships in fundraising (Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999). By including parents' education in this survey instrument, I can examine whether alumni with more educated parents have different giving behaviors, attitudes, and motivations than those alumni with less educated parents.

Undergraduate Student Experiences

Numerous researchers have examined the importance of undergraduate experiences and satisfaction of student experiences in determining alumni

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philanthropic giving (Clotfelter, 2008; Holmes, 2009; Monks, 2003; Wunnava &

Lauze, 2001). These scholarly pieces identified salient aspects of the undergraduate

experiences, both inside and outside of the academic classroom, which development

officers have used to target fundraising campaigns. Most of these studies took a

holistic, exploratory approach, including numerous variables to test their relationship

to donor behaviors and motivations to one's alma mater.

One major limitation of these studies is that nearly every one of them used

alumni from elite, private, liberal arts colleges and universities. As my instrument

included participants from varying institutional types, I used caution in directly

comparing prior results to my instrument. However, because these studies are limited

in that they used similar institutions, it further justified the inclusion of undergraduate

student experience variables in my model. Having a database of alumni from varying

institutions enables me to see which undergraduate student experiences are salient for

LGBTQ alumni across all institutional types.

In the following paragraphs, I list and explain the inclusion of specific

curricular and co-curricular undergraduate student variables. Although most were

broadly related to undergraduate students (e.g., enrollment, legacy, major), some

variables spoke directly to LGBTQ alumni and their time as undergraduate students

(e.g., perception of campus climate and harassment as student, level of outness,

LGBTQ faculty/staff and students known, LGBTQ-related participation).

Enrollment. For this survey instrument, I collected data from participants to

indicate their entry year of enrollment and year of undergraduate graduation at their

alma mater. Examining individuals who did not complete their degree, Holmes

(2009) found that within highly selective institution, these individuals are 69% less generous than those who graduated. For the reasons mentioned previously for age and generational differences in giving, I found it important and relevant to collect enrollment as an additional source of data. In addition to allowing participants to indicate their year of graduation, I added a response option for individuals to select if they did not graduate.

Attended prior institution. I included this variable largely as an exploratory measure to test whether attendance at a four- or two-year institution influences giving at an individual's undergraduate alma mater from which he/she/ze received a degree.

Advanced degree. In his study, Monks (2002) found that individuals with an MBA or a law degree had higher average donations than individuals who did not complete an advanced degree. Alumni who had received a Ph.D. did not give significantly more to their alma mater. Although this instrument concentrated solely on alumni experiences at individuals' undergraduate alma maters, I included this measure to explore this relationship.

Legacy. Legacies are individuals whose relative(s) previously attended their same institution. Across three generations of cohorts of alumni at private, elite institutions (1951, 1976, and 1989), Clotfelter (2008) demonstrated that legacies were more likely to make gifts than other alumni, and their gifts tended to be larger on average. Examining legacy status and its influence on philanthropy is noticeably under-researched. Having this variable in the survey examining LGBTQ alumni philanthropy was largely exploratory, but an important inclusion particularly as

numerous other variables in my survey centered on the importance of family, relationships, and undergraduate education.

Major. In his spring 2000 study surveying the graduating classes of 1989 from highly selective colleges and universities, Monks (2003) found that major field of study is a significant determinant of alumni giving, with alumni who majored in lucrative majors (e.g., business and management, engineering, history, mathematics, social sciences) reporting higher average donations. In addition, after controlling for income, advanced degree attainment, and overall satisfaction with student experience, alumni who majored in fine arts or nursing gave significantly less, and history majors gave significantly more than humanities majors. Holmes (2009) found similar results, noting that the most generous alumni givers were those who graduated with degrees in natural sciences, and those working in banking and finance, computers/technology, government/public policy, and the nonprofit sectors.

In many of these studies, researchers broadly defined major classification usually with group designations for social sciences, natural sciences, and humanities. For my survey instrument, I borrowed the major classification scheme from the National Survey of Student Engagement (2012) and grouped by large categories of related majors (e.g., Arts and Humanities, Biological sciences, Business, Education, Engineering, Physical sciences, Professional, Other), and then had alumni specify within their major category. Having numerous options for major allows me to classify in varying ways, including the traditional broad scheme used in prior philanthropy research, or Biglan's (1973) classification, grouping disciplines across three dimensions (hard versus soft, pure versus applied, and life versus nonlife).

Grade point average. The relationship between undergraduate student grade point average has not been included in many previous studies about alumni philanthropy. The inclusion in this instrument was purely exploratory, and I justified its inclusion from literature that underscores the importance of undergraduate curricular experiences (e.g., major, satisfaction). In my survey, grade point average was self-reported and included response options in ranges on a four-point grade scale.

Academic-related activities. Few scholars have included curricular activities to examine specific influences of academic-related undergraduate involvements. Of noted exception, Monks (2003) included a handful of academic experiences to correlate with alumni giving. His study indicated high correlations of giving amount and giving frequency with graduates who participated in an internship, had contact with faculty outside of class, and had high contact with a major advisor and campus staff.

I broadened this conversation to include a variety of academic-related undergraduate activities for alumni to select. These curricular involvements included academic/department/professional clubs (e.g., pre-law society, academic fraternity, engineering club), culminating senior experiences (e.g., capstone course, thesis), honors programs, learning community, practicum/internship/field experience/co-op experience/clinical experience, research with a professor, and study abroad.

Co-curricular activities. Participation in co-curricular activities generally increases the likelihood of more frequent and larger donations among alumni (Cloftelter, 2008; Holmes, 2009; Monks, 2003). More specifically, alumni who once held a leadership position in a co-curricular activity give more than those who did not

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(Clotfelter, 2008). Monks (2003) examined specific co-curricular involvements, finding positive correlations with philanthropic giving to active participation in student government, intercollegiate athletics, performing arts/music, social fraternities or sororities, and religious groups. Conversely, individuals who actively participated in political organizations or clubs made smaller donations on average than those who did not participate in co-curricular activities.

As indicated in the introduction of this study, I intend for this instrument to have broad appeal for a variety of higher education personnel, including advancement staff and student affairs practitioners. For this reason, I included numerous co-curricular involvement measures, allowing alumni to indicate their leadership in any of their activities. In the survey instrument, I asked about participation in arts/theater/music, athletics, campus-wide programming groups, cultural/international clubs/honors societies, leadership organizations, LGBTQ student organizations, LGBTQ support/counseling groups, media organizations, military, new student transitions, para-professional roles, political/advocacy clubs, religious organizations, service groups, culturally-based and social fraternities and sororities, special interest groups, and student governance groups.

Although most prior studies largely ignored co-curricular undergraduate variables, I found it centrally important when examining philanthropy among an affinity/identity-based group of alumni, namely LGBTQ individuals in this study. LGBTQ students do not often have positive undergraduate experiences overall as compared to their peers, but co-curricular experiences may mediate the negative environment and provide a safe haven for connections and relationship development.

Assessing co-curricular involvements, including LGBTQ-related activities, allows me to test this assumption.

Work. Little philanthropy scholarship has examined the relationship between giving and work (on- or off-campus) during a person's undergraduate experience. Monks (2002) included it in his study examining giving to one's alma mater, and found no significant relationship to undergraduate work and philanthropy. Including this variable was exploratory, and I justified its relevance to the model through its relationship to financial dependence and aid during a person's college experience.

Residence. Similar to other student involvement variables, residence, or where a person lived while an undergraduate student, is not readily explored in most alumni giving studies. Monks (2003) included residential hall life as a co-curricular involvement variable among graduates from selective institutions. He found that resident hall life participation was correlated with greater levels of alumni giving. With this variable, I can examine its direct influence on giving amount and frequency, and also test indirect influence with similar variables (e.g., financial dependence and aid, parents' education). I included a variety of options for alumni to select their undergraduate residence, including with parent/guardian or other relative home, other private home/apartment/room, college/university residence hall, other campus student housing, fraternity or sorority house, and other.

Financial aid and dependence. Philanthropy scholars have frequently examined the influence of financial assistance on alumni giving. These researchers often differentiated with types of financial aid (e.g., need-based, merit-based, grant). Dugan, Mullin, and Siegfried (2000) found significant relationships between giving

and need-based aid with recent graduates from a private university. They found that receipt of a need-based loan lowered the probability of giving to one's alma mater by 13%, while receipt of a need-based grant raised the likelihood of giving by 12%. Other scholars found similar results examining young alumni giving at selective institutions, demonstrating a positive effect of grant aid and a negative effect of loans on giving rates (Clotfelter, 2008; Meer & Rosen, 2011; Monks, 2003; Taylor & Martin, 1995). In regards to scholarship recipients, Meer and Rosen (2011) found that scholarship aid reduces the size of a financial gift but does not affect the probability of making a donation. This finding should be taken with caution, though, as the institution in this study was likely an elite private institution with strong history of fundraising.

In my survey, I differentiated between financial aid and financial dependence. Forms of financial aid that I included were loans, need- and merit-based scholarships and grants, work-study, athletic scholarships, and other aid. Additionally, I asked participants to indicate whether they were financially independent (sole provider for living/educational expenses) or financially dependent (family/guardian assisted with living/educational expenses) during their undergraduate education.

Satisfaction. Having an emotional attachment to one's alma mater is an important factor in predicting alumni support (Beeler, 1982; Gardner, 1975; Shadoian, 1989). Often times, a strong and solid emotional attachment to a graduate's college or university is indicative of positive experiences and relationships. As such, the quality of undergraduate experiences is also a critical factor in predicting alumni support (Clotfelter, 2008; Korvas, 1984; Weerts & Ronca, 2007). In fact, Monks

(2003) discussed that "The single biggest determinant of the generosity of alumni donations is satisfaction with one's undergraduate experience" (p. 129).

For graduates from marginalized communities, their experiences as students are often not as positive as their peers. Previous research suggests that LGBTQ individuals often face a chilly campus climate (Rankin, 2003). LGBTQ students have lower reports of well-being than others, and perceive their college and university environments as more personally challenging with lack of support (Rankin, Blumenfeld, Weber, & Frazer, 2010). According to the *State of Higher Education for LGBT People*, LGBTQ students are much more likely than their counterparts to consider leaving their institution because of experiencing or fearing physical and psychological harassment, discrimination, and violence (Rankin, Blumenfeld, Weber, & Frazer, 2010). However, we do not know how experiences as undergraduates influence volunteering and financial giving to their alma maters among LGBTQ graduates.

Satisfaction is a latent trait that is not directly measureable. I therefore created items to construct a latent factor in order to operationalize satisfaction. Using Rankin, Blumenfeld, Weber, and Frazer's (2010) items to measure undergraduate satisfaction as a launching point, I drafted additional items for the instrument to test. My definition for satisfaction was as follows: the extent to which an alumnus/na favored his/her/hir undergraduate student experience.

Perception of campus climate and harassment as student. Scholars have documented the prevalence of harassment on college campuses for LGBTQ students (Bieschke, Eberz, & Wilson, 2000; Brown, Clarke, Gortmaker, & Robinson-Keilig,

2004; Reason & Rankin, 2006). In the 2010 *State of Higher Education for LGBT People*, Rankin and associates illuminated negative experiences for LGBTQ individuals, from subtle to extreme forms of harassment at higher education institutions. Among their discoveries, the report indicated that LGBTQ respondents experienced significantly more amounts of harassment than their heterosexual and cisgender peers. These results showed that LGBTQ students are at a higher risk than their heterosexual peers for receiving conduct that interferes with their ability to thrive on campus.

Drezner and Garvey (2012) examined motives for giving among LGBTQ college and university graduates and found that some alumni determined their giving based on the campus climate and level of affirmation of their identity that they felt both currently and while as a student on campus. Two specific study participants mentioned that if they had learned that their alma mater was no longer welcoming or supportive of LGBTQ individuals, then they would no longer contribute. Similarly, another individual mentioned that he was more likely to support his alma mater's athletics program after reading that the football coach publicly welcomed gay players on his team.

For my study, I utilized a critical queer perspective so that I could understand how systems of oppression (i.e., heterosexism, homophobia, biphobia, cisgenderism, transphobia) are relevant when researching LGBTQ identities and cultures within philanthropy and fundraising. Perception of campus climate and harassment were two separate latent traits included in my model examining LGBTQ alumni giving. Again, I borrowed specific items from the *2010 State of Higher Education for LGBT People*

and combined with newly formed items to operationalize the latent constructs. I defined perception of campus climate as an alumnus'/alumna's view of how welcoming his/her/hir institution was towards LGBTQ people when he/she/ze was an undergraduate student. Harassment was defined as perception of oppression as an undergraduate student because of LGBTQ identity.

Level of outness. Authors have devoted considerable attention to the coming out process, leading to a variety of coming out models in the literature (e.g., Cass, 1979, 1984; Chapman & Brannock, 1987; Coleman, 1982a, 1982b, 1985; Dank, 1971; Fassinger & Miller, 1996; Isay, 1986; Lee, 1977; Minton & McDonald 1984; Morris, 1997; Plummer, 1975; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001; Troiden, 1979, 1989; Weinberg, 1978; Woodman & Lenna, 1980). Martin (1991) outlined key features shared by many of these coming out models: coming out is a developmental journey that spans many years, the process usually begins in childhood with feelings of being different, a person coming out goes through various stages, and the process ends in consolidation when a person no longer views him/her/hirself primarily in terms of sexual identity.

For many LGBTQ individuals, their undergraduate years are often the time when they disclose their sexual and gender minority identities to others and "come out" (D'Augelli, 1991; Evans & Broido, 1999; Evans & D'Augelli, 1996; Rhoads, 1994). When deciding whether or not to come out, LGBTQ people must negotiate the potential benefits of a positive reaction with the potential costs of a negative reaction. LGBTQ individuals must also understand that the benefits and costs vary across settings and among different groups (Schope, 2002).

For traditionally-aged students, college is a time for growth where individuals can critically question and develop their own identities (Chickering & Reisser, 1993; Pascarella & Terenzini, 1991, 2005; Perry, 1970). Not surprisingly, campus experiences can heavily influence this developmental process (Astin, 1993; Feldman & Newcomb, 1969; Pascarella & Terenzini, 1991, 2005). Understanding the college/university context is particularly important for LGBTQ students because it is often the context for coming out (Evans & Broido, 1999). Few studies examine the relationship of an LGBTQ person's coming out process with developmental outcomes, let alone philanthropy-related measures.

Given its relationship to other variables in the model for LGBTQ alumni giving (e.g., perception of campus climate, satisfaction), I included student outness in the survey. To measure outness, I adapted Sorgen's (2011) outness subscale, which he adapted from Mohr and Fassinger's (2000) Outness Inventory.

LGBTQ faculty/staff and students known. Faculty fundraising and engaging alumni for their institution are becoming more common. Although faculty are often not the ones making the "ask," they have played an important supporting role in the cultivation of alumni gifts (Gasman, 2005). As previously indicated, Monks' (2003) study on alumni giving demonstrated positive correlations with giving and contact with faculty, major advisor, and campus staff. Similarly, Clotfelter (2008) illuminated the positive relationship between alumni donations and having a person who took a special interest in them during their undergraduate career.

For minority and marginalized students, faculty can play an important role in creating an inclusive community. Largely exploratory, I included these variables to

test the assertion of faculty/staff relevance among LGBTQ alumni, an oppressed and marginalized group of individuals.

Use of LGBTQ-related resources. Finding and using resources and services can influence an LGBTQ person's coming out process (Egan, 2000; McKenna & Bargh, 1998; Ryan & Futterman, 1998; Tikkanen & Ross, 2000). LGBTQ-specific spaces and groups are often places where students can feel safe and affirmed in exploring their marginalized identities (Rankin, Blumenfeld, Weber, & Frazer, 2010). Gortmaker and Brown (2006) found that students who were more out with their LGBTQ identities had a stronger network of peers to help navigate the campus culture.

Holmes (2009) found in her research that alumni who participated in affinity groups as undergraduates were 6% less likely to contribute than non-affinity members. She noted:

> In hindsight, this result is perhaps not surprising; most affinity groups are formed based on minority status (i.e., Gay and Lesbians, African-Americans, International student groups, etc.) and it is possible that members of such groups feel less integrated into the campus community and less attached to their alma mater upon graduation. (p. 25)

Affinity group members in her study contributed about 21% less in total than non-affinity members, strengthening her assertion that alumni from minority communities might feel less attachment to their alma mater.

In earlier sections, I discussed the relevance of co-curricular activity involvement and leadership on alumni giving. As this survey solely examined

philanthropic giving for LGBTQ alumni, I was specifically interested in LGBTQ-related co-curricular involvement for its direct effect on philanthropy and its indirect effects through other variables (e.g., perception of campus climate, number of LGBTQ faculty/staff and students known). Specifically, I asked how often as undergraduates a person visited the LGBTQ student services office, participated in an event or program hosted by the LGBTQ student services office, attended an LGBTQ student organization meeting or event, attended an LGBTQ support/counseling group meeting, took an LGBTQ-related academic course, attended an LGBTQ-related educational lecture or program, participated in an LGBTQ-focused workshop or training, participated in an LGBTQ mentor program, and participated in an LGBTQ political/social awareness event.

Alumni Experiences

Monks (2003) wrote "alumni giving is not just motivated by their undergraduate experiences, but also by their feelings about the current state of the institution" (p. 128). Most prior empirical studies examining alumni philanthropy to higher education have either looked solely at undergraduate student variables or at alumni attitudes and behaviors. Few have combined both to understand a longitudinal and holistic perspective to giving among higher education alumni. The survey instrument included both undergraduate student and alumni experiences to understand if and in what ways the two relate to one another, and how each individually and combined influence philanthropy and giving.

Residence. Philanthropy scholars purport that when individuals realize the benefits of being a neighborhood resident in a college or university setting, they are

more likely to give (Leslie & Ramey, 1988; Rivas-Vazquez, 1999). Though largely unexplored, I am interested in examining the relationship between differences philanthropic giving for alumni based on how closely they live to their alma mater. Is there a "neighboring effect" for living in close proximity to one's alma mater? As such, in the survey, I asked participants how close their current residence was to their primary undergraduate alma mater.

Individual and household income. Philanthropic giving is influenced by both donor wealth (Drezner, 2006; Steinberg & Wilhem, 2003) and amount of disposable income (Clotfelter, 2008). In his study examining giving at select colleges, Clotfelter (2008) found that those in the top income bracket were much more likely to give than those below, and had higher average levels of giving. Alumni in his study who gave the most had the highest income, with 97% of these donors making $100,000 or more. Including both individual and household income allows me to directly measure their influences on volunteerism and financial giving, as well as examine indirect effects through other relevant variables (e.g., major, occupation).

Relationship status. Influences of relationship status on philanthropic giving has varied, with some scholars reporting no differences between married donors and their single counterparts (Belfield & Beney, 2000; Monks, 2003), and others noting significantly higher amounts of giving for married individuals (Holmes, 2009). However, all of these studies confine relationship status to heteronormative definitions, limiting options for same-sex couples.

With LGBTQ individuals, relationship statuses may vary by state depending on legislation. In regards to giving, there are complications with estate transfer and

taxes among LGBTQ relationships because of the Defense of Marriage Act. As a result of not receiving the estate tax benefits on federal and perhaps state levels, LGBTQ individuals often are required to pay higher taxes upon their death. To mitigate this issue, LGBTQ individuals and couples often increase philanthropic giving to reduce the taxable portions of their estates and decrease their tax burden (Steinberger, 2009).

Being culturally sensitive to LGBTQ relationship statuses, I included a large set of options for participants to select in my survey instrument. These options included: single; partnered, not married; partnered, married; partnered, civil union; separated, not divorced; divorced, and; widowed.

Legacy. In the case of alumni, I included this variable to understand if an LGBTQ alumnus/na has a child or dependent who has attended their alma mater. For similar reasons as described with legacy with parents and/or guardians, I want to understand if and how legacies of LGBTQ alumni influence that person's giving behavior.

Alumni association. When considering the influence of alumni association involvement on alumni giving, most studies have looked to reunion participation as a marker for involvement with the alumni association. According to Holmes (2009), prior reunion attendance is a good indicator of philanthropic giving, with those in her study who attended a reunion 17% more likely to make a gift to their alma mater than those who did not attend a reunion. In their study examining alumni giving at a small liberal arts college, Wunnava and Lauze (2001) found a 14.9% increase in the level of

alumni donations during reunion years. During major reunion years, the level of

alumni donations increased a staggering 137%.

In their qualitative study, Garvey and Drezner (2012) examined alumni as

advocates for LGBTQ communities. Two of their participants discussed their

volunteering for the alumni association and the relevance and importance of the

identities in the experiences. One participant at the time was serving as the chair of

the diversity committee for the alumni association at her alma mater. In her role as

chair, this alumna coordinated a panel of students from various social backgrounds to

speak to advancement staff about what culture is like on campus. She included topics

not only about race and ethnicity, but was particular in advocating for inclusion of

LGBTQ people and campus issues.

Also in Garvey and Drezner's (2012) study, there were two openly gay male

participants who served on the alumni association board. To many staff at the

institution, their presence on the alumni association board was an indication of a more

recent openness and acceptance at the broader university level for people of sexual

minority identities. Regarding their nomination, one staff member said, "That's a

huge [*sic*] – that never would've happened ten years ago" (p. 29).

Knowing relatively little about LGBTQ alumni, I included this measure in the

survey instrument to further understand the behaviors and involvements of this

affinity constituency and the broader functioning of alumni relations. Having this data

validates and clarifies the importance of identity-based and culturally-sensitive

practices not only in identity-specific spaces, but in larger networks of alumni as well.

In my survey, I asked questions from the institutional level (e.g., whether there is an

alumni association, date alumni association was established) and from the individual level (e.g., participation and leadership in alumni association).

LGBTQ alumni affinity group. In Garvey and Drezner's (2012) qualitative study examining LGBTQ alumni philanthropy, numerous participants discussed the importance of LGBTQ alumni affinity groups on their engagement and giving behaviors. Several participants in their study acknowledged that their overall giving to the university was higher because of their involvement and inclusion in the LGBTQ alumni group.

For many LGBTQ alumni leaders, the opportunity to become more involved with the affinity group created and facilitated a deeper and more meaningful relationship with their alma mater. Alumni discussed drifting away from their alma mater as a natural progression because they had no direct connection to the institution. One alumnus commented that "I think groups like this got me reconnected or kept me in that university in a way that—not because of any particular experience, but perhaps I would have drifted off and just been focused on kind of I guess whatever's going on" (p. 25). One alumna discussed that starting her alma mater's LGBTQ alumni affinity group enabled a sense of ownership within her and the rest of the LGBTQ alumni group leadership. Not only did her leadership within the LGBTQ affinity group inspire her to direct her giving towards LGBTQ student life, but it also increased her likelihood to give more financially to her alma mater (Garvey & Drezner, 2012).

In my instrument, I asked several questions related to LGBTQ alumni affinity groups. First, at the institutional level, I wanted to know if a college or university has

an established affinity group, and if so, when it was created. Second, from alumni, I asked about participation in the LGBTQ alumni affinity group and whether the person has held a leadership position in the group.

Campus employment post-graduation. In their study, Garvey and Drezner (2012) interviewed alumni relations and development staff to discuss LGBTQ alumni philanthropy. Many of these professional staff participants identified themselves as alumni of their current institution and belonging to the LGBTQ community.

Describing their experiences, these LGBTQ alumni and current staff noted disturbing and defining moments in their professional career at their institution related to their LGBTQ identities. During a meeting, one development staff was told "not to highlight the gay part" (p. 21) of a donor proposal. Recalling this experience, this staff member said, "It was really kind of—it was a little bit chilling" (p. 21). On the other side of the continuum, staff discussed the culturally-sensitive practices and behaviors among advancement staff that facilitated a warmer environment for LGBTQ alumni engagement. Many of these individuals described the desire to let alumni know that staff are welcoming and accommodating for LGBTQ people, particularly as it relates to relationship recognition. Other staff members expressed their desire for institutional recognition of LGBTQ alumni in order to increase engagement.

One limitation of Garvey and Drezner's (2012) research was that they were able to talk only with LGBTQ staff members who worked in advancement offices. Including this question in the instrument allows me to survey a broader population of

LGBTQ college and university employees and test whether there are relationships between employment at one's alma mater and philanthropic giving.

Occupation. Most conversations about occupation in relation to alumni philanthropy discuss academic major during an alumna's undergraduate experience, rather than current occupation. One exception to this is Holmes (2009) who examined current alumni profession on giving. She found that alumni working in banking and finance, computers/technology, government/public policy, and the nonprofit sector were more generous than their peers. In wanting to differentiate between undergraduate major and occupation, I included this variable in the model for LGBTQ alumni giving. Rather than assuming occupations based on academic major and individual and household income, I included occupation so that I may test the cultural and financial implications of one's occupation on alumni philanthropy. It will also be interesting to see the various fields in which LGBTQ individuals hold positions, and whether there are unique trends within specific identities (e.g., international alumni, women, alumni of color). To classify occupation, I used the U.S. Office of Management and Budget's North American Industry Classification System, in which occupations are divided into 20 sectors and grouped according to the production criterion (U.S. Department of Labor, 2001).

Harassment as alumnus/na. I included harassment as an alumnus/na as another exploratory measure based on similar scholarship examining harassment as an undergraduate student (Bieschke, Eberz, & Wilson, 2000; Brown, Clarke, Gortmaker, & Robinson-Keilig, 2004; Reason & Rankin, 2006). Although Rankin and other scholars have deeply explored campus climate and harassment for current

students, no studies have examined indicators of harassment among alumni. Harassment is a latent trait, difficult to directly measure. As such, I created a factor based on specific items to measure alumni perceptions of harassment. I defined harassment as perception of oppression as an alumnus/na because of LGBTQ identity.

Perceived support from leadership. Campus leadership plays a key role in fundraising at colleges and universities (Glier, 2004; Miller, 1991), yet there is a lack of empirically-based research to examine the role of institutional leaders in philanthropy. Most scholarship regarding this topic is atheoretical, published by practitioners, consultants, and journalists.

In particular, presidents and deans are fundamental in creating, sustaining, and executing successful institutional cultures of philanthropy. Kaufman (2004) discussed, "Fundraising is one of the most visible and demanding roles expected from campus leaders today" (p. 50). In his qualitative study examining university presidents and fundraising, Cook (1997) found that higher education presidents spent between 50 to 80% of their time engaging in fundraising for their institution. Presidents create the vision (Fisher, 1985; Nicholson, 2007), establish priorities (Essex & Ansbach, 1993; Willmer, 1993), articulate the case for support (Weidner, 2008), and inspire donor confidence (Satterwhite, 2004) that are the most important elements of successful fundraising.

Substantiating past research, Drezner and Garvey's (2012) study found that institutional leadership plays important roles in creating a philanthropically supportive environment among LGBTQ alumni. A number of alumni participants in their study mentioned the importance of their alma mater's leadership in creating an

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inclusive and welcoming campus for all. Participants spoke of their desire for institutional leadership to clearly establish priorities within campaigns that demonstrated a commitment to social identity uplift. Perceived support from leadership is a latent trait which is not directly measurable. Accordingly, I created a factor based on specific items to measure this latent construct. I defined perceived support from leadership as the extent to which campus leaders support and affirm LGBTQ people, issues, and concerns.

Trust. Relationships are fundamental in the field of fundraising (Matheny, 1999; Prince & File, 1994; Worth, 2002). Kelly (1998) posited that fundraising is "the management of relationships between a charitable organization and its donor publics" (p. 8). Especially with colleges and universities needing to garner more alumni support, staff must recognize that cultivating and sustaining relationships among underrepresented minorities is critical (Hall, 2002; Hon & Grunig, 1999; Waters, 2009a, 2009b).

Without trust between donor and solicitor, though, relationships are difficult to build and maintain. Trust is the cornerstone of developing relationships in fundraising (Waters, 2008) and there is little potential for a thriving exchange between institutions and donors when there is no trust. This assertion is particularly true when cultivating and building relationships with diverse alumni who may have distrust with institutions and/or staff personnel. Gasman and Anderson-Thompkins (2003) and Smith, Shue, Vest, and Villarreal (1999) found that advancement staff are more successful at engaging communities of color when there is an established trust

and relationship and therefore can demonstrate the importance of supporting higher education.

Alumni from Garvey and Drezner's (2012) study on LGBTQ giving discussed the role of trust in enabling philanthropic giving to one's alma mater. One alumna said "I think that, in terms of my self-advocating in general, it's really important to me to know where my money is going and to trust the people that I'm giving my money to" (p. 26). Trust was critically important for her when making decisions regarding her financial giving.

Trust for alumni, particularly those from historically marginalized groups, is crucial to understand when examining philanthropic giving. Perception of trust is a latent trait that I operationalized using specific items related to institutional trust. I defined trust as an alumnus'/alumna's faith in campus administrators and leadership.

Level of outness. Coming out is a continuing and almost oppressive task that must be enacted in every new social context (Rothberg & Weinstein, 1996). Although including level of outness as an undergraduate student was certainly important, I found value in asking current level of outness as an alumnus/na. Similar to the previous outness variable, I measured outness for alumni with a modified version of Sorgen's (2011) outness subscale.

Alumni satisfaction. Monks (2003) included measures of alumni satisfaction in his study on graduates from selective colleges and universities. His research found that alumni giving was related to emphasis on faculty research, undergraduate teaching, intercollegiate athletics, extra-curricular activities, a racially diverse student body, need-based financial aid, merit aid, and of course alumni concerns. In

recognizing the relationship between alumni satisfaction and philanthropic giving, I included this construct as a latent variable, operationalized through a series of questions related to satisfaction as an alumnus/na. I defined alumni satisfaction as the extent to which a person favors his/her/hir experience as an alumnus/na.

Institution Variables

Regarding data collection for philanthropy and fundraising, Birkholz (2008) noted, "The new tools of analytics, when combined with centuries of insights about private giving support and volunteering, open new possibilities to build upon the current practices of fundraising and to further the important work of philanthropy" (p. xv). Scholars and practitioners have developed studies in an attempt to predict the likelihood of alumni giving to their alma mater (Wylie & Sammis, 2008).

Unfortunately for the body of scholarship in philanthropy and fundraising, these studies have little or no institutional variability, thus eliminating the possibility to ask questions across colleges and universities to discover similarities and differences based on institutional variables. As such, there was scarce literature to substantiate the inclusion of institutional-level variables in the model of LGBTQ alumni giving. Including these questions, though, allows future researchers to examine multi-level influences, understanding the impact of alumni-level and institutional-level variables on behaviors and motivations of fundraising and philanthropy. In order to minimize length of the survey, I created the institutional survey for LGBT alumni giving instrument (Appendix B). Chapter Three further details the process for collecting institutional data.

Enrollment size. As previously discussed, few studies have examined philanthropic giving among alumni from the institutional level. Including enrollment size was largely exploratory, with minimal risk to survey design. In order to ensure accurate enrollment numbers and decrease length of both the alumni and institutional survey instruments, I plan to collect enrollment size from the Integrated Postsecondary Education Data System (IPEDS), established by the National Center for Education Statistics to collect and disseminate postsecondary education data.

Classification. Scholars know little about the relationship between institutional classification and alumni giving. Clotfelter (2008) found that among alumni from selective institutions, alumni who attended a liberal arts college were more likely to give than those who graduated from a university. At one liberal arts institution, Holmes (2009) found that alumni giving fell 2% when the college fell one place in the *US News and World Report* rankings. Further, institutional prestige seemed to matter less as alumni aged, with concern for brand-name on one's diploma appearing to stimulate giving for young alumni (Holmes, 2009).

In regards to selectivity, individuals from institutions with the most selective admissions were more likely to give and give in greater quantities (Clotfelter, 2008). Using SAT scores as a measure of selectivity, Rhoads and Gerking (2000) found a positive association between giving and both SAT scores and Carnegie Research I status in their sample of 87 Division I institutions. Similar to undergraduate enrollment, I will collect classification from IPEDS.

Alumni association and LGBTQ affinity group. Earlier in the chapter, I discussed the relevance and potential impact of alumni association and LGBTQ

affinity group involvement from an individual level. However, the availability of such groups at colleges and universities may impact to what extent participation and alumni philanthropy relate at the individual level. Accordingly, having both alumni-level and institutional-level data regarding alumni association and LGBTQ affinity group availability and involvement was important for this exploration of LGBTQ alumni. In the institutional survey, I included questions regarding both the alumni association and LGBTQ affinity group, including the availability of such groups, founding year, whether there are dues to become a member, total amount of members, and whether there are local chapters.

Advancement resources. Similarly, how well resourced an advancement office is may likely impact alumni involvement with the office staff and their alumni initiatives. In the institutional survey to measure LGBTQ alumni philanthropy, I asked a series of questions to the point person at each institution regarding resources within the advancement office. These questions asked how many full-time staff work primarily in central alumni relations and development offices (or one if combined in an advancement office), total annual budget for both offices, and total staff and annual budget for working with alumni affinity groups.

Endowment. In Chapter One, I outlined the impact of charitable giving on institutional endowments, referencing large-scale studies (e.g., CAE, 2011; NACUBO, 2012) to demonstrate the effect of philanthropy on endowments. However, researchers have not often examined both direct and indirect effects of alumni giving on endowments, ignoring the complex exchange of other impactful variables on the relationship between endowments and philanthropy. Similar to total

enrollment for each institution, I plan to collect fiscal year endowment for each institution from IPEDS.

Data collection. Both alumni relations and development staff collect data from a variety of sources, including personal contacts, prior mailings, phone calls, student activity records, and event responses, among others. Data includes information about prospects and donors, and can allow advancement staff to make solicitations and appeals more personal (Birkholz, 2008; Drezner, 2011; Wylie & Sammis, 2008). Advancement offices use large data sets for a variety of purposes, including annual fund segmentation and other mass mailings (Worth, 2010; Sargent, Shang, & Associates, 2010). Birkholz (2008) wrote that "data mining is the next great breakthrough in the fundraising industry" (p. xiv).

However useful, most data collection practices in advancement offices largely ignore the identities and experiences of LGBTQ alumni. Unfortunately, there is no current record of the types of questions and options for LGBTQ alumni data collection, nor are there empirically-proven or practice-based recommendations for collecting data for LGBTQ alumni. In the institutional portion of the survey instrument, I included detailed questions pertaining to data collection and LGBTQ alumni. Specifically, I asked if data about alumni sexual identity and gender is collected, and if so, what options are available for alumni to identify and in what ways the data is collected (e.g., in contact reports, self-identified by alumni, through admission data, through student affairs). I also asked similar questions regarding data collection for relationship status, listing LGBTQ-inclusive options for staff to select

(e.g., single; partnered, not married; partnered, married; partnered, civil union; separated, not divorced; divorced; widowed; other).

LGBTQ policies and resources. In their study on social influences of substance-use behaviors among LGB college students, Eisenberg and Wechsler (2003) examined the use of campus resources on student outcomes. They found that having LGB resources on campus inversely related to women's smoking and directly associated with men's binge drinking behaviors. Few other scholars, though, have readily examined LGBTQ resources and policies on other student outcomes. Such is true in the field of philanthropy and fundraising research.

Largely exploratory, I was interested in examining the relationship between LGBTQ alumni giving and prevalence of LGBTQ policies and resources at colleges and universities. As such, I included several items in the institutional portion of the survey instrument to measure these policies and resources (e.g., non-discrimination policies, health insurance and other benefits, LGBTQ service staff, LGBTQ office, safe space program, LGBTQ advisory committee, LGBTQ student organization). I included these variables in the model for LGBTQ alumni giving because I found them particularly relevant to campus climate and harassment for students and alumni.

Philanthropy and Giving

Having measures for philanthropy and giving are at the foundation of this survey instrument. Though prior scholars have examined giving patterns at both the individual and institutional level, researchers have yet to track and measure philanthropic activity of LGBTQ alumni to higher education. Including volunteerism with financial giving recognizes the varied ways in which alumni give back to their

alma maters. Volunteerism as philanthropy is particularly important for young

alumni, as many do not yet have the financial capacity to donate money.

Motivation for college/university giving. Prior philanthropy scholars largely

examined motivations for giving through the perspective of White, wealthy, and

heterosexual men (Drezner, 2011). For the most part, this literature did not account

for cultural and identity-specific philanthropic motivations, therefore ignoring other

identities, namely marginalized and oppressed individuals. Select scholars, though,

have looked specifically at motivations for giving among diverse alumni, revealing

culturally-specific reasons for giving to higher education.

For many marginalized communities, members often engage in philanthropic

giving as a form of social uplift and obligation through providing services and

opportunities (Carson, 2008; Gasman, 2002; Smith et al., 1999). People from

disenfranchised and marginalized communities prefer to support organizations that

uplift their communities and/or support interests that are centrally important to them

(Scanlan & Abrahams, 2002). Cultivation and engagement grows within marginalized

communities when advancement staff highlight advocacy work that enacts social

change, illustrating the short- and long-term goals and impact of the college and

university's worth (Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, &

Villarreal, 1999).

Within LGBTQ communities, there are relatively few external funding

sources for LGBTQ-focused services. As such, individuals find it important to uplift

their communities through charitable contributions (Kendell & Herring, 2001). For

example, women within one lesbian giving community donated 87% of their general

funds to organizations that sponsored lesbian projects (Magnus, 2001). A Horizons Foundation (2008) study found similar patterns among San Francisco donors towards LGBTQ-related causes and non-profits. However, scholars know little about motivations for LGBTQ giving outside of LGBTQ-related organizations.

Anecdotally, some LGBTQ alumni are interested in giving money directly to benefit LGBTQ individuals at their alma maters, with many gifts taking the form of large donations and endowments directly to LGBTQ center directors. University of Pennsylvania alumnus David R. Goodhand and his partner Vincent J. Griski gave $2 million to the LGBT Center. In discussing the motivation behind their giving, Goodhand commented that "When I think about influencing change in society, there are a number of mainstream organizations that have their hearts in the right place – that have a sense of mission and I want to help them" ("Couple Gives," 2000, p. A34). Many LGBTQ alumni give to their alma mater to provide social uplift by making their institutions more welcoming and affirming for LGBTQ students, faculty, and staff. Accordingly, colleges and universities are likely to increase engagement among these alumni when they communicate the institution's commitment to act in a socially responsible manner (Waters, 2009b). Indeed, "organizations must demonstrate through their actions that they are worthy of supportive attitudes and behaviors" (Kelly, 2001, p. 285). In their study of LGBTQ higher education alumni philanthropy, Drezner and Garvey (2012) interviewed donors who gave to support LGBTQ students and uplift on campus, with alumni creating endowed and current-use scholarships to support openly LGBTQ students on at their alma mater.

For this instrument, I created a series of factors that measure varying

motivations for higher education giving among LGBTQ alumni. These motivations

factors included the following: activism/important work (political and social change),

altruism/good work (direct service benefits), community uplift, and salient aspects of

identity. I operationalized each latent trait with a series of items to represent specific

constructs. Activism/important work (political and social change) was defined as an

alumnus'/alumna's support of efforts that provide political and social change for

LGBTQ people. I defined altruism/good work (direct service benefits) as an

alumnus'/alumna's support of efforts that provide direct service benefits to LGBTQ

people. Community uplift was an alumnus'/alumna's support of efforts that enrich the

LGBTQ community. Lastly, I defined salient aspect of identity as the influence of an

alumnus'/ alumna's LGBTQ identity in supporting specific efforts.

Financial giving. LGBTQ people often have unique financial circumstances,

making them attractive candidates for giving financially. In their research, DeLozier

and Rodrigue (1996) showed that LGBTQ individuals are strong prospects for

substantial philanthropic giving due to their high discretionary income levels and

often inability to easily bequeath large portions of their estates to their loved ones due

to current laws not recognizing their relationships. No current empirical studies

measure financial giving to higher education among LGBTQ individuals, nor do

major scale instruments include LGBTQ demographic information for analyses.

In my survey, I asked for the following financial giving information from

alumni: percentage of income that goes towards nonprofits, money donated to

undergraduate alma mater in past year and in total across life, frequency and

consistency of donations (in years), percentage of total philanthropic giving to specific sources (LGBTQ initiatives at alma mater, other initiatives at alma mater, LGBTQ community-related initiatives, and LGBTQ political organizations), and frequency of solicitations by alma mater.

Volunteer giving. Prior research studies have shown positive and significant relationships between monetary giving and volunteering (Brown & Lankford, 1992). Volunteerism at one's alma mater, specifically, is positively associated with alumni giving (Clotfelter, 2008; Taylor & Martin, 1995; Wunnava & Lauze, 2001).

In their study on philanthropy to LGBTQ non-profit organizations, The Institute for Gay and Lesbian Strategies Studies (1998) demonstrated that LGBTQ people who volunteer give more money on average to non-profit organizations than non-volunteers, controlling for other characteristics. Garvey and Drezner (2012) discussed volunteerism with their study participants, with younger LGBTQ alumni in particular indicating that they rather give their time than money because of their current financial situations. One alumna said that serving on the LGBTQ alumni board is her way of giving her time and efforts in a way that her wallet does not allow.

Similar to financial giving, I asked for the following volunteerism information from alumni: time donated to undergraduate alma mater in past year and in total across life, frequency and consistency of volunteering (in years), percentage of total volunteering to specific sources, and frequency of requests to volunteer by alma mater.

Summary

In this chapter, I first began by outlining DeVellis' (2003) theory and application for scale development, which served as the foundation for my study. Following, I detailed the qualitative study examining LGBTQ alumni giving (Drezner & Garvey, 2012; Garvey & Drezner, 2012), illustrating its relevance to this study. I then provided an overview of the theoretical model for LGBTQ giving, justifying the inclusion of each construct in the model through prior literature.

CHAPTER THREE: METHODOLOGY

This study aimed to create a valid and reliable multi-institutional survey instrument to operationalize giving among LGBTQ alumni utilizing the model of LGBTQ alumni giving outlined in Chapter Two. Continuing with DeVellis' (2003) theory and application for scale development, Chapter Three details the methodological decisions behind the survey item generation, construction, review, administration, and evaluation. I approached each step by integrating broad-encompassing suggestions from survey methodology scholarship with my decisions in this particular survey design for LGBTQ alumni giving. I include the survey for LGBTQ alumni giving instrument (Appendix C) as a reference for the following methods discussion. As I addressed the first step in Chapter Two, I begin Chapter Three with the second step.

Step 1:	Determine Clearly What It Is You *Want* to Measure
Step 2:	Generate an Item Pool
Step 3:	Determine the Format for Measurement
Step 4:	Have the Initial Item Pool Reviewed by Experts
Step 5:	Consider Inclusion of Validation Items
Step 6:	Administer Items to a Development Sample
Step 7:	Evaluate the Items
Step 8:	Optimize Scale Length

Step 2: Generate an Item Pool

Upon determining the purpose and scope of the instrument, researchers then generate a large pool of items as potential inclusions in the scale (DeVellis, 2003). In

the following section, I describe the process of measuring latent variables, and discuss appropriate methods for constructing question items.

Measuring Latent Variables

Often in social and behavioral sciences, researchers use latent variables because the phenomenon of interest is not directly observable or quantifiable. Question responses in scale instruments estimate latent variables by reporting participants' actual magnitude based on observable data at the time and place of measurement (DeVellis, 2003; Ghiselli, Campbell, & Zedeck, 1981). Although the actual magnitude is unobservable and thus immeasurable, properties and characteristics of the phenomenon are quantifiable through latent variables. An empirical correlation between observed variables assumes a causal relationship between the measured variables and the latent variable.

Choosing an appropriate name for a latent variable is difficult as one trait name can have different definitions and understandings based on the person and situation. A construct's name can be exact only to the extent that all possible iterations of the name are specified and all who use the name have a mutual understanding of the meaning (Ghiselli, Campbell, & Zedeck, 1981; Nunnally & Bernstein, 1994). Although it is impossible to prove that any collection of measurement items precisely fits a construct name, there are forms of verification that can confirm a construct's name to a satisfying degree.

For constructs that are latent, I developed factors from a series of questions related to the latent variables in the model. Regarding a person's undergraduate experience, I constructed latent factors that operationalized satisfaction, perception of

campus climate, and harassment. For a person's experience as an alumnus/na, I created factors that measured harassment, perceived support from institutional leadership, trust with undergraduate institution, and alumni satisfaction. Finally, to measure constructs related to philanthropy and giving, I created factors that operationalized attitudes towards activism and political/social change, altruism and direct service benefits, community uplift, and salient aspects of identity. Appendix D details the factor definitions for the instrument, and Appendix E specifies questions that represent each latent construct operationalized through the factors.

Question Item Construction

DeVellis (2003) recommended that being over-inclusive of items during the beginning scale development is advantageous because the items must exhaust all possible interpretations of the latent variable. In his words, "Redundancy with respect to content is an asset, not a liability" (p. 70). Further, having a large number of items provides firmer ground for obtaining internal consistency within the scale instrument. Identifying a variety of ways to state the central concepts can assist in developing a large amount of items, especially in the beginning phase of item pool generation. However, each item should measure one, and only one, latent variable (Spector, 1992).

Survey developers should include both positively and negatively worded items, and write all items in inclusive language that is accessible for a majority population of individuals (DeVellis, 2003; Snyder-Nepo, 1993; Spector, 1992; Walsh & Betz, 1990). Researchers represent latent constructs better when both high and low perceptions are included because it decreases "a respondent's tendency to agree with

items, irrespective of their content," (DeVellis, 2003, p. 69). Having both positive and negative representations of the construct can be detrimental, though, as it may be confusing to respondents, especially with a long survey. Survey developers must take caution to avoid the use of negatives to reverse the wording of an item. When adding "not" or "no" to a survey answer, participants may miss the negative cues, thus distorting their responses.

In traditional quantitative survey instruments, researchers may have written items with biased understanding for White, middle class, heterosexual, cisgender individuals. Cultural bias was important to consider as I generated items for the scale instrument (Walsh & Betz, 1990). For example, communities of color may not easily interpret or accept the dominant construct of philanthropy. As such, I paid special attention to constructing items so that they were inclusive of diverse communities. Especially considering the intended population for the survey instrument, I was particularly sensitive to language used in LGBTQ communities when constructing items. Specifically, as I surveyed alumni across generations, I was conscious of using inclusive language for LGBTQ alumni of varying ages.

Creating clear, concise, unambiguous and concrete items is essential in creating a valid scale instrument (Spector, 1992). Certain strategies can reduce item ambiguity, thus strengthening the overall scale instrument. Individual items should not be excessively long, as length often intensifies complexity and threatens clarity (DeVellis, 2003). Further, researchers should consider the reading level of the anticipated participants. DeVellis recommended writing all items between a fifth and seventh grade reading level, as this is an appropriate skill level for the general

population. Since this instrument only surveyed college and university graduates, I took liberties in expanding the reading levels for the questions when necessary. Lastly, wherever possible, researchers must avoid item construction errors that can threaten internal validity of the scale instrument, including multiple negatives, double barreled items, ambiguous pronoun references, misplaced modifiers, using adjective forms instead of noun forms, and using colloquialisms, expressions, and jargon (DeVellis, 2003; Spector, 1992).

Step 3: Determine the Format of Measurement

Determining the format for items in the scale instrument should occur simultaneously with the item generation so that the two complement each other. Researchers measure attitude to understand a participant's personal thoughts, feelings, perceptions, and behaviors towards a referent or cognitive object or situation (Ajzen & Fishbein, 1980; Guilford, 1954; Kerlinger & Lee, 2000). In my instrument for this study, I asked participants for their attitude on their undergraduate and alumni experiences and philanthropic giving. Although a number of general strategies are available to measure attitudes, behavioral and social scientists typically use three primary scales to construct items: summated rating scales (Likert being the most common), equal-appearing interval scales (Thurstone), and cumulative (or Guttman) scales.

Likert Scales

Summated rating scales are among the most popular in social and behavioral sciences research. Likert scales, a specific form of summated rating scales, are the most common scales used by researchers because they are easily constructed and

flexible (Hopkins, 1998). In a Likert scale, researchers present items as a declarative sentence, with response options of varying degrees of agreement with or endorsement of the statement (DeVellis, 2003). In summated rating scales, all items have relatively equal "attitude values." Thus, there is no scale of items. One item has purportedly the same value as any other item.

In a Likert scale, each participant responds with degrees of agreement or disagreement intensity to each item (Kerlinger & Lee, 2000). The sums or averages of an individual's responses yield his/her/hir scaling. Likert scales allow for expressed intensity of attitudes, which yields greater variability of results. On the other hand, the variance of the summated rating scales often seems to contain response set variance because respondents may have difficulty in meaningfully discriminating item responses. Different responses have varying meanings depending on the individual, thus confounding the attitude rating. A researcher should recognize the limiting factors of Likert scale measurement, however, not be overly discouraged by these limitations because the instrument has easy utility and interpretation. Researchers usually chose summated rating scales for scale instruments that measure attitudes.

Crocker and Algina (1986) provided guidelines for writing and reviewing question items that use Likert formats. Statements or questions should be in the present tense and should be short, rarely exceeding 20 words. Each statement should be a proper grammatical sentence and should have only one interpretation. The literature suggests that when constructing questions, researchers should avoid universals (e.g., all, always, none, never), indefinite qualifiers (e.g., only, just, merely, many, few, seldom), and negatives (e.g., not, none, never; Crocker & Algina, 1986;

DeVellis, 2003). Respondents should easily understand question vocabulary, and there should be an equal number of statements expressing positive and negative feelings. Statements should not be factual or capable of being interpreted as factual, and researchers should avoid statements that are likely to be endorsed by almost everyone or almost no one. Finally, whenever possible, questions should be in simple sentences rather than complex or compound sentences.

For this study, I utilized summated rating scales, specifically Likert scales, to measure factor items examining a person's undergraduate alma mater and philanthropic giving. Instructions guided participants through the scale instrument. Although many individuals are likely familiar with Likert scales, brief directions served as a guide for clarity to reduce misunderstanding while completing the survey.

Thurstone Scales

In a Thurstone scale, also known as an equal-appearing interval scale, a researcher assigns a scale value to each item which indicates the various degrees of feelings toward a topic or situation (Hopkins, 1998). The scale value serves a dual purpose: it assigns participant attitude scores, and also places a value on each attitude item. Researchers select the final items to include in the scale so that they have equal intervals between them. A Thurstone attitude scale typically consists of 20 to 45 items that evenly represent the varying intensity values (Kerlinger & Lee, 2000). In the final scale, researchers present the items in a random order, with no indication of their scale values.

A researcher can determine a participant's position on the attitude continuum by taking the median value of the scale items (Guilford, 1954; Kerlinger & Lee,

2000). Since the items precalibrate to the sensitivity of specific levels of the attitude, agreement to the item will reveal how much of the attribute the participant possesses (DeVellis, 2003).

Interval scales are continuous with equal distances between numbers, with the absolute zero of the scale unknown. An interval scale implies that meaning can be made to the distances between responses, thereby allowing for arithmetic operations on the intervals (Ghiselli, Campbell, & Zedeck, 1981). With interval scales, the researcher is able to determine an average level for each attitude being studied, as well as the deviation from the average for each participant.

I did not use Thurstone scales for this instrument. Equal-appearing interval scales are difficult to construct appropriately, requiring a considerable amount of time and effort. Equal-appearing interval scales are much more laborious than other attitude-measuring scales because finding items that have equal distribution within one attitude is quite difficult. Further, finding items that resonate with a specific level of an attitude is challenging, making it highly unlikely to construct a reliable Thurstone scale.

Guttman Scales

Guttman scales consist of a series of items that measure progressively higher levels of an attitude. They are one-dimensional, and therefore only measure one construct. Accordingly, a person's scale response is the basis for his/her/hir ranking of the attitude. Guttman scales concentrate on the scalability of sets of items and on an individual's scale position (Kerlinger & Lee, 2000). These scales consist of a relatively small set of homogeneous items. Guttman scales work particularly well

when a researcher wants to present a situation or attitude that hierarchically increases as the items progress.

For the most part, though, Guttman scales and other cumulative measures are less useful and generally less applicable in attitude research because they take up a large portion of a scale instrument for only one construct. Additionally, researchers must use an attitude that hierarchically increases in a cumulative scale. With this study's instrument, attitudes do not appear hierarchically. Rather, they are situational constructs based on a person's specific circumstances. Guttman scaling was therefore not a logical choice for item format in this survey.

Step 4: Have the Initial Item Pool Reviewed by Experts

Validity is the extent to which an instrument measures what it purports to measure and how well it does so. Including validation items in the initial scale development can have great benefits in constructing the final scale instrument. In actuality, though, a survey instrument may have numerous validities. Simply asking, "Is an instrument valid?" does not recognize that an instrument may be valid for one purpose but not for others. Assessing validity is always limited and particularized. Researchers can only measure an instrument's validity in relation to a given purpose for a specific sample of participants. In understanding validity for a survey instrument, researchers may utilize three common methods: content and construct validities (often with the use of expert reviewers), and criterion-related validity. In addition, researchers may consider including validation items that address social desirability.

Content Validity

Content validity is concerned with whether the content of a scale fully encompasses the entire range of the measured attitude or phenomenon. Participant responses to the items on a valid scale are presumably indicative of what the responses would be to the entire spectrum of attitudes of interest. Determining whether a scale has reasonable content validity relies on judgment and logical analysis (Hopkins, 1998; Kerlinger & Lee, 2000). Although it is impractical to conduct an extensive and exhaustive content validity analysis, researchers should take action to understand the universal representativeness of a construct and how a scale can best represent the varying dimensions of the construct. Expert reviewers play an important role in facilitating content validity of a scale. Thus, researchers should not wait to assess content validity after data collection. Rather, researchers and expert reviewers should critically analyze each item and entire scale constructs to determine whether they capture the entire essence of the construct. Logically, content validity is easiest to achieve when constructs or phenomena are well defined.

Although similar to content validity, face validity is not validity in the technical sense. Face validity refers to what the instrument appears to measure on first impression superficially. Typically, a scale with content validity will also have face validity, but not necessarily (Hopkins, 1998).

Construct Validity

Construct validity determines a variable's theoretical relationship to the other variables (DeVellis, 2003). In essence, construct validity attempts to validate theoretical assumptions that guide a survey instrument (Kerlinger & Lee, 2000).

Cronbach (1990) noted that there are three parts to construct validation. First, researchers develop constructs based on theory. Second, researchers develop testable hypotheses regarding the relationship between the construct and the theory. Lastly, researchers must test the predicted relationships empirically.

The analysis of construct validity has both logical and empirical components (Hopkins, 1998). Using experts' judgment can be useful in determining the relationship of the scale content to the construct of interest. Further, examining studies of the relationship between scale scores and other variables can determine if the theoretical relationship between the scale scores and participants' scores is valid. Examining the relationship of the construct to other items in the survey instrument can also develop an understanding of construct validity for the scale. Lastly, questioning participants to determine their mental processing involved in responding to the scale items can illuminate construct validity (Aiken, 2000).

Expert Reviewers

Relevant experts external to the instrument development should review the instrument specifications (DeVellis, 2003). The purpose of the review, the process by which the review is conducted, and the results of the review should be documented. The qualifications, relevant experiences, and demographic characteristics of expert reviewers should also be documented [American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME), 1999]. For my instrument, I had reviewers who are both content experts and potential respondents. Each group had different and distinct responsibilities when reviewing the survey instrument.

Although expert reviewers provided helpful advice for clarifying and/or condensing items in a scale, the final decision to include or change an item rested solely on me as the scale developer. Expert reviewers may be proficient in the content of the scale but not in survey methodology, or vice versa. I paid careful attention to all the reviewer comments, taking into consideration the proposed modifications.

Content experts. Upon drafting an item pool for each factor in the survey instrument, a group of people who are experts in the content area should analyze the items to address both content and construct validity. Having content experts review the items serves multiple functions related to maximizing the content validity of the scale. First, the experts can confirm or invalidate each phenomenon definition (DeVellis, 2003). In addition, content reviewers may determine the relevance of each item to the phenomenon. Especially when a scale instrument has multiple constructs, experts should be able to differentiate which items correspond to specific variables. Using content experts' judgment can be helpful in determining the relationship of the scale content to the construct of interest, thus measuring construct validity (Allen & Yen, 1979; Ghiselli, Campbell, & Zedeck, 1981). Reviewing the items based on judgment and logical analysis contributes to the content and face validity of the scale instrument (Hopkins, 1998; Kerlinger & Lee, 2000). Finally, content experts may point out ways in which the scale instrument fails to include specific aspects of the phenomenon being measured. Items in a scale must encapsulate the entire meaning of a construct. If a specific aspect of a phenomenon is not included, it may threaten content validity (DeVellis, 2003).

For this study, I had a small group of content experts review factors items in the initial survey instrument and additional items relevant to the respective factors. Appendix F details instructions I provided for each content reviewer. First, these content experts reviewed the working definitions and names for each latent construct (Kerlinger & Lee, 2000). During this process, they evaluated the importance and relevance of each construct to the study of LGBTQ philanthropy, and assessed the appropriateness of each name in capturing the definition of the latent construct.

I then asked reviewers to critically analyze each item and entire scale to determine their relevance to the phenomenon. Using Crocker and Algina's (1986) guidelines for reviewing survey items with Likert formats, they evaluated the construction of each item. Next, the content reviewers determined the relevance of each item to its respective factor and analyzed whether they could differentiate which items correspond to specific factors. Experts also assessed face validity to determine if the factor items appeared to measure what they intended on measuring upon first impression superficially (Hopkins, 1998). In addition, each content reviewer indicated which items they strongly favored for inclusion and elimination on each factor.

Finally, the content experts determined whether the scale captured the entire essence of the phenomenon. I first asked whether there was a specific aspect or dimension of a factor that I did not capture with the existing items. I followed up by asking whether the items in the scale encapsulated the entire meaning and definition of the construct.

I consulted with individuals who had content expertise in philanthropy and LGBTQ individuals to make sure each construct was thoroughly covered and that

each set of items was as inclusive as possible. Appendix G narrates the content

expert reviewers and their respective qualifications. Given their expertise in

philanthropy among diverse individuals in higher education, I asked Dr. Noah

Drezner and Ms. Deb Rhebergen to review factors and items involving alumni

experiences (e.g., perceived support from leadership, trust, alumni satisfaction) and

philanthropy and giving [e.g., activism/important work (political and social change),

altruism/good work (direct service benefits), community uplift, salient aspect of

identity]. Drs. Luke Jensen and Susan R. Rankin are leading practitioners and

scholars for LGBTQ individuals in higher education. As such, I asked them to review

factors and items involving demographics, undergraduate student experiences (e.g.,

satisfaction, perception of campus climate, harassment as student), and alumni

experiences (e.g., harassment as alumnus/na).

Potential respondents. Researchers might also consider having a sample of

potential respondents complete the instrument for additional feedback (DeVellis,

2003; Ghiselli, Campbell, & Zedeck, 1981). Potential respondents are ideal in

critiquing the actual functioning of the survey instrument from the perspective of a

volunteer respondent. Potential respondents review the instrument's appearance and

instructions, as well as specific items. More broadly, these reviewers provide opinions

on general impressions of the survey.

Appendix H details instructions I used when potential respondents reviewed

the survey instrument. I held two reviewer sessions in which potential respondents

came together in person to complete the electronic survey and respond to portions of

the instrument as if they were actually participating in the study. Each respondent had

access to computer and internet. Following, I engaged potential respondents in questions regarding specific portions of the survey instrument.

I first allowed the potential respondents to critique the instructions and instrument's appearance. For example, I asked participants if additional instructions should be included, or if the appearance looks professionally designed. I also asked for reviewers' opinions on whether parts of the instrument should be deleted, or if example answers would be helpful.

Next, I conducted cognitive interviewing with a sample of items. Cognitive interviews allow researchers to probe and evaluate participants' comprehension and answering of survey questions (Fowler, 1995). During this process, potential respondents had the time to paraphrase their understanding of questions, define terms in their own words, and indicate whether an item was confusing or ambiguous. During the cognitive interviewing, the reviewers indicated how confidently they were able to give an answer, and their process for determining each answer.

Lastly, reviewers had the opportunity to track general impressions, indicating opinions on survey length and comfort in answering certain questions. During this time, I also asked these potential respondents to assess any level of bias, cultural exclusivity, or misunderstanding.

When utilizing potential respondents as reviewers, these experts should include individuals representing the population of concern to the survey instrument (AERA, APA, & NCME, 1999). I intentionally chose potential respondents who represented varying social identities and professional experiences within the LGBTQ

communities. Appendix I describes the potential respondents, providing summative

narratives of the group to include relevant identities and experiences.

Criterion-Related Validity

Criterion-related validity determines the extent to which a researcher

compares an item's score with one or more external variables, or criteria, known or

believed to measure the perceived attitude (Kerlinger & Lee, 2000). The fundamental

difficulty in using criterion-related validity is determining an appropriate criterion for

validation, especially with attitude scales.

Social and behavioral researchers often use two subclasses of criterion-related

validity. The more commonly used criterion-related validity is predictive validity.

The other type is concurrent validity, which differs from predictive validity in the

time dimension. Predictive validity relates to future performance of the criterion.

When assessing predictive validity, researchers concentrate not on what the

instrument measures, but rather on how well its predictions agree with subsequent

outcomes (Hopkins, 1998). A correlation coefficient is the accuracy of predictions

between scale scores and a subsequent empirical criterion.

Different from predictive validity, concurrent validity assesses the present

status of individuals against a criterion. Usually used when validating a new

instrument, researchers determine concurrent validity by correlating an existing

measure with a newly tested measure. Concurrent validity can also determine whether

the average scale scores of a particular group are significantly different from the scale

scores of another group. A variety of factors may affect criterion-related validity,

including group differences, survey length, criterion contamination, and base rate (Aiken, 2000).

As there were no current quantitative instruments that measured LGBTQ alumni giving up until this instrument, there were no existing measures to correlate with newly tested measures. Further, I only administered one final survey and did not have subsequent empirical criterion for this particular study. As such, I did not utilize criterion-related validity. Rather, I concentrated on the content and construct validity for this instrument.

Social Desirability

Especially in attitude research, participants may want to present themselves positively, thus resulting in social desirability (Spector, 1992). Including a social desirability scale allows researchers to determine to what extent social desirability influences a participant's responses. Researchers can include a number of social desirability scales to detect various response biases: the ten-item social desirability scale developed by Strahan and Gerbasi (1972); the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1943); Edwards' (1957) social-desirability scale; and the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964).

Forced-choice entry is another tactic used by researchers to control or reduce social desirability (Anastasi & Urbina, 1997; Hopkins, 1998). Forced-choice item format requires participants to discriminate between two or more alternatives that are ideally equally acceptable but differ in validity. This specific method, however, is difficult to develop and interpret, especially when assessing affective outcomes.

To address social desirability in this survey instrument, I included a short form of the Marlowe-Crowne Social Desirability Scale. This scale allowed me to assess and control for response bias resulting from social desirability. Reynolds (1982) developed three short forms of the Marlowe-Crowne Social Desirability Scale, reducing the 33-item scale to 11, 12 and 13 items. The 11-item form has been statistically proven as a viable substitute for the regular 33-item Marlowe Crowne scale (Loo & Thorpe, 2000; Reynolds, 1982). Accordingly, I included the 11-item Marlowe-Crowne Social Desirability Scale short form in this instrument (Appendix J).

Step 5: Consider Inclusion of Validation Items

Along with validity, reliability is another key psychometric property that assesses the level of excellence of a scale measurement. Both unsystematic and systematic errors of measurement may affect an instrument's validity, while only unsystematic errors influence reliability. Thus, an instrument may be reliable without being valid, but it cannot be valid without being reliable.

Scale reliability is the portion of variance that is attributable to the true score of the latent variable (DeVellis, 2003). In essence, reliability evaluates the dependability of measuring the latent variable and how much error of measurement there is in a scale instrument (Anastasi & Urbina, 1997). Reliability is most easily understood through error: the more error, the less reliable; the less error, the more reliable. Logically, then, reliability is inversely related to the amount of random error in a scale instrument. Unlike validity, which is primarily a theoretically-oriented measure, reliability is an empirical issue, centering on how an instrument performs.

When measuring reliability, researchers must identify the type of reliability and the method employed to determine it, because multiple reliabilities may vary depending on how they are tested. Researchers examining attitudes typically use four different methods of reliability testing: internal consistency, test-retest, alternate-form, and split-half. Each reliability method takes into account varying conditions that can produce unsystematic changes in reported scores, thus affecting reliability when researchers administer the scale instrument to a particular group under specific conditions (Aiken, 2000).

Internal Consistency

Internal consistency requires neither splitting nor repeating items from a scale measure to test reliability. This form of reliability relates to the homogeneity of the items within a scale, measuring the correlation between the items. Strong correlations between items imply strong links to the latent variable and the individual items (DeVellis, 2003). Researchers most commonly use coefficient alpha as a statistic to reflect internal consistency.

For my instrument, I utilized internal consistency as a measure for reliability. I calculated coefficient alphas between items measuring the same latent construct with expectations of high internal consistency. In the early stages of validation research, a modest reliability of 0.70 is acceptable and 0.80 is good (Nunnally & Bernstein, 1994).

Test-Retest Reliability

Test-retest reliability evaluates the consistency of scores obtained by a participant when retested with the identical scale instrument (Anastasi & Urbina,

1997; Carmines & Zeller, 1979). The more similar results are across repeated measures, the more reliable a scale measurement. In essence, test-retest measures the correlation between the scores on the same instrument obtained at different points in time.

Although the test-retest method may be one of the easiest ways to test reliability, there are inherent problems with measuring reliability using this method. First, researchers have difficulty in collecting data in one instance, let alone two. Collecting a measure of a phenomenon at more than one point can be unduly expensive, as well as impractical. A participant's practice and memory of the instrument may falsely increase consistency between scores, thus affecting reliability (Pedhazur & Schmelkin, 1991). Depending on when a researcher administers the test and retest, a person's answers from the survey may influence his/her/hir answers on the retest. Accordingly, researchers should specify the interval for when he/she/ze administers the test-retest because retest correlations degrease progressively as the interval increases (Anastasi & Urbina, 1997).

Even if a low test-retest correlation does appear, researchers cannot be certain whether it is indicative of low reliability for the scale, or if the underlying theoretical concept itself has changed (Carmines & Zeller, 1979). Complications may arise especially when researchers design scale instruments to measure a construct that varies over time (Spector, 1992).

Given the complications with test-retest reliability, I did not use this method in my instrument. As I discuss later in the study, LGBTQ alumni are a difficult

population to recruit for survey participation for a variety of reasons. Thus, sampling the same group more than once was impractical and improbable.

Alternative-Form Reliability

The alternative-form method is similar to test-retest in that researchers administer two surveys to the same set of individuals. It differs, however, in that the second administration is an alternative form of the first survey (Carmines & Zeller, 1979). The two surveys forms should not differ in any systematic way. Researchers measure reliability by assessing the correlation between the first and second forms of the survey measures.

The alternative-form addresses the concern of memory bias in test-retest method because researchers use two different forms of the scale instrument. However, similar to the test-retest method, researchers cannot definitively discern the difference between unreliability and true change of the phenomenon. Thus, a specific length of the interval between administrations is important. Nunnally and Bernstein (1994) recommend two weeks between measures, thus allowing day-to-day fluctuations in the person to occur.

Practically, alternative-form method is limiting because it is difficult to construct alternative forms of a scale measure that are parallel. Both survey forms should contain the same number of items, and researchers should write the items and prompts in the same form, measuring the same content (Anastasi & Urbina, 1997). Because of the impracticality of the alternative-form method, other techniques for estimating reliability are often required. For these reasons and for similar reasons as

mentioned in the test-retest reliability method, I did not utilize alternative-form reliability with this instrument.

Split-Half Reliability

Researchers can conduct the split-half method with only one survey administration, unlike the test-retest and alternative-form methods which require two test administrations (Carmines & Zeller, 1997). In the split-half method, researchers divide the total set of items into two halves. The correlation between the two halves of items yields the scale measurement's reliability. Researchers cannot obtain temporal stability using split-half method because only one session is involved. Scholars often call the split-half method of reliability a coefficient of internal consistency, because researchers only need a single administration of one form of the scale instrument (Anastasi & Urbina, 1997).

Researchers can group items into different halves in many ways, thus limiting the accuracy and increasing the indeterminacy of the split-half method of reliability. Traditionally, researchers have found the scores on the odd and even items of the survey instrument. This ensures that researchers assign items from varying portions of the scale instrument (i.e., the beginning, middle, and end) to each half (DeVellis, 2003). If a researcher groups items to reference one particular passage or image, he/she/ze should assign the entire grouping intact to one or the other half (Carmines & Zeller, 1979).

Split-half reliability increases with the number of items used. Thus, when a researcher splits a scale instrument in half, it reduces the number of total items. In a scale instrument of ten items, researchers use all ten items to test reliability in both

test-retest and alternative-form methods. For the split-half method, however, researchers split the instrument in half, thus using only five items to measure a correlation. Therefore, the split-half method of reliability yields a reliability measure for each half of the whole set of items, underestimating the reliability of the entire scale instrument (DeVellis, 2003).

As mentioned, the split-half method of reliability more or less serves as a coefficient of internal consistency. I already measured internal consistency through coefficient alpha calculations. Therefore, I did not utilize split-half reliability.

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Step 6: Administer Items to a Developmental Sample

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Once researchers have identified items to be included in instrument, they must then administer the survey to a sample of participants. For my dissertation, I administered only the pilot study. Thus, only one sample group from the target population of LGBTQ alumni took the survey instrument to field test the items.

Pilot Study

One major issue when conducting survey research is determining the number of participants required to obtain a representative and stable approximation of the population. Survey methodologists agree that the participant size must be large when sampling a survey instrument (DeVellis, 2003; Kerlinger & Lee, 2000), but there are varying opinions on how many people to survey.

There are several risks in using too few participants. Covariation among items may not be stable when sample size is low. Further, when the ratio of participants to survey items is low and the sample size is small, chance may influence correlations among items to a fairly substantial degree (DeVellis, 2003). With small samples, a

deviant sample has greater influence and presence than with a larger sample due to randomization and representation. Further, a small sample size may not adequately detect a significant effect (Kerlinger & Lee, 2000). With an increased sample size, the sampling distribution narrows and the standard error decreases.

Numerous rules regarding sample size have been delivered in scholarship, yet few of them are empirically based. Some measurement scholars have recommended that the sample size be determined by the number of items in the survey instrument (e.g., Baggaley, 1982; Brislin, Lonner, & Thorndike, 1974; Cattell, 1952, 1978; Gorsuch, 1983; Hair, Anderson, Tatham, & Grablowsky, 1979; Kunce, Cook, & Miller, 1975; Lindeman, Merenda, & Gold, 1980; Marascuilo & Leven, 1983; Nunnally & Bernstein, 1994), while others have suggested that a minimum of 100 to 200 participants is sufficient (Comrey, 1973, 1978; Gorsuch, 1983; Guilford, 1954; Hair et al., 1979; Lindeman et al., 1980; Loo, 1983). Cattell (1978) suggested determining number of participants as a function of the number of expected latent factors. Yet again, these rules have been determined by authors based on personal beliefs, experience, or communication from an uncited expert source (Guadagnoli & Velicer, 1988).

Most commonly, though, is the recommendation that researchers should obtain the maximum sample size possible (Guertin & Bailey, 1970; Humphreys, Ilgen, McGrath, & Montanelli, 1969; Press, 1972; Rummell, 1970). In their study, Guadagnoli and Velicer (1988) attempted to develop an approximate rule to determine the number of respondents necessary when conducting survey research. They concluded that the entire sample size was important, but that the number of

variables in a survey instrument were largely inconsequential in determining an appropriate sample size. In their words, "The concept that more observations are needed as the number of variables increases is clearly incorrect" (Guadagnoli & Velicer, 1988, p. 271). Further, they noted that a universal standard for determining participant sample size will overestimate the number of participants required. Indeed, the sample size varies under different experimental conditions used. Their study found that component saturation, or the magnitude of component loadings, had the greatest impact. Lower saturation levels meant higher importance on sample size, and higher saturation levels placed less importance on sample size.

If not enough participants are sampled, the entire population for which the scale is intended may not be represented. To address this concern, both the sample size and participant composition should be a consideration. Nonrepresentative samples can be different from the intended population in two ways: by the level of attribute present in the sample as opposed to the intended population, and with a sample that is qualitatively rather than quantitatively different from the target population. The latter nonrepresentativeness can result when the sample is unlike the population in important ways, thus affecting the underlying causal structure relating variables to true scores and ultimately the scale reliability (DeVellis, 2003). Researchers must take extra care in choosing a sample that closely represents the population for which the instrument is being developed (Ajzen & Fishbein, 1980; Nunnally & Bernstein, 1994).

Rather than assigning an arbitrary number or ratio to items or factors, I used Guadagnoli and Velicer's (1988) assertion that sample size requirements vary under

different experimental conditions. Surveying a marginalized population brings difficulties of generating a large sample size. Particularly for this survey, there were items and themes that were sensitive to individuals, including questions regarding identity and financial giving, among others. Additionally, no other instrument has attempted to quantify giving motivations and behaviors for minority populations in such depth. Having numerous latent constructs that represent varying themes was an inherent strength of the instrument, but placed increased pressure to yield a sufficient sample of participants. Recognizing all these aforementioned conditions, I consciously decided to survey a sample of respondents from one institution. Though the power of my analyses was conditional of the number of respondents, I nonetheless significantly contributed to the advancement of scholarship for LGBTQ people and philanthropy and fundraising for higher education irrespective of sample size.

For the pilot study, I invited one institution that participated in Drezner and Garvey's (2012) qualitative study examining LGBTQ alumni philanthropy. This particular institution is a private research extensive university founded in 1890. It is located in an urban city, with undergraduate and graduate enrollment at about 15,100 in 2011. The institution has about 150,000 solicitable alumni, and has endowment of $6.58 billion. Recently, their LGBTQ alumni affinity group reached over 900 alumni on their electronic listserv. Considering a 10-30% return for the survey, I estimated that I would reach approximately 100-300 respondents for the pilot study. The point person at this institution from the qualitative study is an alumni relations practitioner who works with diverse alumni communities. He himself identifies as gay and an alumnus of this institution. Thus, he was both personally and professionally

committed to serving LGBTQ alumni at his alma mater. Appendix K details the communication letter I sent out to this point people upon first outreach.

Using this point person to relay the survey to participants, I emailed him the invitation and link to the survey instrument. He then forwarded my invitation and survey to the listserv of approximately 900 LGBTQ alumni. All respondents completed the same version of the instrument. The beginning of the survey required participants to read and electronically sign a consent form (Appendix L). I administered the pilot study survey to this sample during fall 2012 in early November. After two weeks of the study being emailed out to participants, I asked the point person to send a reminder email through the listserv to encourage more participation. As an incentive, I offered five randomly-selected $99 gift cards for any participant who completed the entire survey. One month after initial administration (thus two weeks after the reminder), I closed the survey instrument and took it off-line.

The pilot study aimed at having a diverse and representative sample of individuals across gender, sexual identity, race, age, and giving behavior. I asked individuals to participate only if they identified as a sexual and/or gender minority. Thus, people who identified as both heterosexual and cisgender were not eligible to participate in the survey. These demographic variables reflect the diversity among LGBTQ alumni and their degrees of involvement, as well as distinguish behaviors among alumni in involvement in previous research.

Step 7: Evaluate the Items

Upon administering the survey instrument to a sample population, researchers then evaluate the performance of each individual item to determine its appropriateness for including in the respective factor scale. In evaluating the factor scales, researchers should choose items that serve as the best set of empirical indicators of the phenomenon (Carmines & Zeller, 1979). Ultimately, researchers must strive to achieve reliable and valid scale measurements for inclusion in a scale instrument.

With data from the pilot study, I first tested social desirability for participants' responses. I also performed tests of validity and reliability to gauge the instrument's ability to measure respondents' true scores consistently (Aiken, 2000). To address missing values, I used the full information maximum likelihood (FIML) method common in most statistical software packages.

Construct Validity

As previously discussed, construct validity measures items' relationships to other items, and includes both theoretical and empirical components (DeVellis, 2003). A survey instrument that has high construct validity should have high correlations between items and scales that measure the same construct (convergent validity), and should have low correlations between items and scales that measure different constructs (discriminant validity; Aiken, 2000).

For my instrument, I tested construct validity empirically using correlation analyses. I measured convergent validity by running analyses using Spearman's correlation coefficient for all items within each factor. I computed bivariate

correlations across all factors to check for discriminant validity. I interpreted the scores based on the same criteria: 0.4 meant low convergence, between 0.4 and 0.7 meant convergence, and 0.7 or higher meant multicollinearity.

Using results from both the convergent and discriminant validity tests, I flagged items with divergence from or multicollinearity with other items within factors. I also tracked items that converged with other variables across factors.

Factor Analysis

Next, I ran factor analyses on all the factor scale items. Researchers often use factor analysis as a way to identify the interrelationships among observed variables, and then to group a small subset of these variables into factors that represent a latent trait through data reduction (Nunnally & Bernstein, 1994; Pett, Lackey, & Sullivan, 2003). Each latent trait, or factor, is as distinct as possible from the other factors in the instrument (Tabachnick & Fidell, 2001).

For this instrument, I developed a theoretical model for measuring LGBTQ philanthropy. However, most of the research to substantiate this theoretical model was borrowed from adjacent disciplines and scholarly foci. There are few studies in the literature that empirically validate the use of my chosen factors for measuring or understanding LGBTQ alumni. Additionally, though I developed factors with respective items, these phenomena were never previously explored with this specific population, let alone more broadly. I was therefore unfamiliar with the underlying structure of the relationships between items and factors, and between factors themselves. Because of these reasons, and because no scholars have explored LGBTQ alumni philanthropy quantitatively, I used principal components analysis

(PCA) on all of the factor scale items to extract the appropriate number of factors and reduce items that represent each latent trait.

Originally conceived by Pearson (1901) and developed by Hotelling (1933), PCA reduces the dimensionality of a larger set of data to achieve a more parsimonious data set. I used PCA to reduce the number of items to small subsets to represent factors that contain as much information from the initial pool of items as possible. PCA is particularly useful when there is a small sample, a multicollinearity threat, or conceptual uncertainties regarding index construction. There were two steps to this process: defining the number of initial factors, and rotating the factors to improve interpretation (Nunnally & Bernstein, 1994).

Defining the number of initial factors. PCA is advantageous when researchers want to summarize relationships among a large number of variables with a smaller number of components, as in this survey instrument. PCA "linearly transforms an original set of variables into a substantially smaller set of uncorrelated variables that represents most of the information in the original set of variables" (Dunteman, 1989, p. 7). Duntemann wrote that especially when variables are highly correlated, PCA can linearly transform the variables into a relatively small set of uncorrelated variables, or principal components, that maximize the information and prediction of the original variables.

PCA summarizes the interrelationships among variables to yield a small set of orthogonal principal components that are linear combinations of the original variables (Goddard & Kirby, 1976). In PCA, researchers must standardize all variables because they need to be examined using similar units of measurement. With PCA, researchers

assume that there is as much analyzed variance as there are observed variables, and that all variance in an item can be explained through the extracted factors. Researchers describe PCA as eigenanalysis, because of the importance of eigenvectors and their associated eigenvalues. An eigenvector is a column of weights in a correlation matrix, with each weight associated with an item in the matrix. Corresponding eigenvalues represent the amount of variance in all of the items explained by a factor. The larger the eigenvalue, the more item variance explained by that factor (Pett, Lackey, & Sullivan, 2003).

PCA maximizes the sum of squared correlations of the principal component with the original items. The principal components are ordered so that the first account for the most variation and have the highest possible squared multiple correlations with the original items. Since the principal components are uncorrelated, each one independently contributes to understanding the variance of the original items.

An additional use of PCA is to select a subset of items to represent the total set of items in an instrument. Using PCA to select a small subset of items is useful in maintaining the original variables while retaining most of the statistical information in the original set of items. Being able to select only certain items reduces the total survey length and improves parsimony for future disseminations of the survey instrument. Particularly when items have high intercorrelations, it is feasible and reasonable to represent these items by a much smaller subset of items. The first step in reducing the total number of items is to determine how many variables to select. To determine the efficiency of the subset of items in representing the total set of variables, Jolliffe (1986) proposed measuring the total amount of variation that each

selected item explains. In order to obtain PCA solutions, I used SPSS for Windows, generating factor loadings, eigenvalues, and percentages of variance explained.

Next, I selected the number of factors to retain so as to maximize the amount of variance explained with the fewest number of factors. To do so, I plotted extracted factors against their eigenvalues in descending order of magnitude (Pett, Lackey, & Sullivan, 2003). These scree plots (Cattell, 1966) helped me identify distinct breaks in the slope of the plot, thus determining the differentiation between larger eigenvalues and smaller ones. The scree is the name given to the break in the curve of the eigenvalues.

If in the case the cutoff for the number of factors was unclear, I computed several analyses with different numbers of specified factors and items to determine the most parsimonious and theoretically sound set of factors. Using a number of methods to determine how many factors to use recognizes that extraction is decided by both statistical criteria and theoretical knowledge.

Rotating the factors. Factor rotation improves the meaningfulness and interpretation of extracted factors. The rotation process involves turning the reference axes of the factor about their origin to achieve a more simple structure and theoretically more meaningful factor (Hair, Anderson, Tatham, & Black, 1995; Pett, Lackey, & Sullivan, 2003). There are two broad categories of rotations: orthogonal and oblique. Orthogonal rotations assume that extracted factors are independent of one another, and oblique rotations assume that the factors are correlated.

With orthogonal rotations, there are three major approaches: Varimax, Quartimax, and Equimax, with Varimax being the default option with SPSS. A

Varimax rotation maximizes the loadings variance within the factors while also maximizing differences between the high and low factor loadings. A key benefit of Varimax rotation is that it allows researchers to generate a simple structure, thus making factors more interpretable. With SPSS, I was able to employ a Varimax rotation to yield a matrix of regression-like beta weights that estimated the unique contributions of each factor to the item variance (Tabachnick & Fidell, 2001), which I compared before and after the rotation.

Oblique rotations are different from orthogonal rotations because they assume that factors are correlated with each other, which is a likely assumption in educational and social science research. Measurement researchers caution the use of orthogonal rotation in educational and social science research because latent constructs are likely naturally correlated to some degree (Pedhazur & Schmelkin, 1991; Pett, Lackey, & Sullivan, 2003). In order to capture a more holistic picture, I applied both orthogonal and oblique rotations to the data and determine the most appropriate solution based on statistical and theoretical insight.

Cronbach's (1990) Coefficient Alpha

After performing construct validity tests and PCA, I calculated Cronbach's (1990) coefficient alpha to determine the internal-consistency reliability of the items intended to form factor scales on the pilot instrument. Coefficient alpha assesses the proportion of variance in participants' scores that can be attributed to their true scores (DeVellis, 2003). Coefficient alpha is an assessment of reliability for the actual instrument and sum of item scores that represent each latent variable. Again, as this

research is in the early stages of validation, a modest reliability of .70 is acceptable and .80 is good (Nunnally & Bernstein, 1994).

Step 8: Optimize Scale Length

In the final stage of survey development, researchers have a pool of items, each with acceptable measures of reliability. Balancing the length of the survey requires an understanding of participant willingness and reliability. Shorter instruments are advantageous because they require less time and are less burdensome on the participant. Longer survey instruments, however, are favorable because they tend to be more reliable. Balancing these two tensions can be difficult, as survey developers must negotiate the trade-off between brevity and reliability (DeVellis, 2003).

Before initiating the pilot study, I paid careful attention to the total amount of items in each section of the instrument. If the scale was determined to be too long, I consulted reports from content experts and potential respondents to determine which items to eliminate, and what effect that might have on validity and reliability of the scale.

Determining, Interpreting, and Naming Factors

Researchers should remove items that contribute least to the overall consistency of the scale (DeVellis, 2003). In deciding whether or not to eliminate an item from a scale, researchers must consider how the decision will impact the scale's Cronbach (1990) alpha value. If an item's correlation is significantly lower than the average correlation of the other scale items, eliminating it will raise alpha. If the correlation is only slightly lower than the average correlation, retaining the item will

increase alpha. Ideally, researchers should build in a margin of safety into alpha when optimizing scale length because alpha may fluctuate when a sample for which the scale was not developed takes the survey.

Comrey and Lee (1992) provided three conditions that assist in interpreting factors. First, a higher factor loading indicates a stronger overlap between the true variance of the item and factor. Next, a factor is more easily interpretable with more items that have substantial loadings. Finally, the more pure an item definition, the easier it is to infer the latent quality of the factor.

When naming factors, researchers must again rely on both the statistical and theoretical findings. Naming factors should be intuitive and simple to most closely represent the dimension of that factor. As I developed items in groupings based on predicted theoretical latent factors, I returned to these original concepts and used names identical or similar to the original construct. Kachigan (1986) cautioned that once a researcher names a factor, the item uniqueness and identity is lost and the factor name is the sole communicator to outside researchers and practitioners when applying results of studies that use the instrument. Therefore, I took considerable time in determining appropriate, relevant, and representative names for factors in this survey instrument.

Spector (1992) discussed that scale development is an ongoing process that never ends. In that an instrument operationalizes a theoretical or model framework, perfecting a survey is impractical because researchers cannot feasibly perfect a theoretical or model framework in the social and behavioral sciences.

Summary

In this chapter, I outlined the methodological decisions behind the development of my survey instrument measuring LGBTQ alumni giving. Using DeVellis' (2003) model of scale development, the chapter outlined the survey item generation, construction, review, validation, administration, and evaluation.

CHAPTER FOUR: EXPERT REVIEWERS

Chapter Four includes results from validation procedures using expert reviewers to check both content and construct validities. Validity is the extent to which an instrument measures what it purports to measure. Having validation measures during the pilot study can have great benefits when constructing and administering the final scale instrument. Validity is limited and particularized in that researchers can only measure an instrument's validity for a specific purpose and population.

In measuring both content and construct validity, expert reviewers played an important role in reviewing the survey instrument and accompanying factors. There were two groups of individuals who reviewed the LGBTQ alumni philanthropy survey: content experts and potential respondents. Each group had different responsibilities for reviewing the instrument.

I selected four content experts to review the survey in order to assess content and face validity. I provided each content expert with detailed reviewer instructions (Appendix F) and accompanying appendices. In part one of the review, the experts evaluated the definitions, names, and items for each latent factor (Kerlinger & Lee, 2000). In part two, the content experts reviewed individual items in their respective sections (Crocker & Algina, 1986). Two of the reviewers, Drs. Susan (Sue) R. Rankin and Luke Jensen, have expertise in LGBTQ students and issues in higher education, and the other two reviewers, Dr. Noah Drezner and Ms. Deborah Rhebergen, have professional and/or research experience in philanthropy and giving in higher education. As such, I assigned specific portions of the survey instrument for each

content expert to review. Those with LGBTQ student knowledge reviewed factors and items in both the demographics and undergraduate student experiences sections of the survey. Those with philanthropy and giving expertise reviewed factors and items in both the alumni experiences and philanthropy and fundraising sections of the instrument.

Potential respondents included individuals who represented the population of concern to test the instrument, in this case LGBTQ graduates of four year institutions of higher education. Appendix I describes summative identities and experiences of the group of potential respondents. These reviewers critiqued the actual functioning of the instrument from the perspective of a volunteer respondent. I held two sessions in which the potential respondents came to a computer lab to complete the electronic survey instrument in person and respond to each item as if they were actually participating in the study. I engaged potential respondents in questions concerning the survey instrument, paying particular attention to appearance, overall functioning, and latent factors. In critiquing the appearance and overall functioning, these reviewers provided their opinions regarding the instrument's instructions, usability, length, bias and comfort, and general survey structure. The second part of the review included potential respondents critiquing factors and their respective items. I provided the individual items for each factor and asked each reviewer to assign a name and definition for each factor based on their perception. They were also asked to select their three favorite and three least favorite items for each factor.

In the following sections, I combine findings from reviews of both content experts and potential respondents. First, I detail general critiques of the survey,

including overall impressions and appearance. Next, I provide narratives of collated reviews for each item, organized based on the four broad categories in the survey instrument: demographics, undergraduate student experiences, alumni experiences, and philanthropy and giving. Immediately following the reviewer summaries for each item, I provide measurement and conceptual changes that I made to modify the LGBTQ alumni philanthropy survey instrument. Appendix M provides an updated version of the Survey for LGBT Alumni Giving after making specific modifications based on reviews.

Included in this section is also a review of each latent factor provided by reviewers. In addition to narrative summaries for the latent factors, I provide bar graphs to represent ranking of items within each factor from all potential respondents. Specifically with the latent factors, I consciously eliminated two to three questions per factor based on reviews and item ranking to create a more parsimonious instrument. Appendix N details modifications made to the factor definitions, and Appendix O includes modifications to the factor items.

Overall Experience

Regarding the overall experience, both potential participants and content reviewers provided suggestions for improving the survey. Numerous reviewers commented on the need to clarify to which experience I was assessing. One potential respondent wrote that,

The matrix questions about my institution are difficult to answer b/c [*sic*] I transferred from…two very different institutions. I can choose to answer for the one that actually gave me a degree, but my answers would change if I

were to answer for my experience overall. Which do you want? Is there a way/need to clarify?

Another potential participant discussed similar concerns, and encouraged me to start questions with a prompt to specify that I was interested in a respondent's undergraduate experience. Dr. Drezner provided a similar recommendation to specify "undergraduate" in questions so that respondents clearly know to answer according to their experiences as undergraduate students. Further, Dr. Drezner also suggested that I change "primary undergraduate alma mater" to "institution from which you received your undergraduate degree."

In order to address these concerns, I removed wording that requested information from one's "primary undergraduate" experience, replacing with "institution from which you received your undergraduate degree." With questions that had unclear language, I added the phrase "during your undergraduate experience" so that respondents would know to which degree experience I was referring.

Regarding the length of the survey instrument, potential respondents either thought the survey was too long or was an appropriate length. One potential respondent wrote, "It is pretty long. I think it's okay if the person is aware going in." Several reviewers commented that many items, particularly those within factors, were repetitive. Upon explaining my intention to reduce the length of the survey by eliminating certain items of factors, some potential respondents discussed that the length was reasonable. One potential respondent said the survey was "Repetitive. But since you are deleting some questions, this may be resolved."

Based on reviews of the instrument, I determined the length of the instrument to be too long to complete. Particularly considering response rate and completion, I decided to eliminate certain items to reduce the time needed to complete the survey. Using reviews of the items and factors, I reduced many of these groupings from ten to seven. In following sections on specific factors, I describe which items I removed from factors to reduce total length.

Three potential respondents noted specific reasons for why they felt discomfort or bias towards a particular group of alumni. One reviewer attended a historically Black university and noticed that some questions seemed normed to alumni who attended predominantly White institutions, particularly when using the word minority. Another participant discussed his experience as an undergraduate at an institution with few on-campus experiences. His alma mater had a large part-time and commuter student population, and he felt as though the survey was biased towards students living on campus in a traditional college environment. He suggested including a question on the survey that asked if an alumnus was a part-time and/or commuter student and to "rate overall participation in undergraduate experience." A third potential respondent recorded her discomfort with certain Likert-scaled items. She discussed that "Some of the questions/statements were worded in a negative way which made me feel uncomfortable. I would feel judged if I answered agree." In this situation, she was referencing a respondent's inclination to mark socially-desirable responses that would reflect favorably for the participant.

Upon reviewing the instrument, I found language that strongly favored graduates from predominantly White institutions, specifically when I broadly

discussed minority populations at one's alma mater. For example, one factor item read, "Staff at my alma mater are insensitive to minority groups." Although my intention was to measure discrimination for LGBTQ individuals, the wording of this statement did not specific to which minority group I was referring. Graduates from minority-serving institutions, in particular, likely have different conceptualizations of minority populations than graduates from predominantly White institutions. Therefore, I clarified my intention of the word minority to specify sexual and gender minority individuals. In regards to addressing concerns of making the survey more inclusive for part-time and commuter students, the survey did indeed ask a question regarding part-time and full-time status. Although I did not directly have a question that asked for commuter student status, I did have a residency question. I discuss how I modified that particular question in the undergraduate student experiences section of the review. With regards to the social desirability of certain items, I reviewed all items to identify any biased language. Several items included words that might have influenced respondents to answer based on perceived social desirability (e.g., neglect, ignore). I removed specific language that the reviewer referenced and report those findings upon discussing specific factors. I also note that I included a social desirability scale to track this bias.

Both content experts and potential respondents had difficulty with the pretest measures. One reviewer commented that "The question about looking back to before giving to my alma mater was confusing." Another respondent wrote that "The 'think back to before…' questions required me to re-read them a couple of times." Similarly, another potential respondent discussed that "There is something confusing

about the prompt and answer choices" for the pretests. Ms. Rhebergen identified troubles with the scaling of the pretest instruments, discussing that the Likert scale from strongly disagree to strongly agree did not match the question stem.

Pretest measures are inherently difficult to develop. Having respondents think back to a time potentially long ago requires straightforward and understandable language. Using the aforementioned Likert scale did not properly match the stem of the pretest questions. For example, one pretest item asked respondents to measure the extent to which they thought they would be at a welcoming institution for LGBT people. The response options ranged from strongly disagree to strongly agree, which did not directly correlate to the item stem. Accordingly, I changed these response options to reflect frequency, ranging from never to all the time. For other pretests, I modified the responses similarly so that they were specific to each item.

During the reviews, I asked potential respondents if they thought an incentive would increase participation, and if so, what type of incentives would work best for this particular population. One reviewer commented that incentives would not improve completion rate, but would perhaps improve participation rate. When asked if incentives would improve participation, another potential respondent said "Always, but in this case I don't find them glaringly necessary." One reviewer suggested that a $25 gift card to Amazon.com could help. Finally, another potential respondent recommended having a donation to a person's charity of choice as an incentive. Considering all suggestions, I chose to use my initial plan for incentives, offering five randomly-selected $99 donations to a person's charity of choice.

Appearance

For the potential respondents who had taken the actual survey, there were several comments regarding the appearance of the electronic instrument. A considerable amount of reviewers commented on the need to add a back button to the survey. One wrote, "I made a mistake on a demographic question and wanted to change it – but could not." Another respondent suggested making the survey advance automatically instead of clicking next. I consulted with a Qualtrics software expert regarding these issues. Based on her input, I added a back button to the electronic survey. I did not, however, have the pages advance automatically because having a next button keeps respondents alert and involved in the survey administration.

The Qualtrics software provided a progress bar at the bottom of the screen, indicating a percentage of completion for the instrument. One potential respondent asked if I could label the progress bar "progress." Another wrote that "It would be helpful to indicate the progress bar as that, maybe w/ [*sic*] a percentage sign or something." One potential respondent suggested placing the progress bar at the top, rather than at the bottom. Although Qualtrics did not allow me to place the progress bar at the top, I did add text to clearly identify the percentage of survey completion for respondents.

Regarding the coloring of the survey instrument, two potential respondents had suggestions for improvement. One respondent noted that the red and grey coloring might denote certain school rivalries. He suggested using neutral colors that would not bring to mind any particular school. Another reviewer suggested having different colored alternate rows, particularly on the grid-like questions because "The

circles below the 'spectrum' questions are a little hard to follow." To address the first concern, I selected a new theme for the electronic survey called Plain Jane wide which used only black and white coloring. For the second suggestion, I changed the coloring for alternate rows, with every other row as a light grey.

Several respondents had suggestions for making the writing more legible. First, two respondents suggested making the font larger. Other reviewers suggested bolding important words in specific questions. Specifically, one potential respondent wrote that "When the difference in questions/headings is slight it might be good to highlight the important word changes." Another suggested to bold important statements like "check all." To address these review comments, I increased the font size from 100 to 120%. Additionally, I reviewed the entire survey and bolded key words important to the survey administration.

Demographics

In the following section, I provide summaries of reviews from both content experts and potential respondents for demographic items. Drs. Susan (Sue) R. Rankin and Luke Jensen served as content expert reviewers for this specific section. In the case that a variable did not elicit any feedback from reviewers, I did not include in this review. Following each item review summary, I provide detailed revisions that I undertook for my survey instrument.

Items

In the demographics section, I asked respondents, "What is your current gender identity?" with four response options: male, female, intersex, and other. I also asked participants, "What is your current gender expression?" with three response

options: masculine, feminine, and other. Regarding both gender identity and expression, Dr. Jensen wrote, "Why are you asking? What are you trying to get at?" He saw response options as problematic, suggesting that I look at materials from the Williams Institute and the National Gay and Lesbian Task Force to reconstruct the question responses. Dr. Rankin also commented on these items, encouraging me to consider adding, "Mark all that apply" for both gender identity and expression. Two potential respondents also commented on the question asking for gender expression. One wrote, "The gender expression part threw me off & I chose not to answer." Another discussed that "Masc/fem [*sic*] is like asking Black or White – can a spectrum be applied or question omitted?" Although their comments are warranted, it should also be noted that these reviewers both identify as gay and cisgender men. Perhaps gender expression is more familiar of an identity for gender non-conforming people and individuals who identify along the transgender spectrum.

In the demographics section, I also asked a question that asked "What is your current sexual identity?" with 12 response options (Appendix M). Dr. Jensen had comments regarding this item, writing that "It looks like an incomplete laundry list – more than the standard, less than everything." He continued by stating,

> …by multiplying identities we actually lose effectiveness. In other words, we actually lose more people when our intent is to be specifically inclusive with various sexual identity labels. Also, you might consider differing reactions to seeing such a list base on generation. Someone in their 50s or 60s might see this quite differently than someone in their 20s or 30s.

Gender identity and expression and sexual identity items and response options for this survey were generated from the *State of Higher Education for LGBT People*. Including all three demographic questions enabled me to capture a more nuanced and inclusive understanding of LGBTQ individuals. Further, it gave voice to individuals with less common social identities, including people who identify along the transgender and queer spectrums. Having these items also reinforced my critical queer epistemological frame (Britzman, 1995; Renn, 2010; Tierney & Rhoads, 1993). Although some respondents may not identify as or understand some identity listed in these response options, particularly cisgender and more senior individuals, it was important to recognize and celebrate all people in the LGBTQ community. As such, I did not modify gender identity, expression, or sexual identity.

In addition to sexual identity, Dr. Rankin suggested adding a question to ask respondents to indicate their assigned birth sex, with options for male, female, and intersex. Based on Dr. Rankin's suggestions, I did add a question that asks for a person's assigned birth sex (male, female, intersex, other) and changed the responses for gender identity, expression, and sexual identity to a "Check all that apply" response option.

The question asking of participants' race/ethnicity included eight broad racial categories, with a prompt for individuals to indicate a more specific ethnic identity, including selecting more than one racial/ethnic identity (Appendix M). Regarding race and ethnicity, Dr. Jensen questioned the extensiveness of response options. In my instrument, I utilized the U.S. Office of Management and Budget's (1997) standards for classification of federal data on race and ethnicity in combination with

other higher education survey instruments (e.g., *National Study of Living-Learning Programs*, *Multi-Institutional Study of Leadership*, *State of Higher Education for LGBT People*). I collated response options to generate a list of inclusive options for my survey. Having more options than most survey instruments recognized my critical epistemology (Bensimon & Bishop, 2012; Stage, 2007) so that I could give a stronger voice to racial and ethnic minorities. Further, allowing individuals to specify their racial and ethnic identity in blank boxes allowed me to potentially section out specific identities for analyses.

Similarly, Dr. Jensen inquired about the purpose of having such an extensive list of religious and spiritual identities. In the survey, I had 38 options for religious and spiritual identities. Recognizing that the list was not user-friendly, I decided to consolidate response options to include fewer religious and spiritual identities and concentrate on major religious and spiritual identities (Protestant, Catholic, Jewish, Muslim, Hindu, Buddhist, unaffiliated/none, spiritual, and atheist). Dr. Rankin suggested adding a question to examine whether a respondent left his/her/hir religion because of his/her/hir identity as LGBTQ. Although the question is fascinating and though-provoking, it did not necessarily relate to my understanding of LGBTQ philanthropy and giving. As such, I did not include this question in my revised survey. Several potential respondents noted the difficulty in discerning response options for importance of religion, particularly because of the similar connotations for the words extremely and very. Based on these reviews, I changed the response options to not at all important to extremely important so they would more directly reflect the item stem.

In the survey, I asked participants "How would you characterize your political views?" Dr. Rankin provided alterative response options for the question asking about political views. Her options used more nuanced language and allowed respondents to more easily differentiate between options. She also added an option to allow participants to indicate a different response from the preselected answers. As such, I adopted her response options for this question: far left, liberal, moderate, conservative, far right, and undecided.

Additionally, Dr. Rankin also suggested adding an additional response option for the citizenship question. The initial question included seven response options: U.S. citizen, U.S. citizen – naturalized, dual citizenship, permanent resident (immigrant), permanent resident (refugee), international (F-1, J-1, H, A, L, or G visas), and other. Based on her recommendation, I added undocumented as a separate response option for this item.

Undergraduate Student Experiences

Both Drs. Rankin and Jensen similarly provided reviews for the section measuring undergraduate student experiences. Additionally, potential respondents gave critiques of all items and factors.

Items

Initially for the beginning of the undergraduate student experiences section, I had planned on having a drop-down menu to include every four-year institution within each state. However, including all institutions proved to be too cumbersome for the survey. With the first questions regarding enrollment, Dr. Rankin suggested allowing respondents to fill in the blank with their institution name. Taking Dr.

Rankin's advice, I created a drop-down menu for participants to indicate the state of their undergraduate institution and a blank line for a person to type in his/her/hir college or university.

Dr. Rankin also suggested removing the question that asked whether a person had attended another institution before attending his/her/hir undergraduate alma mater. Rather than eliminating the item, I changed the question to "Were you a transfer student?" with binary responses options of yes and no.

Both content experts and potential respondents had difficulty with the major classification system in the survey instrument. One reviewer commented that he "Couldn't find psych [*sic*]" and another similarly wrote "Political science not listed as an Arts/Humanities major; feel this is an oversight." Dr. Jensen commented that "Many alumns [*sic*] graduated with degrees we no longer offer or offer under different names – which is true of academic departments." Dr. Rankin suggested that I offer large academic units and then break down by individual major.

Having originally drafted the major classification scheme from other higher education survey instruments, I revisited the categories and realized that they were not adequate in guiding respondents to select their academic major. Using Dr. Drezner's recommendation, I adopted the coding scheme from the National Center for Education Statistics (2000) Classification of Instructional Program: engineering, life sciences, physical sciences, social and behavioral sciences, arts and humanities, education, and professional programs. Appendix M details the question and item response options.

In the initial design, I included eight response options for the item "Check all the following academic-related activities you participated in during your undergraduate experience." Regarding these academic-related activities, two potential respondents commented on activities that were part of their undergraduate experience but were not on the list. One reviewer wrote that "I was in lots of music organizations as an undergrad. Wasn't sure where to put these – they were academically based – they were a class for my major." Another respondent asked whether service learning should be included in the academic-related activities list.

Following, I included an item that read "Check all the following co-curricular activities you participated in during your undergraduate experience" with 21 response options. One potential respondent asked whether religious retreats should be part of the list. Another person wrote, "Some college experiences were difficult to answer: some of my activities/academic experiences did not fit with how they were listed." One reviewer suggested specifying co-curricular activities as non-paid positions. She wrote, "Most people would understand this but I realized only after writing in "resident life."

I also asked a question that read "Did you hold a leadership position in an organization." Dr. Rankin suggested alternative choices for leadership positions. She noted that having a Likert-type scale from never to always was confusing. Rather, she proposed asking a quantity of leadership positions held so that the question was more easily and consistently interpretable.

I generated the lists of academic-related and co-curricular activities from other national higher education survey instruments, particularly from the *Multi-Institutional*

Study of Leadership and the *National Study of Living-Learning Programs*. Although I could have classified these activities differently and/or included additional options for selection, I decided to leave the lists unchanged. By including an option for participants to specify other options, I allowed for full inclusion of both academic-related and co-curricular activities. Regarding specifying activities as non-paid, I decided to keep the current wording so as to eliminate confusing wording and additional prompts. Further, I adopted Dr. Rankin's suggestion to change the leadership position question responses to quantities: never held a leadership position, held one leadership position, held two leadership positions, held three leadership positions, and held four or more leadership positions.

In the survey, I asked four questions related to work (Appendix M). One potential respondent asked for more clarity on the work-related question that asked "Did you work as an undergraduate student?" He wrote, "I assume in my answer that you mean during the academic year (I also worked full-time over the summers)." To address this concern, I added language to certain work-related questions for respondents to answer based on work during the academic year.

Regarding residency, I asked respondents "Which of the following best describes where you primarily lived while attending college." Dr. Rankin suggested I revisit the response options for residency. I took her suggestion and revised the item response to include homeless (e.g., couch surfing, sleeping in car, sleeping in campus office/lab).

In the survey, I ask respondents "How many openly LGBT faculty/staff did you know as an undergraduate student?" and "How many openly LGBT students did

you know as an undergraduate student?" Dr. Rankin suggested splitting these questions for sexual minorities and gender minorities. Although I greatly understand the need and benefit to asking these separate questions, I decided to leave the questions remaining. Primarily, I made this decision to reduce the already lengthy survey completion time.

Factors

Within the undergraduate student experiences section, reviewers provided recommendations for improving the three factors. I provide these reviews for all three factors in the following paragraphs. When referring to the factors, I use the original names generated for clarity.

Undergraduate satisfaction. Both Drs. Jensen and Rankin provided critiques for undergraduate satisfaction regarding the clarity of the factor in measuring one specific trait. Dr. Jensen noted, "Being satisfied with professional preparation does not equate with overall satisfaction…What about the alumn [*sic*] who feels satisfied with the education, but dissatisfied with social life?" Dr. Rankin similarly discussed that "…many of the questions seem to focus on academic and professional success." She also questioned the use of the word satisfaction in capturing the essence of the factor, asking "If one is 'satisfied' is that a good thing?" Figure 4.1 reflects similar confusions with the latent factor measuring satisfaction. There were few items that were strongly ranked highly or poorly.

Though there are several ways to measure undergraduate satisfaction, I relied on prior literature in philanthropy and fundraising that specifically examined academic training satisfaction (Clotfelter, 2008; Korvas, 1984; Weerts & Ronca,

Figure 4.1

Satisfaction Item Ratings
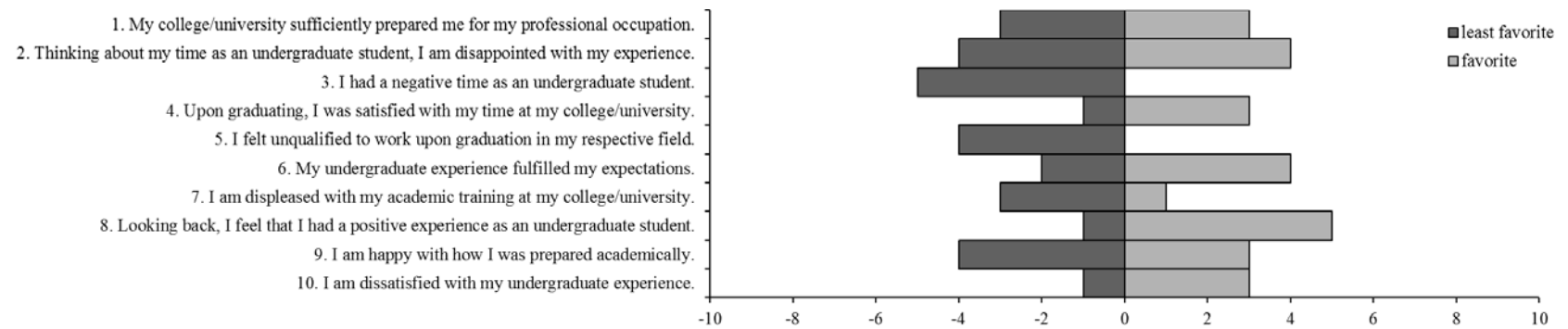
2007). Taking into consideration the reviewer recommendations, I changed the name and definition of this factor to academic training: the extent to which an alumnus/na felt prepared academically by his/her/hir undergraduate experience. Combined with the bar graph, I selected questions that specifically examined academic training satisfaction.

Perception of campus climate. Regarding the perception of campus climate factor, both content experts and potential respondents critiqued the scope of the definition of climate. One potential respondent asked, "Define climate. For whom?" Dr. Jensen noted that overall climate and climate for LGBTQ individuals are different concepts, and Dr. Rankin discussed that I may need to define for respondents what I mean by climate. Figure 4.2 yielded similar critiques, with potential respondents favoring items specific to LGBTQ individuals and poorly ranking items that were broad in scope.

As this instrument was intended on measuring the experiences of LGBTQ alumni, I was specifically interested in perceptions of campus climate that relate to these individuals. I therefore modified the name and the definition to reflect this specification. The new factor name and definition was perception of campus climate for LGBTQ individuals: an alumnus'/alumna's view of how welcoming his/her/hir institution was towards LGBTQ people when he/she/ze was an undergraduate student. I changed the items to ask questions specific to LGBTQ campus climate, eliminating broad definitions of climate.

Harassment as student. The factor measuring harassment as student yielded mostly praise. Dr. Rankin commented that the definition was good, yet specific items

Figure 4.2

Perception of Campus Climate Item Ratings
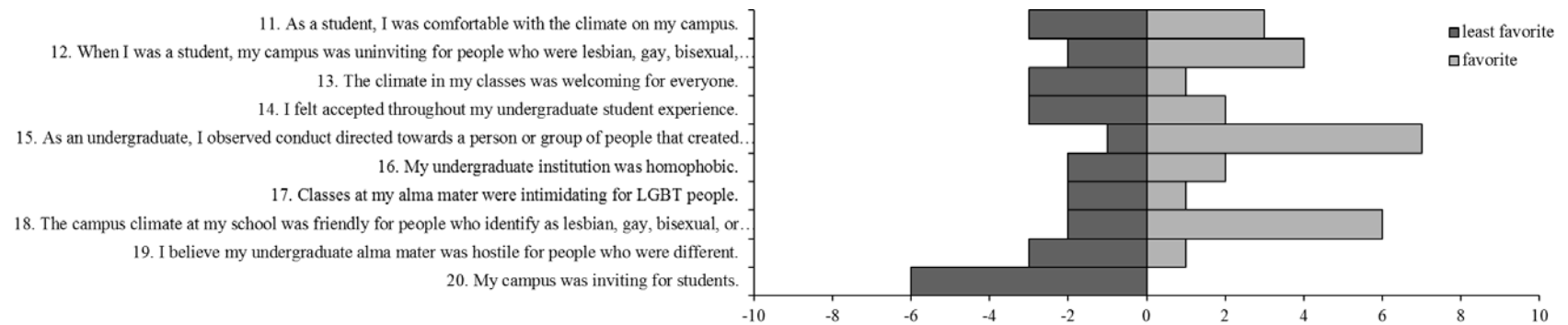
Figure 4.3

Harassment as Student Item Ratings
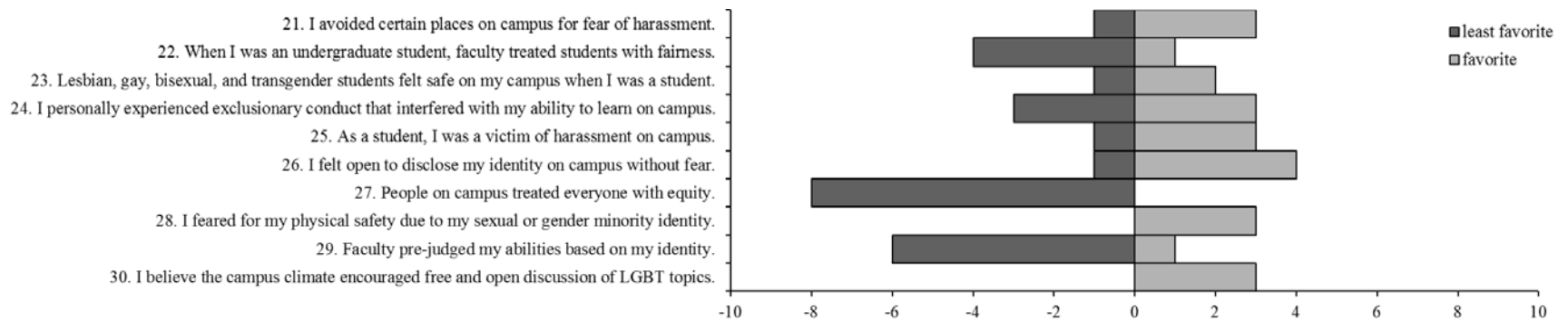
received poor ratings and unfavorable comments from potential respondents. In fact, two items received negative ratings from more than half of the respondents. Generally, the items that were poorly rated had vague language or wording with multiple interpretations. Figure 4.3 displays these findings.

For this factor, I did not change the name or definition. Rather, I used feedback on language for specific items to eliminate problematic questions. In total, I eliminated eight of 30 factor items within the undergraduate student experiences section.

Alumni Experiences

The following section outlines reviews and revisions of items and factors within the alumni experiences section of the survey instrument. Content experts Ms. Deborah Rhebergen and Dr. Noah Drezner provided feedback, as well as nine potential respondents.

Items

One potential respondent wrote that the alumni experiences section felt repetitive, "especially since I answered that I don't know if we have an alumni association." Although many of the questions may seem too closely related to justify their inclusion, each item examined a specific experience or phenomenon relative to LGBTQ alumni. Having received this comment, I reviewed this section closely and determined that all questions were in fact distinct and appropriate to include.

Another potential respondent suggested adding a question on alma mater size. Although there are numerous ways to measure alma mater size (e.g., current undergraduate student enrollment, endowment, solicitable alumni), none were

appropriate to ask on this survey. Asking these questions would take up valuable

survey space and time, producing relatively unreliable data from alumni who are

likely not informed on most institutional-level variables. However, these variables are

important in capturing a holistic picture of LGBTQ alumni philanthropy, which is

why I included them in the institutional survey. Having point people familiar with the

advancement and LGBTQ cultures enables me to ask these questions with more

certainty and reliability in the responses. Additionally, these are all data that can be

collected from other survey instruments (e.g., The Integrated Postsecondary

Education Data System, Voluntary Support of Education).

In the survey, I asked participants "What is your current household income?"

and "What is your current individual income?" When asking about income, Ms.

Rhebergen asked "Why is the scale so specific? I'd combine the two lowest responses

at least, and actually differentiate more at the higher end." Although I decided to keep

the lowest responses as they were originally written, I did differentiate the final

response item to add an additional option (Appendix M).

Also in this section, I asked several questions about alumni association and

LGBTQ alumni affinity group membership (Appendix M). Both Ms. Rhebergen and

Dr. Drezner commented that I should differentiate between dues paying and non-dues

paying associations and groups. Ms. Rhebergen wrote, "My undergrad [*sic*] has an

alumni association that everyone is a member of, no dues. My grad has a dues paying

alumni association." In order to differentiate, I added an additional question to ask if

alumni associations and LGBTQ alumni affinity group memberships are dues paying.

In the initial survey instrument, I asked respondents "Are you currently or have you previously been employed with your undergraduate alma mater post-graduation?" Following Dr. Drezner's recommendation, I deleted the second part of the question and for the pilot study only asked whether a person has or has not worked at their alma mater, regardless of whether it is currently or was previously.

Factors

The factors within alumni experiences were reviewed by content expert and potential respondent reviewers. Within each factor, I critique both the overall construct and specific items.

Harassment as alumnus/na. Similar to the factor measuring harassment as a student, the factor measuring harassment as alumnus/na received favorable critique. Most criticism for the factor was related to individual items and their wording. Again, poorly-rated items were vague and confusing in language and word choice, with two items receiving negative ratings from more than half of the potential respondent reviewers. The bar graph in Figure 4.4 visualizes these findings.

For this factor, I did not change the name or definition. Rather, I used feedback from reviewers to remove problematic items. In total, I removed three items from this factor.

Perceived support from leadership. Ms. Rhebergen wrote that the factor measuring perceived support from leadership "…is strongly relevant to the study as it helps understand whether the perception of campus behavior influences philanthropy." However, this latent factor received feedback from both content experts and potential respondents that it was too vague. Numerous potential

Figure 4.4

Harassment as Alumnus/na Item Ratings
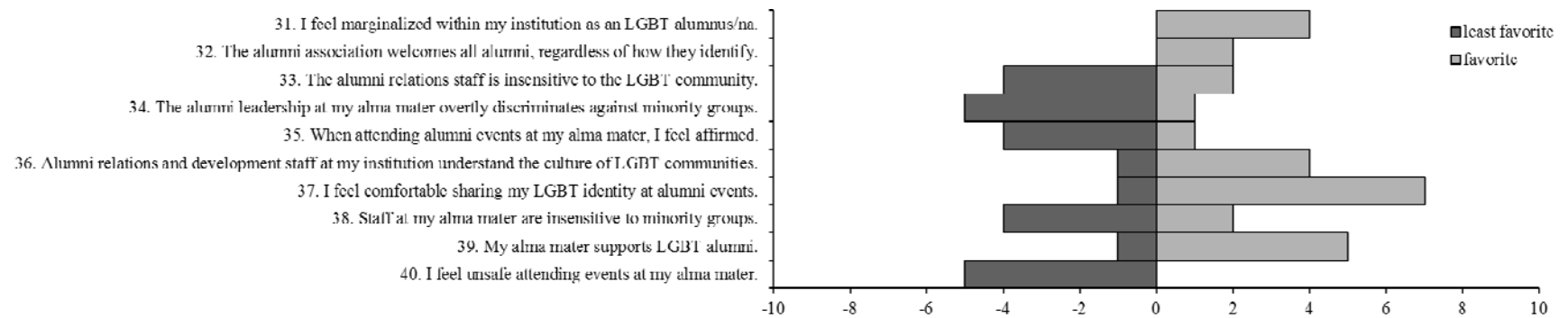
respondents questioned whether I was measuring support for LGBTQ issues specifically or more broad support. This confusion was reflected in the bar graph ranking the items. One item that read "The leadership at my alma mater visibly support sexual and gender minority issues" was ranked highly by seven of the nine respondents. Another item that read "Campus staff are unreliable in meeting my needs" received negative ratings from six of the nine potential respondents. Figure 4.5 displays a bar graph to represent ranking of items within this factor for all potential respondents

Similar to prior factors, I changed the factor name so it specifically referred to support from leadership for LGBTQ communities. I also removed and/or modified items that were too broad in scope, focusing on LGBTQ-specific support from leadership.

Trust. Trust, another factor within the alumni experiences section of the survey instrument, received the most critique of all the factors from reviewers. Ms. Rhebergen discussed, "I'm less confident on the scale or relevance with this factor as it is currently defined. The student and alumni experiences might vary greatly and each person may have compartmentalized 'trust' feelings to different parts of their experience." Dr. Drezner commented that the items asked about trust as it related to different entities (e.g., president, administration, staff), which made it difficult for him to cohesively understand the factor. Several potential respondents indicated that the items in this factor were confusing, particularly because they had not actively considered how their trust influenced their philanthropic giving to their alma mater.

Figure 4.5

Perceived Support from Leadership Item Ratings
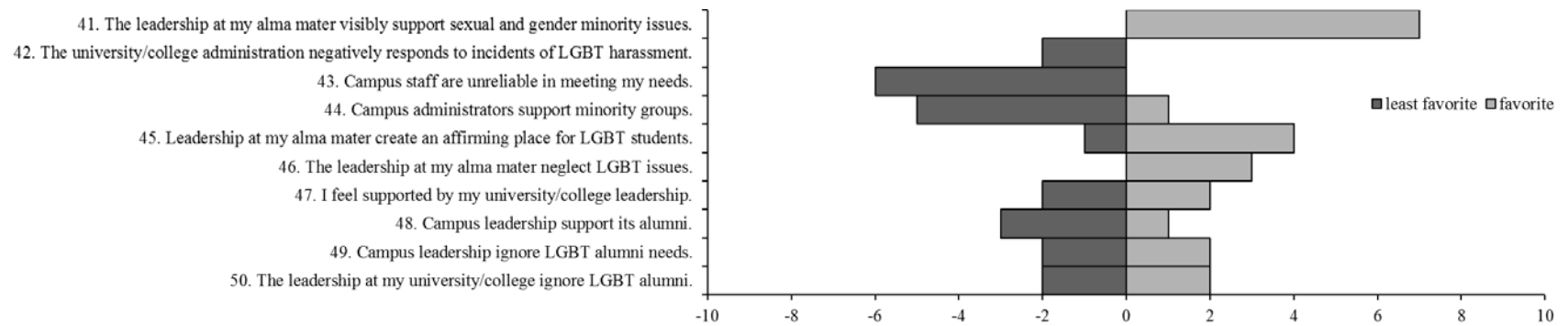
Additionally, they critiqued the phrasing of many items, noting that the wording confused them. I represent the ranking of items within this factor in Figure 4.6.

After reviewing the multiple sources of input, I decided to remove this factor and its respective items from the survey instrument. Recognizing that my instrument was too lengthy, I consciously wanted to remove numerous questions. Although consolidating each factor to seven to eight items from ten did indeed reduce the length, removing an entire factor allowed me to reach a more feasible length for the survey. Additionally, the latent construct trust was the most contested among reviewers, both potential respondents and content experts. As such, I found it appropriate to remove the factor from the instrument.

Alumni satisfaction. The factor measuring alumni satisfaction was reviewed by both content experts and potential respondents. Ms. Rhebergen wrote that this factor is relevant and important to include in an instrument measuring alumni philanthropy. Similar to other factors, Dr. Drezner questioned whether this factor was meant to measure satisfaction with LGBTQ issues, or another construct. The item rating bar graph in Figure 4.7 yielded a split review, with nearly every item receiving equally poor and favorable ratings.

A large part of the problem with this factor was mentioned by Dr. Drezner, in that it did not specify to which dimension of satisfaction alumni should respond. Accordingly, I modified the name and definition to more accurately reflect my intended focus. The name and definition was changed to institutional value: the extent to which a person views the worth of his/her/hir undergraduate degree and institution. I selected items that specifically concentrated on this aspect of satisfaction, and

Figure 4.6

Trust Item Ratings
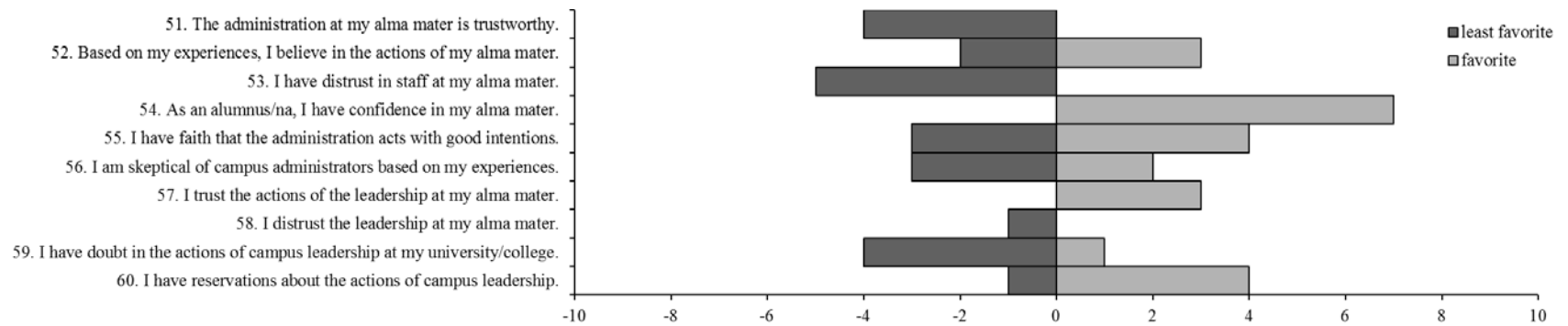
Figure 4.7

Alumni Satisfaction Item Ratings
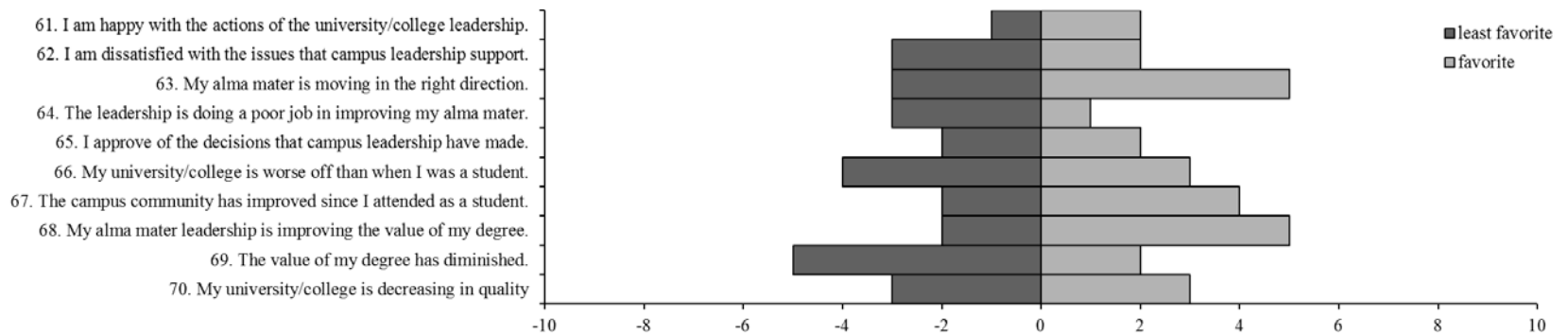
modified all existing items to reflect this academic satisfaction focus. In total, I kept 21 of the 40 total factor questions, and reduced the number of factors from four to three in this survey section.

Philanthropy and Giving

Both items and factors were critiqued by Ms. Rhebergen and Dr. Drezner, as well as potential respondent reviewers. In the following section, I first highlight changes made to individual items, and then discuss the factors within the philanthropy and giving section of the survey instrument.

Items

Regarding the order of questions, Dr. Drezner suggested I slightly alter the sequence of items within both financial giving and volunteering. Per his recommendation, I changed the order so that the question focus progressed from overall giving, to LGBTQ overall giving, followed by higher education giving, and ending with LGBTQ higher education giving.

In the survey I asked "What percentage of your current financial giving to your undergraduate alma mater goes to LGBT initiatives?" Regarding this question, one potential respondent asked "What if your school does not have these LGBT initiatives to give?" Considering the dilemma illuminated from his question, I added questions to ask whether LGBTQ-specific giving opportunities were available. I then branched questions related to LGBTQ higher education giving so that only people who had these giving opportunities available at their alma mater would receive and view these questions.

In the beginning of his review for this section, Dr. Drezner indicated the need to distinguish between charity and nonprofit organizations. One potential respondent questioned, "Do nonprofit orgs [*sic*] include religious institutions? Please clarify." Since this was intended to measure overall philanthropy, I changed all wording from charity to nonprofit organizations.

Dr. Drezner and Ms. Rhebergen provided additional suggestions to modify wording within this section. Ms. Rhebergen wrote that I should note that financial giving to one's alma mater should exclude non-deductible items like season and event tickets. I added this language to the instrument so that it was clearer. The new item read, "How much money did you give this past year to your undergraduate alma mater (excluding non-deductible items like sports and concert tickets)?" Similarly, Dr. Drezner suggested I add language to certain items so that participants knew to include pledges as part of their philanthropic giving. Accordingly, I modified the question to ask "How much money have you given total across your life to your undergraduate alma mater since graduating (including pledges)?"

In the question asking about frequency for attending class year reunions, Ms. Rhebergen suggested I add language to include other reunions. Consequently, I added another response option that read "Attend class year and/or affinity group reunions."

In the survey, I asked participants "What percentage of your current income goes towards nonprofit organizations?" and "What percentage of your current free time goes towards volunteering with nonprofit organizations?" Initially, the survey instrument gave response options for total financial giving and volunteering that spanned from 0-100% in increments of ten. However, Dr. Drezner pointed out that

few respondents likely give more than 30% of their total income or free time to nonprofit organizations. He wrote, "Percent of total income should probably be in smaller grades. The majority will say between 1 to 10%. Few will respond of 30%. Possibly adjust accordingly." Ms. Rhebergen also noted that "In general I find these scales too specific." As such, I modified the scaling of these total giving questions to differentiate lower numbered responses in increments of five and changed the latter half of responses to fifty or above (Appendix M).

One question in the survey asked respondents "How consistently do you give financially to your alma mater?" Although the initial survey included a response for annual giving, it did not allow me to capture alumni who had given consistently since graduating. Dr. Drezner suggested I include a new response to allow respondents to check whether they had been giving every year since graduation. I added this response option in both the financial giving and volunteering sections.

Factors

Ms. Rhebergen discussed, "I think you need to do the most work on the factors in the philanthropy and giving section. It seems like some of the items in the scale are repetitive across factors." Taking this into consideration, I intently reviewed individual items and their collective wholes across factors to differentiate latent factors as well as possible.

Activism/important work (political and social change). Within the factor named activism/important work (political and social change), I realized that I needed to shorten the name to more concisely reflect my intended measure. Additionally, as with previous factors, reviewers discussed that they preferred items that specifically

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Figure 4.8

Activism/Important Work (Political and Social Change) Item Ratings
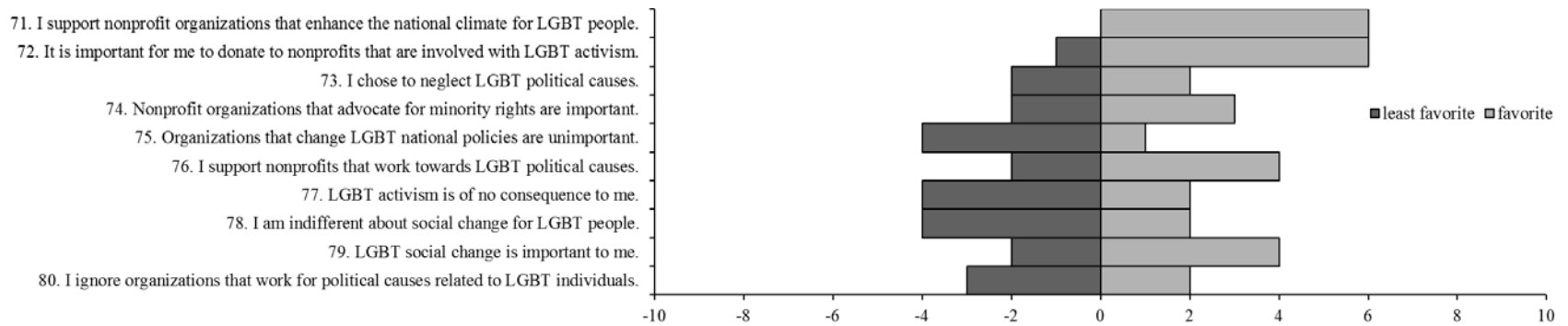
mentioned LGBTQ philanthropy. Item ratings represented in Figure 4.8 yielded

mixed reviews with numerous questions receiving nearly equally favorable and poor

ratings.

Based on reviews, I renamed the factor to LGBTQ political and social change.

I also selected items that mentioned specifically LGBTQ-related political and social

change, eliminating or modifying items that broadly discussed minority-related

change.

Altruism/good work (direct service benefits). Ms. Rhebergen discussed that

the factor measuring altruism/good work is "Very relevant as it gets to direct

involvement and actionable results." Similar to the previously mentioned factor, I

recognized that I needed to change the lengthy name of the factor measuring

altruism/good work (direct service benefits). Within this factor, both Dr. Drezner and

potential respondents noted that some items might elicit socially-desirable responses.

Based on rating reviews, several items received strong favor and poorness, making

item selection easier and more discernible. Figure 4.9 displays these findings.

I shortened the factor name to LGBTQ direct service benefits and ensured that

no questions strongly encouraged socially-desirable responses. I selected questions

based on ratings that discussed direct actions, keeping in mind Ms. Rhebergen's note

that measuring direct service is important and relevant.

Community uplift. The factor measuring community uplift received few

revisions from potential respondents. Dr. Drezner discussed that items should focus

on the individual respondent's attitude, not the nonprofit's mission. For example, one

statement read "Nonprofit organizations are meant to raise up marginalized

Figure 4.9

Altruism/Good Work (Direct Service Benefits) Item Ratings
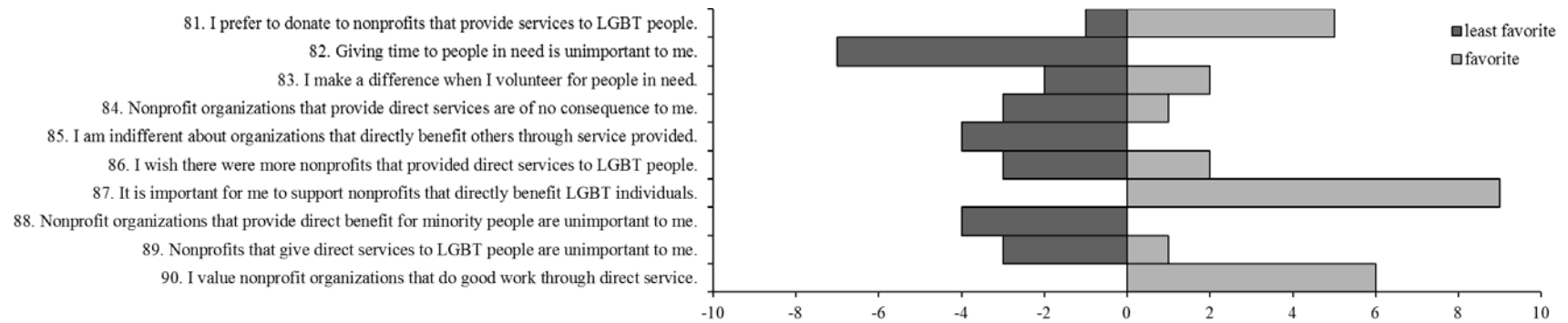
Figure 4.10

Community Uplift Item Ratings
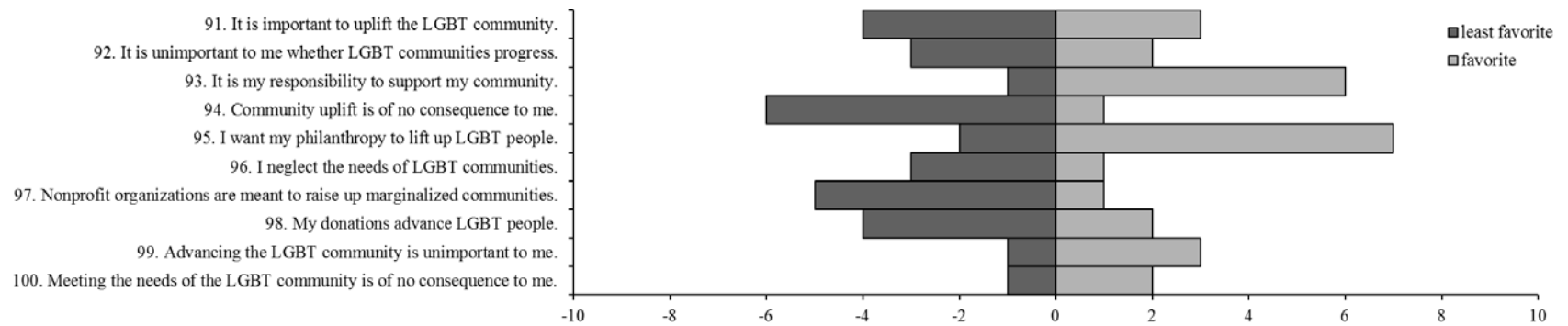
communities." As evidence, this statement focused on nonprofit characteristics rather than an alumnus' giving characteristics. Similar to the previous factor, item ratings yielded strong preferences for the inclusion and omission of specific items. Ms. Rhebergen also encouraged me to remove specific items that might overlap with other factors in this section, for example, "Charities are meant to raise up marginalized communities." Figure 4.10 provides a bar graph of the item rankings for this factor.

As with previous factors, I changed the name to LGBTQ community uplift to specific the focus of this survey instrument. I selected items based on Ms. Rhebergen's suggestions and reviewer item ratings.

Salient aspect of identity. There were few reviewer comments for the factor measuring salient aspect of identity. Ms. Rhebergen commented that there were items that were repeated several times in the factor and encouraged me to remove these repetitions. Similar to other factors, this factor yielded strong item ratings, with three items receiving ratings from two-thirds of the potential respondents (two favorable and one poor). Results of the item ratings within this factor are provided in Figure 4.11.

Once again, I changed the factor name to salient aspect of LGBTQ identity to more accurately reflect the purpose and focus of this survey instrument. Selecting specific items was relatively easy through combining both Ms. Rhebergen's review and the item rating exercise.

As previously discussed, expert reviewers served to check both the content and construct validities of the Survey for LGBT Alumni Giving. Content experts and potential respondents had unique contributions towards the development of the

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Figure 4.11

Salient Aspect of Identity Item Ratings
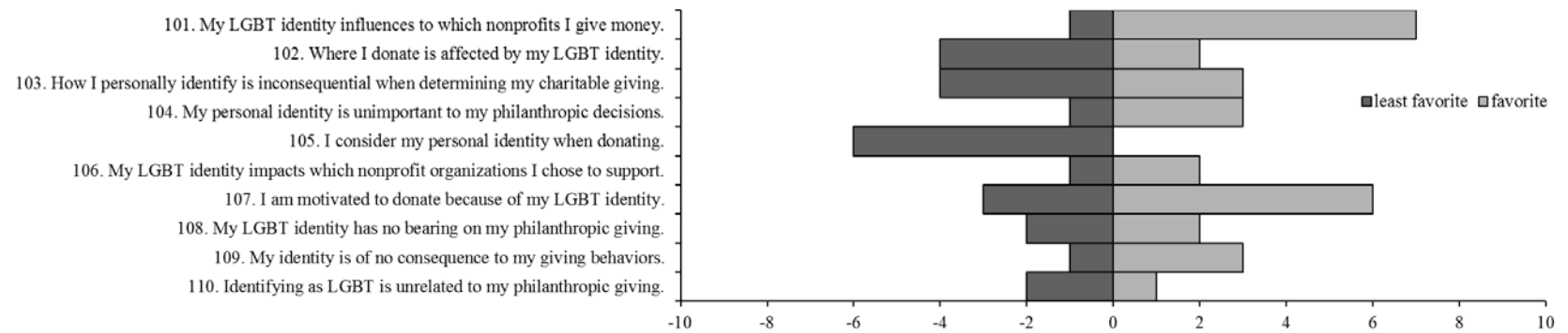
instrument, with each group providing recommendations for improving the clarity and functionality. In total, I eliminated 12 of the 40 factor items in this section.

Summary

Chapter Four began with a discussion of content experts and potential respondents. These individuals served as expert reviewers for the Survey for LGBT Alumni Giving in checking content and construct validities. I described reviewer comments and modifications I made to all four survey sections based on their critiques: undergraduate student experiences, demographics, alumni experiences, and philanthropy and giving. In total, I eliminated 39 of the 110 factor items from the survey based on expert reviews. The remaining number of items totaled 71 across ten factors.

CHAPTER FIVE: RESULTS

I begin Chapter Five with descriptive statistics from the pilot study sample population, providing a context for item reduction analyses. Including a social desirability scale allowed me to determine the extent to which social desirability influenced participants' responses. I detail my method for measuring social desirability bias among individual items in the survey. In order to begin determining which items to remove from the survey instrument, I calculated significant correlation coefficients among survey items and items in the social desirability scale and then looked for significance.

Following, I tested items on the survey instrument for construct validity. As previously discussed, construct validity involves both logical and empirical components (Hopkins, 1998). Whereas expert reviewers assessed the content and construct validities logically, in this chapter I discuss how I tested construct validity empirically using correlation analyses. I ran principal components analysis (PCA) to reduce the number of items that represent each latent trait. PCA reduces the dimensionality of a larger set of items to achieve a more parsimonious data set (Nunnally & Bernstein, 1994). Following, I computed Cronbach's (1990) coefficient alpha values for each factor scale allowing me to determine the internal-consistency reliability of the instrument. The last section in this chapter outlines the process of naming each factor based on both empirical and logical insights.

Descriptive Statistics

Although the primary purpose of the pilot study administration was to generate items that best represented latent factors through data reduction techniques, I

also collected additional data relevant to the study of LGBTQ alumni. These descriptive statistics served several purposes. First, the data provided a context for the sample population in the pilot study. Although I could not determine whether my sample was representative of all LGBTQ alumni (because such statistics are not available), I was able to generate broad characteristics for my population to better understand the context of the latent factors. As discussed in the previous section, including additional items besides the latent factor items allowed me to vet the survey in its entirety to expert reviewers. As I intend to administer the completed survey to a representative national sample of LGBTQ alumni, one aim for this study was to address item construction and survey administration concerns. Beyond expert reviewer comments, I was able to determine the soundness of item constructions based on reporting behaviors of all pilot study participants.

In the following paragraphs, I detail descriptive statistics (i.e., frequency, mean, standard deviation) for all variables in the survey instrument, with the exception of factor items. Prior to providing descriptive statistics, I briefly discuss techniques I followed to clean the raw survey data.

Data Cleaning

Upon closing the survey instrument on Qualtrics, I downloaded data as an SPSS file. First, I removed all unwanted variables from my dataset, including pre-generated variables from the Qualtrics software (e.g., Response Set, Name, External Data Reference). Other variables that were initially removed included participants' email, completion status, consent form, and prompt statements from the survey.

Following, I renamed all variables to give a shortened and more easily understandable label for analysis.

In a few instances, participants selected "Other" and wrote in response for their answers, yet their exact responses were included as pre-generated item response options. These instances occurred mostly in major classification and academic activities. Adjusting these responses, I recategorized the variables into their correct groups.

Inadvertently, I included gender queer as a response option for sexual identity but not for gender identity. Only one person selected gender queer as his/her/hir sexual identity, but also selected queer as a sexual identity response. As such, I changed his/her/hir response accordingly and removed the gender queer response option completely from the sexual identity question.

Next, I removed participant cases that were unusable. First, I deleted any participant who indicated that he/she/ze did not graduate from a four-year institution. I used this question as an eligibility screening as participants could only complete the survey if they graduated from a four-year college or university. I also reviewed cases that came from the same IP address and had responses that were near identical. Though it cannot be determined whether participants used public or private computers, having the same IP address likely signaled that the same person completed the survey more than once. In these situations, I kept only the most recent response. Additionally, I removed cases where participants did not complete any factor scale items. As this pilot study's primary purpose was factor extraction and data reduction, cases with completely missing item factors were not useable. In total,

I removed 63 of 260 cases, leaving me with 197 useable cases for analyses. This resulted in a sample yield of 21.89% (197 of approximately 900 participants).

In order to calculate descriptive statistics for variables in the survey instrument, I consolidated variables with multiple response fields into one field in SPSS (i.e., gender identity, gender expression, sexual identity, race/ethnicity). For individuals who selected more than one gender expression, sexual identity, and/or race/ethnicity, I placed them into the "Other" categories for descriptive analysis purposes.

To address missing values, I used the full information maximum likelihood (FIML) method common in most statistical software packages. Using the FIML method allowed me to compute casewise likelihood functions with observed variables for each case, estimating parameters based on the basis of available complete data as well as the implied values of the missing data given the observed data (Schlomer, Bauman, & Card, 2010). FIML produces results similar to expectation maximization and multiple imputation (Graham, Hofer, & MacKinnon, 1996; Olinsky, Chen, & Harlow, 2003), but has the advantage of producing accurate standard errors by retaining the sample size.

Lastly, I changed the coding scheme for all negatively-worded items measuring latent constructs. Reverse-coding these items enabled me to correlate all items positively, thus reducing confusion with comparing negative and positive items.

Undergraduate Student Experiences

Of the 197 participants in the sample population, 19 (9.6%) indicated that they were transfer students, and 195 (99.0%) were enrolled as full-time students as

undergraduates. The average year that participants began enrollment for the

undergraduate degree was 1987 (*SD*=15.26) and the average graduation year was

1991 (*SD*=15.24). Twelve participants (6.1%) identified as legacies and had at least

one parent or guardian who previously attended their alma mater. A substantial

majority of participants received an advanced degree (*n*=153, 77.7%).

I coded grade point average on a five-point scale (1=1.99 or lower; 2=2.00-

2.49; 3=2.50-2.99; 4=3.00-3.49; 5=3.50 or higher). The mean response for grade

point average was 4.37 (*SD*=0.70) with two responses missing. Major classifications

were grouped into eight categories. A majority of participants studied within the

social and behavioral sciences (*n*=80, 40.6%) and the arts and humanities (*n*=67;

34.0). Table 5.1 further describes the distribution of participants across undergraduate

majors.

Table 5.1
Undergraduate Major Disciplines

Major Disciplines	*N*	%
Engineering	1	0.5
Life sciences	20	10.2
Physical sciences	17	8.6
Social and behavioral sciences	80	40.6
Arts and humanities	67	34.0
Education	0	0.0
Professional program	10	5.1
Other	2	1.0
Total	197	99.5

Note. Total percentage does not equal 100.0 due to rounding.

In the undergraduate student experiences section of the survey instrument, I

collected academic-related and co-curricular activities. Included in these activities

were both general involvements (e.g., honors program, study abroad, athletics) and

involvements more central to the LGBT community (e.g., LGBT student organization, LGBT support/counseling group). Tables 5.2 and 5.3 include the number and percentage of participants for each academic-related and co-curricular activity, respectively.

Table 5.2
Academic-Related Activities

Activity	n	%
Academic/departmental/professional club	69	35.0
Culminating senior experience	79	40.1
Honors program	51	25.9
Learning community	16	8.1
Practicum, internship, field/co-op/clinical experience	70	35.5
Research with a professor	55	27.9
Study abroad	62	31.5
Other	7	3.6

Table 5.3
Co-Curricular Activities

Activity	n	%
Arts/theater/music	83	42.1
Athletics	58	29.4
Campus-wide programming group	44	22.3
Cultural/international club	39	19.8
Honor society	38	19.3
Leadership organization	23	11.7
LGBT student organization	61	31.0
LGBT support/counseling group	19	9.6
Media organization	35	17.8
Military	3	1.5
New student transitions	37	18.8
Para-professional	14	7.1
Political/advocacy club	37	18.8
Religious organization	31	15.7
Service group	25	12.7
Culturally-based fraternity or sorority	2	1.0
Social fraternity or sorority	24	12.2

Special interest group	27	13.7
Student governance group	34	17.3
Student alumni association	16	8.1
Other	7	3.6

Additionally, I asked participants if they had held a leadership position in an organization as an undergraduate student, for example an officer for a club, captain of an athletic team, director in a musical group, or editor of a newspaper. For this particular question, there were five response categories: 1=never held a leadership position; 2=held 1 leadership position; 3=held 2 leadership positions; 4=held 3 leadership positions; and 5=held 4 or more leadership positions. The average response for this item was 2.36, with standard deviation of 1.33. For this item, there were 29 missing responses. However, participants only received the leadership prompt if they indicated their involvement with at least one or more activities previously mentioned.

Among the 197 total participants, 150 (76.1%) worked during the academic year as undergraduate students. One hundred and fifty-eight (80.2%) were financially dependent during their undergraduate years, and 135 (68.5%) received financial aid. Participants were given three response options to indicate their primary housing during their undergraduate experience: campus housing (n=112, 56.9%), non-campus housing (n=85, 43.1%) and homeless (n=0, 0.0%).

To measure outness as an undergraduate student, I adapted Sorgen's (2011) outness subscale, which he adapted from Mohr and Fassinger's (2000) Outness Inventory. Participants indicated their outness as undergraduate students across nine dimensions: around close friends; around close family; around extended family; around extended friends; when they met new people; with professors, faculty, and instructors; at work; with people where they lived; and with members of campus

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activity groups. Response options were on a five-point Likert scale, with one

indicating not at all out and five indicating completely out. I also collected overall

outness as undergraduate students using the same response options. Table 5.4 details

the means and standard deviations for outness scores.

Table 5.4
Outness as Undergraduate Student

	M	*SD*	Missing
Around close friends	3.40	1.62	3
Around close family	2.44	1.54	6
Around extended family	1.86	1.24	5
Around extended friends or 'friends of friends'	2.72	1.59	3
When you met new people in person	2.46	1.50	3
With professors, faculty, and instructors	2.27	1.43	3
At work	2.29	1.50	6
With people where you lived	3.04	1.71	3
With members of campus activity groups	2.85	1.64	5
Overall	2.82	1.46	2

Note. 1=not at all; 2=hardly; 3=somewhat; 4=mostly; 5=completely.

Participants responded to the number of LGBT faculty/staff and students

known as undergraduates. Scaling for these items included five response options

(1=none, 2=1-2, 3=3-5, 4=6-8, 5=9-11). The mean response for LGBT faculty/staff

known was 2.23 (*SD*=1.18) and 4.04 (*SD*=1.83) for LGBT students known. Last in

the undergraduate student experiences section, participants were asked to respond to

their participation with LGBT-related activities and involvements. Response options

were on a five-point Likert scale, with an additional category for alumni to indicate

that the activity or involvement was not available at their institution when they were

undergraduate students. Table 5.5 summarizes these findings.

Table 5.5
LGBT-Related Activities

Activity	*M*	*SD*	Was not available	Missing
Visit the LGBT student services office	1.74	1.09	72	2
Participate in an event or program hosted by the LGBT student services office	2.28	1.26	54	3
Attend an LGBT student organization meeting or event	2.35	1.36	35	3
Attend an LGBT support/counseling group meeting	1.65	1.04	39	3
Take an LGBT-related academic course	1.84	1.17	45	4
Attend an LGBT-related educational lecture or program	2.14	1.20	40	3
Participate in an LGBT-focused workshop or training	1.47	0.95	47	3
Participate in an LGBT-mentor program	1.48	1.11	57	3
Participate in an LGBT political/social awareness event	2.00	1.25	36	3

Note. 1=never; 2=rarely; 3=sometimes; 4=regularly; 5=all the time.

Demographics

In the second section of the survey instrument, I asked questions regarding participants' demographics. Regarding birth sex, 137 (69.5%) were male and 55 (27.9%) were female. No participants selected either intersex or other as birth sex response options. Of the 197 participants, 137 (69.5%) indicated their gender identity as man, 50 (25.4%) as woman, one (0.5%) as transgender, and four (2.0%) as other. Gender expression was categorized into three response options: masculine ($n=132$, 67.0%), feminine ($n=42$, 21.3%), and other ($n=14$, 7.1%).

Also in this section, participants were asked to select their sexual identity. Table 5.6 summarizes these findings. In the event that a person selected more than one sexual identity, I placed them in the "other" category with one exception. I consciously placed participants in the "queer" response category when they selected more than one sexual identity that included queer.

Table 5.6
Sexual Identities

	N	%
Asexual	0	0.0
Bisexual	6	3.0
Gay	119	60.4
Heterosexual	0	0.0
Lesbian	31	15.7
Pansexual	2	1.0
Queer	21	10.7
Questioning	0	0.0
Other	13	6.6
Total	192	97.4
Missing	5	2.5

Note. Total percentage does not equal 100.0 due to rounding.

Regarding race/ethnicity, participants were asked to select their identity based on broad categories, which then prompted them to indicate a more specific race/ethnicity within the broad category. For the purposes of this study, I report only the sample population distribution for the broad category. In the event that participants selected more than one race/ethnicity, I placed them into the multiracial or multiethnic category. Table 5.7 details the response distribution.

Table 5.7
Race/Ethnicities

	N	*%*
American Indian or Alaska Native	0	0.0
Asian	9	4.6
Black or African American	3	1.5
Hispanic or Latino	7	3.6
Native Hawaiian or other Pacific Islander	0	0.0
White	156	79.2
Multiracial or multiethnic	11	5.6
Other	3	1.5
Total	189	96.0
Missing	8	4.1

Note. Total percentage does not equal 100.0 due to rounding.

Participants were given the option to indicate their religious/spiritual identity across 10 categories: Atheist (*n*=44, 22.3%), unaffiliated/none (*n*=42, 21.3%), Jewish (*n*=29, 14.7%), spiritual but no religious affiliation (*n*=26, 13.2%), Protestant (*n*=22, 11.2%), Catholic (*n*=17, 8.6%), other (*n*=7, 3.6%), Buddhist (*n*=4, 2.0%), and Hindu (*n*=1, 0.5%). No participants indicated Muslim as a response, and five did not respond to the question. Additionally, I asked participants to rate the importance of their religious/spiritual identity across a five-point Likert scale from not at all important to

extremely important. The average response was 2.74 with a standard deviation of 1.45 (six non-responses).

Twenty-five of the 197 participants (12.7%) indicated that they had one or more medical conditions that substantially affect a major life activity (five non-responses). The average birth year for participants was 1970 (*SD*=14.8) with 16 missing responses. Regarding citizenship, 182 (92.4%) indicated that they held U.S. citizenship, nine (4.6%) with dual citizenship, and one (0.5%) with naturalized U.S. citizenship. No participants indicated responses in other citizenship categories (permanent resident, immigrant, undocumented, or other). There were five missing responses for this item. Table 5.8 details participants' political views, ranging from far left to far right, and also including response options for both undecided and other.

Table 5.8
Political Identities

	N	*%*
Far left	48	24.4
Liberal	109	55.3
Moderate	19	9.6
Conservative	9	4.6
Far right	0	0.0
Undecided	1	0.5
Other	6	3.0
Total	192	97.4
Missing	5	2.5

Note. Total percentage does not equal 100.0 due to rounding.

I also asked questions regarding parents'/guardians' education and income. Participants were asked to indicate the highest level of formal education obtained by any of their parent(s) or guardian(s): high school or less (*n*=30, 15.2%), some college (*n*=14, 7.1%), associate's degree (*n*=7, 3.6%), bachelor's degree (*n*=42, 21.3%),

master's degree (*n*=53, 26.9%), doctoral or professional degree (*n*=46, 23.6%). I also asked for participants to recall the income of their parent(s) or guardian(s) when they (the participants) were an undergraduate student (1=less than $12,500, 2=$12,500-$24,999, 3=$25,000-$39,999, 4=$40,000-$54,999, 5=$55,000-$74,999, 6=$75,000-$99,999, 7=$100,000-$149,999, 8=$150,000-$199,999, 9=$200,000-$499,999, 10=$500,000 or more). The average response was 5.07 (*SD*=2.31), with 14 missing responses.

Alumni Experiences

To measure participants' household and individual incomes, I used the same response options as with parent/guardian income. The average response for household income was 6.07 (*SD*=2.53), and for individual income was 5.14 (*SD*=2.44). Regarding relationship status, I asked participants to indicate their response among seven categories: partnered, not married (*n*=75, 38.1%); single (*n*=65, 33.0%); partnered, married (*n*=28, 14.2%); partnered, civil union (*n*=10, 5.1%); divorced (*n*=4, 2.0%), widowed (*n*=2, 1.0%); and separated, not divorced (*n*=1, 0.5%). Twelve participants did not respond to this item.

In the survey, I asked participants three questions regarding children. First, 23 (11.7%) of respondents indicated they had children. Of those who had children, the average was 1.74 (*SD*=0.75), and only one participant (0.5%) had a child who attended his/her/hir undergraduate alma mater as a student.

Participants were given five response options for indicating how close they currently reside to their undergraduate alma mater: 1=10 miles or less, 2=11-50 miles,

3=51-250 miles; 4=251-1000 miles; 5=1001 or more miles. The average response for all participants was 3.78 (*SD*=1.33), with 13 missing responses.

I allowed participants to indicate in which ways their alma mater connects with them, including by alumni magazine, e-mail, e-newsletter, personal meeting, social media (e.g., Facebook, Twitter), solicitation, through an event, and with other marketing materials (Table 5.9). In addition, participants also responded to the frequency of outreach from their alma mater (Table 5.10).

Table 5.9
Alma Mater Outreach

	N	*%*
Magazine	162	82.2
E-mail	159	80.7
E-newsletter	86	43.7
Personal meeting	36	18.3
Social media	75	38.1
Solicitation	100	50.8
Event	89	45.2
Other marketing materials	40	20.3

Table 5.10
Alma Mater Outreach Frequencies

	N	*%*
Daily	5	2.5
Weekly	74	37.6
Monthly	68	34.5
Annually	6	3.0
Sporadically	26	13.2
Never	4	2.0
Total	183	92.8
Missing	14	7.1

Note. Total percentage does not equal 100.0 due to rounding.

Also in this section, I asked participants questions regarding alumni associations. Of the 197 respondents, 178 (90.4%) indicated that their alma mater has

an alumni association, with 16 (8.1%) saying that their alumni association is dues-paying. Over 65% (*n*=129, 65.5%) were members of their alumni association, and 17 (8.6%) were leaders within the organization.

Regarding LGBT alumni affinity groups, 144 (73.1%) noted that their alma mater had a group and 4 (2.0%) said the LGBT alumni affinity group was dues-paying. One hundred and twenty-one respondents (61.4%) were members of the LGBT alumni affinity group, and 15 (7.6%) were leaders within the group. Worth noting is that this pilot study was administered through one institution. All participants were recruited through the LGBT alumni affinity group. Thus, it is to be expected that there is a high percentage of alumni involved in the LGBT alumni affinity group.

Respondents were given 13 categories to indicate their profession. Sixteen of the 197 participants did not complete this item. Thirty-three individuals (16.8%) noted that they were currently or had previously been employed with their undergraduate alma mater post-graduation.

Similar to questions in the undergraduate student experiences section, I asked respondents about their outness as alumni using Sorgen's (2011) outness subscale. Participants indicated their outness as alumni across seven dimensions: around close friends, around close family, around extended family, around extended friends, when they met new people, at their undergraduate alma mater, and at work. Response options were on a five-point Likert scale, with one indicating not at all out and five indicating completely out. I also collected overall outness as alumni using the same

response options. Table 5.11 details the means and standard deviations for outness

scores.

Table 5.11
Outness as Alumnus/na

	M	*SD*	Missing
Around close friends	4.89	0.33	19
Around close family	4.63	0.85	21
Around extended family	4.02	1.30	23
Around extended friends or 'friends of friends'	4.56	0.77	19
When you met new people in person	4.16	0.96	19
At your undergraduate alma mater	4.41	0.98	22
At work	4.23	1.10	21
Overall	4.49	0.68	20

Note. 1=not at all; 2=hardly; 3=somewhat; 4=mostly; 5=completely.

Philanthropy and Giving

In the final section of the survey, I measured participants' philanthropic and

giving activities. First, I asked about participants' percentage of their current income

that they donate to nonprofit organizations. Table 5.12 details responses for this item.

Regarding financial giving, I also asked participants to indicate the percentage of

their current financial giving that goes towards LGBT political organizations and

causes, LGBT community-related initiatives, and their undergraduate alma mater

(Table 5.13).

Table 5.12
Percentage of Current Income Towards Nonprofit
Organizations

	N	%
0%	14	7.1
1-4%	91	46.2
5-9%	35	17.8
10-14%	18	9.1
15-19%	9	4.6
20-24%	2	1.0

			N	%
45-49%			1	0.5
50% or more			0	0.0
Total			170	86.3
Missing			27	13.7

Table 5.13

Percentage of Current Financial Giving Towards Specific Initiatives

	LGBT political organizations		LGBT community-related initiatives		Undergraduate alma mater	
	N	%	N	%	N	%
0%	40	20.3	49	24.9	69	35.0
1-10%	59	29.9	59	29.9	69	35.0
11-20%	20	10.2	16	8.1	6	3.0
21-30%	11	5.6	11	5.6	9	4.6
31-40%	7	3.6	5	2.5	1	0.5
41-50%	9	4.6	13	6.6	4	2.0
51-60%	4	2.0	2	1.0	3	1.5
61-70%	4	2.0	2	1.0	2	1.0
71-80%	5	2.5	4	2.0	2	1.0
81-90%	5	2.5	4	2.0	2	1.0
91-100%	5	2.5	4	2.0	2	1.0
Total	169	85.8	169	85.8	169	85.8
Missing	28	14.2	28	14.2	28	14.2

The next survey questions pertained to respondents' financial giving at their undergraduate alma mater. The first question detailed the amount of money given by participants to their alma maters, both within the past year and total across their lives (Table 5.14). I also asked participants to answer how many years they had given financially to their undergraduate alma mater since graduating (1=0 years; 2=1-2 years; 3=3-5 years; 4=6-10 years; 5=11-15 years; 6=16 or more years). The average response was 3.76 (*SD*=1.48) with 51 missing cases. Additionally, participants responded to the consistency of years that they had given to their alma mater: 21.3% (*n*=42) annually, 13.7% (*n*=27) every year since graduating, 0.5% (*n*=1) during

reunions, 1.5% (*n*=3) during campaigns, 4.6% (*n*=9) when there are special projects

that interest them, 24.4% (*n*=48) sporadically, and 3.0% (*n*=6) never. Sixty-one cases

had missing responses for this question.

Table 5.14
Amount of Money Given to Alma Mater

	In past year		Total across life	
	N	%	N	%
$0	65	33.0	36	18.3
$1-20	11	5.6	3	1.5
$21-50	21	10.7	9	4.6
$51-100	22	11.2	14	7.1
$101-250	17	8.6	21	10.7
$251-500	14	7.1	15	7.6
$501-1,000	8	4.1	11	5.6
$1,001-2,000	4	2.0	15	7.6
$2,001-5,000	5	2.5	23	11.7
$5,001-7,500	2	1.0	1	0.5
$7,501-10,000	0	0.0	6	3.0
$10,001-12,500	0	0.0	1	0.5
$12,501-15,000	0	0.0	4	2.0
$15,001-25,000	0	0.0	3	1.5
$25,001-50,000	0	0.0	4	2.0
$50,001-100,000	0	0.0	0	0.0
$100,001-500,000	0	0.0	2	1.0
$500,001-1,000,000	0	0.0	0	0.0
$1,000,001 or more	0	0.0	0	0.0
Total	169	85.8	168	85.3
Missing	28	14.2	29	14.7

Also regarding giving to one's alma mater, I asked whether participants had

the option to give to LGBT initiatives, with 73 respondents (37.1%) indicating yes

(62 missing cases). Following, I asked respondents to indicate the percentage of

giving to their alma mater that went towards LGBT initiatives (1=0%; 2=1-10%;

3=11-20%; 4=21-30%; 5=31-40%; 6=41-50%; 7=51-60%; 8=61-70%; 9=71-80%;

10=81-90%; 11=91-100%). The average response for this item was 3.72 (*SD*=3.62) with 55 missing cases.

I also asked individuals to indicate how often their undergraduate alma mater asked them to donate money: weekly (*n*=18, 9.1%), monthly (*n*=77, 39.1%), annually (*n*=42, 21.3%), sporadically (*n*=30, 15.2%), and never (*n*=3, 1.5%). No respondents checked daily as their response, and there were 27 missing cases. Similarly, I also asked participants how recently their alma mater asked them to donate money: 107 (54.3%) within the past month, 51 (25.9%) within the past six months, 5 (2.5%) within the past year, 4 (2.0%) within the past five years, 2 (1.0%) more than five years ago, and 2 (1.0%) never.

The second half of the philanthropy and giving section of the survey measured participants' volunteerism. I first asked about participants' percentage of their current free time that they used to volunteer with nonprofits (Table 5.15). I also asked participants to indicate the percentage of their volunteerism that was with LGBT political organizations and causes, LGBT community-related initiatives, and their undergraduate alma mater (Table 5.16).

Table 5.15
Percentage of Current Free Time Towards Nonprofit Organizations

	N	%
0%	48	24.4
1-10%	67	34.0
11-20%	28	14.2
21-30%	12	6.1
31-40%	5	2.5
41-50%	3	1.5
51-60%	3	1.5
61-70%	2	1.0
71-80%	1	0.5

	N	0,5
81-90%	1	0,5
91-100%	1	0.5
Total	171	86.8
Missing	26	13.2

Table 5.16
Percentage of Current Volunteering with Specific Initiatives

	LGBT political organizations		LGBT community-related initiatives		Undergraduate alma mater	
	N	%	N	%	N	%
0%	109	55.3	105	53.3	132	67.0
1-10%	29	14.7	27	13.7	15	7.6
11-20%	6	3.0	3	1.5	1	0.5
21-30%	3	1.5	5	2.5	3	1.5
31-40%	1	0.5	5	2.5	3	1.5
41-50%	5	2.5	4	2.0	4	2.0
51-60%	0	0.0	3	1.5	0	0.0
61-70%	1	0.5	1	0.5	1	0.5
71-80%	2	1.0	4	2.0	4	2.0
81-90%	2	1.0	3	1.5	2	1.0
91-100%	10	5.1	8	4.1	4	2.0
Total	168	85.3	168	85.3	169	85.8
Missing	29	14.7	29	14.7	28	14.2

The next survey questions pertained to respondents' volunteerism at their undergraduate alma mater. First, I asked about the amount of time spent volunteering with their alma maters, both within the past year and total across their lives (Table 5.17). I also asked participants to answer how many years they had been volunteering with their undergraduate alma mater since graduating (1=0 years; 2=1-2 years; 3=3-5 years; 4=6-10 years; 5=11-15 years; 6=16 or more years). The average response was 3.24 (*SD*=1.51) with 117 missing cases. Additionally, participants responded to the consistency of years that they had volunteered with their alma mater: 0.5% (*n*=1) weekly, 6.1% (*n*=12) monthly, 7.1% (*n*=14) annually, 1.5% (*n*=3) every year since

graduating, 9.1% (*n*=18) when there are special projects that interest them, 13.7%

(*n*=27) sporadically, and 2.5% (*n*=5) never. One hundred seventeen cases had missing

responses for this question.

Table 5.17
Amount of Time Given to Alma Mater

	In past year		Total across life	
	N	%	N	%
0 hours	123	62.4	88	44.7
1-10 hours	28	14.2	15	7.6
11-25 hours	6	3.0	16	8.1
26-50 hours	9	4.6	16	8.1
51-100 hours	2	1.0	14	7.1
100-200 hours	1	0.5	6	3.0
201 or more hours	1	0.5	13	6.6
Total	170	86.3	168	85.3
Missing	27	13.7	29	14.7

Also regarding volunteering with one's alma mater, I asked whether

participants had the option to volunteer with LGBT initiatives, with 46 respondents

(23.4%) indicating yes (118 missing cases). Following, I asked respondents to

indicate the percentage of volunteering with their alma mater that went towards

LGBT initiatives (1=0%; 2=1-10%; 3=11-20%; 4=21-30%; 5=31-40%; 6=41-50%;

7=51-60%; 8=61-70%; 9=71-80%; 10=81-90%; 11=91-100%). The average response

for this item was 4.20 (*SD*=3.99) with 107 missing cases.

I also asked individuals to indicate how often their undergraduate alma mater

asked them to volunteer: weekly (*n*=2, 1.0%), monthly (*n*=17, 8.6%), annually (*n*=24,

12.2%), sporadically (*n*=73, 37.1%), and never (*n*=47, 23.9%). No respondents

checked daily as their response, and there were 34 missing cases. Similarly, I also

asked participants how recently their alma mater asked them to volunteer: 29 (14.7%)

within the past month, 32 (16.2%) within the past six months, 36 (18.3%) within the past year, 13 (6.6%) within the past five years, four (2.0%) more than five years ago, and 50 (25.4%) never.

Last, I asked participants questions regarding their participation with alumni events with answers ranging from never to all the time on a five-point Likert scale. For alumni association events, the average response was 2.31 (*SD*=1.15) with 31 missing cases. LGBT-specific alumni events had a response average of 2.35 (*SD*=1.33) with 21 missing cases. Finally, attending a class year and/or affinity group reunion had an average response of 2.20 (*SD*=1.19) with 29 missing responses.

Social Desirability

When assessing attitudes and beliefs, individuals often want to present themselves positively, thus leading to social desirability (Spector, 1992). One way of determining to what extent social desirability influences participant responses is by including a social desirability scale. To address social desirability in this survey instrument, I included the 11-item short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982), allowing me to assess and control for response bias resulting from social desirability (Appendix J).

The 11 items for Reynolds' (1982) Marlowe-Crowne Social Desirability Scale were included in the middle of the electronic survey instrument immediately following the demographics section. I used the same response choices for the social desirability scale as for the rest of the Likert items in the instrument (strongly disagree to strongly agree), using reverse scoring for negatively keyed items. To examine the relationships between items on the social desirability scale and

instrument items, I calculated bivariate correlation coefficients (Gall, Gall, & Borg,

2008). Before running the analyses, I created a composite score for social desirability

by summing all item responses in the scale. Table 5.18 lists all correlations and

significant relationships ($p \leq 0.05$). Of the 71 factor items in the survey instrument, 5

significantly correlated with the Reynolds' (1982) Marlowe-Crowne Social

Desirability Scale; V6 (r = 0.166), V9 (r = 0.153), V89 (r = 0.171), V99 (r = 0.191),

and V103 (r = -0.153). These items were all considered for removal from the final

instrument, in combination with results from other decision-making analyses

discussed in the following sections.

Table 5.18
Social Desirability Bivariate Correlations

Factor	Number	Item	r
Undergraduate Student Experiences			
Academic Training	1	My college/university sufficiently prepared me for my professional occupation.	0.100
	2	Thinking about my time as an undergraduate student, I am disappointed with my academic experience.	0.105
	4	Upon graduating, I was happy with my academic training at my college/university.	0.072
	6	My undergraduate academic experience fulfilled my expectations.	0.166*
	7	I am displeased with my academic training at my college/university.	0.071
	8	Looking back, I feel that I had a positive academic experience as an undergraduate student.	0.086
	9	I am unhappy with how I was prepared professionally.	0.153*
Perception of Campus Climate for LGBTQ Individuals	11	As an LGBT student, I was comfortable with the climate on my campus.	-0.032
	12	When I was a student, my campus was uninviting for people who were LGBT.	-0.063

	13	The climate in my classes was welcoming for LGBT students.	-0.059
	14	I felt accepted as an LGBT student throughout my undergraduate student experience.	-0.084
	15	As an undergraduate, I observed conduct directed towards LGBT people that created an intimidating learning environment.	0.054
	16	People at my undergraduate institution were heterosexist.	0.109
	18	The campus climate at my school was welcoming for people who identify as LGBT.	-0.083
	19	I believe my undergraduate alma mater was hostile for people who were LGBT.	0.004
Harassment as LGBTQ Student	21	I avoided certain places on campus for fear of harassment.	0.072
	23	LGBT students felt safe on my campus when I was a student.	-0.073
	24	Because I identified as LGBT, I personally experienced exclusionary conduct that interfered with my ability to learn when I was a student.	0.066
	25	As an LGBT student, I was a victim of harassment on campus.	0.093
	26	I felt open to disclose my LGBT identity on campus without fear of repercussions.	-0.056
	28	I feared for my physical safety because of my LGBT identity.	0.014
	30	I believe the campus climate encouraged free and open discussion of LGBT topics.	0.005
Alumni Experiences Harassment as LGBTQ Alumnus/na	31	I feel marginalized within my institution as an LGBT alumnus/na.	0.016
	33	The alumni relations staff is insensitive to the LGBT community.	0.080
	34	The alumni leadership at my alma mater overtly discriminates against LGBT people.	0.038
	35	When attending alumni events at my alma mater, I feel affirmed as an LGBT person.	0.044
	36	Alumni relations and development staff at my institution understand the culture of LGBT communities.	0.102
	37	I feel comfortable sharing my LGBT	-0.078

		identity at alumni events.	
	38	Staff at my alma mater are insensitive to LGBT groups.	-0.002
Perceived Support from Leadership for LGBTQ Communities	41	The leadership at my alma mater support LGBT-related issues.	0.045
	45	Leadership at my alma mater create an affirming place for LGBT students.	0.119
	46	The leadership at my alma mater neglect LGBT issues.	0.082
	47	I feel supported as an LGBT alumnus/na by my university/college leadership.	0.015
	48	Campus leadership support its LGBT alumni.	-0.010
	49	Campus leadership ignore LGBT alumni needs.	0.100
	50	The leadership at my university/college ignore LGBT alumni.	0.032
Institutional value	63	My alma mater is moving in the right direction.	0.125
	64	The leadership is doing a poor job in improving the academic experience at my alma mater.	0.125
	65	I approve of the decisions that campus leadership have made.	0.129
	67	The value of my degree has improved since I attended as a student.	-0.073
	68	My alma mater leadership is improving the value of my degree.	0.040
	69	The value of my degree has diminished.	0.005
	70	My university/college is decreasing in quality.	0.108
Philanthropy and Giving			
LGBTQ Political and Social Change	71	I give to nonprofit organizations that enhance the national climate for LGBT people.	-0.013
	72	It is important for me to donate to nonprofits that are involved with LGBT activism.	-0.041
	73	I chose to not engage with LGBT political causes.	-0.082
	74	Nonprofit organizations that advocate for LGBT rights are important.	-0.041

	76	I support nonprofits that work towards LGBT political causes.	-0.060
	78	I am indifferent about social change for LGBT people.	0.104
	79	LGBT social change is important to me.	-0.017
LGBTQ Direct Service Benefits	81	I prefer to donate to nonprofits that provide services to LGBT people.	-0.077
	83	I make a difference when I volunteer for people in need.	0.068
	84	Nonprofit organizations that provide direct services to LGBT individuals are not important.	0.069
	86	I wish there were more nonprofits that provided direct services to LGBT people.	-0.096
	87	It is important for me to support nonprofits that directly benefit LGBT individuals.	-0.075
	89	Nonprofits that give direct services to LGBT people are unimportant to me.	0.171*
	90	I value nonprofit organizations that do impactful work through direct service to LGBT people.	0.066
LGBTQ Community Uplift	91	It is important to uplift the LGBT community.	0.071
	92	It is unimportant to me whether LGBT communities progress.	0.052
	93	As an LGBT person, it is my responsibility to support my community.	-0.047
	95	I want my donations to lift up LGBT groups.	0.004
	98	My giving advances LGBT groups.	0.000
	99	Advancing the LGBT community is unimportant to me.	0.191*
	100	Meeting the needs of the LGBT community is of no consequence to me.	0.069
Salient Aspect of LGBTQ Identity	101	My LGBT identity influences the nonprofits to which I give money.	-0.092
	103	How I personally identify is inconsequential when determining my charitable giving.	-0.153*
	104	My personal identity is unimportant to my donation decisions.	-0.128
	106	My LGBT identity impacts which nonprofit organizations I chose to support.	-0.097
	108	My LGBT identity has no bearing on my	-0.149

		volunteerism.	
109		My identity is of no consequence to my giving behaviors.	-0.123
110		Identifying as LGBT is unrelated to my giving to nonprofits.	-0.137

* Correlation significant at the 0.05 level

Construct Validity

Construct validity measures items' and factors' theoretical relationships to other items and factors. During survey construction, it is important to evaluate construct validity both logically and empirically (DeVellis, 2003). Empirically, a survey instrument with high construct validity has high correlations between items and factors that measure the same construct (convergent validity), and low correlations between items and factors that measure different constructs (discriminant validity; Aiken, 2000). I measured convergent validity by running bivariate analyses using Spearman's correlation coefficient for all items within each component. For each analysis, I excluded cases pairwise. I included all items from the 10 factor scales in the correlation analyses, even those with social desirability bias.

Convergent Validity

I first ran correlation analyses between all items within factors to check for convergence. I interpreted scores based on the following criteria: a correlation coefficient lower than 0.4 meant low convergence, scores between 0.4 and 0.7 meant ideal convergence, and coefficients 0.7 or higher meant multicollinearity. Multicollinearity exists when independent variables are highly correlated, and essentially means that two items are too similar to discern a difference in what they are measuring. The following paragraphs summarize findings from convergent validity tests within each factor.

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Within the correlation matrix for the academic training factor, there were three multicollinear relationships. Interestingly, all negatively-worded items were involved in the multicollinearity. As such, I removed all three variables (V1, V2, and V6). All other remaining correlations were between 0.4 and 0.7. Table 5.19 provides the correlation matrix for items within the Academic Training factor.

The items measuring perceptions of campus climate for LGBTQ individuals included eight multicollinear relationships. Similarly, removing negatively-worded items (V11, V13, V14, and V18) solved all multicollinearity within the factor (Table 5.20).

Regarding harassment as an LGBTQ student, there was one variable that had multicollinearity with two other items. As such, I removed V30 to handle the issue of multicollinearity. Additionally, V25 had low convergence with another variable. Although I did not remove it from the factor scale, I did flag it for further consideration. Table 5.21 summarizes these results.

Within the factor measuring harassment as an LGBTQ alumnus/na, there were three items that were multicollinear and worded similarly; V33, V34, and V38. All items were negatively-worded and reverse coded. I removed V33 and V34 and kept V38 because of its stronger correlations with other remaining variables (Table 5.22).

The component measuring perceived support from leadership for LGBTQ communities was highly problematic (Table 5.23). V50 was multicollinear with every other variable. I therefore removed it from the correlation matrix. Three variables essentially asked the same question; V45, V46, and V41. I removed V45 and V46, keeping V41 because it had fewer cases of multicollinearity than the other two.

Table 5.19
Intercorrelations for Academic Training Factor Items

Item	1	2	4	6	7	8	9
1 My college/university sufficiently prepared me for my professional occupation.	-						
2 Thinking about my time as an undergraduate student, I am disappointed with my academic experience.	0.414	-					
4 Upon graduating, I was happy with my academic training at my college/university.	0.595	0.613	-				
6 My undergraduate academic experience fulfilled my expectations.	0.489	0.628	0.689	-			
7 I am displeased with my academic training at my college/university.	0.450	0.524	0.698	0.580	-		
8 Looking back, I feel that I had a positive academic experience as an undergraduate student.	0.480	0.631	0.761	0.703	0.610	-	
9 I am unhappy with how I was prepared professionally.	0.723	0.414	0.571	0.430	0.497	0.501	-

Note. All coefficients are significant at $p < 0.01$

Table 5.20

Intercorrelations for Perception of Campus Climate for LGBTQ Individuals Factor Items

Item	11	12	13	14	15	16	18	19
11 As an LGBT student, I was comfortable with the climate on my campus.	-							
12 When I was a student, my campus was uninviting for people who were LGBT.	0.653	-						
13 The climate in my classes was welcoming for LGBT students.	0.720	0.621	-					
14 I felt accepted as an LGBT student throughout my undergraduate student experience.	0.846	0.640	0.735	-				
15 As an undergraduate, I observed conduct directed towards LGBT people that created an intimidating learning environment.	0.623	0.520	0.612	0.552	-			
16 People at my undergraduate institution were heterosexist.	0.610	0.489	0.559	0.575	0.569	-		
18 The campus climate at my school was welcoming for people who identify as LGBT.	0.798	0.691	0.775	0.769	0.597	0.633	-	
19 I believe my undergraduate alma mater was hostile for people who were LGBT.	0.716	0.620	0.659	0.663	0.610	0.606	0.743	-

Note. All coefficients are significant at $p<0.01$

Table 5.21
Intercorrelations for Harassment as LGBTQ Student Factor Items

Item	21	23	24	25	26	28	30
21 I avoided certain places on campus for fear of harassment.	-						
23 LGBT students felt safe on my campus when I was a student.	0.469	-					
24 Because I identified as LGBT, I personally experienced exclusionary conduct that interfered with my ability to learn when I was a student.	0.539	0.487	-				
25 As an LGBT student, I was a victim of harassment on campus.	0.529	0.362	0.526	-			
26 I felt open to disclose my LGBT identity on campus without fear of repercussions.	0.514	0.698	0.547	0.391	-		
28 I feared for my physical safety because of my LGBT identity.	0.644	0.548	0.661	0.569	0.515	-	
30 I believe the campus climate encouraged free and open discussion of LGBT topics.	0.394	0.756	0.478	0.346	0.710	0.500	-

Note. All coefficients are significant at *p*<0.01

Table 5.22
Intercorrelations for Harassment as LGBTQ Alumnus/na Factor Items

Item	31	33	34	35	36	37	38
31 I feel marginalized within my institution as an LGBT alumnus/na.	-						
33 The alumni relations staff is insensitive to the LGBT community.	0.649	-					
34 The alumni leadership at my alma mater overtly discriminates against LGBT people.	0.648	0.736	-				
35 When attending alumni events at my alma mater, I feel affirmed as an LGBT person.	0.555	0.572	0.446	-			
36 Alumni relations and development staff at my institution understand the culture of LGBT communities.	0.568	0.604	0.519	0.529	-		
37 I feel comfortable sharing my LGBT identity at alumni events.	0.464	0.522	0.482	0.488	0.460	-	
38 Staff at my alma mater are insensitive to LGBT groups.	0.665	0.766	0.743	0.527	0.603	0.526	-

Note. All coefficients are significant at $p<0.01$

Table 5.23

Intercorrelations for Perceived Support from Leadership for LGBTQ Communities Factor Items

Item	41	45	46	47	48	49	50
41 The leadership at my alma mater support LGBT-related issues.	-						
45 Leadership at my alma mater create an affirming place for LGBT students.	0.722	-					
46 The leadership at my alma mater neglect LGBT issues.	0.711	0.758	-				
47 I feel supported as an LGBT alumnus/na by my university/college leadership.	0.623	0.687	0.677	-			
48 Campus leadership support its LGBT alumni.	0.689	0.709	0.721	0.798	-		
49 Campus leadership ignore LGBT alumni needs.	0.679	0.757	0.735	0.703	0.711	-	
50 The leadership at my university/college ignore LGBT alumni.	0.723	0.736	0.772	0.702	0.734	0.751	-

Note. All coefficients are significant at $p<0.01$

V47, V48, and V49 were all worded similarly. I kept V48 because it had the strongest correlation with V41. Unfortunately, the high multicollinearity of the items within the factor resulted in only two items for the latent trait. Three or more items are generally required to measure a latent trait (DeVellis, 2003). However, I kept the factor intact until running discriminant validity so as to compare the items across other factor items.

The correlation matrix for the factor measuring institutional value was affirming, with only one instance of multicollinearity. To remove this threat, I eliminated V65 from the factor. V65 also had low convergence with another item, making it a suitable candidate for deletion. Table 5.24 provides the correlation matrix for the institutional value factor.

Within the factor measuring LGBTQ political and social change, V71 was multicollinear with V72 and V76. Whereas I could have eliminated V71, I instead opted to remove V72 and V76 because of their similarity in language and item construction. Table 5.25 summarizes results from this correlation analysis.

Certain items within the factor for direct services had low converge. I removed V83 and V86 because they had low convergence with every variable. All other relationships had acceptable correlations, with scores ranging from 0.444 through 0.658 (Table 5.26).

Similarly, the factor measuring LGBTQ community uplift had concerns only with low convergence. V92 had correlation coefficients below 0.4 with all other variables. As such, I removed it from the factor scale. Table 5.27 provides the correlation matrix for this factor.

Table 5.24

Intercorrelations for Institutional Value Factor Items

Item	63	64	65	67	68	69	70
63 My alma mater is moving in the right direction.	-						
64 The leadership is doing a poor job in improving the academic experience at my alma mater.	0.462	-					
65 I approve of the decisions that campus leadership have made.	0.710	0.434	-				
67 The value of my degree has improved since I attended as a student.	0.450	0.438	0.360	-			
68 My alma mater leadership is improving the value of my degree.	0.518	0.520	0.511	0.624	-		
69 The value of my degree has diminished.	0.486	0.446	0.404	0.668	0.498	-	
70 My university/college is decreasing in quality.	0.586	0.509	0.566	0.583	0.471	0.637	-

Note. All coefficients are significant at $p<0.01$

Table 5.25

Intercorrelations for LGBTQ Political and Social Change Factor Items

Item	71	72	73	74	76	78	79
71 I give to nonprofit organizations that enhance the national climate for LGBT people.	-						
72 It is important for me to donate to nonprofits that are involved with LGBT activism.	0.753	-					
73 I chose to not engage with LGBT political causes.	0.521	0.515	-				
74 Nonprofit organizations that advocate for LGBT rights are important.	0.519	0.502	0.522	-			
76 I support nonprofits that work towards LGBT political causes.	0.718	0.686	0.693	0.660	-		
78 I am indifferent about social change for LGBT people.	0.421	0.434	0.531	0.518	0.465	-	
79 LGBT social change is important to me.	0.393	0.418	0.449	0.545	0.550	0.638	-

Note. All coefficients are significant at $p<0.01$

Table 5.26
Intercorrelations for Direct Service Factor Items

Item		81	83	84	86	87	89	90
81	I prefer to donate to nonprofits that provide services to LGBT people.	-						
83	I make a difference when I volunteer for people in need.	0.287	-					
84	Nonprofit organizations that provide direct services to LGBT individuals are not important.	0.296	0.318	-				
86	I wish there were more nonprofits that provided direct services to LGBT people.	0.390	0.263	0.263	-			
87	It is important for me to support nonprofits that directly benefit LGBT individuals.	0.561	0.272	0.444	0.256	-		
89	Nonprofits that give direct services to LGBT people are unimportant to me.	0.398	0.303	0.531	0.215	0.505	-	
90	I value nonprofit organizations that do impactful work through direct service to LGBT people.	0.458	0.386	0.587	0.336	0.633	0.658	-

Note. All coefficients are significant at $p<0.01$

Table 5.27

Intercorrelations for LGBTQ Community Uplift Factor Items

Item		91	92	93	95	98	99	100
91	It is important to uplift the LGBT community.	-						
92	It is unimportant to me whether LGBT communities progress.	0.164	-					
93	As an LGBT person, it is my responsibility to support my community.	0.432	0.176	-				
95	I want my donations to lift up LGBT groups.	0.649	0.201	0.642	-			
98	My giving advances LGBT groups.	0.515	0.193	0.579	0.694	-		
99	Advancing the LGBT community is unimportant to me.	0.422	0.399	0.469	0.497	0.500	-	
100	Meeting the needs of the LGBT community is of no consequence to me.	0.455	0.250	0.496	0.595	0.555	0.635	-

Note. All coefficients are significant at *p*<0.01

-

Within the factor for salient aspect of LGBTQ identity, there were two sets of three items that were closely worded: V103, V104, and V109; and V108, V109, V110. As V109 was included in both sets of problematic items, I first removed this item. I kept V103 and V110 over V104 and V108 because of their strong relationships to other items in the factor. Table 5.28 summarizes these findings.

As evidenced, numerous factors had items which were multicollinear with others. Interestingly, negatively-worded items were frequent concerns as they often had multicollinear relationships with one another. Additionally, items that had only select words different from others were multicollinear.

Discriminant Validity

After running correlation analyses within factors, I then computed bivariate correlations among items within survey sections; undergraduate student experiences factors, alumni experiences factors, and philanthropy and giving factors. Running the correlation analyses across different factors but within the same survey section enabled me to check for discriminant validity, or the extent to which items of unrelated constructs related to one another. I interpreted the scores based on the same criteria: 0.4 meant low convergence, between 0.4 and 0.7 meant convergence, and 0.7 or higher meant multicollinearity. As I was measuring correlations across different constructs, both convergent and multicollinear items were problematic.

Within undergraduate student experiences, academic training diverged well from both perception of campus climate for LGBTQ individuals and harassment as LGBTQ student, with values between -0.067 and 0.306. Unfortunately, though, perception of campus climate for LGBTQ individuals converged almost perfectly

Table 5.28

Intercorrelations for Salient Aspect of LGBTQ Identity Factor Items

Item		101	103	104	106	108	109	110
101	My LGBT identity influences the nonprofits to which I give money.	-						
103	How I personally identify is inconsequential when determining my charitable giving.	0.651	-					
104	My personal identity is unimportant to my donation decisions.	0.558	0.704	-				
106	My LGBT identity impacts which nonprofit organizations I chose to support.	0.736	0.664	0.549	-			
108	My LGBT identity has no bearing on my volunteerism.	0.504	0.615	0.638	0.554	-		
109	My identity is of no consequence to my giving behaviors.	0.663	0.722	0.742	0.635	0.740	-	
110	Identifying as LGBT is unrelated to my giving to nonprofits.	0.681	0.641	0.639	0.708	0.718	0.794	-

Note. All coefficients are significant at $p<0.01$

with harassment as LGBTQ student, with values ranging from 0.333 to 0.692. Essentially, this meant that both factors measured the same underlying construct. Accordingly, I decided to combine both factors into one larger component. Upon combining the two factors into one composite component, V25 had low convergence with two items. I had previously flagged V25 as potentially problematic while computing convergent validity. As such, I removed this item from the new composite scale. Table 5.29 summarizes the correlations for factors and items within the undergraduate student section.

Alumni experiences originally had three factors in the survey instrument. However, as previously noted, the factor measuring perceived support from leadership for LGBTQ communities had only two items remaining after convergent validity tests. Upon running correlation analyses across the three factors, I discovered that items within harassment as LGBTQ alumnus/na converged too well with items from perceived support from leadership for LGBTQ communities. Values ranged from 0.504 to 0.712. In essence, both factors were measuring the same underlying construct. I combined both factors into a new composite factor, and then eliminated V48 because of multicollinearity in the new construct. Worth noting is that perceived support from leadership for LGBTQ communities was therefore reduced to only one item (V41). As this factor was combined with items from the factor measuring harassment as an LGBTQ alumnus/na, it was not particularly problematic. Regarding institutional value, some items converged with others. I removed V38 and V63 because of multicollinearity, resulting in low convergence for all other variables (r = 0.143-0.402). Table 5.30 summarizes these results.

Table 5.29

Intercorrelations for Undergraduate Student Experiences Items

Item	2	7	8	9	12	15	16	19	21	23	24	26	28
2	-												
7	0.524	-											
8	0.631	0.610	-										
9	0.414	0.497	0.501	-									
12	0.098	0.088	0.122	-0.023	-								
15	0.117	0.113	0.260	0.054	0.520	-							
16	0.107	0.007	0.095	-0.062	0.489	0.569	-						
19	0.146	0.030	0.176	0.006	0.620	0.610	0.606	-					
21	0.247	0.164	0.306	0.094	0.426	0.490	0.381	0.528	-				
23	0.029	0.005	0.140	-0.067	0.673	0.601	0.612	0.681	0.469	-			
24	0.160	0.130	0.222	0.007	0.552	0.575	0.474	0.603	0.539	0.487	-		
26	0.174	0.082	0.190	-0.030	0.618	0.584	0.544	0.692	0.514	0.698	0.547	-	
28	0.173	0.172	0.273	0.132	0.526	0.558	0.451	0.656	0.644	0.548	0.661	0.515	-

Table 5.30

Intercorrelations for Alumni Experiences Items

Item	31	35	36	37	41	64	67	68	69	70
31	-									
35	0.555	-								
36	0.568	0.529	-							
37	0.464	0.488	0.460	-						
41	0.582	0.543	0.585	0.511	-					
64	0.310	0.271	0.261	0.143	0.300	-				
67	0.392	0.275	0.281	0.164	0.320	0.438	-			
68	0.309	0.289	0.374	0.202	0.394	0.520	0.624	-		
69	0.337	0.242	0.279	0.268	0.386	0.446	0.668	0.498	-	
70	0.402	0.280	0.242	0.193	0.390	0.509	0.583	0.471	0.637	-

Although the philanthropy and giving section originally had four factor scales, all four converged together during the discriminant validity analysis. In essence, all four constructs measured the same underlying phenomena. As such, I consolidated the factors into one large component. Upon combining all factors together, there were two multicollinear relationships. To remedy these multicollinearities, I removed V98 and V100. Additionally, I removed V81, V84, and V91 because of low convergence (Table 5.31).

The last step for determining discriminant validity was to combine all remaining items across all factors into one correlation matrix. I ran bivariate correlation analyses using Spearman's correlation coefficient, excluding cases pairwise. Across factors, I looked for low convergence ($r = 0.4$ or lower), noting when items from different factors converged ($r = 0.4$-0.7) and were multicollinear ($r = 0.7$ or higher). Of all the correlations, only three converged above 0.4. I kept all items, however, because the correlations were all close to the cut-off ($r = 0.402$-0.416). Table 5.32 provides the correlation matrix for all items across all factor constructs.

Before conducting correlation analyses to test for construct validity, there were 71 items across ten factors. Upon completing the convergent and discriminant validity tests, there were 36 items and five factors. Appendix P provides the new set of items and factors. Conducting construct validity tests ensured a more valid scale before beginning PCA. The following section describes the PCA process that I used to further reduce items to make statistically and theoretically sound constructs.

Table 5.31
Intercorrelations for Philanthropy and Giving Items

Item	71	73	74	78	87	90	93	95	101	103	110
71	-										
73	0.521	-									
74	0.519	0.522	-								
78	0.421	0.531	0.518	-							
87	0.587	0.554	0.564	0.493	-						
90	0.528	0.434	0.593	0.509	0.633	-					
93	0.491	0.435	0.468	0.488	0.593	0.556	-				
95	0.660	0.518	0.595	0.499	0.682	0.661	0.642	-			
101	0.660	0.552	0.550	0.486	0.546	0.537	0.560	0.659	-		
103	0.490	0.521	0.469	0.466	0.531	0.499	0.535	0.582	0.651	-	
110	0.471	0.496	0.550	0.539	0.557	0.550	0.537	0.601	0.681	0.641	-

Table 5.32
Intercorrelations Among All Items

Item	2	7	8	9	12	15	16	19	21	23	24	26	28	31	35
2	-														
7	0.524	-													
8	0.631	0.610	-												
9	0.414	0.497	0.501	-											
12	0.098	0.088	0.122	-0.023	-										
15	0.117	0.113	0.260	0.054	0.520	-									
16	0.107	0.007	0.095	-0.062	0.489	0.569	-								
19	0.146	0.030	0.176	0.006	0.620	0.610	0.606	-							
21	0.247	0.164	0.306	0.094	0.426	0.490	0.381	0.528	-						
23	0.029	0.005	0.140	-0.067	0.673	0.601	0.612	0.681	0.469	-					
24	0.160	0.130	0.222	0.007	0.552	0.575	0.474	0.603	0.539	0.487	-				
26	0.174	0.082	0.190	-0.030	0.618	0.584	0.544	0.692	0.514	0.698	0.547	-			
28	0.173	0.172	0.273	0.132	0.526	0.558	0.451	0.656	0.644	0.548	0.661	0.515	-		
31	0.222	0.193	0.320	0.125	0.289	0.301	0.383	0.390	0.329	0.338	0.276	0.285	0.416	-	
35	0.230	0.096	0.246	0.173	0.211	0.229	0.321	0.332	0.238	0.347	0.162	0.291	0.303	0.555	-
36	0.230	0.139	0.210	0.025	0.250	0.236	0.405	0.329	0.276	0.362	0.234	0.260	0.258	0.568	0.529
37	0.216	0.091	0.210	0.052	0.317	0.331	0.285	0.352	0.340	0.382	0.231	0.363	0.347	0.464	0.488
41	0.316	0.181	0.347	0.192	0.264	0.237	0.390	0.317	0.258	0.388	0.159	0.267	0.278	0.582	0.543
64	0.196	0.173	0.248	0.250	0.104	0.089	0.225	0.102	0.123	0.054	0.144	0.064	0.161	0.310	0.271
67	0.140	0.245	0.281	0.258	0.154	0.096	0.150	0.159	0.106	0.076	0.143	0.063	0.216	0.392	0.275
68	0.126	0.111	0.178	0.173	0.095	0.076	0.219	0.102	0.089	0.122	0.102	0.008	0.104	0.309	0.289
69	0.217	0.254	0.334	0.377	0.168	0.155	0.183	0.136	0.166	0.113	0.236	0.074	0.237	0.337	0.242

Table 5.32 (continued)
Intercorrelations Among All Items

Item	2	7	8	9	12	15	16	19	21	23	24	26	28	31	35
70	0.217	0.232	0.356	0.362	0.152	0.153	0.210	0.145	0.089	0.106	0.156	0.038	0.240	0.402	0.280
71	0.038	0.050	0.028	0.016	-0.022	-0.109	-0.250	-0.145	-0.144	-0.140	-0.052	-0.150	-0.095	-0.074	0.114
73	0.208	0.076	0.085	0.073	-0.093	-0.204	-0.356	-0.211	-0.146	-0.260	-0.168	-0.201	-0.176	-0.161	-0.015
74	0.150	0.108	0.106	0.080	-0.070	-0.156	-0.208	-0.194	-0.130	-0.153	-0.070	-0.148	-0.157	-0.080	-0.039
78	0.096	0.099	0.103	0.063	-0.033	-0.103	-0.154	-0.107	-0.114	-0.100	0.003	-0.068	-0.061	-0.053	-0.002
79	0.044	0.052	0.083	0.038	-0.244	-0.207	-0.288	-0.297	-0.224	-0.214	-0.111	-0.209	-0.230	-0.037	-0.064
87	0.101	0.055	0.090	0.033	-0.188	-0.241	-0.386	-0.294	-0.298	-0.219	-0.140	-0.178	-0.240	-0.232	-0.117
89	0.069	0.079	0.047	0.134	-0.051	-0.132	-0.262	-0.146	-0.048	-0.151	0.006	-0.044	-0.048	-0.174	-0.091
90	0.034	0.115	0.007	0.066	-0.170	-0.251	-0.385	-0.315	-0.271	-0.271	-0.132	-0.206	-0.220	-0.234	-0.077
93	-0.003	0.038	0.024	-0.014	-0.136	-0.175	-0.282	-0.275	-0.208	-0.210	-0.143	-0.144	-0.242	-0.220	-0.130
95	0.086	0.084	0.067	-0.053	-0.148	-0.163	-0.286	-0.230	-0.233	-0.170	-0.097	-0.173	-0.185	-0.215	-0.055
99	0.037	0.120	0.047	0.092	-0.025	-0.067	-0.215	-0.165	-0.058	-0.164	0.023	-0.179	-0.041	-0.059	-0.099
101	0.108	0.050	0.110	0.042	-0.031	-0.135	-0.351	-0.204	-0.207	-0.169	-0.037	-0.087	-0.116	-0.093	-0.053
103	0.072	-0.104	0.001	-0.016	-0.043	-0.164	-0.298	-0.214	-0.189	-0.165	-0.058	-0.139	-0.151	-0.152	0.019
110	0.114	0.029	0.056	0.013	-0.022	-0.175	-0.309	-0.214	-0.187	-0.084	-0.012	-0.079	-0.152	-0.173	-0.029

Table 5.32 (continued)
Intercorrelations Among All Items

Item	36	37	41	64	67	68	69	70	71	73	74
36	-										
37	0.460	-									
41	0.585	0.511	-								
64	0.261	0.143	0.300	-							
67	0.281	0.164	0.320	0.438	-						
68	0.374	0.202	0.394	0.520	0.624	-					
69	0.279	0.268	0.386	0.446	0.668	0.498	-				
70	0.242	0.193	0.390	0.509	0.583	0.471	0.637	-			
71	-0.027	0.071	-0.044	0.107	0.105	0.084	0.138	0.119	-		
73	-0.132	-0.046	-0.060	0.046	0.043	-0.024	0.133	-0.029	0.521	-	
74	-0.070	0.033	0.003	0.062	0.197	0.116	0.252	0.160	0.519	0.522	-
78	-0.008	0.094	0.052	0.048	0.131	0.062	0.184	0.081	0.421	0.531	0.518
79	-0.058	0.018	-0.018	0.015	0.002	-0.033	0.094	0.101	0.393	0.449	0.545
87	-0.119	0.002	-0.094	0.006	-0.002	0.066	0.094	0.050	0.587	0.554	0.564
89	-0.033	-0.031	-0.094	0.047	0.006	0.039	0.101	0.048	0.429	0.417	0.481
90	-0.093	-0.007	-0.129	0.031	0.009	0.048	0.086	0.040	0.528	0.434	0.593
93	-0.157	-0.050	-0.111	-0.025	0.059	0.109	0.158	-0.018	0.491	0.435	0.468
95	-0.051	-0.039	-0.091	-0.002	0.053	0.081	0.096	0.045	0.660	0.518	0.595
99	0.029	0.029	-0.016	0.058	0.026	0.071	0.169	0.090	0.382	0.391	0.450
101	-0.117	-0.117	-0.094	0.004	0.078	-0.016	0.080	0.059	0.660	0.552	0.550
103	-0.103	-0.103	-0.100	0.023	0.053	0.069	0.086	0.012	0.490	0.521	0.469
110	-0.033	-0.033	-0.012	-0.051	0.025	0.037	0.087	-0.035	0.471	0.496	0.550

Table 5.32 (continued)
Intercorrelations Among All Items

Item	78	79	87	89	90	93	95	99	101	103	110
78	-										
79	0.638	-									
87	0.493	0.464	-								
89	0.600	0.473	0.505	-							
90	0.509	0.532	0.633	0.658	-						
93	0.488	0.446	0.593	0.502	0.556	-					
95	0.499	0.512	0.682	0.554	0.661	0.642	-				
99	0.650	0.498	0.421	0.674	0.555	0.469	0.497	-			
101	0.486	0.466	0.546	0.489	0.537	0.560	0.659	0.437	-		
103	0.466	0.434	0.531	0.466	0.499	0.535	0.582	0.372	0.651	-	
110	0.539	0.512	0.557	0.534	0.550	0.537	0.601	0.487	0.681	0.641	-

Principal Components Analysis

I ran principal components analysis (PCA) to reduce the number of items that represent each latent trait. PCA reduces the dimensionality of a larger set of items to achieve a more parsimonious data set (Nunnally & Bernstein, 1994). As previously discussed, PCA is especially useful when there is a small sample size, a multicollinearity threat, or conceptual uncertainties regarding component construction. As my survey instrument involved all three threats to some extent, PCA was an appropriate analysis choice.

In order to obtain PCA solutions, I used SPSS for Windows to compute initial factor loadings for all remaining items within each respective component. Upon computing PCA, I observed the communalities and factor loadings for each item within their respective components. When there were item factor loadings lower on average than others, I considered removal. I also used previous results from social desirability correlations and construct validity tests to make decisions regarding item removal. I used both conceptual and empirical insight when making my decisions for removing items from components, with the goal of maximizing the percentage of variance explained while reducing the number of items to represent each factor. Table 5.33 details final factor loadings for all items within each latent trait.

Table 5.33
Factor Loadings for Items

	Item	Factor loading
	Undergraduate Student Experiences: Academic Training	
2	Thinking about my time as an undergraduate student, I am disappointed with my academic experience.	0.850
7	I am displeased with my academic training at my college/university.	0.761

8	Looking back, I feel that I had a positive academic experience as an undergraduate student.	0.883

Undergraduate Student Experiences: New Factor

12	When I was a student, my campus was uninviting for people who were LGBT.	0.815
19	I believe my undergraduate alma mater was hostile for people who were LGBT.	0.872
23	LGBT students felt safe on my campus when I was a student.	0.867
26	I felt open to disclose my LGBT identity on campus without fear of repercussions.	0.850
28	I feared for my physical safety because of my LGBT identity.	0.769

Alumni Experiences: New Factor

31	I feel marginalized within my institution as an LGBT alumnus/na.	0.837
35	When attending alumni events at my alma mater, I feel affirmed as an LGBT person.	0.816
36	Alumni relations and development staff at my institution understand the culture of LGBT communities.	0.823
41	The leadership at my alma mater support LGBT-related issues.	0.847

Alumni Experiences: Institutional Value

67	The value of my degree has improved since I attended as a student.	0.873
69	The value of my degree has diminished.	0.883
70	My university/college is decreasing in quality.	0.837

Philanthropy and Giving: New Factor

71	I give to nonprofit organizations that enhance the national climate for LGBT people.	0.782
87	It is important for me to support nonprofits that directly benefit LGBT individuals.	0.797
90	I value nonprofit organizations that do impactful work through direct service to LGBT people.	0.748
93	As an LGBT person, it is my responsibility to support my community.	0.749
95	I want my donations to lift up LGBT groups.	0.855
101	My LGBT identity influences the nonprofits to which I give money.	0.826
110	Identifying as LGBT is unrelated to my giving to nonprofits.	0.795

I first began with the factor representing academic training. All four remaining

items had strong factor loadings. I removed V9 and reran PCA because it was

previously found to be significant with the social desirability scale, and it also had a lower factor loading compared to others. V9 also had the lowest correlation convergence between other items when examining convergent validity. Upon removing V9 the percent of total variance explained increased from 60.826 with four items to 69.362 with three items. Among the remaining three items, each had good factor loading.

The second PCA I ran was with the new factor within undergraduate student experiences. As previously discussed, this new factor included items from previous factors measuring perceived campus climate for LGBTQ individuals and harassment as an LGBTQ student. I first ran PCA with all nine items, and explained 60.657% of the variance. Factor loadings ranged from 0.696 (V21) to 0.850 (V19). V21 had low convergence with another variable during the validity tests, so I removed it and reran PCA. Upon removal, the remaining eight items explained 62.823% of the variance. Within these items, V16 had a lower factor loading than others. The item discussed heterosexism and its influence on campus climate. In relation to the other items, it was the only one that did not include gender identity or expression and solely discussed sexual identity. Considering this, I thought it was troubling to include conceptually with other variables. As such, I removed V16 and reran PCA. The new total percent of variance explained increased to 64.813. Among the remaining items, the two variables with the lowest loadings related exclusively to classroom climate, while the others addressed campus issues more broadly. I removed these variables (V15 and V24) and reran PCA. The new construct accounted for 69.818% of total

variance. Considering the remaining five items, I was confident with the factor both conceptually and empirically.

I then moved on to alumni experiences and began with the new factor. As already discussed, the new factor included items previously from harassment as an LGBTQ alumnus/na and perceived support from leadership for LGBTQ communities. I ran the initial PCA with all five items, with 63.884% of the variance explained. Factor loadings ranged from 0.725 (V37) to 0.843 (V41). V37 was the only item with factor loading less than 0.8. Conceptually, this item related more to identity disclosure than alumni experiences. Additionally, it had the lowest convergence among remaining items in the factor. I removed V37 from PCA and reran, yielded a new percent of variance explained at 69.065. The remaining loadings ranged from 0.816 (V35) to 0.847 (V41). Conceptually, it represented a solid construct and loaded appropriately empirically. I therefore decided to include the remaining four items for this construct.

Also in alumni experience, I ran PCA for the institutional value factor with all five remaining items. The percent of variance explained was 63.150. Two items had lower variance explained than others, and they also had the lowest convergence among all items during validation. I removed V64 because it had the lowest variance explained in PCA. Removing this item also balanced the number of positive and negative items in the factor. Furthermore, this item discussed the academic experience itself, not the value of the experience directly. Upon removing V64, the percent of variance explained in the factor increased to 67.885. Among the remaining items, V68 had the lowest variance explained. Although other items broadly

discussed value, this item specifically asked about the influence of leadership in degree value. The item previously removed (V64) also discussed leadership's influence on institutional value. As such, I removed V68 and reran PCA. The new percent of variance explained increased to 74.758. Conceptually, the remaining three items represented institutional value, and empirically the factor loadings were strong.

Last, I ran items in the new factor within philanthropy and giving. As previously discussed, I consolidated items within the four previous factors because of high convergence and multicollinearity. In this factor, I included all 14 items with the challenge of removing an appropriate number of items while also maintaining conceptual sense. The first PCA yielded two components, with 48.786 and 8.895% of the variance explained. V79, V89, and V99 all had "importance" as a key word. All three of these items also had low loadings with convergent validity. Furthermore, these three items loaded strongly on the second component (V79 = 0.346, V89 = 0.488; V99 = 0.635). As such, I inferred that the word "importance" created issues with the factor loadings. I removed the three items and reran PCA, yielding only one component with 55.404% of variance explained. Previously, I found that V89, V99, and V103 all had significant correlations with the social desirability scale. As I had already removed V89 and V99, I removed V103 and reran PCA. The new variance explained was 55.830. Although this was not a large increase of variance explained, I kept this decision to eliminate threat of social desirability. Among the remaining items, V74 had the lowest variance explained. It also used the troubling word "importance," and was the only item to discuss the mission of nonprofits rather than a person's involvement or support of nonprofits. I removed and reran PCA, with

57.685% of the variance explained. Of the remaining items, V78 and V73 were the only item that did not directly discuss nonprofit organizations. V78 discussed a person's beliefs on social change, and V73 mentioned political causes, not nonprofits. I removed these two items and the new percent of variance explained increased to 63.035. Among the seven remaining items, the loadings ranged from 0.748 (V90) to 0.855 (V95).

Following, I combined all items across all five factors and ran a PCA. I used this step as confirmation for convergence of items within each factor, and divergence of items across different factors. Since components are uncorrelated in PCA, each set of items should be easily discernible. Factor rotation improves the interpretation of extracted factors. I used Varimax rotation to maximize the loadings variance within factors and also maximizing the differences between high and low factor loadings. A Varimax rotation maximizes the loadings variance within the factors while also maximizing differences between the high and low factor loadings. Varimax rotation allowed me to generate a simple structure, thus making interpretation easier. Results from the total PCA yielded five clear components with 70.684% of variance explained. Table 5.34 includes factor loadings for each item, with the highest factor loadings in boldface. As evidenced, each item loaded highest on its respective factor. Table 5.35 includes factor eigenvalues, percent of variance explained by each factor, and cumulative variance.

After combining results from social desirability, construct validation, and PCA there were five remaining factors in the instrument. Across all five factors, there were 22 items. Appendix Q details final items and factors for the survey instrument.

Table 5.34
Rotated Factor Loadings

		Factor Loading				
	Item	Academic Training	New Factor	New Factor	Institutional Value	New Factor
	Undergraduate Student Experiences: Academic Training					
2	Thinking about my time as an undergraduate student, I am disappointed with my academic experience.	**0.813**	0.098	0.203	0.044	0.098
7	I am displeased with my academic training at my college/university.	**0.740**	0.001	-0.084	0.118	0.059
8	Looking back, I feel that I had a positive academic experience as an undergraduate student.	**0.820**	0.119	0.158	0.210	0.089
	Undergraduate Student Experiences: New Factor					
12	When I was a student, my campus was uninviting for people who were LGBT.	0.029	**0.839**	0.094	0.106	0.003
19	I believe my undergraduate alma mater was hostile for people who were LGBT.	0.028	**0.820**	0.294	0.040	-0.192
23	LGBT students felt safe on my campus when I was a student.	-0.041	**0.813**	0.274	-0.024	-0.084
26	I felt open to disclose my LGBT identity on campus without fear of repercussions.	0.159	**0.822**	0.200	-0.062	-0.064
28	I feared for my physical safety because of my LGBT identity.	0.090	**0.798**	0.051	0.204	-0.121

Note. Boldface indicates highest factor loadings.

Table 5.34 (continued)
Rotated Factor Loadings

Item		Factor Loading				
		Academic Training	New Factor	New Factor	Institutional Value	New Factor
Alumni Experiences: New Factor						
31	I feel marginalized within my institution as an LGBT alumnus/na.	0.012	0.298	**0.713**	0.297	-0.224
35	When attending alumni events at my alma mater, I feel affirmed as an LGBT person.	-0.005	0.180	**0.802**	0.140	-0.017
36	Alumni relations and development staff at my institution understand the culture of LGBT communities.	0.102	0.188	**0.794**	0.079	-0.056
41	The leadership at my alma mater support LGBT-related issues.	0.182	0.198	**0.793**	0.217	-0.055
Alumni Experiences: Institutional Value						
67	The value of my degree has improved since I attended as a student.	0.105	0.099	0.191	**0.843**	0.043
69	The value of my degree has diminished.	0.145	0.101	0.213	**0.846**	0.145
70	My university/college is decreasing in quality.	0.144	0.009	0.153	**0.844**	0.091

Note. Boldface indicates highest factor loadings.

Table 5.34 (continued)
Rotated Factor Loadings

		Factor Loading				
	Item	Academic Training	New Factor	New Factor	Institutional Value	New Factor
	Philanthropy and Giving: New Factor					
71	I give to nonprofit organizations that enhance the national climate for LGBT people.	-0.128	-0.011	0.073	0.148	**0.792**
87	It is important for me to support nonprofits that directly benefit LGBT individuals.	0.178	-0.181	-0.054	0.041	**0.758**
90	I value nonprofit organizations that do impactful work through direct service to LGBT people.	0.077	-0.200	-0.121	0.035	**0.730**
93	As an LGBT person, it is my responsibility to support my community.	0.053	-0.069	-0.103	0.040	**0.741**
95	I want my donations to lift up LGBT groups.	0.091	-0.110	-0.053	0.000	**0.835**
101	My LGBT identity influences the nonprofits to which I give money.	0.013	0.014	-0.040	0.090	**0.835**
110	Identifying as LGBT is unrelated to my giving to nonprofits.	0.058	0.049	-0.024	-0.030	**0.801**

Note. Boldface indicates highest factor loadings.

Table 5.35
Eigenvalues, Percentages of Variance, and Cumulative Percentages for Rotated Factors

Factor	Eigenvalue	% of variance	Cumulative %
Philanthropy and Giving: New Factor	5.83	26.501	26.501
Undergraduate Student Experiences: New Factor	4.594	20.880	47.381
Alumni Experiences: New Factor	2.201	10.005	57.386
Alumni Experiences: Institutional Value	1.642	7.462	64.848
Undergraduate Student Experiences: Academic Training	1.284	5.836	70.684

Reliability

The last remaining step for developing the factors within the survey was to run reliability tests. From results with social desirability, construct validity, and PCA, I reduced the number of items and factors. Computing Cronbach's (1990) coefficient alpha values for each factor scale allowed me to determine the internal-consistency reliability of the instrument.

With new survey constructions a modest reliability of 0.70 is acceptable and 0.80 is good (Nunnally & Bernstein, 1994). Factor coefficient alphas were all either acceptable or good, with values ranging from 0.760 to 0.898 (Table 5.36).

Table 5.36
Cronbach Alpha Coefficients for Factors

Factor	Cronbach Alpha
Undergraduate Student Experiences: Academic Training	0.898
Undergraduate Student Experiences: New Factor	0.889
Alumni Experiences: New Factor	0.894
Alumni Experiences: Institutional Value	0.831
Philanthropy and Giving: New Factor	0.760

Naming Factors

The final stage of survey development involves naming factors within the instrument (DeVellis, 2003). The more pure a name and definition, the easier it is to infer the latent quality of each factor (Comrey & Lee, 1992). I relied on both statistical and theoretical findings to name the remaining factors in the survey instrument. Once a factor is named, the uniqueness of the items is removed and the factor name is the sole communicator to each latent trait being measured (Kachigan, 1986). I took considerable time in determining the most appropriate and accurate name and definition for each remaining factor.

Within undergraduate student experiences, one factor retained items exclusively from its original list of items. As such, the factor measuring academic training kept its most recent name and definition. After analyses, the two other factors converged to measure only one new factor. This newly constructed factor included items from both perception of campus climate for LGBTQ individuals and harassment as LGBTQ student. Delving deeper into the items representing the new construct, I determined that the construct more broadly represented campus climate, with harassment and safety as a key component of campus climate. I named the new factor campus climate for LGBTQ students, and defined it as how welcoming an institution was for LGBTQ people when alumnus/na was an undergraduate student.

Similarly within alumni experiences, two previous factors converged to create one new factor. I used definitions from the two converged factors (harassment as LGBTQ alumnus/na and perceived support from leadership for LGBTQ

communities) to create the new factor name and definition. Paralleling the undergraduate student experience factor, I named the new factor as campus climate for LGBTQ alumni. The factor measures how welcoming an institution is currently for LGBTQ people. Also in alumni experiences, I retained the most recent name and definition for institutional value.

As discussed earlier, all four factors within philanthropy and giving converged to create one new factor. Previously, the four original factors measured different dimensions of motivations for philanthropy and giving among LGBTQ alumni. As such, I named the new factor as LGBTQ motivation for giving, and defined it as an alumnus'/alumna's philanthropic support for LGBTQ-related efforts. Appendix R details the new factor names and definitions as revised from the previous analyses.

In order to provide a holistic view of the factor creation and item reduction, I created a timeline for my survey design. Appendix S provides factor construction across all four analysis components: initial construction, expert review, construct validity, and principal components analysis. Each component of the survey (undergraduate student experiences, alumni experiences, philanthropy and giving) has factor names and items through each phase of the analysis.

Summary

Chapter Five began with a review of descriptive statistics results across all four sections of the survey instrument: undergraduate student experiences, demographics, alumni experiences, and philanthropy and giving. This allowed me to provide a better understanding of the pilot study population. Next, I detailed my method for measuring social desirability bias among individual items in the survey. In

order to begin determining which statements to remove, I reported significant correlation coefficients among survey items and items in the social desirability scale.

I then ran tests to measure construct validity for all items and factors. Using these findings, I discussed how similar items converged and those with different underlying components diverged. I ran principal components analysis (PCA) to reduce the number of items that represent each latent trait. Following, I computed Cronbach's (1990) coefficient alpha values for each factor scale allowed me to determine the internal-consistency reliability of the instrument. Factor items were reduced from combined findings across all analyses: expert reviewers, social desirability, construct validity, PCA, and reliability. The chapter closed with the naming process for all factors.

CHAPTER SIX: DISCUSSION AND CONCLUSION

This study created a survey instrument to operationalize philanthropic involvement and motivation among LGBTQ alumni. More specifically, through this study I created factors and items related to undergraduate experiences, demographics, alumni experiences, and philanthropy and giving. Utilizing a queer theoretical framework and DeVellis' (2003) model for scale development, I followed his eight steps to create and validate a reliable survey instrument for LGBTQ alumni giving.

In this chapter I provide closing remarks on the process of creating the survey instrument, including a summary of results and an explanation of findings. Additionally, I discuss how the survey instrument contributes to the scholarship and practice of philanthropy and giving in higher education, as well as to LGBTQ identities and issues among college and university alumni.

After discussing findings, I outline proposed changes for future survey administrations and detail limitations of the study. Lastly, I describe future directions for the survey instrument and this research topic, detailing my intentions to move forward with this research. I close with a summary of the chapter.

Summary of Results

I provide a summary of results to give context to the explanations and implications of findings, as well as contributions of the instrument and other aspects of this chapter. My results summary includes findings from both expert reviewers detailed in Chapter Four and analyses discussed in Chapter Five.

Expert Reviewers

I utilized expert reviewers to review and modify the survey instrument and factors before survey administration. Having expert reviewers allowed me to check for both content and construct validity, which is the extent to which an instrument measures what it purports to measure (DeVellis, 2003). Additionally, it enabled me to review the process and experience of responding to my survey instrument. I asked both content experts and potential respondents to be a part of the expert review process, with each group having unique roles in ensuring validity. Their reviews concentrated on general critiques of the survey and specific recommendations for survey items and components.

Based on reviewer recommendations of the overall experience, I more directly described the intentions of the survey so that participants could clearly understand what I intended on measuring. Additionally, I shortened the length of the survey instrument to make the process easier and less arduous for respondents. Based on reviews from potential respondents, I modified certain questions deemed culturally insensitive or biased. These questions favored certain identities and experiences over others, and by removing or modifying them I was able to more broadly capture the intentions of my survey instrument. Among both content experts and potential respondents, reviewers had difficulty with response options matching questions or statements. Accordingly, I modified pretest question responses and other items to more directly correlate with items and questions.

Regarding the appearance of the electronic survey instrument, potential respondents had several suggestions for improving the experience for participants.

From their reviews, I added a back button to the electronic survey, provided text to clearly identify the percentage of survey completion, made the color more neutral, increased the font size, and bolded key words in questions and statements.

Within the demographics section of the survey, I modified both items and factors based on reviewer comments. Based on recommendations from expert reviewers, I added a question regarding participants' birth sex and changed other demographic questions (gender identity, expression, sexual identity) to a "Check all that apply" response option. These changes supported my critical queer epistemological approach (Britzman, 1995; Renn, 2010; Tierney & Rhoads, 1993) in that it enabled a fluid and inclusive measurement of identities. I also modified response options for religion and political views based on reviews that the original response options were over-inclusive and confusing.

Regarding the section measuring undergraduate student experiences, I changed the questions and response options for several items, including an item about transfer student status and another asking undergraduate major. Although I did not change the list of undergraduate curricular and co-curricular activities, I did change response options for the question asking about leadership within student involvements based on recommendations from expert reviewers. I also revised the question about residency to include homeless (e.g., couch surfing, sleeping in car, sleeping in campus office/lab) as a response option.

Among the three factors within undergraduate student experiences, I changed the definitions and names to more specifically capture my intended measure. The originally-named satisfaction factor was changed to academic training and

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concentrated on how an alumnus/na felt prepared academically by his/her/hir undergraduate experience. I also changed the factor name from perception of campus climate to campus climate for LGBTQ individuals to more appropriately reflect my focus on how welcoming an institution was towards LGBTQ students. Across all three components, I eliminated 8 of 30 items based on critiques from reviewers.

I changed several items within the section measuring alumni experiences based on reviews from both content experts and potential respondents. For example, I changed the response options for the questions asking about individual and household income to further differentiate income levels. I also added a question in order to distinguish between dues paying alumni associations and LGBTQ alumni affinity groups.

Regarding factors within the alumni experiences section, I made modifications similar to those made within the undergraduate student experiences section to more directly measure my intended constructs. For example, I changed the factor labeled perceived support from leadership to perceived support from leadership for LGBTQ communities. I also changed the satisfaction factor name to institutional value in order to specify which dimension of alumni satisfaction I intended on measuring. Both expert reviewers and potential respondents expressed concern with the items in the factor measuring trust, noting that with such a broad construct it was difficult to discern to which dimension I was referring. As such, and in an effort to reduce the survey length, I eliminated the entire factor and accompanying items completely. In total, I kept 21 of the 40 total questions, and reduced the number of factors from 4 to 3 in this portion of the survey.

Both items and factors within the philanthropy and giving section were modified based on reviews from experts. Regarding the flow of the survey questions, I changed the order of the first several questions to progress from broad to specific avenues of giving (e.g., giving to nonprofits, giving to alma mater, giving to LGBTQ causes, giving to LGBTQ alma mater causes). Changing the order of questions within both the financial giving and volunteerism questions simplified the survey design for participants. Similar to income, I changed the response options for financial giving and volunteerism to more appropriately differentiate amounts.

One content reviewer noted that among all of the factors, I had to do the most work on the components within the section measuring philanthropy and giving. Accordingly, I changed the names of all four factors and revised definitions to be clearer about my intended measures. These revisions were all in an effort to more clearly distinguish the four factors within this section, as reviewers had difficulty differentiating between the four constructs. In total, I eliminated 12 of the 40 factor items in this section.

Across all four survey sections, I eliminated a total of 39 factor items, reducing the total number of items from 110 to 71. The process of item reduction continued following survey administration with analyses to create valid and reliable factors.

Social Desirability, Construct Validity, and Principal Components Analysis

In Chapter Five I outlined results from analyses after survey administration. After removing unusable cases, my sample yield was 21.89% (197 of approximately 900 potential participants). In the following paragraphs, I describe results from three

analyses: social desirability, construct validity, and principal components analysis (PCA). Combined, all three analyses helped guide my decision for item reduction and factor names and definitions.

I included the 11-item short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) in my survey instrument. Correlating this scale with factor items from the survey, I was able to determine the influence of social desirability on participants' answers. Of all the items in the instrument, only five items significantly correlated with Reynolds' (1982) social desirability scale ($p \leq 0.05$).

Using Spearman's correlation coefficients, I measured construct validity for all items. Measuring within each factor, I checked for convergent validity. Examining items between factors, I looked for discriminant validity. Upon completing the convergent and discriminant validity tests, I removed 35 of the 71 items from the survey instrument. As such, there were 36 items remaining for PCA.

I ran PCA to further reduce the number of items and factors in the survey instrument. I used both empirical and theoretical insights when making decisions for removing items from components, with the goal of maximizing the percentage of variance explained and reducing the total number of items in the survey. Results of PCA yielded five clear components that explained 70.684% of the total variance. Across all five factors, there were 22 items total. Upon defining the number of factors and items, I computed Cronbach's (1990) coefficient alpha values for each factor scale. The scores measured internal-consistency reliability and ranged from 0.760 to 0.898.

After determining the validity and reliability of all five factors, I gave each construct a name and definition. Whereas two factors retained their most recent name and definition, the three new constructs were assigned new names and definitions. I used both empirical and conceptual knowledge to determine the most appropriate names and definitions for the factors. Appendix R details the five factors' names and definitions.

Finally, I created Appendix S to provide factor construction and item reduction throughout the entire survey design process. I included names and items within each phase of the analysis and chronicled the process I undertook to make a valid, reliable, and more parsimonious survey instrument.

Explanation of Findings

Results across all analyses and validations led to the conclusion that the final instrument and accompanying factors are useable in measuring LGBTQ alumni giving. Although the original intention was to measure eleven components, the final instrument yielded five empirically and conceptually valid concepts. In the following paragraphs, I delve into specific findings, providing reasoning behind the results.

Upon beginning this study, I thought I knew the underlying structure of the phenomenon of philanthropy and fundraising for LGBTQ alumni. After having completed over two years of research and becoming intimately familiar with philanthropic studies and LGBTQ issues and identities in higher education, I thought I had a stronger understanding of the topic. Particularly because I completed the qualitative constructivist case study with Dr. Drezner, I believed I had a thorough understanding of the phenomena being measured. Throughout the entire survey

development, I kept in mind the model for LGBTQ alumni giving (Appendix A) when constructing items and factors. However, upon completing construct validity tests and PCA, the structure of the factors evolved and changed. After performing the analyses, I realized that regardless of my knowledge of the research or prior experiences, the empirical results yielded a more appropriate model for measuring LGBTQ alumni philanthropy.

In the process of running my analyses, I had a colleague review my results. Indicating my surprise with the new constructed factors, he explained to me the nature of exploratory research. Much like grounded theory within qualitative research, PCA explores and theorizes an underlying foundation for latent factors. Whereas other data reduction techniques use pre-existing theories and models to ground analyses, PCA does not have prior research to create a theoretical base.

Regardless of my understanding of exploratory factor analysis, I was determined to maintain my original conceptual understanding of the factors in my model. For example, I had originally created items for both campus climate and harassment for LGBTQ students in the undergraduate student experiences section. Using inspiration from the *2010 State of Higher Education for LGBT People* (Rankin, Blumenfeld, Weber, & Frazer), I intentionally differentiated between the two constructs largely because they had been validated in prior research studies. During expert reviews, however, both potential respondents and content experts had difficulty differentiating between the two constructs. Nonetheless, I was set to maintain both factors as distinct and mutually exclusive. As such, I included them as separate factors in the pilot administration of the survey. Assuming that my study

would confirm the validity of both latent factors, I was surprised when the two constructs converged during tests of construct validity. Reflecting back on the process, though, I realized the importance of suspending bias during the entire survey construction in order to come to a more theoretically and empirically sound instrument.

Similarly, my data did not differentiate between different philanthropy and giving motivations the way I thought. Prior scholarship demonstrated unique motivations for giving among minority populations of alumni (Carson, 2008; Gasman, 2002; Smith et al., 1999) and particularly among LGBTQ alumni (Drezner & Garvey, 2012; Kendell & Herring, 2001). However, these studies relied either on qualitative data or did not use empirical analyses and, consequently, were not generalizable. I created the four motivations for giving factors based on prior scholarship assuming results from my study would yield four distinct components. As evidenced, though, there was strong convergence (and multicollinearity) across items in all four factors.

Again during the expert review process, both content reviewers and potential participants demonstrated difficulty in differentiating the specific giving motivations within all of the philanthropy and giving items. In fact, several of the factors received unfavorable reviews because of perceived overlap with other factors. As discussed before, though, I was determined to find empirical evidence that all four giving factors were discrete.

For participants in my study, giving motivations were more universal and less specific. Whereas I had developed detailed constructs with nuanced differences,

participants who completed my survey did not perceive any of the four factors as distinct. Rather, alumni conceived giving motivations only as a broad construct with all four of my previous factors converging into one phenomenon. Both construct validity tests and PCA yielded one underlying construct that I named LGBTQ motivation for giving.

During validation and PCA, I discovered that many of my items were multicollinear both within and across factors. Upon closer examination of the items, I found patterns to explain the multicollinearity. For example, many of my negatively-worded items were multicollinear with positively-worded items. Before running analyses, I reverse-coded all negatively-worded items so that I could universally interpret all items using the same measurement scale. However, reverse-coding the negative items essentially duplicated many of the positively-worded items. For example, V41 read "The leadership at my alma mater support LGBT-related issues" and V46 read "The leadership at my alma mater neglect LGBT issues." Reverse-coding V46 essentially duplicated V41, thus resulting in multicollinearity.

Results from expert reviews and analyses enabled me to construct a survey instrument to measure LGBTQ alumni philanthropy. Though my original model evolved and changed, the resulting survey instrument yielded five valid and reliable components. The following section describes how the newly constructed instrument contributes to both research and practice.

Contribution of Instrument

Results from this study provide significant contributions within both research and practice. Most centrally, the creation of a survey instrument to measure LGBTQ

alumni philanthropy provides substantial contribution to the scholarship of philanthropic studies, higher education and student affairs, and LGBTQ issues and identities.

Fundraising and alumni relations is scarcely informed by research (Brittingham & Pezzulo, 1990) and most scholarship within philanthropic studies is atheoretical (e.g., Burnett, 2002; Ciconte & Jacobs, 2001; Connors, 2001; Dove, 2001; Flanagan, 1999; Greenfield, 2001; Worth, 2002). Advancement staff often have difficulty in gleaning insight from philanthropy scholarship because the research is not grounded in theoretical or conceptual models (Drezner, 2011, 2013). Particularly among identity-based philanthropy, few scholars have empirically validated measurements for giving. Without empirical evidence, LGBTQ alumni have gone largely unnoticed and have received scant attention from practitioners.

Through this study, I created empirically and theoretically sound items and factors germane to the understanding of LGBTQ alumni philanthropy. Consequently, the measurements in this instrument can yield evidence-based studies to gain a greater understanding of LGBTQ alumni. Recently, scholars have called for the increased examination of LGBTQ issues and identities in higher education research (Renn, 2010; Sanlo, 2002). The items and factors within this instrument can provide a foundation for countless empirical examinations of LGBTQ people.

From a practitioner perspective, advancement staff can utilize findings from studies with this instrument to attract a more active and engaged LGBTQ alumni community. With greater understanding of the unique experiences of LGBTQ alumni, advancement staff can develop culturally-sensitive and relevant engagement and

solicitation practices that recognize and incorporate LGBTQ alumni identities and experiences. Student affairs practitioners can better understand and promote undergraduate student involvements that influence philanthropic giving motivations, frequency, and quantity. Senior administrators in higher education can explore environmental differences within and across campuses to promote a more affirming campus climate for LGBTQ individuals.

As discussed in Chapter One, the creation of this instrument gives a powerful and sustaining voice for LGBTQ alumni. From my personal experiences as an alumnus and hearing the stories during the qualitative exploration of LGBTQ alumni philanthropy, I have come to understand the importance of having a voice. Alumni from minority communities often feel disengaged from their alma maters because of experiences during their undergraduate years (Gasman, 2002; Gasman & Anderson-Thompkins, 2003; Smith, Shue, Vest, & Villarreal, 1999). By utilizing an instrument to measure LGBTQ alumni philanthropy, institutions send a message to these alumni that they are an important and vital part of the university community. Colleges and universities can administer the survey in a demonstration of interest and care for LGBTQ alumni, recognizing their voices as central to alumni philanthropy at their institutions.

Regarding data collection and psychometrics, this instrument advances the conversation about the importance of thoughtful data collection for LGBTQ people, both institutionally and within empirical research. The LGBTQ community is not a monolithic group, and having a survey devoted entirely to LGBTQ people brings to light the diversity and myriad of identities among LGBTQ individuals.

Proposed Changes

Though my process of survey development was thorough and evidence-based, there are several changes I would have made throughout the study. I hope these insights will be useful for future researchers conducting research with similar topics and methodologies.

As a critical quantitative scholar, I have previously used numerous datasets to conduct post hoc statistical analyses. However, constructing the LGBTQ alumni giving survey was the first time I endured the entire survey development process. The most important lesson I discovered was the difficulty and necessity of eliminating items and factors. Having devoted a considerable amount of time with all items and components, I had trouble removing questions from my survey, even when empirical and conceptual evidence supported the elimination. If I were to begin this process from the beginning, I would have more actively embraced the process of survey reduction.

My critical queer epistemology influenced my decision on how I asked demographic questions. I enabled participants to "select all that apply" with numerous identity-based questions in order to recognize the fluidity and multiple dimensions of identity (Tierney & Dilley, 1998; Wilchins, 2004). After administering the pilot study, I ran descriptive statistics for all items, as described in Chapter Five. Upon analyzing frequencies of demographic data, I had difficulty capturing the responses of individuals who selected more than one option within a demographic question. "Select all that apply" was favorable for my critical queer epistemology, but brought difficulty with my analyses. I was forced to make choices for participants' identities.

For example, when a participant indicated more than one gender identity, I placed him/her/hir in the "other" category.

The tension between recognizing fluid identities and quantitatively categorizing responses will be a continual struggle for me as a critical survey methodologist. Inherently, my critical queer epistemology and the limitations of survey design and administration conflict with each other. From question construction and response categorization, to model development and analysis choices, utilizing quantitative data with a critical queer epistemology creates difficult decisions. As I progress with this scholarship, I will remind myself that rather than focusing on the methods of my research, I must concentrate on the intentions of creating a more just and equitable world for marginalized individuals. This distinction allows me to conduct quantitative research using a critical queer paradigm (Stage, 2007).

Upon completing the survey administration, I realized the difficulty of collecting information about resource availability and frequency. A significant portion of alumni indicated that specific resources were not available at their institution when they were undergraduate students. When running the analyses, though, I had to make difficult decisions with how to handle these cases. Furthermore, having alumni recall their undergraduate experience can be difficult for participants, particularly older alumni. Before administering the final survey, I plan on running exploratory analyses to more closely examine the utility of these measurements.

Regarding the construction of the survey holistically, I intentionally designed the question sequence so that items were asked temporally, or in a time-ordered

sequence. As such, I asked questions regarding philanthropy and giving last. However, the missing values were particularly high for these variables as compared to others. I questioned why these response rates were so low, and considered the influence of survey fatigue and discomfort with asking finance-related questions. If I were to re-administer the pilot survey, I would have placed these questions earlier in the survey because of their central importance to studies about LGBTQ alumni giving.

Related to these questions, I also recognize that responses to giving variables (e.g., frequency, total giving in a year) depend largely on at what point in the year I administer the survey. Given my time schedule for the study, I administered the survey in November 2012. Of the total participants, 107 (54.3%) donated to their alma mater within the past month, and 51 (25.9%) donated within the past six months. These numbers might have been a result of the solicitation schedule and calendar. Considering the importance of end-of-year giving to many individuals, I would have changed the administration to January so that I could have had a more accurate account of annual giving.

As discussed in previous chapters, I used principal components analysis (PCA) on all of the component scale items to extract the appropriate number of components and reduce items that represent each latent trait. PCA relies on orthogonal rotations, which assume that extracted components are independent of one another. Conversely, oblique rotations assume components are correlated. Given the model and constructs within the survey instrument, it is likely that the components are correlated with one another. There are other extraction techniques that do not require

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orthogonal rotations, and can more easily recognize correlations among variables through the use of oblique rotations. One such analysis is principal axis factoring. For individuals considering a similar study, I recommend utilizing principal axis factoring during the factor extraction and data reduction processes. Whereas PCA is useful when there are conceptual uncertainties and/or multicollinearity threats, principal axis factoring is helpful in educational and social science research because latent constructs are likely naturally correlated to some degree (Pedhazur & Schmelkin, 1991; Pett, Lackey, & Sullivan, 2003).

Limitations

As with any research, there were limitations within my study that must be noted. First, the scarcity of LGBTQ alumni philanthropy research did not provide much of a foundation for creating an LGBTQ alumni giving survey. Consequently, I had to rely on philanthropy studies in other marginalized communities and atheoretical pieces by practitioners. Although this study was largely exploratory, the foundation of understanding was limited. As the instrument is administered in future studies, it is important to remember that items and factors are specific to the constructs they measure. Results should not be generalized beyond the defined factors and items.

Furthermore, the survey was tested using LGBTQ alumni from only one institution. Specific characteristics of this institution (e.g., academic prestige, culture of giving, endowment) may have impacted the findings in this study. Although the participants were a diverse representation of LGBTQ alumni, they do not wholly represent all LGBTQ alumni. Administering the final survey will provide a more

representative population, but findings still must be taken within the context of an institution. For example, historically Black colleges and universities, single-sex colleges, and religiously-affiliated institutions should use the instrument to validate findings specific to their institutions and ensure that the instrument is inclusive of all college students.

Developing a survey instrument specifically for LGBTQ alumni requires a focus on issues and experiences specific to these individuals. Consequently, certain factors more broadly measuring alumni philanthropy were not included in the instrument. For example, although I developed a factor to measure LGBTQ motivations for giving, I did not include more general motivations for giving across all alumni. As other instruments include such broad measures, I consciously chose not to include these factors and items.

Among numerous variables, there were large percentages of missing data from the sample population. Most of these variables with large percentages of missing data were located towards the end of the survey, with many in the philanthropy and giving section. Given the placement and time to complete the pilot study, survey fatigue may have influenced the missingness of data. Throughout my data analyses, I consolidated the number of items and components in the survey. As such, the final study administration should be considerably shorter in length and time completion, thus reducing the likelihood of survey fatigue.

Future Directions for Research

This study only administered the pilot for the instrument. Therefore, there are innumerable avenues for future research endeavors. As discussed in Chapter Three, I

plan to continue this research to further validate and refine the instrument by collecting data for a nationally representative sample of LGBTQ alumni. In the coming year, I will begin recruiting institutions of varying types to participate in the survey.

Considering a 10-30% return for the main study, finding an appropriate amount of subjects may be difficult. For the final study administration, I expect to have a population sample of 2,000 as the target for the main survey study in hopes that 200-600 participants will return the survey instrument.

During the qualitative portion of this study, we developed strong and meaningful relationships with point people. These institutional contacts were mainly alumni relations staff who worked directly with diversity- and identity-related affinity groups. In order to garner an appropriate number of participants for the final study, I will contact alumni relations staff working with LGBTQ alumni affinity groups or who control LGBTQ alumni listservs and ask them to forward my survey and invitation to their alumni. All alumni participants will receive the same version of the survey. In addition to contacting LGBTQ alumni, I will also ask point people to complete the aforementioned institutional survey for LGBTQ alumni giving (Appendix B). In the event that a point person does not know an answer to a question on the institution portion of the survey, I will encourage this person to contact the appropriate colleague to confirm the information.

In the near future, I will develop a contact spreadsheet, detailing the institution, institutional contacts who might serve as point people, LGBTQ alumni affinity group (yes/no), and other pertinent information. From this spreadsheet, I will

begin reaching out to and communicating with institutional contacts upon finishing the pilot study administration. I plan on having at least 100 four-year institutions total to contact, representing all Carnegie classifications and geographic regions. Similar to the pilot study, I plan to have the survey instrument open for four weeks, with point people sending out reminders two weeks after initial administration.

Identifying new samples and reevaluating the factors is critical to advancing research within philanthropic studies. Specifically with the factor measuring LGBTQ motivation for giving, I plan to adapt this component to measure philanthropy among other minority populations (e.g., alumni of color, alumni with disabilities, international alumni, religious minority alumni). Because this factor is community-specific, it has the capacity to transform identity-based philanthropy and develop more culturally-sensitive practices for working with minority alumni.

Specifically among institutions with focused missions, this survey can potentially transform advancement practices. For example, factors from this survey can be adapted to measure giving in the context of Jesuit institutions or Hispanic-serving institutions. As the measures are community-specific, this survey can connect with the mission and focus of these institutions to more accurately capture the experiences of their alumni.

Summary

Results from this study are exciting, providing new explorations of LGBTQ alumni giving and encouraging future philanthropic studies. Though various avenues were discussed for future research directions, this study confirmed a valid and reliable instrument to measure LGBTQ alumni philanthropy. This survey will facilitate new

understandings within both research and practice, and give voice to an important

alumni community.

Appendix A: Model for LGBTQ Alumni Giving

Demographics	Undergraduate student experiences	Alumni experiences	Institution variables	Philanthropy and giving
• Gender identity • Gender expression • Sexual identity • Race/ ethnicity • Religion • Religious saliency • Medical condition • Age • Citizenship • Political views • Parents' education	• Institution • Transfer student • Enrollment status • Enrollment year • Graduation year • Legacy (parent or guardian) • Advanced degree • Grade point average • Major • Academic-related activities • Co-curricular activities • Leadership • Work • Residence • Financial dependence and aid • Satisfaction • Perception of campus climate • Harassment as student • Level of outness as student • LGBT faculty/staff known • LGBT students known • LGBT-related participation	• Residence • Income • Relationship status • Legacy • Alumni association • LGBT alumni affinity group • Campus employment post-graduation • Occupation • Harassment as alumnus • Perceived support from leadership • Trust • Level of outness as alumnus • Alumni satisfaction	• Institution • Enrollment size • Classification • Alumni association • LGBTQ affinity group • Advancement resources • Endowment • Data collection • LGBTQ policies • LGBTQ resources	• Motivation for college/university giving • Financial giving • Volunteer giving

Appendix B: Institutional Survey for LGBTQ Alumni Giving

The following questions pertain to institutional variables at your current college or university of employment.

1. In what state is your institution
    a. (insert drop-down list of states)
2. What is your institution?
    a. (insert drop-down list of institutions by state)

The following questions pertain to the advancement office at your current institution of employment.

3. Does your institution have an alumni association?
    a. Yes
        i. In what year was the alumni association founded?
            1. ___
        ii. Are there dues to be a member?
            1. Yes
            2. No
        iii. What is the total amount of people who belong to the alumni association?
            1. ___
        iv. Do you have local chapters in your alumni association?
            1. Yes
                a. How many?
                    i. ___
            2. No
        v. Do you have affinity groups in your alumni association?
            1. Yes
                a. How many?
                    i. ___
    b. No
4. How many full-time staff work primarily in the central alumni relations office at your institution?
    a. ___
5. What is the total annual budget for the central alumni relations office?
    a. ___
6. How many full-time staff work primarily in the central development office at your institution?
    a. ___
7. What is the total annual budget for the central development office?
    a. ___
8. How many full-time staff work primarily with alumni affinity groups?
    a. ___
9. What is the total annual budget for work with alumni affinity groups?
    a. ___

10. What is total institution endowment as of 2011?
      a. ___
11. Does your institution have an LGBTQ alumni affinity group?
      a. Yes
            i. In what year was the LGBTQ alumni affinity group founded?
                1. ___
            ii. Are there dues to be a member?
                1. Yes
                2. No
            iii. What is the total amount of people who belong to the LGBTQ alumni affinity group?
                1. ___
            iv. Do you have local chapters in your LGBTQ alumni affinity group?
                1. Yes
                    a. How many?
                        i. ___
      b. No

The following questions relate to data collection in your advancement office at your current institution of employment.

12. Does your advancement office collect data about alumni sexual orientation?
      a. Yes
            i. What options are available to identify the sexual orientation of alumni? (please mark all that apply)
                1. Heterosexual
                2. Gay
                3. Lesbian
                4. Bisexual
                5. Queer
                6. Other (please specify)
            ii. How is sexual orientation data collected? (please mark all that apply)
                1. In contact reports
                2. Self-identified by alumni
                3. Through admissions data
                4. Through student affairs (e.g., student organizations)
                5. Other (please specify)
      b. No
13. Does your advancement office collect data about gender?
      a. Yes
            i. What options are available to identify the gender of alumni? (please mark all that apply)
                1. Man
                2. Woman

3. Transgender
                          4. Other (please specify)
              ii. How is gender data collected? (please mark all that apply)
                          1. In contact reports
                          2. Self-identified by alumni
                          3. Through admissions data
                          4. Through student affairs (e.g., student organizations)
                          5. Other (please specify)
      b. No
14. Does your advancement office collect data about relationship status?
      a. Yes
              i. What options are available to identify the relationship statuses
                 of alumni? (please mark all that apply)
                          1. Single
                          2. Partnered, not married
                          3. Partnered, married
                          4. Partnered, civil union
                          5. Separated, not divorced
                          6. Divorced
                          7. Widowed
                          8. Other (please specify)
              ii. How is relationship status data collected? (please mark all that
                 apply)
                          1. In contact reports
                          2. Self-identified by alumni
                          3. Other (please specify)
      b. No

**The following questions relate to LGBTQ policies and resources at your current
institution of employment (Campus Pride, 2007). Please consult with student
affairs and/or student services professionals if you are unsure of these questions.**

15. Does your institution prohibit discrimination based on sexual orientation by
      including the words "sexual orientation" in its primary non-discrimination
      statement or Equal Employment Opportunity policy?
      a. Yes
              i. When was this policy established?
                          1. ___
      b. No
16. Does your institution prohibit discrimination based on gender identity or
      gender expression by including the words "gender identity" or "gender
      identity or expression" in its primary non-discrimination statement or Equal
      Employment Opportunity policy?
      a. Yes
              i. When was this policy established?
                          1. ___

b. No
17. Does your campus offer health insurance coverage to employees' same-sex partners?
   a. Yes
      i. When was this benefit established?
         1. ___
      ii. Does your campus "gross up" wages for employees who enroll for same-sex partner health benefits to cover the added tax burden from the imputed value of the benefit that appears as income for the employee?
         1. Yes
         2. No
   b. No
      i. Does your campus offer cash compensation to employees to purchase their own health insurance for same-sex partners?
         1. Yes
         2. No
18. Which other benefits does your campus offer equally to both opposite-sex and same-sex partners of employees? (please mark all that apply)
   a. Dental
   b. Vision
   c. Spouse/partner's dependent medical coverage
   d. Sick or bereavement leave
   e. Supplemental life insurance for the spouse/partner
   f. Relocation/travel assistance
   g. Tuition remission for spouse/partner/dependents
   h. Survivor benefits for the spouse/partner in the event of employee's death
   i. Retiree health care benefits
   j. Employee discounts
   k. Use of campus facilities/privileges for spouse/partner/family
   l. Child-care services for spouse/partner family
19. Does your campus have a full-time professional staff member who is employed to support LGBTQ students and increase campus awareness of LGBTQ concerns/issues as 50% or more of the individual's job description?
   a. Yes
      i. When was this position established?
   b. No
      i. Does your campus have at least one graduate staff person who is employed to support LGBTQ students and increase campus awareness of LGBTQ concerns/issues as 50% or more of the individual's job description?
         1. Yes
            a. When was this position established?
         2. No

20. Does your campus have an LGBTQ concerns office or an LGBTQ student resource center (i.e., an individually funded space specifically for LGBTQ, gender and sexuality education, and/or support services?
    a. Yes
        i. When was this office or center established?
    b. No
        i. Does your campus have another office or resource center that deals actively with and comprises LGBTQ issues and concerns (e.g., Women's Center, Multicultural Center)?
            1. Yes
                a. When was this office or center established?
            2. No
21. Does your campus have a Safe Zone, Safe Space, and/or Ally program (i.e., an ongoing network of visible people on campus who identify openly as allies/advocates for LGBTQ people and concerns?
    a. Yes
        i. When was this program established?
    b. No
22. Does your campus have a standing advisory committee that deals with LGBT issues similar to other standing committees on ethnic minority/multicultural issues that advises the administration on constituent group issues and concerns?
    a. Yes
        i. When was this committee established?
    b. No
23. Does your campus have a college/university-recognized organization for LGBTQ students and allies?
    a. Yes
        i. When was this organization established?
    b. No

Appendix C: Survey for LGBT Alumni Giving

PART 1 – UNDERGRADUATE STUDENT EXPERIENCES

The following questions pertain to your **primary undergraduate student experiences**. Please respond according to the undergraduate institution to which you feel most connected.

1. Did you attend a 4-year institution in the United States?
   a. Yes
   b. No
2. In what state is your primary undergraduate institution
   a. (insert drop-down list of states)
3. What is your primary undergraduate institution?
   a. ___
4. Did you attend another college or university before attending your primary undergraduate institution?
   a. Yes
   b. No
5. How would you characterize your enrollment at your primary undergraduate institution?
   a. Full-time
   b. Less than full-time
   c. Other (please specify)
6. What year did you begin enrollment at your primary undergraduate institution?
   a. ___
7. What year did you graduate from your primary undergraduate institution?
   a. ___
   b. Did not graduate
      i. Did you receive your undergraduate degree from another 4-year institution (not your primary undergraduate institution)?
         1. Yes
         2. No
8. Did any of your parents/guardians also attend your primary undergraduate institution?
   a. Yes
   b. No
9. Did you receive an advanced degree after your undergraduate degree?
   a. Yes
   b. No
      i. What advanced degree(s) did you receive after your undergraduate degree?
         1. Masters degree
         2. JD
         3. Medical degree

4. PhD
                5. Other (please specify)
          ii. Did you receive an advanced degree at your primary
              undergraduate institution?
                1. Yes
                2. No
10. What was your undergraduate cumulative grade point average (GPA)?
    a. 3.50 or higher
    b. 3.00 – 3.49
    c. 2.50 – 2.99
    d. 2.00 – 2.49
    e. 1.99 or lower
11. What was your primary undergraduate academic major?
    a. Arts and Humanities
          i. Art, fine and applied
         ii. English (language and literature)
        iii. History
         iv. Journalism
          v. Language and literature (except English)
         vi. Music
        vii. Philosophy
       viii. Speech
         ix. Theater or drama
          x. Theology or religion
         xi. Other (please specify)
    b. Biological sciences
          i. Biology (general)
         ii. Biochemistry or biophysics
        iii. Botany
         iv. Environmental science
          v. Marine (life) science
         vi. Microbiology or bacteriology
        vii. Zoology
       viii. Other (please specify)
    c. Business
          i. Accounting
         ii. Business administration (general)
        iii. Finance
         iv. International business
          v. Marketing
         vi. Management
        vii. Other (please specify)
    d. Education
          i. Business education
         ii. Elementary/middle school education
        iii. Music or art education

iv. Physical education or recreation
v. Secondary education
vi. Special education
vii. Other (please specify)
e. Engineering
i. Aero-/astronautical engineering
ii. Civil engineering
iii. Chemical engineering
iv. Electrical or electronic engineering
v. Industrial engineering
vi. Materials engineering
vii. Mechanical engineering
viii. General/other engineering (please specify)
f. Physical sciences
i. Astronomy
ii. Atmospheric science (including meteorology)
iii. Chemistry
iv. Earth science (including geology)
v. Mathematics
vi. Physics
vii. Statistics
viii. Other (please specify)
g. Professional (other)
i. Architecture
ii. Urban planning
iii. Health technology (medical, dental, laboratory)
iv. Law
v. Library/archival science
vi. Medicine
vii. Dentistry
viii. Veterinarian
ix. Nursing
x. Pharmacy
xi. Allied health/other medical
xii. Therapy (occupational, physical, speech)
xiii. Other (please specify)
h. Other
i. Agriculture
ii. Communications
iii. Computer science
iv. Family studies
v. Natural resources and conservation
vi. Kinesiology
vii. Criminal justice
viii. Military science
ix. Parks, recreation, leisure studies, sports management

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x. Public administration
xi. Technical/vocational
xii. Other (please specify)
12. Check all the following academic-related activities you participated in during your undergraduate experience:
    a. Academic/departmental/professional club (e.g., pre-law society, academic fraternity, engineering club)
    b. Culminating senior experience (e.g., capstone course, thesis)
    c. Honors program
    d. Learning community or some other formal program where groups of students took two or more classes together
    e. Practicum, internship, field experience, co-op experience, or clinical experience
    f. Research with a professor
    g. Study abroad
    h. Other (please specify)
13. Check all the following co-curricular activities you participated in during your undergraduate experience:
    a. Arts/theater/music (e.g., theater group, marching band)
    b. Athletics (e.g., varsity hockey, club rowing)
        i. Varsity
        ii. Club
        iii. Intramural
    c. Campus-wide programming group (e.g., program bard, film series board, multicultural programming committee)
    d. Cultural/international club (e.g., Black Student Union, German Club)
    e. Honor society (e.g., Omicron Delta Kappa, Mortar Board)
    f. Leadership organization (e.g., peer leadership program, emerging leaders program)
    g. LGBT student organization
    h. LGBT support/counseling group (e.g., safe space, safe zone)
    i. Media organization (e.g., campus radio, student newspaper)
    j. Military (e.g., ROTC)
    k. New student transitions (e.g., admissions ambassador, orientation advisor)
    l. Para-professional (e.g., resident assistant, peer advisor)
    m. Political/advocacy club (e.g., College Democrats)
    n. Religious organization (e.g., Hillel, Intervarsity Christian Fellowship)
    o. Service group (e.g., Circle K, Alpha Phi Omega)
    p. Culturally-based fraternity or sorority (e.g., Alpha Phi Alpha Fraternity Inc., Lambda Theta Alpha)
    q. Social fraternity or sorority (e.g., Sigma Phi Epsilon, Kappa Kappa Gamma)
    r. Special interest group (e.g., comedy group)
    s. Student governance group (e.g., student government, residence hall association)

t. Other (please specify)

14. Did you hold a leadership position in an organization (e.g., officer for a club, captain of an athletic team, director in a musical group, editor of the newspaper)?
   a. Never
   b. Rarely
   c. Sometimes
   d. Most of the time
   e. Always

15. Did you work during your undergraduate experience?
   a. Yes
      i. On-campus
         1. Approximately how many hours did you work on-campus in a typical 7 day week?
            a. ___
      ii. Off-campus
         1. Approximately how many hours did you work off-campus in a typical 7 day week?
            a. ___
   b. No

16. Which of the following best describes where you primarily lived while attending college?
   a. Parent/guardian or other relative home
   b. Other private home, apartment, or room
   c. College/university residence hall
   d. Fraternity or sorority house
   e. Other campus student housing
   f. Other (please specify)

17. Were you primarily financially dependent or independent as an undergraduate student?
   a. Dependent (family/guardian assisted with your living/educational expenses)
   b. Independent (you were the sole provider for your living/educational expenses)

18. Did you receive financial aid during your undergraduate experience?
   a. Yes
      i. What type(s) of financial aid did you receive? Check all that apply:
         1. Loans
         2. Need-based scholarships or grants
         3. Merit-based scholarships or grants
         4. Work-study
         5. Athletic scholarship
         6. Other (please specify)
   b. No

19. Please indicate your answer to each statement as it relates to your primary undergraduate experience:
  a. (insert items in mixed order for the following factors: Satisfaction, Perception of campus climate, Harassment)
20. As an undergraduate student, how open were you with your LGBT identity:
  a. Around your close friends?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  b. Around your close family?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  c. Around your extended family?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  d. Around extended friends or 'friends of friends'?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  e. When you met new people in person?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  f. With professors, faculty, and instructors?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  g. At work?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly

v. Completely
    h. With people where you lived (e.g., roommates, suitemates, people in
       your residence hall)?
            i. Not at all
            ii. Hardly
            iii. Somewhat
            iv. Mostly
            v. Completely
    i. With members of campus activity groups?
            i. Not at all
            ii. Hardly
            iii. Somewhat
            iv. Mostly
            v. Completely
21. Overall, how open were you about your LGBT identity as an undergraduate
    student?
    a. Not at all
    b. Hardly
    c. Somewhat
    d. Mostly
    e. Completely
22. How many openly LGBT faculty/staff did you know as an undergraduate
    student?
    a. None
    b. 1 – 2
    c. 3 – 5
    d. 6 – 8
    e. 9 – 11
    f. 12 or more
23. How many openly LGBT students did you know as an undergraduate student?
    a. None
    b. 1 – 2
    c. 3 – 5
    d. 6 – 8
    e. 9 – 11
    f. 12 or more
24. During your undergraduate time, how often did you:
    a. Visit the LGBT student services office?
            i. Never
            ii. Rarely
            iii. Sometimes
            iv. Quite often
            v. Very often
            vi. Was not available at my institution
    b. Participate in an event or program hosted by the LGBT student
       services office (e.g., Lavender Graduation, Queer Monologues)?

       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

c. Attend an LGBT student organization meeting or event (e.g., student dance, student drag show)?
       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

d. Attend an LGBT support/counseling group meeting (e.g., safe space)?
       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

e. Take an LGBT-related academic course?
       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

f. Attend an LGBT-related educational lecture or program (e.g., LGBT book reading, queer studies symposium)?
       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

g. Participate in an LGBT-focused workshop or training (e.g., Safe Zone training)?
       i.   Never
      ii.   Rarely
     iii.   Sometimes
     iv.   Quite often
      v.   Very often
     vi.   Was not available at my institution

h. Participate in an LGBT mentoring program?
       i.   Never

      ii. Rarely
      iii. Sometimes
      iv. Quite often
      v. Very often
      vi. Was not available at my institution

i. Participate in an LGBT political/social awareness event (e.g., march for equality, voter registration)?
      i. Never
      ii. Rarely
      iii. Sometimes
      iv. Quite often
      v. Very often
      vi. Was not available at my institution

25. Think back to before you enrolled as an undergraduate student and indicate the extent to which you thought you would:

a. Be satisfied with your undergraduate student experience.
      i. Strongly disagree
      ii. Disagree
      iii. Neither agree nor disagree
      iv. Agree
      v. Strongly Agree

b. Be at a welcoming institution for LGBT people.
      i. Strongly disagree
      ii. Disagree
      iii. Neither agree nor disagree
      iv. Agree
      v. Strongly Agree

c. Experience harassment as an undergraduate student.
      i. Strongly disagree
      ii. Disagree
      iii. Neither agree nor disagree
      iv. Agree
      v. Strongly Agree

PART 2 – DEMOGRAPHICS

26. What is your current gender identity?
    a. Man
    b. Woman
    c. Transgender (please specify)
    d. Other (please specify)

27. What is your current gender expression?
    a. Masculine
    b. Feminine
    c. Other (please specify)

28. Which term best describes your sexual identity?
    a. Asexual
    b. Bisexual
    c. Gay
    d. Genderqueer
    e. Heterosexual
    f. Lesbian
    g. Man loving man
    h. Pansexual
    i. Queer
    j. Questioning
    k. Woman loving woman
    l. Other (please specify)

29. What is your race/ethnicity? Please mark all that apply:
    a. African American/African/Black
    b. American Indian/Alaska Native
    c. Asian American/Asian
    d. Caribbean/West Indian
    e. Latino(a)/Hispanic (please specify)
    f. Latin American (please specify)
    g. Middle Eastern (please specify)
    h. Multiracial/multiethnic
    i. Pacific Islander/Native Hawaiian
    j. White/Caucasian (not Latino(a)/Hispanic)

30. What is your current religious/spiritual affiliation?
    a. Protestant
    b. Catholic
    c. Orthodox (Christian)
    d. Judaism/Jewish

e. Islam/Muslim
f. Unaffiliated/none
g. Spiritual, but no religious affiliation
h. Other (please specify)

31. How important is your religion/spirituality in your life?
    a. Not at all important
    b. Very unimportant
    c. Neither important nor unimportant
    d. Very important
    e. Extremely important

32. Do you have a medical condition (physical, learning, psychological) that substantially affects a major life activity?
    a. Yes
        i. Please mark all medical conditions that substantially affect a major life activity:
            1. Auditory (e.g., deaf, hearing impaired)
            2. Cognitive (e.g., learning disability, attention deficit disorder)
            3. Developmental (e.g., mental retardation)
            4. Environmental (e.g., allergies, chemical sensitivities)
            5. Immunodeficiency (e.g., HIV/AIDS)
            6. Medical (e.g., cancer, epilepsy, severe asthma, diabetes, chronic fatigue, cystic fibrosis, severe arthritis)
            7. Mobility (e.g., spinal cord injury, disease, paralysis, amputation)
            8. Psychiatric (e.g., anxiety disorder, depression, bipolar disorder, schizophrenia, post-traumatic stress)
            9. Speech (e.g., speech impediment, vocal paralysis)
            10. Vision (e.g., blind, visually impaired)
    b. No

33. What is your birth year?
    a. ___

34. What is your citizenship status?
    a. US citizen
    b. US citizen – naturalized
    c. Dual citizenship
    d. Permanent resident (immigrant)
    e. Permanent resident (refugee)
    f. International (F-1, J-1, H, A, L, or G visas)
    g. Other (please specify)

35. How would you characterize your political views?
    a. No political viewpoint
    b. Very liberal
    c. Slightly liberal
    d. Middle-of-the-road
    e. Slightly conservative
    f. Very conservative
36. What is the highest level of formal education obtained by any of your parent(s) or guardian(s)?
    a. High school or less
    b. Some college
    c. Associates degree
    d. Bachelors degree
    e. Masters degree
    f. Doctoral or professional degree (e.g., JD, MD, PhD)
    g. Do not know
37. What was the household income of your parent(s) or guardian(s) when you were an undergraduate student? Consider income from all sources before taxes:
    a. Less than $12,500
    b. $12,500 - $24,999
    c. $25,000 - $39,999
    d. $40,000 - $54,999
    e. $55,000 - $74,999
    f. $75,000 - $99,999
    g. $100,000 - $149,999
    h. $150,000 - $199,999
    i. $200,000 or more
38. Indicate the extent to which you agree with the following statements:
    a. It is sometimes hard for me to go on with my work if I am not encouraged.
        i. Strongly disagree
        ii. Disagree
        iii. Neither agree nor disagree
        iv. Agree
        v. Strongly agree
    b. I sometimes feel resentful when I don't get my way.
    c. No matter who I'm talking to, I'm always a good listener.
    d. There have been occasions when I took advantage of someone.
    e. I'm always willing to admit it when I make a mistake.
    f. I sometimes try to get even rather than forgive and forget.
    g. I am always courteous, even to people who are disagreeable.

h. I have never been irked when people expressed ideas very different from my own.
i. There have been times when I was quite jealous of the good fortune of others.
j. I am sometimes irritated by people who ask favors of me.
k. I have never deliberately said something that hurt someone's feelings.

PART 3 – ALUMNI EXPERIENCES

The following questions pertain to your alumni experiences with your **primary undergraduate alma mater**.

39. How close do you currently reside to you primary undergraduate alma mater?
    a. 5 miles or less
    b. 6 – 25 miles
    c. 26 – 50 miles
    d. 51 – 100 miles
    e. 101 miles or more

40. What is your current **household** income? Consider income from all sources before taxes:
    a. Less than $12,500
    b. $12,500 - $24,999
    c. $25,000 - $39,999
    d. $40,000 - $54,999
    e. $55,000 - $74,999
    f. $75,000 - $99,999
    g. $100,000 - $149,999
    h. $150,000 - $199,999
    i. $200,000 or more

41. What is your current **individual** income? Consider income from all sources before taxes:
    a. Less than $12,500
    b. $12,500 - $24,999
    c. $25,000 - $49,999
    d. $50,000 - $74,999
    e. $75,000 - $99,999
    f. $100,000 - $124,999
    g. $150,000 - $174,999
    h. $175,000 - $199,999
    i. $200,000 or more

42. What is your relationship status?
    a. Single
    b. Partnered, not married
    c. Partnered, married
    d. Partnered, civil union
    e. Separated, not divorced
    f. Divorced

g. Widowed
43. Do you have children?
    a. Yes
        i. How many?
            1. ___
    b. No
44. Have any of your children attended your primary undergraduate alma mater as students themselves?
    a. Yes
    b. No
45. Does your primary undergraduate alma mater have an alumni association?
    a. Yes
        i. Are you a member of the alumni association?
            1. Yes
            2. No
        ii. Are you a leader within the alumni association?
            1. Yes
            2. No
    b. No
    c. Do not know
46. Does your primary undergraduate alma mater have an LGBT alumni affinity group?
    a. Yes
        i. Are you a member of the LGBT alumni affinity group?
            1. Yes
            2. No
        ii. Are you a leader within the LGBT alumni affinity group?
            1. Yes
            2. No
    b. No
    c. Do not know
47. What is your current occupation?
    a. Agriculture, forestry, fishing, or hunting
    b. Mining
    c. Utilities
    d. Construction
    e. Manufacturing
    f. Wholesale trade
    g. Retail trade
    h. Transportation or warehousing

i. Information

j. Finance or insurance

k. Real estate or rental and leasing

l. Professional, scientific, or technical services

m. Management of companies or enterprises

n. Administrative and support, waste management, or remediation services

o. Educational services

p. Health care or social assistance

q. Arts, entertainment, or recreation

r. Accommodation or food services

s. Public administration

t. Other (please specify)

48. Are you currently or have you previously been employed with your primary undergraduate alma mater post-graduation?

    a. Yes

        i. For how many years have you or were you employed with your primary undergraduate alma mater?

            1. ___

    b. No

49. Please indicate your answer to each question as it relates to your alumni experiences with your primary undergraduate alma mater:

    a. (insert items in mixed order for the following factors: Experiences of harassment as alumnus, Perceived support from undergraduate alma mater leadership, Trust with undergraduate institution, Alumni satisfaction)

50. How open are you about your LGBT identity currently:

    a. Around your close friends?

        i. Not at all

        ii. Hardly

        iii. Somewhat

        iv. Mostly

        v. Completely

    b. Around your close family?

        i. Not at all

        ii. Hardly

        iii. Somewhat

        iv. Mostly

        v. Completely

    c. Around your extended family?

        i. Not at all

        ii. Hardly

        iii. Somewhat

iv. Mostly
    v. Completely
  d. Around extended friends or 'friends of friends'?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  e. When you meet new people in person?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  f. At your primary undergraduate alma mater?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
  g. At work?
      i. Not at all
      ii. Hardly
      iii. Somewhat
      iv. Mostly
      v. Completely
51. Overall, how open are you about your LGBT identity currently?
  a. Not at all
  b. Hardly
  c. Somewhat
  d. Mostly
  e. Completely
52. Think back to before you became an alumnus and indicate the extent to which
    you thought you would:
  a. Experience harassment as an alumnus.
      i. Strongly disagree
      ii. Disagree
      iii. Neither agree nor disagree
      iv. Agree
      v. Strongly Agree
  b. Have campus leaders who support and affirm LGBT people, issues,
      and concerns.
      i. Strongly disagree
      ii. Disagree
      iii. Neither agree nor disagree

        iv. Agree

        v. Strongly Agree

c. Have faith in campus administrators and leadership.

        i. Strongly disagree

        ii. Disagree

        iii. Neither agree nor disagree

        iv. Agree

        v. Strongly Agree

d. Be satisfied with your experience as an alumnus.

        i. Strongly disagree

        ii. Disagree

        iii. Neither agree nor disagree

        iv. Agree

        v. Strongly Agree

PART 4 – PHILANTHROPY AND GIVING

53. Please indicate your answer to each question as it relates to your current attitudes:
    a. (insert items in mixed order for the following factors: Activism/important work [political and social change], Altruism/good work [direct service benefits], Community uplift, Salient aspect of identity)

54. What percentage of your total income goes towards charity?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

55. What percentage of your total philanthropic giving goes to LGBT community-related initiatives, excluding giving to your alma mater's LGBT initiatives (e.g., LGBT community center, LGBT chorus, HIV/AIDS health care)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

56. What percentage your total philanthropic giving goes to LGBT political organizations and causes (e.g., candidate campaign donations, Human Rights Campaign)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%

h. 61 – 70%
i. 71 – 80%
j. 81 – 90%
k. 91 – 100%

The following questions pertain to your financial giving at you **primary undergraduate alma mater.**

57. What percentage of your total philanthropic giving goes to your primary undergraduate alma mater?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

58. How much money did you give this past year to your alma mater?
    a. $0
    b. $1 – $20
    c. $21 – $50
    d. $51 – $100
    e. $101 – $250
    f. $251 – $500
    g. $501 – $1000
    h. $1001 – $2000
    i. $2001 – $5000
    j. $5001 – $7500
    k. $7501 – $10,000
    l. $10,001 – $12,500
    m. $12,501 – $15,000
    n. $15,001 – $25,000
    o. $25,001 – $50,000
    p. $50,001 – $100,000
    q. $100,001 – $500,000
    r. $500,001 – $1,000,000
    s. $1,000,001 or more

59. How much money have you given total across your life to your alma mater since graduating?
    a. $0
    b. $1 – $20
    c. $21 – $50
    d. $51 – $100

 e. $101 – $250
 f. $251 – $500
 g. $501 – $1000
 h. $1001 – $2000
 i. $2001 – $5000
 j. $5001 – $7500
 k. $7501 – $10,000
 l. $10,001 – $12,500
 m. $12,501 – $15,000
 n. $15,001 – $25,000
 o. $25,001 – $50,000
 p. $50,001 – $100,000
 q. $100,001 – $500,000
 r. $500,001 – $1,000,000
 s. $1,000,001 or more

60. For how many years have you given financially to your alma mater since graduating?
 a. 0
 b. 1 – 2
 c. 3 – 5
 d. 6 – 10
 e. 11 – 15
 f. 16 or more

61. How consistently do you give financially to your alma mater?
 a. Annually
 b. During reunions (e.g., 5-year, 10-year)
 c. During campaigns
 d. When there are special projects that interest me
 e. Sporadically
 f. Never

62. What percentage of your total philanthropic giving to your alma mater goes to LGBT initiatives (e.g., LGBT student scholarships, LGBT student center, LGBT speaker series)?
 a. 0%
 b. 1 – 10%
 c. 11 – 20%
 d. 21 – 30%
 e. 31 – 40%
 f. 41 – 50%
 g. 51 – 60%
 h. 61 – 70%
 i. 71 – 80%
 j. 81 – 90%
 k. 91 – 100%

63. What percentage of your total philanthropic giving to your alma mater goes to other initiatives (e.g., general fund, athletics, academic department, student scholarships)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%
64. How often does your alma mater ask you to donate money?
    a. Never
    b. Rarely
    c. Sometimes
    d. Often
    e. All of the time
65. How recently has your alma mater asked you to donate money?
    a. Within the past month
    b. Within the past 6 months
    c. Within the past year
    d. Within the past 5 years
    e. More than 5 years ago
66. What percentage of your total volunteering is with LGBT community-related initiatives, excluding volunteering with your alma mater's LGBT initiatives (e.g., pride parade, youth mentoring program, HIV/AIDS patient services)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%
67. What percentage of your total volunteering is with LGBT political organizations and causes (e.g., candidate campaign drives, voter registration)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%

e. 31 – 40%
f. 41 – 50%
g. 51 – 60%
h. 61 – 70%
i. 71 – 80%
j. 81 – 90%
k. 91 – 100%

The following questions pertain to your volunteering at you **primary undergraduate alma mater.**

68. What percentage of your total volunteering is with your primary undergraduate alma mater?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

69. How much have you volunteered this past year with your alma mater?
    a. 0 hours
    b. 1 – 5 hours
    c. 6 – 10 hours
    d. 11 – 25 hours
    e. 26 – 50 hours
    f. 51 – 100 hours
    g. 101 – 200 hours
    h. 201 or more hours

70. How much have you volunteered total across your life to your alma mater since graduating?
    a. 0 hours
    b. 1 – 10 hours
    c. 11 – 25 hours
    d. 26 – 50 hours
    e. 51 – 100 hours
    f. 101 – 200 hours
    g. 201 or more hours

71. For how many years have been volunteering with your alma mater since graduating?
    a. 0
    b. 1 – 2
    c. 3 – 5
    d. 6 – 10

  e. 11 – 15

  f. 16 or more

72. How consistently do you volunteer with your alma mater?

  a. Annually

  b. Weekly

  c. Monthly

  d. When there are special projects that interest me

  e. Sporadically

  f. Never

73. What percentage of your total volunteering at your alma mater is with LGBT initiatives (e.g., LGBT alumni event, LGBT speaker series, LGBT graduation)?

  a. 0%

  b. 1 – 10%

  c. 11 – 20%

  d. 21 – 30%

  e. 31 – 40%

  f. 41 – 50%

  g. 51 – 60%

  h. 61 – 70%

  i. 71 – 80%

  j. 81 – 90%

  k. 91 – 100%

74. What percentage of your total volunteering at your alma mater is with other initiatives (e.g., alumni association event, class reunion, academic department event)?

  a. 0%

  b. 1 – 10%

  c. 11 – 20%

  d. 21 – 30%

  e. 31 – 40%

  f. 41 – 50%

  g. 51 – 60%

  h. 61 – 70%

  i. 71 – 80%

  j. 81 – 90%

  k. 91 – 100%

75. How often does your alma mater ask you to volunteer?

  a. Never

  b. Rarely

  c. Sometimes

  d. Often

  e. All of the time

76. How recently has your alma mater asked you to volunteer?

  a. Within the past month

  b. Within the past 6 months

     c.   Within the past year

     d.   Within the past 5 years

     e.   More than 5 years ago

77. How often do you:

     a.   Participate in events through your undergraduate alumni association?

         i.   Never

        ii.   Rarely

      iii.   Sometimes

      iv.   Often

       v.   All the time

     b.   Participate in LGBT-specific alumni events?

         i.   Never

        ii.   Rarely

      iii.   Sometimes

      iv.   Often

       v.   All the time

     c.   Attend class year reunions?

         i.   Never

        ii.   Rarely

      iii.   Sometimes

      iv.   Often

       v.   All the time

78. Think back to before you donated your money or time and indicate the extent to which you thought you would:

     a.   Support efforts that provide political and social change for LGBT people.

         i.   Strongly disagree

        ii.   Disagree

      iii.   Neither agree nor disagree

      iv.   Agree

       v.   Strongly Agree

     b.   Support efforts that provide direct service benefits to LGBT people.

         i.   Strongly disagree

        ii.   Disagree

      iii.   Neither agree nor disagree

      iv.   Agree

       v.   Strongly Agree

     c.   Support efforts that uplift the LGBT community.

         i.   Strongly disagree

        ii.   Disagree

      iii.   Neither agree nor disagree

      iv.   Agree

       v.   Strongly Agree

d. Have your LGBT identity influence your giving.
     i. Strongly disagree
     ii. Disagree
     iii. Neither agree nor disagree
     iv. Agree
     v. Strongly Agree

Appendix D: Factor Definitions

Undergraduate Student Experiences
- Satisfaction – the extent to which an alumnus/na favored his/her/hir undergraduate student experience
- Perception of Campus Climate – an alumnus'/alumna's view of how welcoming his/her/hir institution was towards LGBTQ people when he/she/ze was an undergraduate student
- Harassment as Student – perception of oppression as an undergraduate student because of LGBTQ identity

Alumni Experiences
- Harassment as Alumnus/na – perception of oppression as an alumnus/na because of LGBTQ identity
- Perceived Support from Leadership – extent to which campus leaders support and affirm LGBTQ people, issues, and concerns
- Trust – an alumnus'/na's faith in campus administrators and leadership
- Alumni Satisfaction – the extent to which a person favors his/her/hir experience as an alumnus/na

Philanthropy and Giving
- Activism/Important Work (Political and Social Change) – an alumnus'/alumna's support of efforts that provide political and social change for LGBTQ people
- Altruism/Good Work (Direct Service Benefits) – an alumnus'/alumna's support of efforts that provide direct service benefits to LGBTQ people
- Community Uplift – an alumnus'/alumna's support of efforts that enrich the LGBTQ community
- Salient Aspect of Identity – the influence of an alumnus'/alumna's LGBTQ identity in supporting specific efforts

Appendix E: Factor Items

Undergraduate Student Experiences

Satisfaction

1. My college/university sufficiently prepared me for my professional occupation.
2. Thinking about my time as an undergraduate student, I am disappointed with my experience.
3. I had a negative time as an undergraduate student.
4. Upon graduating, I was satisfied with my time at my college/university.
5. I felt unqualified to work upon graduation in my respective field.
6. My undergraduate experience fulfilled my expectations.
7. I am displeased with my academic training at my college/university.
8. Looking back, I feel that I had a positive experience as an undergraduate student.
9. I am happy with how I was prepared academically.
10. I am dissatisfied with my undergraduate experience.

Perception of Campus Climate

11. As a student, I was comfortable with the climate on my campus.
12. When I was a student, my campus was uninviting for people who were lesbian, gay, bisexual, transgender, or queer.
13. The climate in my classes was welcoming for everyone.
14. I felt accepted throughout my undergraduate student experience.
15. As an undergraduate, I observed conduct directed towards a person or group of people that created an intimidating learning environment.
16. My undergraduate institution was homophobic.
17. Classes at my alma mater were intimidating for LGBT people.
18. The campus climate at my school was friendly for people who identify as lesbian, gay, bisexual, or transgender.
19. I believe my undergraduate alma mater was hostile for people who were different.
20. My campus was inviting for students.

Harassment as Student

21. I avoided certain places on campus for fear of harassment.
22. When I was an undergraduate student, faculty treated students with fairness.
23. Lesbian, gay, bisexual, and transgender students felt safe on my campus when I was a student.
24. I personally experienced exclusionary conduct that interfered with my ability to learn on campus.
25. As a student, I was a victim of harassment on campus.
26. I felt open to disclose my identity on campus without fear.

27	People on campus treated everyone with equity.
28	I feared for my physical safety due to my sexual or gender minority identity.
29	Faculty pre-judged my abilities based on my identity.
30	I believe the campus climate encouraged free and open discussion of LGBT topics.

Alumni Experiences

Harassment as Alumnus/na

31	I feel marginalized within my institution as an LGBT alumnus/na.
32	The alumni association welcomes all alumni, regardless of how they identify.
33	The alumni relations staff is insensitive to the LGBT community.
34	The alumni leadership at my alma mater overtly discriminates against minority groups.
35	When attending alumni events at my alma mater, I feel affirmed.
36	Alumni relations and development staff at my institution understand the culture of LGBT communities.
37	I feel comfortable sharing my LGBT identity at alumni events.
38	Staff at my alma mater are insensitive to minority groups.
39	My alma mater supports LGBT alumni.
40	I feel unsafe attending events at my alma mater.

Perceived Support from Leadership

41	The leadership at my alma mater visibly support sexual and gender minority issues.
42	The university/college administration negatively responds to incidents of LGBT harassment.
43	Campus staff are unreliable in meeting my needs.
44	Campus administrators support minority groups.
45	Leadership at my alma mater create an affirming place for LGBT students.
46	The leadership at my alma mater neglect LGBT issues.
47	I feel supported by my university/college leadership.
48	Campus leadership support its alumni.
49	Campus leadership ignore LGBT alumni needs.
50	The leadership at my university/college ignore LGBT alumni.

Trust

51	The administration at my alma mater is trustworthy.
52	Based on my experiences, I believe in the actions of my alma mater.
53	I have distrust in staff at my alma mater.
54	As an alumnus/na, I have confidence in my alma mater.
55	I have faith that the administration acts with good intentions.
56	I am skeptical of campus administrators based on my experiences.
57	I trust the actions of the leadership at my alma mater.
58	I distrust the leadership at my alma mater.

| 59 | I have doubt in the actions of campus leadership at my university/college. |
| 60 | I have reservations about the actions of campus leadership. |

Alumni Satisfaction
61	I am happy with the actions of the university/college leadership.
62	I am dissatisfied with the issues that campus leadership support.
63	My alma mater is moving in the right direction.
64	The leadership is doing a poor job in improving my alma mater.
65	I approve of the decisions that campus leadership have made.
66	My university/college is worse off than when I was a student.
67	The campus community has improved since I attended as a student.
68	My alma mater leadership is improving the value of my degree.
69	The value of my degree has diminished.
70	My university/college is decreasing in quality.

Philanthropy and Giving

Activism/Important Work (Political and Social Change)
71	I support nonprofit organizations that enhance the national climate for LGBT people.
72	It is important for me to donate to nonprofits that are involved with LGBT activism.
73	I chose to neglect LGBT political causes.
74	Nonprofit organizations that advocate for minority rights are important.
75	Organizations that change LGBT national policies are unimportant.
76	I support nonprofits that work towards LGBT political causes.
77	LGBT activism is of no consequence to me.
78	I am indifferent about social change for LGBT people.
79	LGBT social change is important to me.
80	I ignore organizations that work for political causes related to LGBT individuals.

Altruism/Good Work (Direct Service Benefits)
81	I prefer to donate to nonprofits that provide services to LGBT people.
82	Giving time to people in need is unimportant to me.
83	I make a difference when I volunteer for people in need.
84	Nonprofit organizations that provide direct services are of no consequence to me.
85	I am indifferent about organizations that directly benefit others through service provided.
86	I wish there were more nonprofits that provided direct services to LGBT people.
87	It is important for me to support nonprofits that directly benefit LGBT individuals.
88	Nonprofit organizations that provide direct benefit for minority people are unimportant to me.

89 Nonprofits that give direct services to LGBT people are unimportant to me.

90 I value nonprofit organizations that do good work through direct service.

Community Uplift

91 It is important to uplift the LGBT community.

92 It is unimportant to me whether LGBT communities progress.

93 It is my responsibility to support my community.

94 Community uplift is of no consequence to me.

95 I want my philanthropy to lift up LGBT people.

96 I neglect the needs of LGBT communities.

97 Nonprofit organizations are meant to raise up marginalized communities.

98 My donations advance LGBT people.

99 Advancing the LGBT community is unimportant to me.

100 Meeting the needs of the LGBT community is of no consequence to me.

Salient Aspect of Identity

101 My LGBT identity influences to which nonprofits I give money.

102 Where I donate is affected by my LGBT identity.

103 How I personally identify is inconsequential when determining my charitable giving.

104 My personal identity is unimportant to my philanthropic decisions.

105 I consider my personal identity when donating.

106 My LGBT identity impacts which nonprofit organizations I chose to support.

107 I am motivated to donate because of my LGBT identity.

108 My LGBT identity has no bearing on my philanthropic giving.

109 My identity is of no consequence to my giving behaviors.

110 Identifying as LGBT is unrelated to my philanthropic giving.

Appendix F: Content Expert Reviewer Instructions

Hello <mark>NAME</mark>,

Thank you for volunteering to be a reviewer for my dissertation instrument entitled *Survey for LGBT Alumni Giving*. Below, I have provided detailed instructions for the review process. I kindly ask that you follow all steps in sequence and complete the entire review process. You are welcome to use the outline below to type your notes and comments. You'll notice that I have attached a document detailing factors in the instrument, their definitions, and their respective items for Part 1 of the review process. I have also attached a document with individual items from the survey for Part 2 of the review process. Please consult these documents when completing the respective parts of the review. I ask that you please complete your review on or before <mark>DATE</mark> and email me with your write-up. Feel free to email or call me at any point during your review if you have any questions or concerns.

Thank you for your involvement and support!

Jay Garvey
jason.c.garvey@gmail.com
315.727.0494

Please use the attached documents entitled *Appendix D – Factor Definitions* and *Appendix E – Factor Items* for Part 1 of the review. Each latent construct (i.e., factor) is represented by ten items and one definition. You are responsible for reviewing <mark>X</mark> factors.

Part 1 – Factor Review Process
1. Review working definitions and names for each latent construct.
   - How important and relevant is this definition to the study of LGBTQ philanthropy?
   - How well does the name capture the definition of the latent construct?
2. Critically analyze each item and entire scale.
   - Use the guidelines for reviewing survey items with Likert formats (included below) to evaluate the construction of each item.
   - How relevant is each item to its respective factor?
   - Do any items appear to be unrelated to the rest of the factor scale?
   - Can you differentiate which items corresponded to specific factors?
   - Which item(s) do you strongly favor for inclusion on each factor?
   - Which item(s) do you strongly favor for elimination on each factor?
   - Should additional items be added? If so, which?
3. Determine whether the scale captures the entire essence of the phenomenon.
   - Is there a specific aspect or dimension of a factor that I do not capture with the existing items?

- Do the items in the scale encapsulate the entire meaning and definition of the construct?

Please use the attached document entitled *Appendix C – Survey for LGBT Alumni Giving* for Part 2 of the review. These questions are individual items and do not represent latent constructs. The individual items are separated into broad category themes: <mark>INSERT BROAD CATEGORY THEMES FOR EACH RESPECTIVE REVIEWER</mark>.

Part 2 – Individual Item Review Process
1. Critically analyze each item.
   - Use the guidelines for reviewing survey items with Likert formats (included below) to evaluate the construction of each item that uses Likert formats.
   - How relevant is each item to its broad category theme?
   - Do any items appear to be unrelated to the rest of the broad category theme?
   - Which item(s) do you strongly favor for inclusion on each broad category theme?
   - Which item(s) do you strongly favor for elimination on each broad category theme?
   - Should additional items be added? If so, which?
2. Critically analyze response options for each item.
   - Do the response options capture the entirety of possible responses?
   - Are any response options confusing? If so, how can the response option(s) be re-written more clearly?
   - Which response option(s) do you strongly favor for inclusion?
   - Which response option(s) do you strongly favor for elimination?
   - Should additional response options be added? If so, which?

Guidelines for reviewing survey items with Likert formats
(Crocker & Algina, 1986)
- Put statements or questions in the present tense.
- Do not use statements that are factual or capable of being interpreted as factual.
- Avoid statements that can have more than one interpretation.
- Avoid statements that are likely to be endorsed by almost everyone or almost no one.
- Try to have an almost equal number of statements expressing positive and negative feelings.
- Statements should be short, rarely exceeding 20 words.
- Each statement should be a proper grammatical sentence.

- Statements containing universals such as *all*, *always*, *none*, and *never* often introduce ambiguity and should be avoided.
- Avoid use of indefinite qualifiers such as *only*, *just*, *merely*, *many*, *few*, or *seldom*.
- Whenever possible, statements should be in simple sentences rather than complex or compound sentences. Avoid statements that contain "if" or "because" clauses.
- Use vocabulary that can be understood easily by the respondents.
- Avoid use of negatives (e.g., *not*, *none*, *never*).

Appendix G: Content Expert Reviewers and Qualifications

Noah D. Drezner, Ph.D.
Dr. Drezner is an assistant professor of higher education at the University of Maryland, College Park. His research interests include philanthropy and fundraising as it pertains to colleges and universities, including higher education's role in the cultivation of prosocial behaviors. Dr. Drezner has published numerous articles and given several presentations on related topics. His dissertation *Cultivating a Culture of Giving: An Exploration of Institutional Strategies to Enhance African American Young Alumni Giving*, was chosen as the Outstanding Doctoral Dissertation winner for the 2009 Council for the Advancement and Support of Education (CASE) H.S. Warwick Award for Outstanding Research in Alumni Relations for Educational Advancement. Additionally, Noah is an associate editor of an ASHE reader on *Philanthropy, Fundraising, and Volunteerism in Higher Education* (2007) which was named the 2009 CASE John Grenzebach Award for Outstanding Research in Philanthropy for Educational Advancement. His book *Philanthropy and Fundraising in American Higher Education* has been adopted in master's and doctoral programs across the country. In November 2011, *Race, Gender, and Leadership in Nonprofit Organizations* was published by Palgrave Macmillan. Prior to returning to graduate school Noah was an advancement officer at the University of Rochester, where he gained the practitioner experience that informs his research.

Deborah Rhebergen, MA
Ms. Rhebergen is the Director of Development for the College of Behavioral and Social Sciences at the University of Maryland. Formerly, she served as Director for Leadership Annual Giving and the Colonnade Society, also at the University of Maryland. From 2005-2008, she worked at Lafayette College as Assistant Director of the Annual Fund. Ms. Rhebergen is a 2011 M.A. graduate of Higher Education Administration at the University of Maryland.

Luke Jensen, Ph.D.
Dr. Jensen is the Director of the LGBT Equity Center at the University of Maryland. Since 2002, he has represented the Consortium of Higher Education LGBT Resource Professionals on the Board of Directors of the Council for the Advancement of Standards in Higher Education. He has served as a member of the National Advisory Committee for Expanding the circle: Creating an inclusive environment in higher education for LGBTQ students and studies, an annual conference of the California Institute of Integral Studies. Within the University System of Maryland, he has chaired the LGBT Issues Committee of the Diversity Network, and has assisted other campuses as they build their infrastructure to support LGBT people.

Susan R. Rankin, Ph.D.
Dr. Rankin is a Research Associate in the Center for the Study of Higher Education and Associate Professor of Education in the College Student Affairs Program at The Pennsylvania State University. She has presented and published widely on the impact of sexism, racism, and heterosexism in the academy and in intercollegiate athletics.

Dr. Rankin's current research focuses on the assessment of institutional climate and providing program planners and policy makers with recommended strategies to improve the campus climate for under-served communities. Dr. Rankin has collaborated with over 70 institutions/organizations in implementing assessments and developing strategic plans regarding social justice issues. In her advocacy work, Dr. Rankin is a founding member of the Consortium of Higher Education LGBT Resource Professionals, a network of professionals doing advocacy work for LGBT people on college campuses and the Statewide Pennsylvania Rights Coalition, a network of individuals and organizations across the Commonwealth committed to securing and defending full civil rights for LGBT individuals.

Appendix H: Potential Respondents Reviewer Instructions

Review Process
1. Hold two reviewer sessions in which potential respondents come together in person to complete the electronic survey instrument and respond to each item on the instrument as if they were actually participating in the study.
   - Respondents must have access to computer and internet
2. Engage potential respondents in questions regarding specific portions of the survey instrument. Between the two groups, the entire instrument will be reviewed by potential respondents, but each group will only have to review about half of the entire instrument.
3. Critique instructions and instrument's appearance.
   - Are the instructions clear and easy to follow?
   - Should additional instructions be included?
   - Does the instrument's overall appearance look professionally designed?
   - Is the instrument easy to read and answer? Is it easy to understand and mark the response items?
   - Are the items too crowded on the page?
   - Are there parts of the instrument that need to be deleted?
   - Would an example of how to answer an item help to clarify the instructions?
4. Cognitive interviewing with sample of items
   a. Paraphrase your understanding of the question.
   b. Define the term in your own words.
   c. Is anything confusing or ambiguous with the question?
   d. How confident are you that you can give an accurate answer?
   e. What was the process by which you answered that question?
5. Track general impressions.
   - How long did it take you to complete the survey?
   - Is the survey too short? Too long?
   - Was there any portion of the survey that you were uncomfortable answering?
   - Is there anything on the survey that is culturally insensitive, particularly to LGBTQ individuals?
   - Do you think incentives will help completion rate?
   - Do you have any additional comments, concerns, or questions?

Name:

Biography: Please write a brief (3-5 sentences) biography about yourself. Include social identities (e.g., race/ethnicity, gender, sexual orientation, and other important identities), graduation information (e.g., institution, year of graduation, degrees), work/professional experience, and other outside involvements as they relate to philanthropy and/or LGBTQ issues.

Instructions

Complete the electronic survey instrument and respond to each item on the instrument as if you were actually participating in the study. Track your opinion of the survey appearance, overall survey critique, and review of specific questions as indicated.

Survey start time:

Survey end time:

Survey Appearance

Are the instructions clear and easy to follow? How might they be clearer?

Should additional instructions be included? If so, what kind of instructions?

Does the instrument's overall appearance look professionally designed? How might I improve the design?

Is the instrument easy to read and answer? Is it easy to understand and mark the response items?

Are the items too crowded on the page? Which specific pages seemed too crowded?

Are there parts of the instrument that are irrelevant and need to be deleted?

Would an example of how to answer an item help to clarify the instructions? Which item?

Overall Survey Critique

Is the survey too short? Too long?

Was there any portion of the survey that you were uncomfortable answering?

Is there anything on the survey that is culturally insensitive, particularly to LGBTQ individuals?

Do you think incentives will help completion rate?

Do you have any additional comments, concerns, or questions?

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- My college/university sufficiently prepared me for my professional occupation.

- Thinking about my time as an undergraduate student, I am disappointed with my experience.

- I had a negative time as an undergraduate student.

- Upon graduating, I was satisfied with my time at my college/university.

- I felt unqualified to work upon graduation in my respective field.

- My undergraduate experience fulfilled my expectations.

- I am displeased with my academic training at my college/university.

- Looking back, I feel that I had a positive experience as an undergraduate student.

- I am happy with how I was prepared academically.

- I am dissatisfied with my undergraduate experience.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- As a student, I was comfortable with the climate on my campus.

- When I was a student, my campus was uninviting for people who were lesbian, gay, bisexual, transgender, or queer.

- The climate in my classes was welcoming for everyone.

- I felt accepted throughout my undergraduate student experience.

- As an undergraduate, I observed conduct directed towards a person or group of people that created an intimidating learning environment.

- My undergraduate institution was homophobic.

- Classes at my alma mater were intimidating for LGBT people.

- The campus climate at my school was friendly for people who identify as lesbian, gay, bisexual, or transgender.

- I believe my undergraduate alma mater was hostile for people who were different.

- My campus was inviting for students.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- I avoided certain places on campus for fear of harassment.

- When I was an undergraduate student, faculty treated students with fairness.

- Lesbian, gay, bisexual, and transgender students felt safe on my campus when I was a student.

- I personally experienced exclusionary conduct that interfered with my ability to learn on campus.

- As a student, I was a victim of harassment on campus.

- I felt open to disclose my identity on campus without fear.

- People on campus treated everyone with equity.

- I feared for my physical safety due to my sexual or gender minority identity.

- Faculty pre-judged my abilities based on my identity.

- I believe the campus climate encouraged free and open discussion of LGBT topics.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- I feel marginalized within my institution as an LGBT alumnus/na.

- The alumni association welcomes all alumni, regardless of how they identify.

- The alumni relations staff is insensitive to the LGBT community.

- The alumni leadership at my alma mater overtly discriminates against minority groups.

- When attending alumni events at my alma mater, I feel affirmed.

- Alumni relations and development staff at my institution understand the culture of LGBT communities.

- I feel comfortable sharing my LGBT identity at alumni events.

- Staff at my alma mater are insensitive to minority groups.

- My alma mater supports LGBT alumni.

- I feel unsafe attending events at my alma mater.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- The leadership at my alma mater visibly support sexual and gender minority issues.

- The university/college administration negatively responds to incidents of LGBT harassment.

- Campus staff are unreliable in meeting my needs.

- Campus administrators support minority groups.

- Leadership at my alma mater create an affirming place for LGBT students.

- The leadership at my alma mater neglect LGBT issues.

- I feel supported by my university/college leadership.

- Campus leadership support its alumni.

- Campus leadership ignore LGBT alumni needs.

- The leadership at my university/college ignore LGBT alumni.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- The administration at my alma mater is trustworthy.

- Based on my experiences, I believe in the actions of my alma mater.

- I have distrust in staff at my alma mater.

- As an alumnus/na, I have confidence in my alma mater.

- I have faith that the administration acts with good intentions.

- I am skeptical of campus administrators based on my experiences.

- I trust the actions of the leadership at my alma mater.

- I distrust the leadership at my alma mater.

- I have doubt in the actions of campus leadership at my university/college.

- I have reservations about the actions of campus leadership.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- I am happy with the actions of the university/college leadership.

- I am dissatisfied with the issues that campus leadership support.

- My alma mater is moving in the right direction.

- The leadership is doing a poor job in improving my alma mater.

- I approve of the decisions that campus leadership have made.

- My university/college is worse off than when I was a student.

- The campus community has improved since I attended as a student.

- My alma mater leadership is improving the value of my degree.

- The value of my degree has diminished.

- My university/college is decreasing in quality.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- I support nonprofit organizations that enhance the national climate for LGBT people.

- It is important for me to donate to nonprofits that are involved with LGBT activism.

- I chose to neglect LGBT political causes.

- Nonprofit organizations that advocate for minority rights are important.

- Organizations that change LGBT national policies are unimportant.

- I support nonprofits that work towards LGBT political causes.

- LGBT activism is of no consequence to me.

- I am indifferent about social change for LGBT people.

- LGBT social change is important to me.

- I ignore organizations that work for political causes related to LGBT individuals.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- I prefer to donate to nonprofits that provide services to LGBT people.

- Giving time to people in need is unimportant to me.

- I make a difference when I volunteer for people in need.

- Nonprofit organizations that provide direct services are of no consequence to me.

- I am indifferent about organizations that directly benefit others through service provided.

- I wish there were more nonprofits that provided direct services to LGBT people.

- It is important for me to support nonprofits that directly benefit LGBT individuals.

- Nonprofit organizations that provide direct benefit for minority people are unimportant to me.

- Nonprofits that give direct services to LGBT people are unimportant to me.

- I value nonprofit organizations that do good work through direct service.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- It is important to uplift the LGBT community.

- It is unimportant to me whether LGBT communities progress.

- It is my responsibility to support my community.

- Community uplift is of no consequence to me.

- I want my philanthropy to lift up LGBT people.

- I neglect the needs of LGBT communities.

- Nonprofit organizations are meant to raise up marginalized communities.

- My donations advance LGBT people.

- Advancing the LGBT community is unimportant to me.

- Meeting the needs of the LGBT community is of no consequence to me.

Item Critique

Factor name:
Factor definition:

Indicate your three favorite (+) and three least favorite (-) items in this series.

- My LGBT identity influences to which nonprofits I give money.

- Where I donate is affected by my LGBT identity.

- How I personally identify is inconsequential when determining my charitable giving.

- My personal identity is unimportant to my philanthropic decisions.

- I consider my personal identity when donating.

- My LGBT identity impacts which nonprofit organizations I chose to support.

- I am motivated to donate because of my LGBT identity.

- My LGBT identity has no bearing on my philanthropic giving.

- My identity is of no consequence to my giving behaviors.

- Identifying as LGBT is unrelated to my philanthropic giving.

Appendix I: Potential Respondent Reviewers

Number of potential respondents   9

Gender identity
Male   6
Female   3

Sexual identity
Gay   6
Lesbian   2
Bisexual   1

Race/ethnicity
White   7
Black   1
Asian/Asian American   1

Employment
Graduate student   4
Higher education administrator   3
Nonprofit management   1
Federal government   1

Philanthropy and giving
LGBTQ   7
Other non-profit   5
Alma mater   3

Appendix J: Reynolds' (1982) Short Form of the Marlowe-Crowne Social
Desirability Scale

- It is sometimes hard for me to go on with my work if I am not encouraged.
- I sometimes feel resentful when I don't get my way.
- No matter who I'm talking to, I'm always a good listener.
- There have been occasions when I took advantage of someone.
- I'm always willing to admit it when I make a mistake.
- I sometimes try to get even rather than forgive and forget.
- I am always courteous, even to people who are disagreeable.
- I have never been irked when people expressed ideas very different from my own.
- There have been times when I was quite jealous of the good fortune of others.
- I am sometimes irritated by people who ask favors of me.
- I have never deliberately said something that hurt someone's feelings.

Appendix K: Point People Communication Letter

Hello <mark>NAME</mark>,

My name is Jay Garvey and I am a doctoral candidate at the University of Maryland studying higher education philanthropy and fundraising. I am currently completing my dissertation, examining philanthropy for lesbian, gay, bisexual, transgender, and queer (LGBTQ) higher education alumni.

I am interested in having <mark>INSTITUTION</mark> involved in this study, and I am contacting you because of your professional involvement with LGBTQ <mark>ALUMNI/STUDENTS</mark> at <mark>INSTITUTION</mark>. I hope you are interested in becoming point person for your institution and this important study. As a point person for your institution, I would ask for your assistance in identifying LGBTQ alumni, and emailing all identified LGBTQ alumni the study's survey. Participation for both alumni and your institution is voluntary and strictly confidential.

In addition, I would ask for your assistance in completing an institutional portion of the survey, which asks questions pertaining to your <mark>ADVANCEMENT/ALUMNI RELATIONS AND DEVELOPMENT</mark> office, as well as LGBTQ policies and resources at your institution.

As a thank-you for participating, I will create a report detailing findings and recommendations for your institution so that you may better serve LGBTQ alumni and students. Please feel free to consult your colleagues to discuss involvement of alumni from <mark>INSTITUTION</mark>. I ask that you respond to my request either via email or phone by <mark>DATE</mark>.

I look forward to hearing from you, thanks so much for your consideration.

Jay Garvey
jason.c.garvey@gmail.com
315.727.0494

Appendix L: Consent Form

Purpose of the Study: This study investigates the culture in lesbian, bisexual, transgender, and queer (LGBTQ) communities of philanthropic participation, specifically to higher education and how universities are engaging with these alumni. All LGBTQ people who have obtained an undergraduate degree from a four-year college or university are eligible to complete the survey.

Procedure: The procedure involves completing a four-part online survey, and will take approximately 10-15 minutes from start to finish. The first section pertains to your primary undergraduate student experiences, the second section asks questions regarding demographics, section three relates to alumni experiences at participants' primary undergraduate institutions, and part four asks questions regarding philanthropy and giving. In the beginning of the survey, you will be presented with a consent statement, at which point you can click "I Agree/Consent" to give consent and proceed with the survey, or click "I Do Not Agree/Consent" and exit the survey. The survey is administered through Qualtrics (www.qualtrics.com), a university-contracted online survey design tool. The data from the surveys are downloadable from a secure location within the Qualtrics website, and are only accessible by the researchers.

Sample Questions:
- What is your sexual orientation?
- How close do you currently reside to your primary undergraduate alma mater?
- What percentage of your total philanthropic giving goes to your primary undergraduate alma mater?

Potential Risks and Discomforts: There may be some risks from participating in this research study. In the survey, you will be asked questions regarding your sexual and gender identity, and philanthropic giving behavior. You do not have to answer any question that makes you uncomfortable. All information is collected confidentially; however, there is potential for the loss/breach of confidentiality.

Potential Benefits: There are no direct benefits to participate, but there are some possible benefits for researchers, administrators, and alumni themselves. Not only will the instrument creation be beneficial, but the utilization of the instrument will provide much use as well. Specifically for alumni, completing this survey may validate their experiences and voices as LGBTQ individuals, leading to a more healthy and productive relationship with their alma maters. Through this instrument, institutions will demonstrate interest in recruiting and cultivating LGBTQ alumni as important facets of the university culture.

Confidentiality: Your name will not be included on the surveys and other collected data. A code will be placed on the survey and other collected data. Through the use of an identification key, the researcher will be able to link your survey to your identity. Only the researcher will have access to the identification key. If we write a report or

article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.

Right to Withdraw and Questions: Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you are an employee or student, your employment status or academic standing at your institution will not be affected by your participation or non-participation in this study. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator:

Jason C. Garvey
3214 Benjamin Building
University of Maryland, College Park, MD 20742
301.405.3567
garvey@umd.edu

Participant Rights: If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:

University of Maryland College Park
Institutional Review Board Office
1204 Marie Mount Hall
College Park, Maryland, 20742
E-mail: irb@umd.edu
Telephone: 301-405-0678

This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Appendix M: Survey for LGBT Alumni Giving (revised)

SURVEY FOR LGBT ALUMNI GIVING

Your electronic signature indicates that you are at least 18 years of age; you have read the consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may print a copy of this consent form. If you agree to participate, please click "I Agree/Consent" below.

- I Agree/Consent
- I Do Not Agree/Consent

<u>Survey for LGBT Alumni Giving – Consent Form</u>

PART 1 – UNDERGRADUATE STUDENT EXPERIENCES

The following questions pertain to the **institution from which you received your undergraduate degree**.

1. Did you attend a 4-year institution in the United States?
    a. Yes
    b. No
2. In what state is your **undergraduate alma mater**?
    a. (insert drop-down list of states)
3. What is your **undergraduate alma mater**?
    a. ___
4. Were you a transfer student?
    a. Yes
    b. No
5. How would you characterize your enrollment during your **undergraduate degree**?
    a. Full-time
    b. Part-time
    c. Other (please specify)
6. What year did you begin enrollment for your **undergraduate degree**?
    a. ___
7. What year did you graduate with your **undergraduate degree**?
    a. ___
    b. Did not graduate
8. Did any of your parents/guardians also attend your **undergraduate alma mater**?
    a. Yes
    b. No
9. Did you receive an advanced degree after your **undergraduate degree**?
    a. Yes
    b. No
        i. What advanced degree(s) did you receive after your undergraduate degree? **Check all that apply**:
            1. Masters degree
            2. JD
            3. Medical degree
            4. PhD
            5. Other (please specify)
        ii. Did you receive an advanced degree at the same institution as your **undergraduate degree**?
            1. Yes
            2. No
10. What was your undergraduate cumulative grade point average (GPA)?
    a. 3.50 or higher
    b. 3.00 – 3.49
    c. 2.50 – 2.99

d. 2.00 – 2.49
e. 1.99 or lower

11. In which of these general categories did your **primary undergraduate major** fall? If you had more than one major, please choose the category for what you considered to be your **primary major**:

a. Engineering
    i. Aerospace engineering
    ii. Chemical engineering
    iii. Civil engineering
    iv. Computer science
    v. Electrical engineering
    vi. Industrial engineering
    vii. Materials engineering
    viii. Mechanical engineering
    ix. Unspecified engineering
    x. Other (please specify)

b. Life sciences
    i. Biological sciences
    ii. Dentistry
    iii. Medical laboratory sciences
    iv. Medical sciences
    v. Nursing
    vi. Pharmacy
    vii. Public health
    viii. Speech/language pathology
    ix. Veterinary science
    x. Unspecified life sciences
    xi. Other (please specify)

c. Physical sciences
    i. Astronomy
    ii. Atmospheric sciences
    iii. Chemistry
    iv. Earth sciences
    v. Mathematics and statistics
    vi. Oceanography
    vii. Physics
    viii. Unspecified physical sciences
    ix. Other (please specify)

d. Social and behavioral sciences
    i. Anthropology
    ii. Criminology
    iii. Economics
    iv. Geography
    v. Political science/public administration
    vi. Psychology
    vii. Sociology

        viii. Unspecified social and behavioral sciences
        ix. Other (please specify)
- e. Arts and humanities
    - i. Area and ethnic studies
    - ii. Arts and music
    - iii. English and literature
    - iv. Foreign languages
    - v. History
    - vi. History of science
    - vii. Linguistics
    - viii. Philosophy
    - ix. Religion
    - x. Unspecified arts and humanities
    - xi. Other (please specify)
- f. Education
    - i. Mathematics education
    - ii. Nonscience education
    - iii. Other science/technical
    - iv. Science education
    - v. Social science education
    - vi. Unspecified education
    - vii. Other (please specify)
- g. Professional program
    - i. Social service professions
    - ii. Prelaw
    - iii. Business and management
    - iv. Accounting
    - v. Other professional program
    - vi. Unspecified professional program
    - vii. Other (please specify)

12. **Check all** the following academic-related activities you participated in during your undergraduate experience:
    - a. Academic/departmental/professional club (e.g., pre-law society, academic fraternity, engineering club)
    - b. Culminating senior experience (e.g., capstone course, thesis)
    - c. Honors program
    - d. Learning community or some other formal program where groups of students took two or more classes together
    - e. Practicum, internship, field experience, co-op experience, or clinical experience
    - f. Research with a professor
    - g. Study abroad
    - h. Other (please specify)

13. **Check all** the following co-curricular activities you participated in during your undergraduate experience:
    - a. Arts/theater/music (e.g., theater group, marching band)

    b.   Athletics (e.g., varsity hockey, club rowing, intramural basketball)
         i.   Varsity
        ii.   Club
      iii.   Intramural
    c.   Campus-wide programming group (e.g., program bard, film series board, multicultural programming committee)
    d.   Cultural/international club (e.g., Black Student Union, German Club)
    e.   Honor society (e.g., Omicron Delta Kappa, Mortar Board)
    f.   Leadership organization (e.g., peer leadership program, emerging leaders program)
    g.   LGBT student organization
    h.   LGBT support/counseling group (e.g., safe space, safe zone)
    i.   Media organization (e.g., campus radio, student newspaper)
    j.   Military (e.g., ROTC)
    k.   New student transitions (e.g., admissions ambassador, orientation advisor)
    l.   Para-professional (e.g., resident assistant, peer advisor)
    m. Political/advocacy club (e.g., College Democrats)
    n.   Religious organization (e.g., Hillel, Intervarsity Christian Fellowship)
    o.   Service group (e.g., Circle K, Alpha Phi Omega)
    p.   Culturally-based fraternity or sorority (e.g., Alpha Phi Alpha Fraternity Inc., Lambda Theta Alpha)
    q.   Social fraternity or sorority (e.g., Sigma Phi Epsilon, Kappa Kappa Gamma)
    r.   Special interest group (e.g., comedy group)
    s.   Student governance group (e.g., student government, residence hall association)
    t.   Student alumni association
    u.   Other (please specify)

14. Did you hold a leadership position in an organization (e.g., officer for a club, captain of an athletic team, director in a musical group, editor of the newspaper)?
    a.   Never held a leadership position
    b.   Held 1 leadership position
    c.   Held 2 leadership positions
    d.   Held 3 leadership positions
    e.   Held 4 or more leadership positions

15. Did you work during the academic year as an **undergraduate student**?
    a.   Yes
         i.   Where did you primarily work?
             1.   On-campus
             2.   Off-campus
        ii.   How many semesters did you work?
             1. ___
      iii.   Approximately how many hours did you work in a typical 7 day week during the academic year?

> 1. ___
>
> b. No

16. Which of the following best describes where you **primarily** lived while attending college? If you lived in more than one type of housing, please select the one in which you lived longer.
    a. Campus housing
        i. Residence hall
        ii. University owned apartment
        iii. Family housing
        iv. Other (please specify)
    b. Non-campus housing (including fraternity/sorority)
        i. Independently in an apartment/house
        ii. Living with family member/guardian
        iii. Co-op
        iv. Fraternity/sorority
        v. Other (please specify)
    c. Homeless (e.g., couch surfing, sleeping in car, sleeping in campus office/lab)

17. Were you primarily financially dependent or independent as an **undergraduate student**?
    a. Dependent (family/guardian assisted with your living/educational expenses)
    b. Independent (you were the sole provider for your living/educational expenses)

18. Did you receive financial aid during your **undergraduate experience**?
    a. Yes
        i. What type(s) of financial aid did you receive? **Check all that apply**:
            1. Loans
            2. Need-based scholarships or grants
            3. Merit-based scholarships or grants
            4. Work-study
            5. Athletic scholarship
            6. Other (please specify)
    b. No

19. Please indicate your answer to each statement as it relates to your **undergraduate experience**:
    a. (insert items in mixed order for the following factors: Satisfaction, Perception of campus climate, Harassment)

20. As an **undergraduate student**, how open were you with your LGBT identity:
    a. Around your close friends?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely

b. Around your close family?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
c. Around your extended family?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
d. Around extended friends or 'friends of friends'?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
e. When you met new people in person?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
f. With professors, faculty, and instructors?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
g. At work?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
h. With people where you lived (e.g., roommates, suitemates, people in your residence hall)?
    i. Not at all
    ii. Hardly
    iii. Somewhat
    iv. Mostly
    v. Completely
i. With members of campus activity groups?
    i. Not at all
    ii. Hardly

       iii. Somewhat
       iv. Mostly
       v. Completely

21. Overall, how open were you about your LGBT identity as an **undergraduate student**?
    a. Not at all
    b. Hardly
    c. Somewhat
    d. Mostly
    e. Completely

22. How many openly LGBT faculty/staff did you know as an **undergraduate student**?
    a. None
    b. 1 – 2
    c. 3 – 5
    d. 6 – 8
    e. 9 – 11
    f. 12 or more

23. How many openly LGBT students did you know as an **undergraduate student**?
    a. None
    b. 1 – 2
    c. 3 – 5
    d. 6 – 8
    e. 9 – 11
    f. 12 or more

24. During your **undergraduate time**, how often did you:
    a. Visit the LGBT student services office?
       i. Never
       ii. Rarely
       iii. Sometimes
       iv. Regularly
       v. All the time
       vi. Was not available at my institution
    b. Participate in an event or program hosted by the LGBT student services office (e.g., Lavender Graduation, Queer Monologues)?
       i. Never
       ii. Rarely
       iii. Sometimes
       iv. Regularly
       v. All the time
       vi. Was not available at my institution
    c. Attend an LGBT student organization meeting or event (e.g., student dance, student drag show)?
       i. Never
       ii. Rarely

iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

d. Attend an LGBT support/counseling group meeting?
i. Never
ii. Rarely
iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

e. Take an LGBT-related academic course?
i. Never
ii. Rarely
iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

f. Attend an LGBT-related educational lecture or program (e.g., LGBT book reading, queer studies symposium)?
i. Never
ii. Rarely
iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

g. Participate in an LGBT-focused workshop or training (e.g., Safe Zone training)?
i. Never
ii. Rarely
iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

h. Participate in an LGBT mentoring program?
i. Never
ii. Rarely
iii. Sometimes
iv. Regularly
v. All the time
vi. Was not available at my institution

i. Participate in an LGBT political/social awareness event (e.g., march for equality, voter registration)?
i. Never
ii. Rarely
iii. Sometimes

      iv.   Regularly

      v.   All the time

      vi.   Was not available at my institution

25. Think back to **before you were enrolled as an undergraduate student** and indicate the extent to which you thought you would:

    a. Feel prepared academically by your undergraduate experience.

        i.   Totally unprepared

        ii.   Somewhat unprepared

        iii.   Neither prepared nor unprepared

        iv.   Somewhat prepared

        v.   Totally prepared

    b. Be at a welcoming institution for LGBT people.

        i.   Totally unwelcoming

        ii.   Somewhat unwelcoming

        iii.   Neither welcoming nor unwelcoming

        iv.   Somewhat welcoming

        v.   Totally welcoming

    c. Experience harassment as an LGBT undergraduate student.

        i.   Never

        ii.   Rarely

        iii.   Sometimes

        iv.   Regularly

        v.   All the time

PART 2 – DEMOGRAPHICS

26. What is your birth sex?
    a. Male
    b. Female
    c. Intersex
    d. Other (please specify)

27. What is your current gender identity? Please mark all that apply:
    a. Man
    b. Woman
    c. Transgender (please specify)
    d. Other (please specify)

28. What is your current gender expression? Please mark all that apply:
    a. Masculine
    b. Feminine
    c. Other (please specify)

29. What is your current sexual identity? Please mark all that apply:
    a. Asexual
    b. Bisexual
    c. Gay
    d. Genderqueer
    e. Heterosexual
    f. Lesbian
    g. Man loving man/MSM
    h. Pansexual
    i. Queer
    j. Questioning
    k. Woman loving woman/WSW
    l. Other (please specify)

30. What is your race/ethnicity? Please mark all that apply:
    a. American Indian or Alaska Native
    b. Asian
        i. Asian Indian
        ii. Chinese
        iii. Filipino
        iv. Japanese
        v. Korean
        vi. Vietnamese
        vii. Other (please specify)
    c. Black or African American

             i. African
            ii. African American
           iii. Black
           iv. Caribbean
            v. Haitian
           vi. Kenyan
          vii. Nigerian
        viii. West Indian
          ix. Other (please specify)

d. Hispanic or Latino
             i. Central or South American
            ii. Cuban
           iii. Dominican
           iv. Mexican, Mexican American, or Chicano
            v. Puerto Rican
           vi. Other (please specify)

e. Native Hawaiian or other Pacific Islander
             i. Native Hawaiian
            ii. Guamian or Chamorro
           iii. Samoan
           iv. Other (please specify)

f. White
             i. Caucasian or White
            ii. Middle Eastern
           iii. North African
           iv. Other (please specify)

g. Multiracial or multiethnic

h. Other (please specify)

31. What is your current religious/spiritual affiliation?
a. Protestant
b. Catholic
c. Jewish
d. Muslim
e. Hindu
f. Buddhist
g. Unaffiliated/none
h. Spiritual, but no religious affiliation
i. Atheist
j. Other (please specify)

32. How important is your religion/spirituality in your life?

a. Not at all important
b. Somewhat unimportant
c. Neither important nor unimportant
d. Somewhat important
e. Extremely important

33. Do you have a medical condition (physical, learning, psychological) that substantially affects a major life activity?
    a. Yes
        i. Please mark all medical conditions that substantially affect a major life activity:
            1. Auditory (e.g., deaf, hearing impaired)
            2. Cognitive (e.g., learning disability, attention deficit disorder)
            3. Developmental (e.g., mental retardation)
            4. Environmental (e.g., allergies, chemical sensitivities)
            5. Immunodeficiency (e.g., HIV/AIDS)
            6. Medical (e.g., cancer, epilepsy, severe asthma, diabetes, chronic fatigue, cystic fibrosis, severe arthritis)
            7. Mobility (e.g., spinal cord injury, disease, paralysis, amputation)
            8. Psychiatric (e.g., anxiety disorder, depression, bipolar disorder, schizophrenia, post-traumatic stress)
            9. Speech (e.g., speech impediment, vocal paralysis)
            10. Vision (e.g., blind, visually impaired)
    b. No

34. What is your birth year?
    a. ___

35. What is your citizenship status?
    a. US citizen
    b. US citizen – naturalized
    c. Dual citizenship
    d. Permanent resident (immigrant)
    e. Permanent resident (refugee)
    f. International (F-1, J-1, H, A, L, or G visas)
    g. Undocumented
    h. Other (please specify)

36. How would you characterize your political views?
    a. Far left
    b. Liberal
    c. Moderate

      d. Conservative

      e. Far right

      f. Undecided

      g. Other (please specify)

37. What is the highest level of formal education obtained by any of your parent(s) or guardian(s)?

      a. High school or less

      b. Some college

      c. Associates degree

      d. Bachelors degree

      e. Masters degree

      f. Doctoral or professional degree (e.g., JD, MD, PhD)

      g. Do not know

38. What was the household income of your parent(s) or guardian(s) when you were an undergraduate student? Consider income from all sources before taxes. If you are not sure, please estimate to the best of your ability.

      a. Less than $12,500

      b. $12,500 - $24,999

      c. $25,000 - $39,999

      d. $40,000 - $54,999

      e. $55,000 - $74,999

      f. $75,000 - $99,999

      g. $100,000 - $149,999

      h. $150,000 - $199,999

      i. $200,000 - $499,999

      j. $500,000 or more

39. Indicate the extent to which you agree with the following statements:

      a. It is sometimes hard for me to go on with my work if I am not encouraged.

            i. Strongly disagree

            ii. Disagree

            iii. Neither agree nor disagree

            iv. Agree

            v. Strongly agree

      b. I sometimes feel resentful when I don't get my way.

      c. No matter who I'm talking to, I'm always a good listener.

      d. There have been occasions when I took advantage of someone.

      e. I'm always willing to admit it when I make a mistake.

      f. I sometimes try to get even rather than forgive and forget.

      g. I am always courteous, even to people who are disagreeable.

      h. I have never been irked when people expressed ideas very different from my own.

i. There have been times when I was quite jealous of the good fortune of others.
j. I am sometimes irritated by people who ask favors of me.
k. I have never deliberately said something that hurt someone's feelings.

PART 3 – ALUMNI EXPERIENCES

40. What is your current **household** income? Consider income from all sources before taxes:
    a. Less than $12,500
    b. $12,500 - $24,999
    c. $25,000 - $39,999
    d. $40,000 - $54,999
    e. $55,000 - $74,999
    f. $75,000 - $99,999
    g. $100,000 - $149,999
    h. $150,000 - $199,999
    i. $200,000 - $499,999
    j. $500,000 or more

41. What is your current **individual** income? Consider income from all sources before taxes:
    a. Less than $12,500
    b. $12,500 - $24,999
    c. $25,000 - $49,999
    d. $50,000 - $74,999
    e. $75,000 - $99,999
    f. $100,000 - $124,999
    g. $150,000 - $174,999
    h. $175,000 - $199,999
    i. $200,000 - $499,999
    j. $500,000 or more

42. What is your relationship status?
    a. Single
    b. Partnered, not married
    c. Partnered, married
    d. Partnered, civil union
    e. Separated, not divorced
    f. Divorced
    g. Widowed

43. Do you have children?
    a. Yes
        i. How many?
            1. ___
        ii. Have any of your children attended your undergraduate alma mater as students themselves?

              1. Yes

              2. No

      b. No

The following questions pertain to your **alumni experiences with the institution from which you received your undergraduate degree**.

44. How close do you currently reside to your undergraduate alma mater?
    a. 10 miles or less
    b. 11 – 50 miles
    c. 51 – 250 miles
    d. 251 – 1000 miles
    e. 1001 miles or more

45. How does your undergraduate alma mater connect with you? **Please mark all that apply**:
    a. Alumni magazine
    b. E-mail
    c. E-newsletter
    d. Personal meeting
    e. Social media (e.g., Facebook, Twitter)
    f. Solicitation
    g. Through event
    h. Other marketing material

46. How often does your **undergraduate alma mater** connect with you?
    a. Daily
    b. Weekly
    c. Monthly
    d. Annually
    e. Sporadically
    f. Never

47. Does your **undergraduate alma mater** have an alumni association?
    a. Yes
        i. Is it a dues-paying association?
            1. Yes
            2. No
        ii. Are you a member of the alumni association?
            1. Yes
            2. No
        iii. Are you a leader within the alumni association?
            1. Yes
            2. No
    b. No

    c. Do not know
48. Does your **undergraduate alma mater** have an LGBT alumni affinity group?
    a. Yes
        i. Is it a dues-paying group?
            1. Yes
            2. No
        ii. Are you a member of the LGBT alumni affinity group?
            1. Yes
            2. No
        iii. Are you a leader or founder within the LGBT alumni affinity group?
            1. Yes
            2. No
    b. No
    c. Do not know
49. What is your current occupation? If you have more than one occupation, please choose the one that you consider to be your primary occupation:
    a. Arts, performance, music
    b. Business, consulting, finance management, sales
    c. Communication, journalism, media
    d. Community, public, social service
    e. Education, teaching
    f. Entrepreneur, self-employed
    g. Government, public policy, politics
    h. Law
    i. Medicine, health
    j. Military service
    k. Religion, theology
    l. Research, academic
    m. Technology or engineering
    n. Student
    o. Retired
    p. Unemployed
    q. Other (please specify)
50. Are you currently or have you previously been employed with your **undergraduate alma mater** post-graduation?
    a. Yes
    b. No
51. Please indicate your answer to each question as it relates to your **alumni experiences with your undergraduate alma mater**:

a. (insert items in mixed order for the following factors: Experiences of harassment as alumnus, Perceived support from undergraduate alma mater leadership, Alumni satisfaction)

52. How open are you currently about your LGBT identity:
    a. Around your close friends?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    b. Around your close family?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    c. Around your extended family?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    d. Around extended friends or 'friends of friends'?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    e. When you meet new people in person?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    f. At your undergraduate alma mater?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    g. At work?
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely

53. Overall, how open are you currently about your LGBT identity?
    a. Not at all
    b. Hardly
    c. Somewhat
    d. Mostly
    e. Completely
54. Think back to **before you graduated with your undergraduate degree** and
    indicate the extent to which you thought you would:
    a. Experience harassment as an LGBT alumnus/na.
        i. Never
        ii. Rarely
        iii. Sometimes
        iv. Regularly
        v. All the time
    b. Have campus leaders who support and affirm LGBT people, issues,
       and concerns.
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely
    c. Value the worth of your undergraduate degree and institution.
        i. Not at all
        ii. Hardly
        iii. Somewhat
        iv. Mostly
        v. Completely

PART 4 – PHILANTHROPY AND GIVING

55. Please indicate your answer to each question as it relates to your current attitudes:
    a. (insert items in mixed order for the following factors: Activism/important work [political and social change], Altruism/good work [direct service benefits], Community uplift, Salient aspect of identity)

The following questions pertain to your financial giving to nonprofit organizations.

56. What percentage of your **current income** goes towards nonprofit organizations?
    a. 0%
    b. 1 – 4%
    c. 5 – 9%
    d. 10 – 14%
    e. 15 – 19%
    f. 20 – 24%
    g. 25 – 29%
    h. 30 – 34%
    i. 35 – 39%
    j. 40 – 44%
    k. 45 – 49%
    l. 50% or more

57. What percentage your **current financial giving** goes to LGBT political organizations and causes (e.g., candidate campaign donations, Human Rights Campaign)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

58. What percentage of your **current financial giving** goes to LGBT community-related initiatives, excluding giving to your undergraduate alma mater's LGBT initiatives (e.g., LGBT community center, LGBT chorus, HIV/AIDS health care)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%

    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

The following questions pertain to your financial giving at the institution from which you received your **undergraduate degree**.

59. What percentage of your **current financial giving** goes to your primary undergraduate alma mater?
    l. 0%
    m. 1 – 10%
    n. 11 – 20%
    o. 21 – 30%
    p. 31 – 40%
    q. 41 – 50%
    r. 51 – 60%
    s. 61 – 70%
    t. 71 – 80%
    u. 81 – 90%
    v. 91 – 100%

60. How much money did you give this past year to your undergraduate alma mater (excluding non-deductible items like sports and concert tickets)?
    a. $0
    b. $1 – $20
    c. $21 – $50
    d. $51 – $100
    e. $101 – $250
    f. $251 – $500
    g. $501 – $1000
    h. $1001 – $2000
    i. $2001 – $5000
    j. $5001 – $7500
    k. $7501 – $10,000
    l. $10,001 – $12,500
    m. $12,501 – $15,000
    n. $15,001 – $25,000
    o. $25,001 – $50,000
    p. $50,001 – $100,000
    q. $100,001 – $500,000
    r. $500,001 – $1,000,000
    s. $1,000,001 or more

61. How much money have you given total across your life to your undergraduate alma mater since graduating (including pledges)?
    a. $0
    b. $1 – $20
    c. $21 – $50
    d. $51 – $100
    e. $101 – $250
    f. $251 – $500
    g. $501 – $1000
    h. $1001 – $2000
    i. $2001 – $5000
    j. $5001 – $7500
    k. $7501 – $10,000
    l. $10,001 – $12,500
    m. $12,501 – $15,000
    n. $15,001 – $25,000
    o. $25,001 – $50,000
    p. $50,001 – $100,000
    q. $100,001 – $500,000
    r. $500,001 – $1,000,000
    s. $1,000,001 or more
62. How many years have you given financially to your undergraduate alma mater since graduating?
    a. 0
    b. 1 – 2
    c. 3 – 5
    d. 6 – 10
    e. 11 – 15
    f. 16 or more
63. How consistently do you give financially to your undergraduate alma mater?
    a. Annually
    b. Every year since graduating
    c. During reunions (e.g., 5-year, 10-year)
    d. During campaigns
    e. When there are special projects that interest me
    f. Sporadically
    g. Never
64. Does your undergraduate alma mater give you the opportunity to give financially to LGBT initiatives?
    a. Yes
    b. No
65. What percentage of your **current financial giving to your undergraduate alma mater** goes to LGBT initiatives (e.g., LGBT student scholarships, LGBT student center, LGBT speaker series)?
    a. 0%
    b. 1 – 10%

     c. 11 – 20%
     d. 21 – 30%
     e. 31 – 40%
     f. 41 – 50%
     g. 51 – 60%
     h. 61 – 70%
     i. 71 – 80%
     j. 81 – 90%
     k. 91 – 100%

66. How often does your undergraduate alma mater ask you to donate money?
     a. Daily
     b. Weekly
     c. Monthly
     d. Annually
     e. Sporadically
     f. Never

67. How recently has your undergraduate alma mater asked you to donate money?
     a. Within the past month
     b. Within the past 6 months
     c. Within the past year
     d. Within the past 5 years
     e. More than 5 years ago
     f. Never

The following questions pertain to your volunteering with nonprofit organizations.

68. What percentage of your **current free time** goes towards volunteering with nonprofit organizations?
     a. 0%
     b. 1 – 10%
     c. 11 – 20%
     d. 21 – 30%
     e. 31 – 40%
     f. 41 – 50%
     g. 51 – 60%
     h. 61 – 70%
     i. 71 – 80%
     j. 81 – 90%
     k. 91 – 100%

69. What percentage of your **current volunteering** is with LGBT political organizations and causes (e.g., candidate campaign drives, voter registration)?
     a. 0%
     b. 1 – 10%
     c. 11 – 20%
     d. 21 – 30%
     e. 31 – 40%
     f. 41 – 50%

g. 51 – 60%
h. 61 – 70%
i. 71 – 80%
j. 81 – 90%
k. 91 – 100%
70. What percentage of your **current volunteering** is with LGBT community-related initiatives, excluding volunteering with your undergraduate alma mater's LGBT initiatives (e.g., pride parade, youth mentoring program, HIV/AIDS patient services)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

The following questions pertain to your volunteering at the institution from which you received your undergraduate degree.
79. What percentage of your **current volunteering** is with your undergraduate alma mater?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%
80. How much have you volunteered this past year with your undergraduate alma mater?
    a. 0 hours
    b. 1 – 10 hours
    c. 11 – 25 hours
    d. 26 – 50 hours
    e. 51 – 100 hours
    f. 101 – 200 hours
    g. 201 or more hours
81. How much have you volunteered total across your life to your undergraduate alma mater since graduating?

    a. 0 hours
    b. 1 – 10 hours
    c. 11 – 25 hours
    d. 26 – 50 hours
    e. 51 – 100 hours
    f. 101 – 200 hours
    g. 201 or more hours

82. How many years have been volunteering with your undergraduate alma mater since graduating?
    a. 0
    b. 1 – 2
    c. 3 – 5
    d. 6 – 10
    e. 11 – 15
    f. 16 or more

83. How consistently do you volunteer with your undergraduate alma mater?
    a. Weekly
    b. Monthly
    c. Annually
    d. Every year since graduating
    e. When there are special projects that interest me
    f. Sporadically
    g. Never

84. Does your undergraduate alma mater give you the opportunity to volunteer with LGBT initiatives?
    a. Yes
    b. No

85. What percentage of your **current volunteering at your undergraduate alma mater** is with LGBT initiatives (e.g., LGBT alumni event, LGBT speaker series, LGBT graduation)?
    a. 0%
    b. 1 – 10%
    c. 11 – 20%
    d. 21 – 30%
    e. 31 – 40%
    f. 41 – 50%
    g. 51 – 60%
    h. 61 – 70%
    i. 71 – 80%
    j. 81 – 90%
    k. 91 – 100%

86. How often does your undergraduate alma mater ask you to volunteer?
    a. Daily
    b. Weekly
    c. Monthly
    d. Annually

    e. Sporadically

    f. Never

87. How recently has your undergraduate alma mater asked you to volunteer?

    a. Within the past month

    b. Within the past 6 months

    c. Within the past year

    d. Within the past 5 years

    e. More than 5 years ago

    f. Never

88. How often do you:

    a. Participate in events through your undergraduate alumni association?

        i. Never

        ii. Rarely

        iii. Sometimes

        iv. Regularly

        v. All the time

        vi. Is not available at my institution

    b. Participate in LGBT-specific alumni events?

        i. Never

        ii. Rarely

        iii. Sometimes

        iv. Regularly

        v. All the time

        vi. Is not available at my institution

    c. Attend class year and/or affinity group reunions?

        i. Never

        ii. Rarely

        iii. Sometimes

        iv. Regularly

        v. All the time

        vi. Is not available at my institution

89. Think back to **before you began donating your money or time** and indicate the extent to which you thought you would:

    a. Give to nonprofits that provide political and social change for LGBT people.

        i. Never

        ii. Rarely

        iii. Sometimes

        iv. Regularly

        v. All the time

    b. Give to nonprofits that provide direct service benefits to LGBT people.

        i. Never

        ii. Rarely

        iii. Sometimes

        iv. Regularly

        v. All the time

c. Give to nonprofits that uplift the LGBT community.
    i. Never
    ii. Rarely
    iii. Sometimes
    iv. Regularly
    v. All the time
d. Have your LGBT identity influence your giving.
    i. Never
    ii. Rarely
    iii. Sometimes
    iv. Regularly
    v. All the time

Appendix N: Factor Definitions Revised from Expert Reviewers

Undergraduate Student Experiences
- Academic Training – the extent to which an alumnus/na felt prepared academically by their undergraduate experience
- Perception of Campus Climate for LGBTQ Individuals – an alumnus'/alumna's view of how welcoming his/her/hir institution was towards LGBTQ people when he/she/ze was an undergraduate student
- Harassment as LGBTQ Student – perception of oppression as an undergraduate student because of LGBTQ identity

Alumni Experiences
- Harassment as LGBTQ Alumnus/na – perception of oppression as an alumnus/na because of LGBTQ identity
- Perceived Support from Leadership for LGBTQ Communities – extent to which campus leaders support and affirm LGBTQ people, issues, and concerns
- Institutional Value – the extent to which a person views the worth of his/her/hir undergraduate degree and institution

Philanthropy and Giving
- LGBTQ Political and Social Change – an alumnus'/alumna's philanthropy towards political and social change for LGBTQ people
- LGBTQ Direct Service Benefits – an alumnus'/alumna's philanthropy towards efforts that provide direct service benefits to LGBTQ people
- LGBTQ Community Uplift – an alumnus'/alumna's support of efforts that enrich the LGBTQ community
- Salient Aspect of LGBTQ Identity – the influence of an alumnus'/alumna's LGBTQ identity in supporting specific efforts

Appendix O: Factor Items Revised from Expert Reviewers

Undergraduate Student Experiences

Academic Training

1   My college/university sufficiently prepared me for my professional occupation.

2   Thinking about my time as an undergraduate student, I am disappointed with my academic experience.

4   Upon graduating, I was happy with my academic training at my college/university.

6   My undergraduate academic experience fulfilled my expectations.

7   I am displeased with my academic training at my college/university.

8   Looking back, I feel that I had a positive academic experience as an undergraduate student.

9   I am unhappy with how I was prepared professionally.

Perception of Campus Climate for LGBTQ Individuals

11   As an LGBT student, I was comfortable with the climate on my campus.

12   When I was a student, my campus was uninviting for people who were LGBT.

13   The climate in my classes was welcoming for LGBT students.

14   I felt accepted as an LGBT student throughout my undergraduate student experience.

15   As an undergraduate, I observed conduct directed towards LGBT people that created an intimidating learning environment.

16   People at my undergraduate institution were heterosexist.

18   The campus climate at my school was welcoming for people who identify as LGBT.

19   I believe my undergraduate alma mater was hostile for people who were LGBT.

Harassment as LGBTQ Student

21   I avoided certain places on campus for fear of harassment.

23   LGBT students felt safe on my campus when I was a student.

24   Because I identified as LGBT, I personally experienced exclusionary conduct that interfered with my ability to learn when I was a student.

25   As an LGBT student, I was a victim of harassment on campus.

26   I felt open to disclose my LGBT identity on campus without fear of repercussions.

28   I feared for my physical safety because of my LGBT identity.

30   I believe the campus climate encouraged free and open discussion of LGBT topics.

Alumni Experiences

Harassment as LGBTQ Alumnus/na

31   I feel marginalized within my institution as an LGBT alumnus/na.

33	The alumni relations staff is insensitive to the LGBT community.
34	The alumni leadership at my alma mater overtly discriminates against LGBT people.
35	When attending alumni events at my alma mater, I feel affirmed as an LGBT person.
36	Alumni relations and development staff at my institution understand the culture of LGBT communities.
37	I feel comfortable sharing my LGBT identity at alumni events.
38	Staff at my alma mater are insensitive to LGBT groups.

Perceived Support from Leadership for LGBTQ Communities

41	The leadership at my alma mater support LGBT-related issues.
45	Leadership at my alma mater create an affirming place for LGBT students.
46	The leadership at my alma mater neglect LGBT issues.
47	I feel supported as an LGBT alumnus/na by my university/college leadership.
48	Campus leadership support its LGBT alumni.
49	Campus leadership ignore LGBT alumni needs.
50	The leadership at my university/college ignore LGBT alumni.

Institutional Value

63	My alma mater is moving in the right direction.
64	The leadership is doing a poor job in improving the academic experience at my alma mater.
65	I approve of the decisions that campus leadership have made.
67	The value of my degree has improved since I attended as a student.
68	My alma mater leadership is improving the value of my degree.
69	The value of my degree has diminished.
70	My university/college is decreasing in quality.

Philanthropy and Giving

LGBTQ Political and Social Change

71	I give to nonprofit organizations that enhance the national climate for LGBT people.
72	It is important for me to donate to nonprofits that are involved with LGBT activism.
73	I chose to not engage with LGBT political causes.
74	Nonprofit organizations that advocate for LGBT rights are important.
76	I support nonprofits that work towards LGBT political causes.
78	I am indifferent about social change for LGBT people.
79	LGBT social change is important to me.

LGBTQ Direct Service Benefits

81	I prefer to donate to nonprofits that provide services to LGBT people.
83	I make a difference when I volunteer for people in need.

84	Nonprofit organizations that provide direct services to LGBT individuals are not important.
86	I wish there were more nonprofits that provided direct services to LGBT people.
87	It is important for me to support nonprofits that directly benefit LGBT individuals.
89	Nonprofits that give direct services to LGBT people are unimportant to me.
90	I value nonprofit organizations that do impactful work through direct service to LGBT people.

LGBTQ Community Uplift

91	It is important to uplift the LGBT community.
92	It is unimportant to me whether LGBT communities progress.
93	As an LGBT person, it is my responsibility to support my community.
95	I want my donations to lift up LGBT groups.
98	My giving advances LGBT groups.
99	Advancing the LGBT community is unimportant to me.
100	Meeting the needs of the LGBT community is of no consequence to me.

Salient Aspect of LGBTQ Identity

101	My LGBT identity influences the nonprofits to which I give money.
103	How I personally identify is inconsequential when determining my charitable giving.
104	My personal identity is unimportant to my donation decisions.
106	My LGBT identity impacts which nonprofit organizations I chose to support.
108	My LGBT identity has no bearing on my volunteerism.
109	My identity is of no consequence to my giving behaviors.
110	Identifying as LGBT is unrelated to my giving to nonprofits.

Undergraduate Student Experiences

Academic Training

2   Thinking about my time as an undergraduate student, I am disappointed with my academic experience.

7   I am displeased with my academic training at my college/university.

8   Looking back, I feel that I had a positive academic experience as an undergraduate student.

9   I am unhappy with how I was prepared professionally.

New factor

12   When I was a student, my campus was uninviting for people who were LGBT.

15   As an undergraduate, I observed conduct directed towards LGBT people that created an intimidating learning environment.

19   I believe my undergraduate alma mater was hostile for people who were LGBT.

21   I avoided certain places on campus for fear of harassment.

23   LGBT students felt safe on my campus when I was a student.

24   Because I identified as LGBT, I personally experienced exclusionary conduct that interfered with my ability to learn when I was a student.

26   I felt open to disclose my LGBT identity on campus without fear of repercussions.

28   I feared for my physical safety because of my LGBT identity.

Alumni Experiences

New factor

31   I feel marginalized within my institution as an LGBT alumnus/na.

35   When attending alumni events at my alma mater, I feel affirmed as an LGBT person.

36   Alumni relations and development staff at my institution understand the culture of LGBT communities.

37   I feel comfortable sharing my LGBT identity at alumni events.

41   The leadership at my alma mater support LGBT-related issues.

Institutional value

64   The leadership is doing a poor job in improving the academic experience at my alma mater.

67   The value of my degree has improved since I attended as a student.

68   My alma mater leadership is improving the value of my degree.

69   The value of my degree has diminished.

70   My university/college is decreasing in quality.

Philanthropy and Giving

New factor

71	I give to nonprofit organizations that enhance the national climate for LGBT people.
73	I chose to not engage with LGBT political causes.
74	Nonprofit organizations that advocate for LGBT rights are important.
78	I am indifferent about social change for LGBT people.
79	LGBT social change is important to me.
87	It is important for me to support nonprofits that directly benefit LGBT individuals.
89	Nonprofits that give direct services to LGBT people are unimportant to me.
90	I value nonprofit organizations that do impactful work through direct service to LGBT people.
93	As an LGBT person, it is my responsibility to support my community.
95	I want my donations to lift up LGBT groups.
99	Advancing the LGBT community is unimportant to me.
101	My LGBT identity influences the nonprofits to which I give money.
103	How I personally identify is inconsequential when determining my charitable giving.
110	Identifying as LGBT is unrelated to my giving to nonprofits.

Undergraduate Student Experiences

Academic Training

2   Thinking about my time as an undergraduate student, I am disappointed with my academic experience.

7   I am displeased with my academic training at my college/university.

8   Looking back, I feel that I had a positive academic experience as an undergraduate student.

New factor

12   When I was a student, my campus was uninviting for people who were LGBT.

19   I believe my undergraduate alma mater was hostile for people who were LGBT.

23   LGBT students felt safe on my campus when I was a student.

26   I felt open to disclose my LGBT identity on campus without fear of repercussions.

28   I feared for my physical safety because of my LGBT identity.

Alumni Experiences

New factor

31   I feel marginalized within my institution as an LGBT alumnus/na.

35   When attending alumni events at my alma mater, I feel affirmed as an LGBT person.

36   Alumni relations and development staff at my institution understand the culture of LGBT communities.

41   The leadership at my alma mater support LGBT-related issues.

Institutional value

67   The value of my degree has improved since I attended as a student.

69   The value of my degree has diminished.

70   My university/college is decreasing in quality.

Philanthropy and Giving

New factor

71   I give to nonprofit organizations that enhance the national climate for LGBT people.

87   It is important for me to support nonprofits that directly benefit LGBT individuals.

90   I value nonprofit organizations that do impactful work through direct service to LGBT people.

93   As an LGBT person, it is my responsibility to support my community.

95   I want my donations to lift up LGBT groups.

101   My LGBT identity influences the nonprofits to which I give money.

110   Identifying as LGBT is unrelated to my giving to nonprofits.

Appendix R: Factor Definitions Revised from Social Desirability, Construct Validity, and Principal Components Analysis

Undergraduate Student Experiences
- Academic Training – the extent to which an alumnus/na felt prepared academically by their undergraduate experience
- Campus Climate for LGBTQ Students – how welcoming an institution was for LGBTQ people when alumnus/na was an undergraduate student

Alumni Experiences
- Campus Climate for LGBTQ Alumni – how welcoming an institution is currently for LGBTQ people
- Institutional Value – the extent to which an alumnus/na views the worth of his/her/hir undergraduate degree and institution

Philanthropy and Giving
- LGBTQ Motivation for Giving – an alumnus'/alumna's philanthropic support of LGBTQ-related efforts

Appendix S: Item Reduction and Evolution of Factors

	Initial Construction	Expert Reviewers	Construct Validity	PCA/Final
Undergraduate Student Experiences	Satisfaction (10)* 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	Academic Training (7) 1, 2, 4, 6, 7, 8, 9	Academic Training (4) 2, 7, 8, 9	Academic Training (3) 2, 7, 8
	Perception of Campus Climate (10) 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	Perception of Campus Climate for LGTQ Individuals (8) 11, 12, 13, 14, 15, 16, 18, 19	New Factor (8) 12, 15, 19, 21, 23, 24, 26, 28	Campus Climate for LGBTQ Students (5) 12, 19, 23, 26, 28
	Harassment as Student (10) 21, 22, 23, 24, 25, 26, 27, 28, 29, 30	Harassment as LGBTQ Student (7) 21, 23, 24, 25, 26, 28, 30		
Alumni Experiences	Harassment as Alumnus/na (10) 31, 32, 33, 34, 35, 36, 37, 38, 39, 40	Harassment as LGBTQ Alumnus/na (7) 31, 33, 34, 35, 36, 37, 38	New Factor (5) 31, 35, 36, 37, 41	Campus Climate for LGBTQ Alumni (4) 31, 35, 36, 41
	Perceived Support from Leadership (10) 41, 42, 43, 44, 45, 46, 47, 48, 49, 50	Perceived Support from Leadership for LGBTQ Communities (7) 41, 45, 46, 47, 48, 49, 50		
	Trust (10) 51, 52, 53, 54, 55, 56, 57, 58, 59, 60			
	Alumni Satisfaction (10) 61, 62, 63, 64, 65, 66, 67, 78, 79, 70	Institutional Value (7) 63, 64, 65, 67, 68, 69, 70	Institutional Value (5) 64, 67, 68, 69, 70	Institutional Value (3) 67, 69, 70
Philanthropy and Giving	Activism/Important Work (Political and Social Change) (10) 71, 72, 73, 74, 75, 76, 77, 78, 79, 80	LGBTQ Political and Social Change (7) 71, 72, 73, 74, 76, 78, 79	New Factor (14) 71, 73, 73, 78, 79, 87, 89, 90, 93, 95, 99, 101, 103, 110	LGBTQ Motivation for Giving (7) 71, 87, 90, 93, 95, 101, 110
	Altruism/Good Work (Direct Service Benefits) (10) 81, 82, 83, 84, 85, 86, 87, 88, 89, 90	LGBTQ Direct Service Benefits (7) 81, 83, 84, 86, 87, 89, 90		
	Community Uplift (10) 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	LGBTQ Community Uplift (7) 91, 92, 93, 95, 98, 99, 100		
	Salient Aspect of Identity (10) 101, 102, 103, 104, 105, 106, 107, 108, 109, 110	Salient Aspect of LGBTQ Identity (7) 101, 103, 104, 106, 108, 109, 110		

Numbers in parentheses indicate number of items in each respective factor

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