Going Green? Transforming Sorority Sustainability Programs at the University of California, Berkeley

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ABSTRACT

Institutions around the world are rapidly adopting sustainability programs targeted at reducing resource consumption, achieving carbon neutrality, providing sustainable dining and performing environmentally-preferable purchasing. As one of these institutions, the University of California, Berkeley (UCB) has adopted a comprehensive sustainability plan. However, the UCB plan does not consider the sustainability practices of affiliated off-campus housing, such as sororities, fraternities, and Berkeley student cooperatives. To address this gap in UCB's sustainability plan, I studied the barriers and pathways to achieving successful sorority sustainability programs. My research utilized a three-pillar framework for assessing sustainability programs, including institutional, technological, and behavioral components. Of these pillars, my research focused on the institutional and behavioral. I conducted interviews with sustainability program leaders and facility managers to explore the institutional barriers and pathways to achieving sustainability. To understand the behavioral component, I conducted a chapter member sustainability survey that queried members values, practices, and education levels relating to sustainability. I found that the greatest barriers facing sorority sustainability programs are the complex bureaucratic structure of sororities, the low prioritization of sustainability, the low status of sustainability program leaders, and chapter member behavior. To address these issues, I created a comprehensive list of recommendations, including developing sustainability regulations, enforcing mandatory sustainability education and increasing the visibility of the sorority sustainability program. These recommendations can serve as an action plan for future UCB sorority sustainability program leaders. Sustainability is on the radar of the sorority institution, and despite these challenges, UCB is paving the way for the implementation of successful sorority sustainability programs around the nation.

KEYWORDS

Greek system, institutional barriers, behavioral barriers, value-action gap, resource conservation

INTRODUCTION

Universities around the world are adopting sustainability policies, plans and pledges to reduce their environmental impact. Tasked with providing education and accommodation across a range of scales, it is essential that universities integrate sustainability into their daily operations (Alshuwaikhat and Abubakar 2008) and foster a transition to more sustainable practices and lifestyles (Velazquez et al. 2006). The University of California has adopted a comprehensive Sustainable Practices policy that encompasses nine focus areas, including waste reduction and recycling, sustainable food service, environmentally preferable purchasing and sustainable water systems (University of California 2016). Although the University of California Office of the President (UCOP) has produced an integrated approach to achieving sustainability on campuses, the policy does not prioritize helping students transition to sustainable lifestyles in their off-campus lives, highlighting the limits of the programs as a means of creating a sustainable university (University of California 2016).

UCB is responsible for fulfilling the Sustainable Practices policy enacted by UCOP. Similar to the UCOP policy, the UCB campus Sustainability Plan does not focus on facilitating environmentally conscious student behavior off-campus (UC Berkeley 2009). In addition to the University's efforts to achieve sustainability, the Student Environmental Resource Center (SERC) "provides resources for students to actualize their visions of a more equitable, socially just, and resilient future (Student Environmental Resource Center 2015)." SERC's programs include the Green Initiative Fund (TGIF), that provides financing for student's campus sustainability related projects (The Green Initiative Fund 2014), and the student organization green certification program (ASUC Internal Department of Sustainability). In addition to providing these resources, SERC advises over 40 student-led environmental and sustainability organizations, focusing on promoting sustainability through business consulting, community outreach, community building, education, engineering, and more (University of California-Berkeley 2017). Although there are many environmental organizations at UCB, none are solely dedicated to fostering off-campus students sustainability practices. Greening The Greeks (GTG), for example, is an organization that aims to educate, inspire, and provide the tools for sorority and fraternity members to reduce energy and waste, however, GTG does not specify any interest in changing aspects of policy, governance, or institutional structure that may inhibit Greek members from performing basic conservation

practices, such as recycling (University of California-Berkeley Greening the Greeks). GTG only focuses on sorority and fraternity housing, leaving other off campus housing arrangements, such as apartment buildings and student occupied houses, without any support to improve their water, waste, and energy conservation practices. Despite the efforts of SERC, TGIF, and other student environment and sustainability organizations to improve campus sustainability, only minimal efforts have been made to facilitate student sustainability behaviors off-campus.

Off-Campus housing ranges from large apartment complexes to single family homes. At UCB, off campus affiliated housing includes 17 student-run Berkeley Student Cooperative (BSC) owned cooperatives, 31 Interfraternity Council (IFC) recognized fraternity houses and 13 Panhellenic Council (PHC)-recognized sorority houses (Berkeley Student Cooperative, LEAD Center Find a Chapter). With thousands of students living in group housing, organizations like the BSC, IFC, and PHC have a responsibility to systematically integrate sustainability practices. Currently, there is very little research and data available on the environmental performance of fraternities and sororities (Amin et al. 2008). Even at UCB, where every IFC and PHC chapter has a Director of Sustainability, amazon boxes still stack endlessly on sorority doorsteps and empty beer cans can be found anywhere but the recycling at fraternities. Despite the efforts from Directors of Sustainability, it is clear that sustainability programs are largely ineffective. This may be due to rapid student turnover, an absence of reporting requirements, a lack of institutional support and other factors. However, we lack substantive research the challenges that Greek sustainability programs face and how they can be overcome to effectively decrease resource consumption in chapter houses.

To address this point I focused on sorority sustainability programs at UCB. My central research question was: How can sustainability programs in UCB sororities be reformed to more effectively develop and implement sustainability goals regarding water, waste, and energy? To answer this question, I considered the following sub-questions: What barriers and pathways do sustainability program leaders identify in their efforts to improve their chapter's water, waste and energy conservation practices? What are general chapter members values, practices, and education levels relating to sustainability? How can individuals and chapters be motivated reduce their waste, water, and energy consumption? As a result of my research, I aimed to produce a set of recommendations that can be utilized by future leaders to reform sustainability programs in sororities at UCB.

Background

The Greek community at UCB comprises 3,400 members housed in over 60 national and international sororities and fraternities (LEAD Center About CalGreeks). Sororities have social and philanthropic missions, and are value-based organizations focused on leadership, scholarship, friendship and service. I focused on sorority chapters recognized by the UCB Panhellenic council and with chapter housing facilities (Table 1). In order to be founded, sororities are required to be chartered by their associated university. In this relationship at UCB, the university does not have any authority to set policies regarding how chapters operate. Chapter facilities are independent organizations.

Table 1. UCB Panhellenic Council recognized chapter facility and national organization status

Chapter's Recognized by UCB Panhellenic Council	Has Chapter Housing Facility	Part of a National Organization
Alpha Chi Omega	Yes	Yes
Alpha Delta Pi	Yes	Yes
Alpha Phi	Yes	Yes
Chi Omega	Yes	Yes
Delta Delta Delta [Tri Delta]	Yes	Yes
Delta Gamma	Yes	Yes
Delta Sigma	Yes	No
Gamma Phi Beta	Yes	Yes
Kappa Alpha Theta	Yes	Yes
Kappa Kappa Gamma	Yes	Yes
Omega Pi Beta	No	Yes
Pi Beta Phi	Yes	Yes
Sigma Kappa	Yes	Yes
Sigma Psi Zeta	No	Yes
Zeta Tau Alpha	Yes	Yes

Overview of sorority institutional structure

The role of the Panhellenic Council and chapter Nationals

Nationally, the Panhellenic Conference advocates and supports the advancement of the sorority experience nationwide (National Panhellenic Conference). At the university level, Panhellenic councils facilitate relationships between sororities, enforce national and local Panhellenic bylaws, oversee fall formal recruitment, and provide programming resources and support. The role of a sorority's national organization is to unify chapters across the nation through a set of standards and bylaws that pertain to the chapter's mission, values, organizational structure, facilities management, recruitment procedures and programming requirements. As regulating entities, the Panhellenic council and national organizations have the ability to create policies that affect the sustainability of chapters. The associate chapter, Delta Sigma, does not have a national organization to report to and therefore, has more autonomy to set its own bylaws. Internally, sorority chapters are organized and managed similarly to each other. The similarity potentially benefits sorority sustainability programs because sustainability solutions can be replicated across chapters.

Chapter staff organization

There are many parties involved in running a sorority chapter. Most chapter houses at UCB are owned by a local housing corporation board. The boards are comprised of organizational active status alumni. Boards meet on a monthly or bimonthly basis and act as landlords, overseeing the general running of the house, collecting rent and utilities from the chapter, hiring staff members and making decisions about which housing projects to fund. UCB chapters that do not have local housing boards include Zeta Tau Alpha, that has a private landlord, and Alpha Chi Omega, that has a national housing board. Staff members at a sorority house typically include a house director (also known as a housemother) facilities manager, kitchen staff including a chef and assistants, a house cleaner and weekend support staff. The specific duties of each of these staff members varies between chapters. Generally, housemothers are responsible for personal property within the facility. Their duties include managing other staff, running the payroll, ordering supplies and

communicating with the housing boards. The maintenance staff is responsible for the real property of a facility, including, electric, plumbing, water, alarm systems and more. The chef is responsible for ordering kitchen supplies, creating menus, preparing food and overseeing assistants. Assistants are responsible for washing dishes, dining room cleaning and helping with food preparation. Facility cleaners empty waste receptacles, vacuum, dust and clean restrooms. Weekend support staff wash dishes and tidy some common spaces on the weekends when staff is off.

Chapter student organization

Chapter members are organized into an executive board, officers and general members (Figure 1). Executive board members are elected, and board positions typically include the board President and Vice-Presidents (VP) of risk, finance, marketing, education and programming, recruitment, and community development. In addition to these elected positions there are appointed positions that support executive members and perform specify tasks. One such position is the Director of Sustainability. Finally, a chapter has general members that are responsible for paying dues and recruiting new members. The many levels of authority in sorority chapters and complicated governance structure makes setting and achieving sustainability goals a long and difficult process.

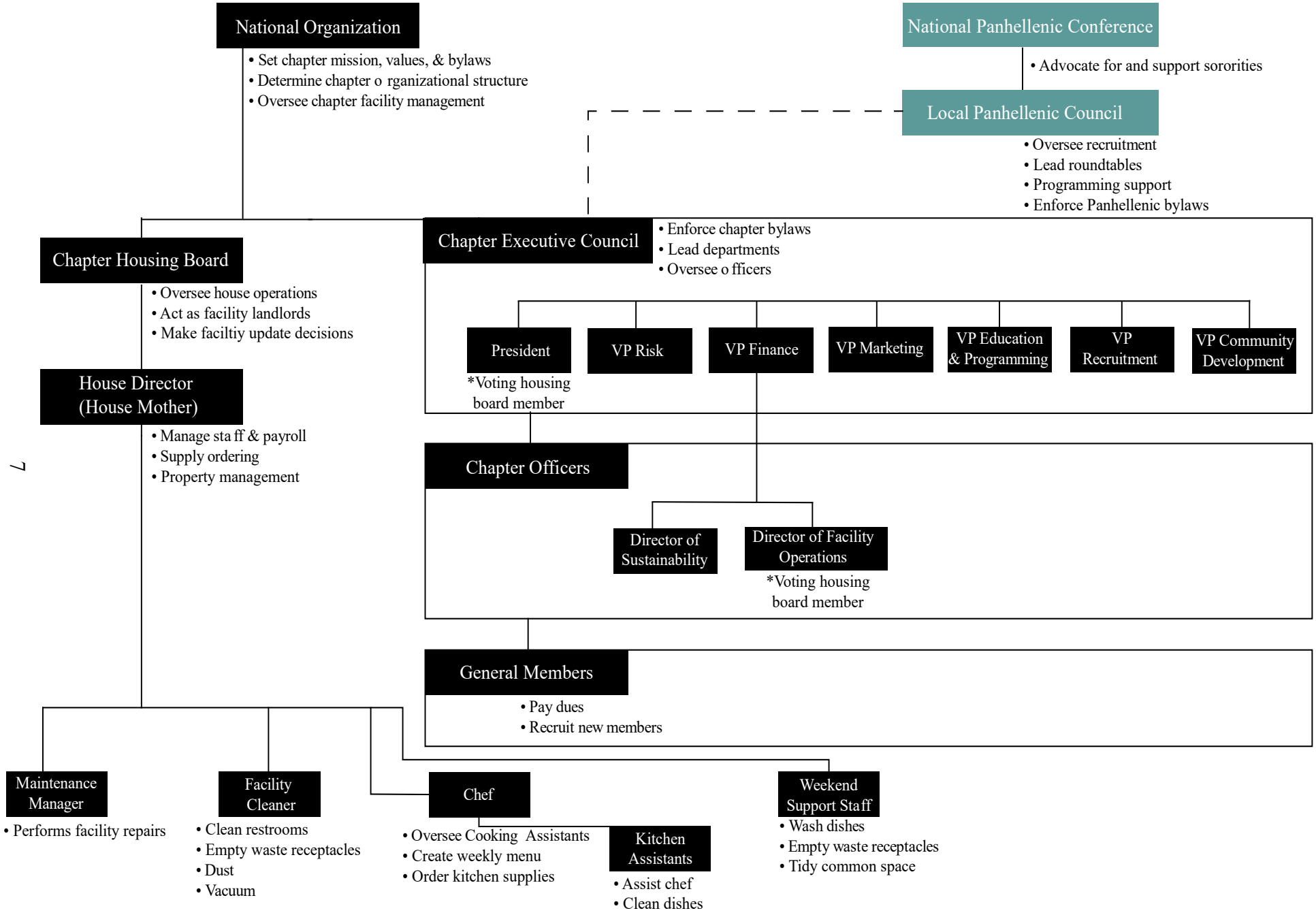


Figure 1. Sorority institutional structure. Chapter level organization can vary slightly. This is just one possible arrangement and description of positions.

History of sustainability programs in sororities

In the years leading up to the Panhellenic-wide adoption of sustainability programs in 2015, many chapters already had a Sustainability Chair position. The 2014 Panhellenic Council recognized that sustainability was an emerging value of the community and, as a result, adopted bylaws that created a Panhellenic VP of Sustainability and required every chapter to have a Director of Sustainability. In 2015 the bylaws went into effect. Since, the sustainability positions are mandated on a local level, the Directors of Sustainability receive no programming support or official position descriptions from their national organizations. However, the duties of the Panhellenic VP of Sustainability are very detailed in the Panhellenic bylaws (Table 2).

Table 2. Panhellenic VP of Sustainability duties. Adapted from UCB Panhellenic Bylaws (University of California, Berkeley Panhellenic Association).

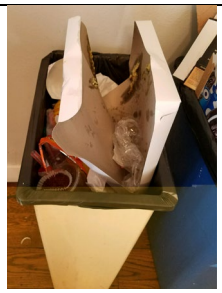
Category	Description
1. Sustainability Roundtables	Chair a committee that meets at least once per month made up of all chapter Sustainability Directors.
2. Policy Enforcement	Ensure that all housed chapters are in compliance with CalGreeks, university and municipal sustainability mandates.
3. Increase General Sustainability	Work to increase general sustainability within the community.
4. Sustainability Education	Organize sustainability-oriented education and programming for the community.
5. Event Greening	Collaborate with other Executive Council officers to make their events green-certified by UCB standards.
6. Greening the Greeks Liaison	Partner with the Greening the Greeks organization and serve as a liaison between their leadership and the Panhellenic Executive Council.

Current state of sorority sustainability programs

UCB sororities have adopted a range of technology and infrastructure to reduce their waste, water, and energy consumption. The most commonly adopted technologies include composting and recycling systems, low-flow shower heads and toilets, motion sensor lights and LED light-

bulbs. The extent to which these technologies are adopted and used varies between chapters. Despite the availability of resource conservation technology, chapter members continue to abuse the systems. Lights are mindlessly left on, showers last 20 minutes and plastic makes it into every waste bin but the recycling (Table 3).

Table 3. Depiction of current unsustainable practices. Photos were taken from three of the thirteen chapters. Issues depicted here are common across all chapters.

 Compostable and recyclables stuffed in a trash can	 Wasted food from uneaten late plates
 Daily amount of delivered packages	 Cardboard boxes piled outside a chapter house

Relevant models for sorority housing

UCB sorority chapter housing facilities are just one type of group living accommodation found on college campuses. Other, comparable, forms of group living include student cooperatives, university dorms, and fraternity housing. Student cooperatives and university dorms at UCB have sustainability programs. Since sororities are responsible for feeding their residents, Cal Dining facilities can also serve as a model for sustainable food service. Additionally, according to the 2017 Greek Advisor, there are many other campus Greek communities that have sustainability programs, including at UCLA and the University of Washington. These various

institutions face similar challenges to establishing successful sustainability programs. They especially face similar behavioral challenges because they all house college students, who can be difficult to motivate to perform environmentally conscious behaviors (Mcnamara 2017).

Overview of relevant sustainability programs

Relevant sustainability programs include the University of California Sustainable Practices Policy (Table 4), UCB Residential Sustainability Program (Table 5) and the Cal Dining Sustainability Practices (Table 6). These sustainability programs may serve as a model for a successful sorority sustainability program.

Table 4. UC Sustainable Practices Policy not reflected in RSP or Cal Dining description. Adapted from UC Sustainable Practices policy (University of California 2017)

Topic	Description
Clean energy	Reduce consumption of non-renewable energy
Environmentally preferable purchasing*	Maximize its procurement of environmentally preferable products and services
Reporting	Annual report to Regents

*Designation for those products whose manufacture, use, and disposal results in relatively less environmental harm than comparable products.

Table 5. UCB Residential Sustainability Program (RSP) description. Adapted from the UCB RSP website (UC Berkeley 2018).

Mission Statement	"Educate and inform residents about the importance of a sustainable lifestyle and to make lasting proactive changes in the environments that we live in"	
Committee	**Description**	**Current Projects**
Communication	Publishes and distributes *The Greenie* (RSP's newsletter)	Increase social media/ online prescience. Host events
Education	Develop and implement outreach materials	Sustainability fair
Advocacy	Advocate for sustainability in residence halls	Golden Bear Orientation sustainability unit
Goal	**Description**	
Residential Waste Goal	Achieve a 95% landfill diversion rate by 2020	
Water Conservation Goal	Reduce water use by 10% below 2008 levels, and reduce water use by 20% by 2020	
Sustainable Purchases	Comply with UC's environmentally-preferable purchasing policies and procedures	
Energy Challenge	For Earth Week 2018 RSP will report and compare energy use for each residence hall.	

Table 6. Cal Dining sustainability practices. Adapted from the Cal Dining sustainability website (Cal Dining).

Practice	**Description**
Sustainable food	"Focus on plant-forward cooking, prioritizing ingredients that are locally grown, humanely-treated and environmentally and socially responsible"
Waste reduction	"Reduce both solid waste and food waste in [their] operations. Follow food waste hierarchy."
Green buildings	Research, pilot and implement new sustainability programs

Methodology

I have identified three pillars of sustainability programs, institutional, technological, and behavioral, that will serve as a framework for me to study sustainability programs in sororities (Table 7). These pillars do not exist in isolation. Rather, they interact to produce various levels of sustainability within organizations. For each pillar, I described reasons for adoption of sustainability practices, barriers to adoption and pathways to overcome barriers.

Table 7. Three pillars of sustainability programs.

Pillar	Description
Institutional	Administrative decision-making systems
Technological	Infrastructure (e.g. low-flow shower heads, solar panels)
Behavioral	Individual practices

Institutional pillar

Institutional considerations

Many institutions, including businesses, universities, and governments, are adopting sustainability practices and policies (Kiron et al. 2012, Mcnamara 2017), seeking competitive advantage and driven by stakeholder and regulatory pressure (Devereaux Jennings and Zandbergen 1995, Caprar and Neville 2012). In many cases sustainability is seen as a competitive necessity (Caprar and Neville 2012). When universities adopt sustainability curricula and programs, potential students may perceive them as more desirable. Similarly, in the case of sororities, successful sustainability programs can be marketed during recruitment as another reason for potential new members to join one chapter over another. Stakeholders, that can influence organizations sustainability practices and policies (Rusinko 2010), in the sororities at UCB include the university, the Panhellenic Council, chapter members, chapter nationals, Greening the Greeks and other campus clubs that promote sustainability.

Regulatory pressure is prominent in promoting the implementation of sustainability plans, as shown in the Campus Environment Report, over 60 percent of campuses' presidents indicated that government regulations influenced their sustainability plan (Mclntosh et al. n.d.). The sororities at UCB are also subject to government regulations, especially from the City of Berkeley. In addition, local chapters are strictly regulated by their national organizations. The Panhellenic Council loosely governs local chapters. Sororities In my research are motivated to improve their sustainability programs by competitive recruitment and marketing incentives, stakeholder interest and regulatory pressure. Yet, barriers to the adoption and success of sustainability programs within institutions counter these driving factors.

Institutional barriers

In many cases, the difficulty of defining sustainability, lack of time, low prioritization, and role specialization impede the adoption and success of sustainability programs within institutions (Shriberg 2002, Starik and Rands 2016, Mcnamara 2017). The challenge of defining sustainability creates an institutional barrier to adopting sustainability programs because without a clear definition, it is impossible to measure progress (Shriberg 2002). Lack of staff time as a barrier is related to low prioritization of sustainability within organizations. Without constant reinforcement from upper management that sustainability is a high priority, staffs often focus their time on economic performance or administrative duties (Mclntosh et al. n.d.). One study found that businesses only rank sustainability eighth on their priority list although 70% of those businesses identified sustainability as important (Kiron et al. 2012). This indicates that there is a value-action gap plaguing sustainability commitments in businesses and other institutions (Gilbert et al. 2017). Role specialization is an obstacle to successful sustainability programs because achieving sustainability requires that all people in all positions are dedicated to performing their jobs in the most sustainable way. If there is a specialized sustainability position it is easy for those with other functions to ignore sustainability as part of their duties. Specialization also makes communication between positions less frequent, limiting opportunities to convey the importance of sustainability (Starik and Rands 2016) . Sororities are subject to the same obstacles that other institutions face in adopting and achieving sustainability practices and policies. My research will evaluate which barriers are most prominent in the sorority institution.

Overcoming institutional barriers

Although challenges to adopting sustainability exist, it is possible to overcome these hurdles. Setting clear and measurable goals, increasing accountability, decreasing power distance, establishing environmental councils, and incorporating sustainability into mission statements are institutional measures that can be taken to improve sustainability programs. While it can be difficult to define sustainability, setting clear and measurable goals is essential to having a successful sustainability program (Mcnamara 2017). As mentioned, it is common for businesses and other organizations to state that they care about sustainability, however sustainability still remains a low priority for many leaders. Having clear and measurable goals holds individuals more accountable for the commitments they make and therefore produces stronger sustainability programs (Epstein and Buhovac 2010, Gilbert et al. 2017). Decreasing power distance in organizations can help overcome role specialization. When staff are more well-connected, sustainability efforts of leaders can be more readily communicated and pursued throughout all levels of an institution (Caprar and Neville 2012). Holding conversations about sustainability through environmental councils signals the importance of sustainability within organizations. Environmental councils also provide a space where members of organizations can think about how to overcome specific challenges they face (Mclntosh et al. n.d.). Similarly, mission statements that include commitments to sustainability signal to all members of an organization, and to those outside of the organization, that sustainability is a priority. Sending this signal aids in creating an organizational culture that values sustainability (Epstein and Buhovac 2010). Sororities are employing some of these mechanisms to overcome barriers to achieving sustainability. For example, the PHC VP of Sustainability holds bimonthly environmental councils, called roundtables, with all chapter Directors of Sustainability.

Technological pillar

Technological considerations

Institutional adoption of environmentally favorable technologies varies—every industry has unique processing and operating mechanisms—and is essential to increasing the environmental

performance of an organization (Kemp 1994). Most firms adopt environmental technology due to stakeholder pressures (Biondi et al. 2002). The competitive advantage associated with adopting sustainable technologies also plays a critical role in motivating firms to adopt them (Shrivastava 1995). Additionally, as innovation leaders, firms have a duty to create and implement new environmental technologies (Kemp 1994, Devereaux Jennings and Zandbergen 1995). Despite an institutional duty to lead technological innovation, motivations to increase environmental performance through technological advancement face challenges.

Technological barriers

The range of difficulties institutions face varies as much as the institutions themselves (Shrivastava 1995). Long development times and high start-up costs are often a barrier to implementing environmentally preferable technologies (Kemp 1994). This barrier is relevant to the adoption of solar panels in sororities, for instance. Lack of financial resources is the most often cited reason for not adopting new sustainable technologies (Biondi et al. 2002, Mcnamara 2017). Without sufficient institutional motivations to forge traditional pressure to prioritize short-term earnings, it is easier for institutions not to adopt sustainable technologies (Epstein and Buhovac 2010). Traditional pressures that need to be overcome for sororities to pursue sustainability include the high value of chapter aesthetics and status. The barriers of high time and information costs associated with researching, implementing and managing new technologies (Biondi et al. 2002) impact sororities because, as full-time students, Directors of Sustainability cannot spend unlimited time on researching, promoting and implementing new technology.

Overcoming technological barriers

Creating a culture of sustainability, through the aforementioned institutional mechanisms, makes it easier for members to make decisions that prioritize the adoption of sustainable technologies despite high information and fiscal costs (Biondi et al. 2002). Networking can reduce information and management costs and increase each firms knowledge base (Kemp 1994, Biondi et al. 2002). In addition to networking, policy incentives are crucial to encouraging firms to adopt environmental technology (Epstein and Buhovac 2010). The best policies are flexible enough to

allow firms to innovate and implement technologies that are most effective for their operations (Biondi et al. 2002). Overcoming barriers to adopting environmentally conscious technologies is an essential component to building a successful sustainability programs. However, technology alone is not be enough to overcome the environmental challenges that institutions face (Kemp 1994). Therefore, it is necessary to understand how institutional structures influence the adoption of technologies and how members of an institution utilize those technologies. In my research, I did not focus on detailing what technologies chapters have adopted, since doing so was a central goal of the current VP of Sustainability. Instead I examined the institutional barriers that Directors of Sustainability face when proposing the implementation of new water, waste, and energy saving technology to House Directors and Housing Boards.

Behavioral pillar

Behavioral considerations

Common determinants of sustainability related behavior include environmental values, environmental attitude, demographic characteristics, and environmental education. Someone with deep environmental values and a positive environmental attitude is more likely to act consciously as a result of believing that their actions are interconnected with their environment (Barr 2006 and Chan 1996). Demographic factors may also correlate with sustainability practices. For example, one study found that gender identification was a significant characteristic in determining students recycling behaviors (Chan 1996). Another study found that students from a university in Hawaii were more likely to state that they value the environment and partake in environmentally conscious behavior than students from an Alabama university. These results illustrate that place of origin and residence can contribute to sustainability practices (Emanuel and Adams 2011). Without buy in from members, institutional and technological efforts to increase sustainability can quickly become ineffective (Amin et al. 2008). It is particularly important for institutional leaders to promote sustainability practices, because doing so makes it easier for lower management to feel confident making tradeoffs supporting sustainability initiatives (Epstein and Buhovac 2010).

Behavioral barriers

Individuals face many obstacles when choosing to adopt sustainability practices. Individuals that do not believe that their actions have a significant effect on the natural world are a barrier because they often believe that the responsibility of making changes falls on governing bodies, not on them making behavioral changes (Chan 1996 and Chaplin and Wyton n.d.) Another barrier is anonymity because when individuals do not believe that they can be held accountable for their behaviors it is easier for them to act unsustainably. A lack of community contributes to anonymity (Young et al. 2017). Additionally, time is frequently cited as a reason why individuals do not practice sustainable behaviors. Often acting sustainably requires forethought and determination, whereas unsustainable behaviors are often more convenient. Therefore, sustainable behaviors are seen as inconvenient and time intensive, deterring people from making better environmental decisions (Ando and Gosselin 2005). Many people who say they value the environment do not routinely take measures to reduce their environmental impact. This environmental value-action gap is a thoroughly studied phenomenon that has clear implications for the study of sustainability practices in the context of sororities at UCB.

Overcoming behavioral barriers

Several motivating techniques can be used to overcome impediments to sustainable behavior, including building a sense of community, environmental education, and the promotion of environmental values. Building a sense of community involvement can be useful in motivating members to act sustainably by decreasing their sense of anonymity (Barr 2006). To overcome the value-action gap, extensive innovative techniques can be implemented at strategic points where value-action gaps are most likely to occur. For example, a common value-action gap occurs with recycling. If inconvenient location of recycling receptacles is a common reason for lack of participation, then adding more receptacle can close the action gap (Chung and Leung 2007). Education can also help close the value-action gap because education helps people understand how and why they need to act more sustainably (Dahlstrand and Biel 1997). In addition, informing people about how their participation compares with those around them creates social norms that may motivate people to improve their behaviors (StopWaste 2008). To motivate members to

perform sustainable behaviors in an institutional setting, it is necessary for the core values of the institution to truly reflect principals of resource conservation (Denton-borhaug 2013).

Institutional, technological, and behavioral interactions

Reviewing the literature makes it clear that organizational sustainability programs are firmly grounded in institutional, technological and behavioral factors. To understand success in any one of these pillars, it is necessary to consider the interactions between them. A sustainability program cannot succeed without all three pillars interacting and supporting each other effectively. Since it is a priority of the current VP of Sustainability of the UCB Panhellenic Council to document the technological pillar of sorority sustainability programs, my research focused on the institutional and behavioral components of sorority sustainability programs and their interactions. To research institutional and behavioral considerations, my study design sought to identify and assess motivations, barriers and pathways to adoption of sustainable practices at UCB sororities.

METHODS

I used interview and survey methods to collect data. I conducted interviews, addressing the institutional component of my research to identify barriers and pathways that sustainability leaders experience when trying to implement their goals. I distributed a Chapter Member Sustainability Survey addressing the behavioral component of my research to identify the community's values, practices and education levels relating to sustainability. In this section I detail these data collection methods and analysis techniques as they relate to my research sub-questions.

Semi-structured interviews

To document the barriers and pathways identified by Greek sustainability leaders, I conducted 21 semi-structured interviews with sustainability leaders (Table 8) and facility managers (Table 9). I asked a series of questions about their sustainability goals, priorities, process, barriers and pathways to achieving their goals. Sustainability leaders and advisor interviews and

surveys were collected during October and November of 2017 (Appendix A; Appendix C). Facility manager interviews were conducted in December of 2017 (See Appendix B for full facility manager question guide). I recorded audio files of the interviews using Apple Quicktime and took hand written notes during each interview. To analyze my interview results I used the audio recordings and my notes to identify common themes and extract relevant quotes.

Table 8. Interviewed Greek advisor and Sustainability Leaders.

Position	**Organization**
Greek Advisor	UCB Leadership, Engagement, Advising, & Development Center
2017 VP of Sustainability	UCB Panhellenic Council
Spring 2017 President	Greening The Greeks
Fall 2017 Co-Presidents	Greening The Greeks
Director of Sustainability	Alpha Phi
Director of Sustainability	Chi Omega
Director of Sustainability	Delta Delta Delta [Tri Delta]
Director of Sustainability	Delta Gamma
Director of Sustainability	Delta Sigma
Director of Sustainability	Gamma Phi Beta
Director of Sustainability	Kappa Alpha Theta
Director of Sustainability	Kappa Kappa Gamma
Director of Sustainability	Phi Beta Phi
Director of Sustainability	Sigma Kappa
Director of Sustainability	Zeta Tau Alpha

Table 9. Interviewed Facility Managers.

Position	Organization
House Corporation Board President	Alpha Phi
House Corporation Board President	Gamma Phi Beta
House Director	Alpha Phi
House Director	Chi Omega
House Director	Delta Gamma
House Director	Gamma Phi Beta
Maintenance Manager	Alpha Phi, Kappa Kappa Gamma, Sigma Kappa, Chi Omega

Chapter member sustainability survey

To gauge community member's values, practices, and education levels relating to sustainability I conducted an online Chapter Member Sustainability Survey. The purpose of this survey was to understand the behavioral component to sorority sustainability programs and get insight into the community's attitude toward sustainability. The survey was conducted using the Qualtrics online survey tool. To distribute and promote the surveys I worked with each chapter's Panhellenic delegate and Director of Sustainability. The survey was comprised of seven sections: behavior, values, environmental knowledge, personal and chapter motivations, willingness to change behavior, sustainability program goals and insights and demographics (See Appendix D for full survey).

Survey data analysis

To analyze my survey results I first generated a sustainability score for each respondent. The total score was based on five sub-scores built from their responses to questions about their behaviors, values, environmental knowledge, willingness to change behavior and support of sustainability program goals (Table 10). After generating the total sustainability score and sub-

scores, I visualized relationships between the total sustainability score, sub-scores and demographic information through descriptive statistical analysis in excel. I also utilized internal data visualization reporting in Qualtrics to review my survey results. To visualize the top individual and chapter motivation techniques I created histograms of the top and bottom ranking motivations, displaying how many respondants ranked the technique as one (highest motivating) to 5 or 6 (lowest motivating).

Table 10. Sustainability score calculation technique.

Sub-Score Category	Question Number	# of Statements	Question Type	Scale Type & Point Values	Min Score	Max Score
Behavior	1	6	5-point scale	Never (1) – Always (5)	6	30
Values	2	5	5-point scale	Strongly Disagree (1) – Strongly Agree (5)	5	25
Environmental Knowledge	3	5	5-point scale	Strongly Disagree (1) – Strongly Agree (5)	5	25
Willingness to Change Behavior	6	1	Multiple choice	None (1) – 20 Minutes (5)	1	5
Willingness to Change Behavior	7	4	5-point scale	Definitely not (1) – Definitely yes (5)	4	20
Support sustainability program goals	12	1	5-point scale	Strongly disagree (1) – Strongly agree (5)	1	5
Support sustainability program goals	13	5	5-point scale	Very unimportant (1) – Very important (5)	5	25
Total sustainability score	N/A	N/A	N/A	N/A	27	135

RESULTS

Sustainability leaders and Greek advisor interview findings

Director of Sustainability interview findings

The Directors of Sustainability identified the complex bureaucratic sorority structure, chapter member behavior and low status for their position as top barriers to fulfilling their goals (Table

11). In addition to these self-identified barriers, ten of the eleven Directors of Sustainability set unmeasurable and vague goals, indicating effective goal setting as a challenge. The most commonly mentioned goals involved reducing food waste, getting members to sort their waste correctly and turn off the lights, and phasing out single-use disposable products. Other goals included installing solar panels and changing house culture to be more sustainably-minded (Table 11). The most commonly mentioned chapter member behavioral issues were incorrect waste sorting and failure to turn off lights. In regard to the Director of Sustainability position, four chapters allocate a sustainability budget, zero Directors of Sustainability are recognized by their national organizations and only one Director got a thorough transition into their position.

The Directors of Sustainability identified sustainability roundtables, supportive house directors and housing corporation boards as pathways to achieving their goals (Table 12). All Directors of Sustainability said that the sustainability roundtables were a valuable resource for them. Roundtable meetings provide a platform for Directors to discuss their ideas, the challenges they face and potential solutions. Directors of Sustainability report a wide range of house director and housing corporation board support for sustainability initiatives. In some chapters, Directors of Sustainability perceived chapter housing corporation boards and House Directors as extremely supportive of proposed sustainability initiatives. However, in other chapters, chapter housing corporation boards and House Directors were perceived as skeptical of and reluctant to implement sustainability ideas. None of the Directors of Sustainability identified, UCB as a useful resource for them in their positions. At most, some of them got ideas for projects from living and eating in the dorms.

Table 11. Common Director of Sustainability Goals

Education	**Infrastructure**	**Waste**
Change chapter culture around sustainability	Implement Light Sensors	Eliminate single-use disposable products
Food waste implications	Get Solar Panels	Implement hand dryers
General awareness of environmental issues	Get Shower Timers	Decrease waste sorting contamination

Table 12. Director of Sustainability identified barriers and pathways

Barriers	Pathways
Bureaucratic structure of sorority structure	Sustainability roundtables
Chapter member behavior	Supportive house directors
Low status for Director of Sustainability position	Supportive housing corporation boards

Panhellenic VP of Sustainability interview findings

The VP of Sustainability identified the low status of sustainability positions, chapter member behavior, the bureaucratic sorority structure and lack of support from UCB as barriers to implementing her initiatives (Table 13). In addition, the VP of Sustainability discussed how her position was not well defined and that the first part of her term was spent figuring out what she wanted to do. She became frustrated that the Directors of Sustainability that she lead did not carry a lot of weight in the decision-making processes of their chapters. The VP of Sustainability also expressed frustration about not being able to "rely on the student body and people's desire to be green" (2017 VP of Sustainability). For example, she could not count on the Directors of Sustainability to follow through on initiatives that she put in place. The VP also talked about the challenge of the bureaucratic sorority system when trying to pass bylaws and implement changes to the recruitment process. Finally, the VP of Sustainability felt a lack of support from UCB resources such as the ASUC Green Certification Program and TGIF. Although she adamantly attempted to request green certifications, the ASUC program failed to assist in the development or execution of audits. Despite her failure to pass sustainability bylaws, the VP of Sustainability still viewed regulation as a pathway to achieving sustainability. To overcome the lack of support from UCB and Directors of Sustainability, she began to seek professional sustainability consultants (Table 13). Finally, the VP of Sustainability discussed the goals that she held in her position (Figure 2). Similar to the Directors of Sustainability, many of the VP of Sustainability's goals were not clearly defined.

Table 13. Panhellenic VP of Sustainability identified barriers and pathways

Barriers	Pathways
Low status for sustainability positions	Panhellenic Sustainability Bylaws
Chapter member behavior	Hire professional sustainability consultants
Bureaucratic structure of sorority structure	
Lack of support from UCB	

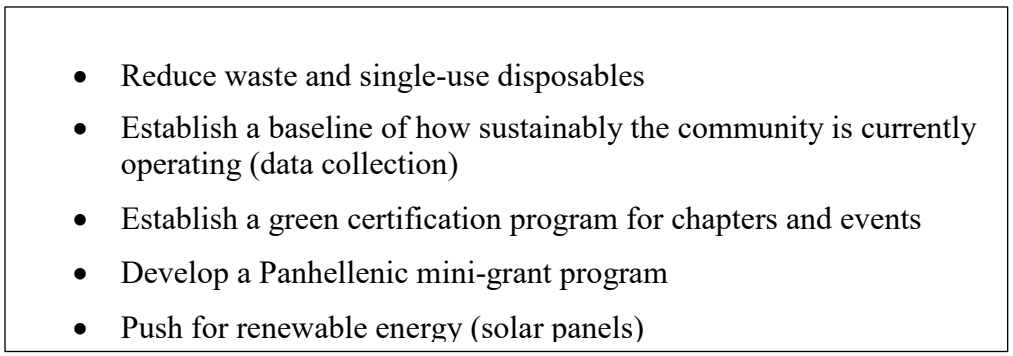


Figure 2. 2017 VP of Sustainability goals.

Greek Advisor interview findings

The Greek Advisor identified the bureaucracy of the sorority institution, low prioritization of sustainability, low status for sustainability positions, and budget allocation as barrier to achieving sustainability in sororities (Table 15). The Greek Advisor emphasized that the bureaucracy of the sorority systems complicates and slows the creation of rules and regulations by which chapters to operate, however she was hopeful that regulations could be achieved and serve as a pathway to a successful sustainability program. She discussed how sustainability's low status on her priority list. She is more focused on risk management issues in the community and facilitating good relationships between members of the Panhellenic council. The Greek Advisor identified the challenge of having a young sustainability program by referencing the lack of authority given to Directors of Sustainability and the lack of structure for the Panhellenic VP of Sustainability position. A final identified barrier involved budget allocation among the Panhellenic

board. For instance, thousands of dollars are allotted to the VP of Programming to spend on a Giants baseball night, that does not better or develop the community in a meaningful way.

One pathway that the Greek Advisor discussed was committed leadership. She has overseen three Panhellenic VP's of Sustainability and noted a huge difference in accomplishments based on their involvement and commitment to bettering the sustainability program (Table 15). Although the Greek Advisor is not actively pursuing sustainability goals, she would like to see a sustainable recruitment, establishment of a green certification program and a Panhellenic mini-grant program (Box 2).

Table 15. Greek Advisor identified barriers and pathways

Barriers	**Pathways**
Bureaucracy of structure of sorority institution	Panhellenic Sustainability Bylaws
Low prioritization of sustainability	Committed leaders
Low status for sustainability positions	
Budget allocation	

- Have a sustainable recruitment
- Establish a green certification program for chapters and events
- Develop a Panhellenic mini-grant program

Figure 3. Greek advisor sustainability goals.

Greening the Greeks club presidents interview findings

Since the inception of the sorority sustainability program, Greening the Greeks club has not been very active in the community. It has occasionally held Greek-wide sustainability meetings and organized clean up events. However, its lack of consistent leadership has hampered its ability to make any substantial impact on sorority sustainability programs. Currently, the club is defunct.

- Inactive and ineffective at greening the Greek community
- Does not act as a resource for the Directors of Sustainability or VP of Sustainability

Figure 4. Greening the Greeks interview conclusion.

Facility managers interview findings

Housing Corporation Board Presidents

The top priorities of the Alpha Phi and Gamma Phi Beta Housing Corporation Board Presidents were fiscally responsible house management and welcoming, safe house atmosphere. They also prioritize aesthetic appeal of the houses in order to attract new members and please parents. In addition to these self-identified priorities, both Housing Corporation board presidents spoke adamantly about focusing on running the chapter facilities in line with member wishes (Box 4). The top barriers they identified to the success of sustainability efforts were chapter member behavior and a lack of knowledge about environmental issues and misunderstanding about how to correctly engage with sustainability technology, like recycling systems. The Gamma Phi Beta Housing Corporation Board president also identified frequent resident turnover as a barrier to the success of sustainability efforts. To overcome these barriers, Gamma Phi Beta has implemented house rules that require members to correctly sort their waste. Members can even incur a fine if they do not appropriately participate in the recycling program. The Alpha Phi Housing Corporation Board President stated that sustainability "is something that needs to be bottom-up" indicating that house rules, created by members, are a likely pathway to improving the sustainability program (Table 16). Gamma Phi Beta and Alpha Phi Housing Corporation board presidents offered conflicting opinions about the potential effectiveness of Panhellenic Sustainability Bylaws. The Gamma Phi Beta Housing Corporation Board President viewed the bylaws as a very effective way to push chapters towards sustainably. When hearing about the bylaws proposal in 2017, the Gamma Phi Beta Housing Corporation Board President did not question them. Instead she just began operating the facility as if the bylaws had passed. In doing so she eliminated all single-use-disposables from the kitchenette and purchased reusable items instead.

When asked about how they consider sustainability when making facility updates, the Housing Corporation Board residents both discussed their diligence in doing projects the right way and purchasing durable products as a mechanism for sustainability. The Gamma Phi Beta Housing Corporation Board President told me that they recently invested extra money in a project to make sure that the construction waste was recycled, instead of landfilled. When asked if they thought that increased communication with other Housing Corporation Board presidents about sustainability topics would encourage the community to change, the Alpha Phi Housing Corporation Board President stated that communication would not help. The Gamma Phi Beta Housing Corporation Board President responded enthusiastically by stating that she would be willing to talk with anyone about the efforts that they are making at Gamma Phi Beta. Overall, the Housing Corporation Board presidents that I have interviewed have positive attitudes about sustainability. Although their proactiveness in implementing changes varies, both presidents were willing to do whatever the chapter wants, as long as it is thought out and fiscally responsible. They were, however, less likely to issue directives to their staff to operate sustainably on a daily basis.

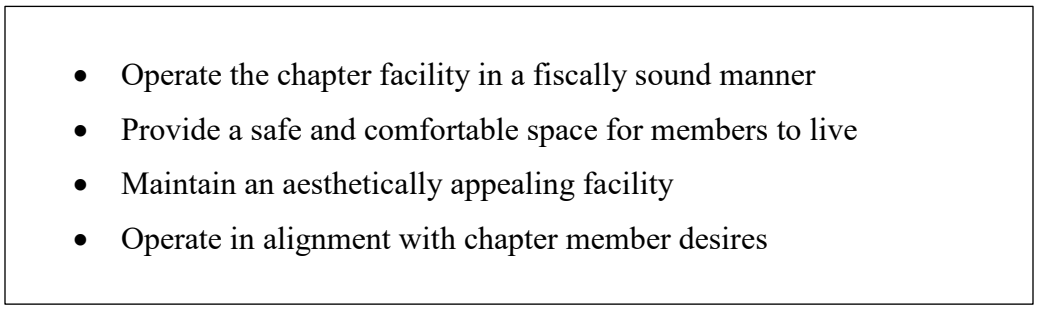


Figure 5. Housing Corporation Board President Priorities

Table 16. Barriers and pathways identified by Housing Corporation Board presidents.

Barriers	**Pathways**
Member behavior	House rules
Lack of knowledge about environmental issues	Member initiated efforts
Lack of knowledge about how to correctly utilize sustainability technologies (recycling)	

House Director interview findings

The top priority of the House Directors interviewed was member safety, and all House Directors were adamant about their intention to operate the facility in a way that aligns with the members desires. They highlighted member behavior as the top barriers to achieving sustainability in their chapters. The Chi Omega and Gamma Phi Beta House Directors were the only ones who had implemented self-directed sustainability initiatives. The Chi Omega House Director educated every house member about recycling as they moved in because she observed that women were not correctly sorting waste. The Gamma Phi Beta House Director held a waste sorting challenge where members had to generate less than a trash can of waste per day for ten days. When they achieved this, they received a barbecue lunch prize. As a result of their efforts, both House Director's succeeded in reducing their facilities' garbage service, increasing recycling, and ultimately saving money. To support recycling at Alpha Phi, the House Director drives to the El Cerrito recycling facility to recycle soft plastics, batteries and electronics. Although this effort was not self-directed, it indicates a willingness to support sustainability efforts. Finally, the Delta Gamma House Director demonstrated an eagerness to support her chapter Director of Sustainability in implementing compost, purchasing organic chicken and getting compostable late plates (dinner plates for women who missed meal time). The Chi Omega and Gamma Phi Beta House Director's acknowledged their unique position to positively impact the sustainability of the facility, indicating the House Director position as a potential pathway to the success of sorority sustainability programs. Finally, all House Director's were interested in more communication with other chapter House Director's to learn about their operating practices.

- Member safety is a priority
- Willingness to implement changes desired by members
- Chapter member behavior and environmental education are barriers to achieving sustainability
- Critical position to have supporting sustainability programs
- Interest in learning about other chapters operating practices

Figure 6. Summary of House Director interview findings

Maintenance manager

Timothy Smith (Tim) has been working as a maintenance manager in Sororities at UCB since 2009. He does the majority of his work at Alpha Phi, Kappa Kappa Gamma and Sigma Kappa and had done some work for Chi Omega. In the past three or four years he has noticed a big push for compost and recycling. For water conservation, there has been some effort made at these chapters to implement low flow appliances. For electricity and gas there are "no teeth" in efforts to monitor or reduce consumption, although chapters are implementing efficient lighting as old bulbs burn out. Smith identified chapter member behavior as a barrier to the reduction of energy consumption, estimating that a third to a fourth of chapter electricity use is phantom pull (energy pull from appliances being plugged in, even when not in use, such as chargers and printers). The use of power strips, that can be shut off to stop pulling electricity, could address issue, but that would require a behavior change. Smith identified education as the tool to get members to change their behavior. Working with multiple Housing Corporation Boards, Smith contended that when it comes to sustainability the board's hearts are in the right place but they do not push through directives to really make change. Overall, the greatest barriers Smith identified to the overall success of sorority sustainability programs were resident turnover rates and the old age of chapters themselves. Additionally, Smith indicates that aesthetics is very important to Housing Corporation Boards and he has to keep that in mind when proposing projects.

1. Boards make little effort to monitor water and energy consumption
2. Main barriers are resident turnover rate and the old age of the facility
3. Member behavior is a barrier to reducing energy consumption
4. Continued education a tool to overcome the behavioral barrier
5. Aesthetics is top priority for HCBs

Figure 7. Summary of maintenance manager interview findings

Chapter member sustainability survey findings

A total of 344 UCB Panhellenic chapter members completed my Chapter Member Sustainability Survey, representing about 19 percent of the total Panhellenic population. I received responses from women in all 13 chapters, however, the number of responses per chapter ranged from 1 to 56 (Figure 2). College enrollment, year at Cal, Chapter, and location of a respondent's home of origin did not correlate with sustainability scores.

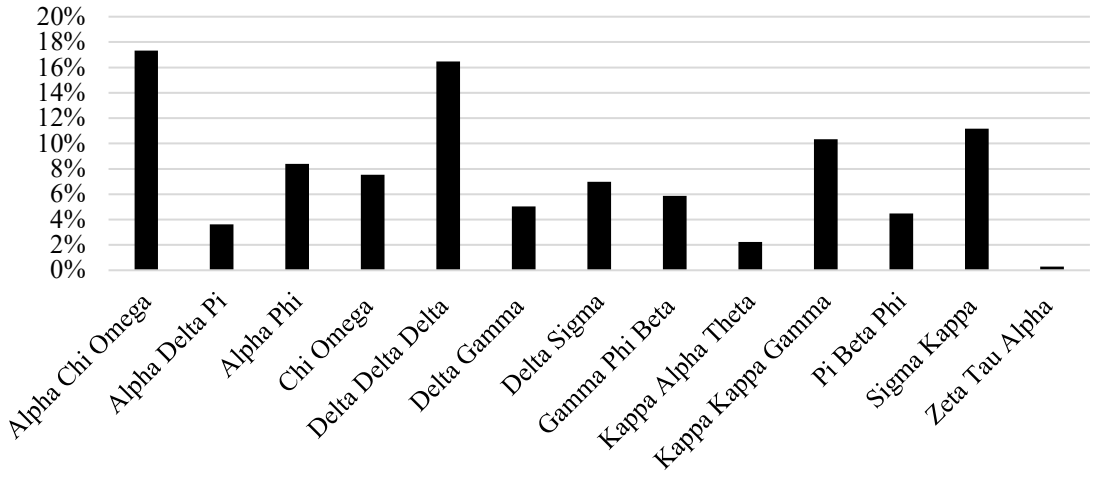


Figure 8. Percent of total survey respondents by chapter.

Sustainability score analysis findings

Subtracting respondent's values score yielded negative values for the majority of respondents, indicating the prevalence of a value-action gap in the community (Figure 9). Plotting respondent's willingness to change their behavior scores versus their understanding of environmental issues score, I found a positive relationship (Figure 10).

Motivations ranking analysis findings

The top ranking individual motivation techniques were disseminating knowledge about the environmental impact of behaviors actions and peers reminding members about unconscious resource conservation behavior (Figure 11). The bottom ranking individual motivation technique was announcements at chapter meetings (Figure 12). The top-ranking chapter motivating

techniques were a Panhellenic wide sustainability competition and sustainable chapter operation standards from chapter nationals (Figure 11). The lowest ranking chapter motivation was an active Greek wide sustainability club (Figure 12).

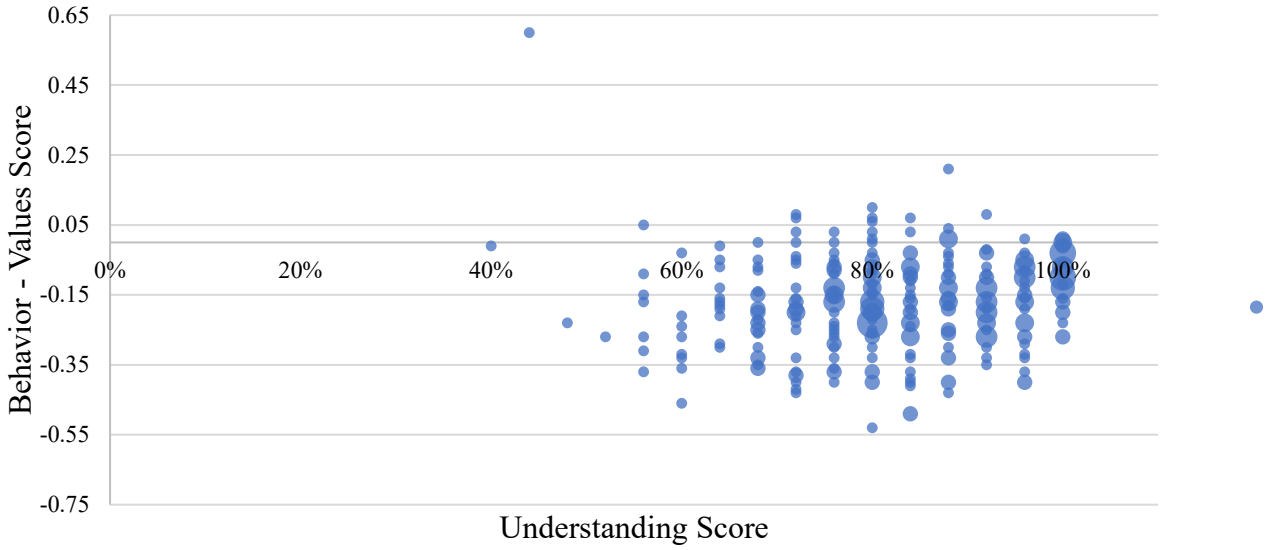


Figure 9. Value/action gap vs. environmental understanding.

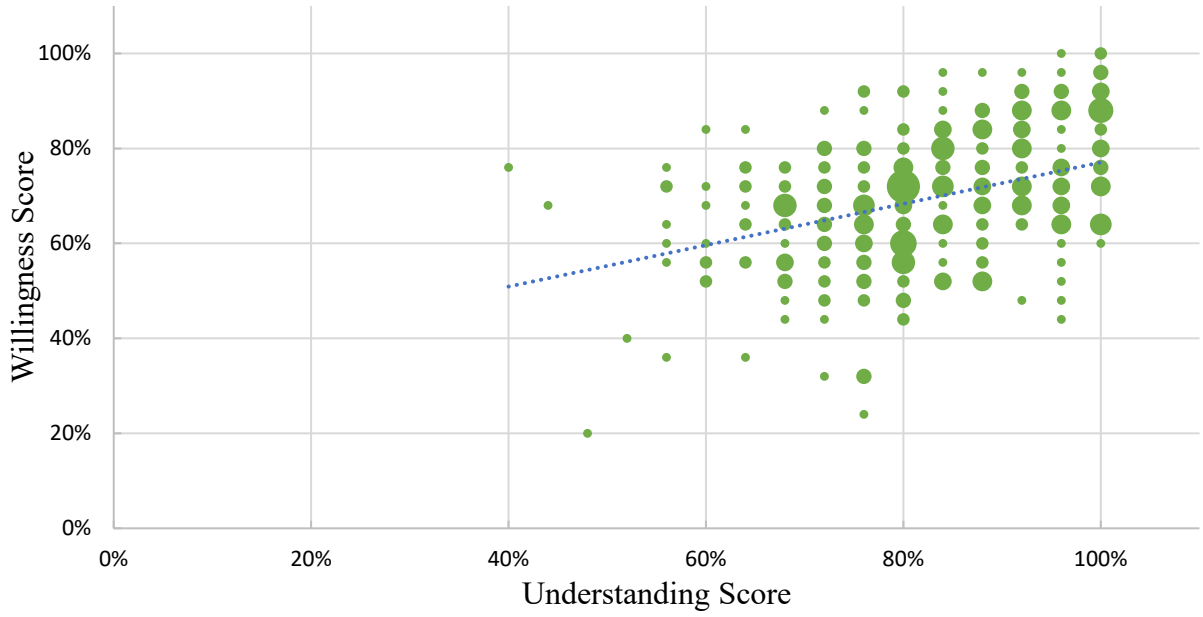


Figure 10. Willingness to change behavior vs. environmental understanding.

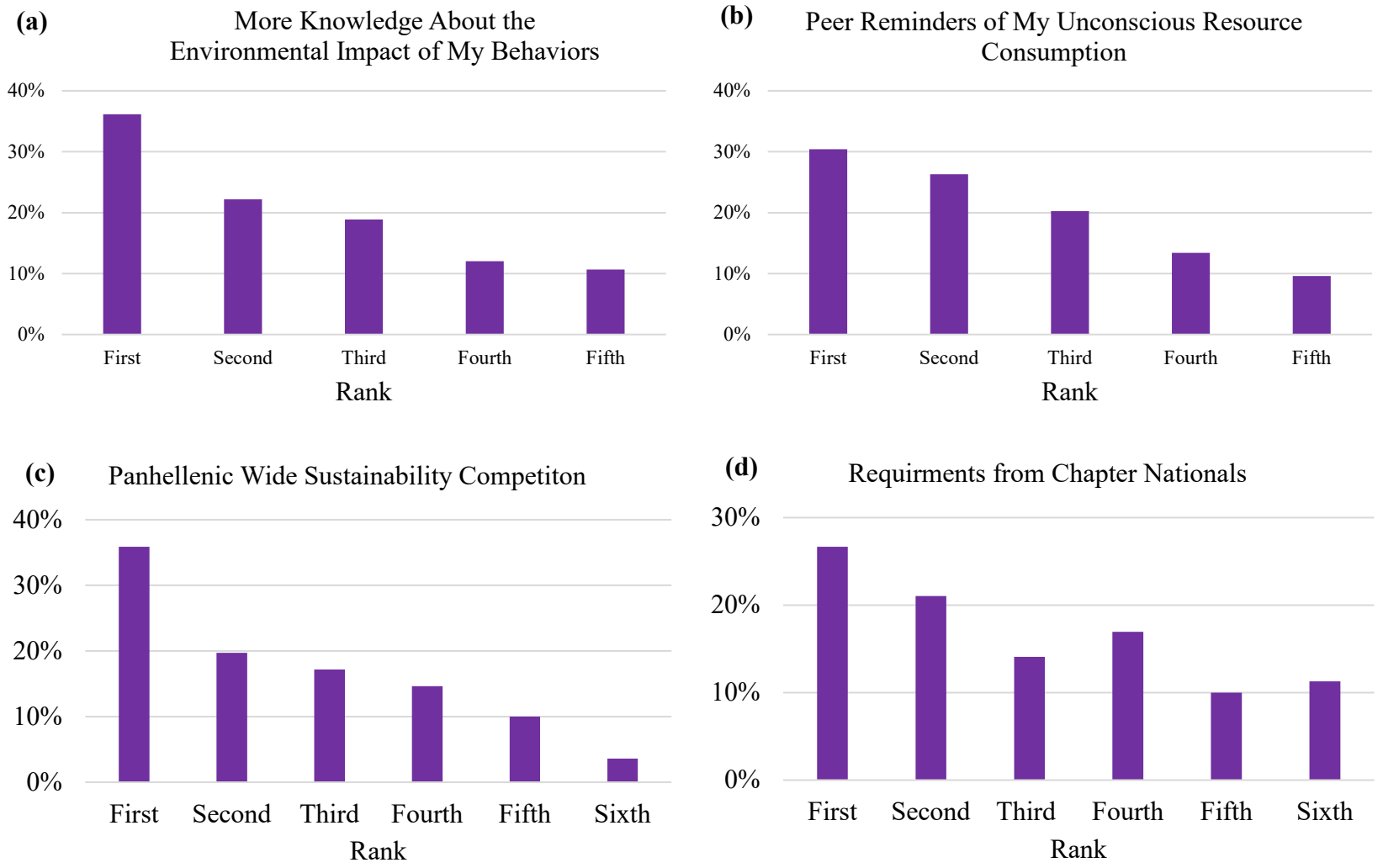


Figure 11. Top ranked personal and chapter motivations. (a) and (b) represent the top ranked personal motivations to improve individual resource conservation behavior. (c) and (d) represent the top ranked chapter motivations to improve resource conservation practices. Ranking is from first (most motivating) to fifth or sixth (least motivating).

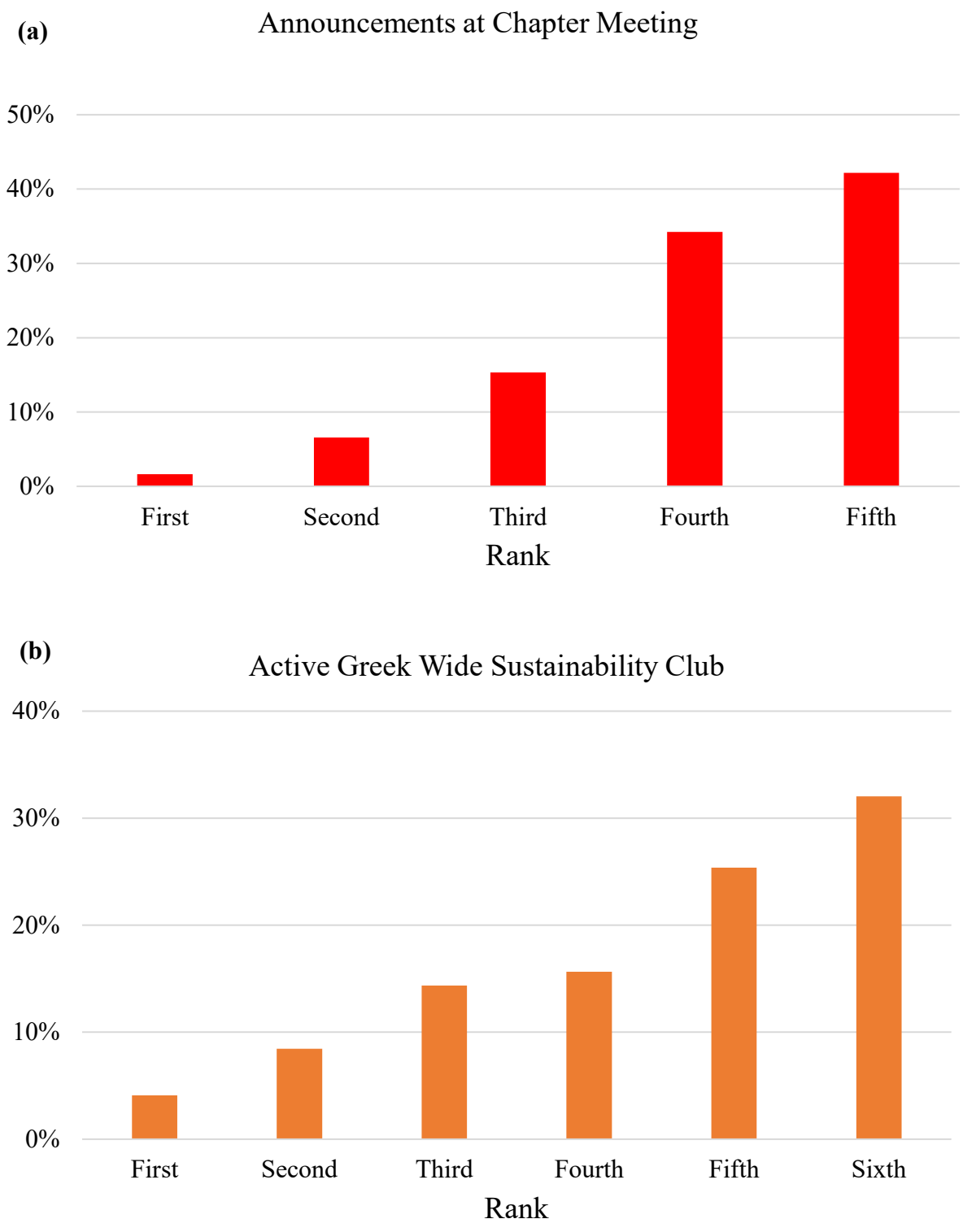


Figure 12. Bottom ranked personal and chapter motivations. (a) is the bottom ranked personal motivations to improve individual resource conservation behavior. (b) is the bottom ranked chapter motivation to improve resource conservation practices. Ranking is from first (most motivating) to fifth or sixth (least motivating).

Free response questions findings

- Cost and budget allocation
- Chapter member behavior
- Lack of willingness to act sustainably
- Apathy toward environmental issues
- Inconvenience of acting sustainably
- Waste generation
- Lack of environmental knowledge
- Lack of understanding of how to sort waste

Figure 13. Most common respondent identified challenges to achieving sustainability in sororities. *Summarized from question 15 responses.*

- Go zero waste
- More member education (presentations, information at meetings)
- Incentives
- Policy (bylaws, rules)

Figure 14. Respondent identified ways sororities could improve their sustainability programs.

Results synthesis

- 78% of respondents strongly agree or agree that sororities should operate as sustainably as possible even if it costs more
- 73% of respondents are willing to eat 5 or more meatless meals per week
- 71% of respondents have never been involved in an environment or sustainability related organization
- 88% of survey respondents are willing to spend 5 or more minutes of extra time during chapter meeting discussing house related

Figure 15. Other relevant survey findings

Table 17. Aggregate interview findings

Barriers	Pathways
Bureaucracy of structure of sorority institution	Support from chapter House Directors
Low prioritization of sustainability	Support from chapter housing corporation boards
Low status for sustainability positions	Sustainability roundtables
Chapter member behavior	Sustainability requirements/ regulations

DISCUSSION

I found that the institutional structure of sororities hampers the success of their sustainability programs by requiring initiatives to go through multiple bureaucratic hurdles. Within the complex bureaucratic system, the Panhellenic VP of Sustainability and chapter Directors of Sustainability face the low prioritization of sustainability and a low status of sustainability-oriented positions as the major institutional barriers to resource availability and goal achievement. To overcome the bureaucracy, I suggest utilizing sustainability roundtables and pressuring nationals, housing boards, and the Panhellenic Council for top-down policy. To address the low prioritization and status of sustainability I recommend setting and tracking goals, creating bottom-up policies through chapter bylaws and house rules and, uniting House Directors in a mission to achieve sustainability. Fulfilling these recommendations will lead the community to acknowledge sustainability as a priority and subsequently allot more power and responsibility to those who hold sustainability-oriented positions.

Chapter member behavior is another major barrier to the success of sorority sustainability programs. Getting members on board with sustainability initiatives is a key concern of Housing Boards and House Directors when deciding whether or not to implement new programs. Directors of Sustainability and survey respondents also identify chapter member behavior as a major barrier to the success of sustainability initiatives. Accustomed to current practices, changing individual's mindsets and behaviors around sustainability will be crucial to increasing the success of sorority sustainability programs. To overcome the chapter member behavioral challenge I suggest increasing the visibility of the sustainability program and increasing environmental education.

Despite UCB's efforts to achieve sustainability on campus, their absence of attention to Panhellenic sororities is evident. Although Directors of Sustainability were positively influenced by sustainability programs they saw in the dorms and dining halls, they do not feel that UCB has helped them in their positions in any way. To address this finding, I recommend that UCB support sorority sustainability program set, track, and implement goals. In developing my recommendations, I draw upon sustainability programs and practices on other college campuses.

Institutional barrier 1: complex bureaucratic structure of sororities

The decision-making process in sororities is complex. Directors of Sustainability and the Panhellenic VP of Sustainability struggle to operate within this complex structure in order to implement policy changes or physically update their chapters (Figure 1). The 2017 Greek Advisor, discussed her hopes for a more sustainable recruitment, but noted that setting sustainability standards would require all Panhellenic chapters to agree. The Greek advisor states that the sustainable recruitment effort "speaks to the hierarchical nature of Panhellenic; sometimes it's like turning the Titanic." Discussing the Spring 2017 attempt at passing Panhellenic sustainability bylaws, the Greek Advisor stated that "part of the problem with sustainability is that there are so many folks to go through to get the approval." The strong orientation of an organization toward internal process results in a rigid bureaucracy that is highly resistant to change (Linnenluecke and Griffiths 2010). The sorority bureaucracy falls victim to this rigidness and has resulted in a lack of Panhellenic wide sustainability policies, regulations, and goals.

In addition to the bureaucratic structure creating challenges on a Panhellenic level, individual chapter systems can be difficult to navigate. The Alpha Phi Director of Sustainability, for instance, stated that the "biggest barrier is a large bureaucratic system where we have to deal with a lot of people with different opinions, concerns, and priorities that slows the process down and makes our goals harder to accomplish." The bureaucratic structure of Kappa Kappa Gamma created challenges for their Director of Sustainability because their National organization does not allow the Sustainability Chair to sit on chapter council, making it difficult for them to attend relevant meetings. Directors who did not explicitly describe the bureaucracy as a barrier achieved their goals by circumventing procedural guidelines. For example, talking directly with the Chef about ordering practices versus going through the House Director. Based on the failure of the

sustainability bylaws initiative and experience of the Directors of Sustainability, it is clear that the bureaucratic structure of sororities has slowed down the progress of the development of sustainability policies on a community wide scale and implementing sustainability initiatives on the chapter level.

Institutional barrier 2: low prioritization of sustainability

The three main institutional sorority priorities are risk management (member safety and wellbeing), recruiting new members and maintaining a high community perception, while sustainability is a relatively low priority, making it difficult for sustainability leaders to attain financial and advisory resources to achieve their goals. The Greek Advisor stated that "sustainability is not very high on my priority list." Instead, she is concerned with "managing risk in the community or managing relationships within the Panhellenic Council." The Alpha Phi Housing Corporation Board President stated, "There are three top priorities, and [sustainability] is not one of them." Her top priorities werre"keeping the house running in a fiscally sound manner, and then the safety of members, and finally our charge from internationals is that we have the nicest house on campus." Constant reinforcement from higher authorities is needed for sustainability to be maintained as a priority (Mclntosh et al. n.d.). Currently, enforcement from higher authorities is lacking in the Panhellenic community and as a result sustainability has remained low on the priority list. The low prioritization of sustainability is further conveyed by my findings that only four of the eleven Directors of Sustainability that I interviewed had designated sustainability budgets.

The lack of designated sustainability funds makes it difficult for Directors of Sustainability to make changes in their chapters. Although some of them can get funding from other budgets within their chapters, doing so is often a long and difficult process. In the Panhellenic setting, the VP of Sustainability is allotted only $300 dollars for her entire year term, which pales in comparison to the $14,100 VP of Programming and $5,900 VP of Scholarship budgets (Appendix E). The overall lack of internal funding for sustainability projects is a symptom of the community's low prioritization of sustainability. My findings align with the literature that shows that a common barrier to the advancement of sustainability programs is the low prioritization of sustainability (Shriberg 2002, Starik and Rands 2016, Mcnamara 2017).

Institutional barrier 3: low status of sustainability-oriented leadership positions

The Sorority Sustainability Program began in 2015 with the creation of the Panhellenic level VP of Sustainability position and the chapter level Director of Sustainability position. Since the inception of the program Panhellenic and chapter sustainability leaders have struggled to gain the respect of their peers. Committed leaders are crucial to the success of sustainability programs and their status in the community should reflect their important role (Hoover and Harder 2015). However, a lack of status for sustainability-oriented leadership positions is conveyed by the young age of the Directors of Sustainability, vague position descriptions, and a lack of chapter national recognition of the Director of Sustainability position. The lack of experience of the Directors of Sustainability indicates that chapters view the position as entry-level. For most, the Director of Sustainability position is the first position they will hold in their chapters, suggesting that these women do not understand the basic institutional structure of the chapter. As Freshmen, many of them do not live in the chapter houses that they are trying to update. The Kappa Kappa Gamma Director of Sustainability stated that "I [was] a freshman and it was intimidating to be making a change in a house that I was not living in." Another explanation for the lack of status of the Director of Sustainability position is that historically, those who run for the position do it as an easy way to get officer points, that help women compete, in a point based system, for general living spots and specific rooms within the chapter house. Therefore, they put little or no effort into actually making changes in their chapters.

One reason that Directors of Sustainability have been able to do the bare minimum in their positions is because their job descriptions are very loosely defined by their chapters. Ten of the eleven Directors of Sustainability indicated that they did not have any expectations in their positions. In fact, according to the Delta Sigma Director, "sustainability has always been a little bit more up in the air." No chapters require Directors of Sustainability to create goals, track progress or hold educational events. In addition, there is no regulation or acknowledgment of the Director of Sustainability position by chapter nationals. Therefore, Directors of Sustainability do not receive the programming support that most other chapter positions get. Despite their predecessor's low regard for the Director of Sustainability position, many of the 2017 Directors were determined to be the ones to change that perception in their chapters.

Sorority chapters and the Panhellenic Council perform many functions that have environmental impacts, such as hosting events and ordering apparel. Without high status for the Director of Sustainability positions, it is rare that other officers consult with sustainability leaders when making decisions. The lack of communication between positions is found in the literature to be a barrier to successful sustainability programs (Shriberg 2002, Starik and Rands 2016, Mcnamara 2017). Overall, a higher status for Sustainability leadership positions is needed to increase the effectiveness of the Sustainability Program.

Institutional Solution 1: overcoming complex bureaucratic structure

Sustainability Roundtables

At sustainability roundtables, the Directors of Sustainability from each chapter join for a meeting led by the Panhellenic VP of Sustainability. These roundtables serve as a platform for the VP of Sustainability to check in about what each Director is doing in their chapters, what is working for them, and what challenges they are facing. Being able to compare the progress of sustainability programs on a university level is crucial,and translates to the importance of comparing progress in sororities sustainability programs (Shriberg 2002). All eleven interviewed Directors of Sustainability described the Roundtables as very beneficial. The Delta Sigma Director stated that, although her house is behind some chapters, "it is really useful because those houses make it work, so it is possible to make it work," and that she "enjoy[s] talking and thinking about what goals that we can all have in our chapters." The Delta Sigma Director of Sustainability experience is an example of the power of mimicry forces in propelling the adoption of sustainability practices (Devereaux Jennings & Zandbergen 1995). Although Directors of Sustainability identified the roundtables as beneficial to their positions, they do not occur very frequently. Only one roundtable occurred during the Fall 2017 semester. This was a result of the VP of Sustainability becoming frustrated with Directors lack of attendance and commitment to the meetings. In spring 2018 there were more sustainability roundtables, however only about fifty percent of chapters were represented at the meetings. To make sustainability roundtables more effective, I recommend the following.

A. Enforce attendance at Roundtables. Although there are not many requirements of the Directors of Sustainability, they are, in fact, required to attend the Sustainability Roundtables. To increase attendance at these roundtables, the VP of Sustainability should contact the chapter Presidents of Directors who are not in attendance. Although Sustainability may not be a priority for chapter presidents, they are accountable to the Panhellenic Council. Enforcement through chapter presidents will increase the accountability of Directors of Sustainability, and therefore increase their attendance. Accountability through effective leadership is a critical component to successful sustainability programs (Epstein and Buhovac 2010). Through collaborative problem solving, having more Directors in attendance will be benefit each chapter's sustainability program because it will increase the amount of ideas to which the directors are exposed (Pahl-Wostl et al. 2008). More Directors in attendance will also be beneficial for the VP of Sustainability to gauge they can focus their efforts to best help the community.

B. Educate Directors of Sustainability about sorority bureaucracy. A presentation from the VP of Sustainability about how sororities operate can empower Directors to overcome barriers of personal inexperience with institutional structures. The presentation could include details about typical roles of executive boards, house directors, housing boards, chefs, and the role of Panhellenic, giving Directors a better idea about how to implement changes in their chapters and the wider community. Although every chapter operates slightly differently, their overall structures are the same. In addition to talking about sorority structure, the presentation could give tips about how to circumvent typical processes to accomplish goals faster.

Pressure nationals, housing boards, and the Panhellenic Council for top-down policy

A. Increase communication with the chapter housing board. Each semester, the Director of Sustainability should share their goals with the Chapter Housing board. Additionally, they should attend or send sustainability representatives to House Board Meetings to advocate for the consideration of sustainability in proposed facility updates. In addition, they should advocate for their board to support sustainability policies. In the Spring of 2017, the Panhellenic VP of Sustainability attempted to pass sustainability bylaws. However, Housing Corporation Boards rejected them claiming that they were an overstep of Panhellenic power. As a result, they were

quickly shot down by chapter Housing Corporation Boards. Increased pressure from Directors of Sustainability and chapter members could have made it more likely for housing boards to pass the bylaws. The effort of increasing communication with the housing board will create more connection between the board and the director of sustainability, and therefore result in better environment to pursue sustainability efforts (Caprar and Neville 2012). Since the sorority institution operates under a rigid bureaucratic structure, precise and data-based communication are best (Linnenluecke and Griffiths 2010). In doing these things, Directors can make sure that it is clear to the board that the chapter is concerned about sustainability.

B. Establishing standards of excellence. Despite the fact that the 2017 Sustainability Bylaws were rejected, some chapters proceeded to operate under their stipulations. As a result, those chapters quickly made impactful strides toward greening their chapter operations. Sustainability regulations are necessary to establish sustainability as the norm within an institution (Devereaux Jennings & Zandbergen 1995). Bylaws are an essential form of regulation for the institutionalization of sustainability in the Panhellenic community and if adopted will increase the longevity and effectiveness of efforts to achieve sustainability (Creighton 1998) The rapid improvement of chapters operating by the sustainability bylaws indicated that a top-down sustainability policy would be effective at achieving sustainability in sororities. However, passing Panhellenic sustainability bylaws is unlikely. Pursuing a Panhellenic sustainability pledge or standards of excellence is more likely and would be a good first step towards regulation.

C. Pressure chapter nationals to consider sustainability policies. Developing sustainability policy on a national level is unlikely, however, yet top level institutional commitment is necessary to achieving sustainability (Creighton 1998). To facilitate this, national organizations should know that chapters at UCB are thinking about sustainability and would like to see policies and programming support. Therefore, every semester, the Director of Sustainability should contact their national advisor and let them know what their sustainability goals are and that they would like sustainability to be addressed at a national level. Having national regulations would be the most effective way to get chapters to operate more sustainably.

Institutional Solution 2: Overcoming low prioritization and status of sustainability

Implementing policy is unlikely on a Panhellenic and National level. However, it may be possible to implement changes to individual chapter bylaws that will aid in the development of sustainability programs. House rules and chapter bylaws are developed by chapter members, therefore incorporating sustainability language into these documents can send a signal to all members that the chapter values sustainability as a priority and everyone is expected to participate. A chapter sustainability pledge is another option for furthering the sustainability program, especially if chapters are reluctant to implement rules.

Goal setting and tracking

A. Establish Panhellenic Wide Sustainability Goals. The community will benefit from a common goal/goals to rally behind. Striving to achieve zero waste is a good starting point for people to engage with sustainability and would be the best first goal to set in the Greek community (Dahle and Neumayer 2001). Especially, because no chapters are doing a perfect job at sorting their waste. There is also a clear behavioral element of waste sorting, so setting this goal would require women to take an active role in participating effectively. Establishing goals will also necessitate the establishment of data collection and tracking systems. Data should be collected with intended purpose and in light of clear goals (Creighton 1998). Although data tracking is difficult, it is necessary to understand the progress of sorority sustainability programs.

B. Develop individual chapter sustainability goals. In addition to participating in a community wide goal, it is important that each chapter set their own goals that are more tailored to their current challenges. Although it may be difficult to set goals, it is critical (Mcnamara 2017). To make goal-setting easier, I suggest that chapters utilize UCB sustainability goals that are relevant to their operations.

Create bottom-up policies through chapter bylaws and house rules

A. Define the Director of Sustainability position in chapter bylaws. The current Directors of Sustainability should work with their chapter Bylaws committee to develop the Director of Sustainability position description. Defining the Director of Sustainability position will keep leaders accountable and committed, which is essential to the success of sustainability programs (Creighton 1998, Hoover Harder 2015). Position descriptions should become more thorough and detailed, specifying requirements for holding events, giving presentations and data collection. The Panhellenic VP of Sustainability should work with Directors of Sustainability to develop and standardize the position descriptions.

B. Increase sustainability budgets. Chapters should allot a designated sustainability budget. This would signal a level of respect for the position. Additionally, the Panhellenic VP of Sustainability budget should be significantly increased.

C. Update House Rules to Reflect Waste Sorting, Light Use and Water Use Expectations. At most chapter houses, house rules include safety procedures and descriptions of how to properly use chapter facilities. At Gamma Phi Beta, the house rules state that members are subject to a fine if they do not sort your waste properly. Although the fine has not yet been enforced, the existence of this house rule signifies that sorting waste is extremely important to facilities managers. Gamma Phi Beta is the only chapter that has implemented sustainability practices into their house rules. More chapters need to incorporate sustainability practices into their house rules in order to signify the importance of individual participation and accountability (Young et al. 2017). House rules are created and enforced by chapter members, therefore, incorporating sustainability policy on this level is a bottom-up mechanism for change (Creighton 1998) that can serve as effective means of achieving sustainability.

Utilize the power of House Directors

A. Hold a semesterly house director sustainability event. Chapter housing corporation boards hold the most decision-making power regarding facility operations. However, the House Directors

strongly influence board decisions. Since housing corporation board members are not often local, the House Director is the most accessible facility manager to chapter members. With their permanent staff status, accessibility and influence on housing board decisions, gaining support of House Directors needs to be a priority for Directors of Sustainability (Epstein and Buhovac 2010). Gaining their support as advocates for sustainability can increase the longevity of and effectiveness of sustainability initiatives.

Therefore, I recommend that each semester Directors of Sustainability and House Directors meet to discuss goals and assess the effectiveness about sustainability initiatives in the community, as a form of social learning (Pahl-Wostl et al. 2008) that may allow identified solutions to be disseminated throughout the community (Devereaux Jennings and Zandbergen 1995). A house director and sustainability director event will further the sense of community within Panhellenic around sustainability and help build interpersonal relationships and networks. Collaboration creates a shared sense of ownership over solutions (Hoover and Harder 2015), and can bring sustainability into the realm of house directors concerns, signaling its importance (Mclntosh et al. n.d.). Getting the house directors on board with sustainability is an essential step to achieving sustainability in sororities at UCB.

Behavioral barrier 1: Facility Managers Behavioral Concerns

The Alpha Phi Chapter Housing Board President and House Director indicated that their top concern when adding sustainability programs was whether members will actually use systems correctly. Alpha Phi's House Director stated that her "issue with sustainability as it relates to this house is that the girls don't practice it regularly, so I am constantly pulling out metal foil trays from the compost…it is hard to get everyone on board for that reason." Similarly, when talking about the recycling program, the Chi Omega House Director stated that she "find[s] [herself] at the point where there is a behavioral element." The Gamma Phi House Director stated that transitioning single use disposable products out of their kitchenette was very difficult due to reluctance of members to change their behaviors.

Housing Board Presidents exhibited similar reservations. The Alpha Phi Housing Board President stated that she "want[s] to empower all of [the members] to make positive changes," but when they implement composting, she hears that "every single day [the house keeper] is fishing

bottles and cans out of the compost" and therefore finds it difficult for her to support these changes. In relation to eliminating single-use disposables from Alpha Phi, the Board President said, "it is totally fine, I don't care what cups you drink out of; I just know that it will turn into this thing where no one is doing what they say." Chapter Housing Board Presidents and House Directors are not adamantly against the adoption of sustainability projects. However, when presented with ideas for sustainability projects, housing Boards and Directors were often skeptical of their potential for success due to doubt that chapter members will utilize implementations responsibly. Therefore, it is clear that chapter member behavior is a barrier to support from Chapter Board President and Housing Directors. Despite their concerns about chapter member behavior, it is essential that facility managers continue to provide sustainability infrastructure because its availability can greatly encourage positive behavior (Kollmuss and Julian 2002).

Behavioral barrier 2: chapter Director of Sustainability and Panhellenic VP of Sustainability challenges

Directors of Sustainability view the behavioral practices of their chapter members as a top barrier to the success of their sustainability initiatives. All of the eleven Directors of Sustainability that I interviewed discussed their members' reluctance to change their behaviors as a major issue for the success of their initiatives. The Delta Delta Delta Director of Sustainability stated that, "Everyone is externally excited about sustainability, they get really excited when I do my sustain-a-fact at general meetings...but when it comes into practice, and at the end of the day I don't think there is a lot of sustainable habits being practiced, which is always difficult." Although members show positive feedback to sustainability education, the actions of the members do not reflect their stated enthusiasm. The Delta Delta Delta Director of Sustainability's experience indicates a value-action gap that is commonly cited in literature as a barrier to the success of sustainability programs (Gilbert et al. 2017). The Zeta Tau Alpha Director of Sustainability stated that "a lot of people have low motivation for sustainability." In discussion of barriers to her position, the Chi Omega Director of Sustainability said "getting people to actually listen and take action" is challenging. Similar to how the Directors of Sustainability have difficulty counting on their members to support proposed changes, the Panhellenic VP of sustainability stated that "the reason that none of [her] projects have been completed is because [she] chose to rely on the student body and people's desire

to be green and it is not how [stuff] gets done." The sorority community is struggling to rally support from members for sustainability improvements. Without member support, institutional efforts by facility managers and sustainability programs leaders to improve sustainability can be fruitless (Amin et al. 2008). Evidently, the slow progress of sorority sustainability programs is closely related to members' lack of desire to change their behaviors.

Behavioral barrier 3: chapter member sustainability survey insights

Member identified behavioral challenges

Like facility managers and sustainability program leaders identification of a behavioral barrier, community members also identified the issue of behavior as barrier to achieving sustainability in sororities. When asked "what are the biggest challenges you see to achieving sustainability" chapter member behavior was the second most common response. This barrier was highlighted in members' recognition of an unwillingness to change and commit to more sustainable lifestyles. This was also frequently stated in terms of the challenge of getting members "on board" with the sustainability initiatives. Another indication of the behavioral barrier is the frequency with which apathy, laziness and lack of convenience were cited as barriers to sustainability. One survey respondent stated that "people come from very privileged backgrounds and, at the end of the day, just don't care about the impact of their actions because it won't affect them, and they do not want to inconvenience themselves." Another respondent stated that "people are horribly careless and lazy." The perception that sustainable behaviors are time intensive and inconvenient is a common deterrent for people to make sustainable choices (Ando and Gosselin 2005). In alignment with my findings, a study done to raise awareness of environmental issues within the Greek community at Worcester Polytechnic Institution found that poor habits, laziness, and inconvenience are the major issues preventing change (Amin et al. 2008). In order for sorority sustainability programs to progress, chapter members must support initiatives with their behaviors. Simultaneously, chapter facility managers need to continue to increase the convenience of sustainable practices by making unsustainable practices more inconvenient. For example, chapters that are not providing single-use disposable utensils are making it more convenient for members

to have their own set of reusable utensils. Overall, as one respondent put it, there is a "collective action problem" and this problem must be addressed to achieve sustainability in sororities.

Prevalence of environmental value-action gap

An environmental values-action gap is evident in the Panhellenic community (Figure 9). The pervasiveness of an environmental value-action gap is also prominent in the literature (Gilbert et al. 2017, Kollmuss and Julian 2002). Identifying that there is a value and action gap prevalent in the Panhellenic community allows future VP's of Sustainability and Directors of Sustainability to target their efforts towards addressing this issue. Visualizing the value-action gap against understanding scores in Figure 3 indicates that as understanding of environmental issues increases, respondents value-action gap does not tend to decrease. This leads to the conclusion that education may not be the best way to address the environmental value-action gap, or that more specified education is needed to target particular behavior change. For example, the strategy of community based social marketing, where education is targeted based on identified barriers and specific behavior changes, has shown promising results (Kollmuss and Julian 2002, Mohr-McKenzie 2000). Although I have identified a value-action gap, it is difficult to know if I have accurately measured it due to confounding factors and the issue that attitudes are measured on a broader scope than behaviors (Newhouse 1990). Overall, getting people to make choices based on altruistic motives, other than immediate and self-selective motives that revolve around one's own needs is difficult and presents an obvious barrier to sustainable practices.

Understanding and Willingness to Change Behavior

As members understanding of environmental issues increases, so does their willingness to change their behaviors (Figure 10). This finding is hopeful because it indicates that if members receive more environmental education then they will change their behaviors. However, the solution is not that simple because this finding is in contrast to my finding that the value-action gap does not decreases with increased understanding (Figure 9). This contradiction indicates that people state that they are willing to change their behaviors, but they are not actually practicing sustainable behaviors. To address this contradiction, holding individuals accountable for their

actions may prove to be helpful. Overall, Figure 10 indicates that putting time and effort into educating members is worthwhile due to its potential to make people willing to participate in sustainability initiatives.

Behavioral solution 1: overcoming chapter member behavioral barrier

Increase visibility of the sustainability program

To increase the sense of community around sustainability there needs to be more thought and effort directed to promoting the sustainability accomplishments and efforts of the Panhellenic VP of Sustainability and the Directors of Sustainability. As some indicated in their sustainability survey, "I have no idea who our sustainability chair is or what their committee is doing and it's never really talked about in the house." Publicizing sustainability efforts is a powerful tool for motivating behavioral change (Creighton 1998). There are many ways to publicize sustainability efforts here I highlight a few key means:.

A. Hold a biannual sustainability competition. Holding a competition was ranked highly by respondents on the chapter motivations section of the sustainability survey (Figure 5). There is a clear competitive culture in the community that could motivate sustainability efforts. Tapping into this competitive nature by informing people about how their participation compares to those around them is shown to motivate behavior change (StopWaste 2008). A competition would be a beneficial way to promote the sustainability program and help achieve a set Panhellenic goal

B. Open sustainability roundtables. There should be at least one open Sustainability Roundtable each semester that is promoted throughout chapters. At open roundtables, other interested community members can come and see what the sustainability program is about. Since there is not an active Greek greening club that would allow for building this sense of community, the roundtables can provide a perfect platform. Building community involvement can make members feel less anonymous and therefore motivate behavior change (Barr 2006). Open meetings would allow for more input on how to solve community issues.

C. Frequent Chapter Announcements. The sustainability survey showed that the majority of people are willing to take 5-10 minutes to talk about sustainability at chapter meetings. Directors of Sustainability should take advantage of this and use the time to educate members and promote their efforts. Chapter announcements can also serve as a platform to address individual accountability and responsibility, which is beneficial for changing behavior (Newhouse 1990). For example, at Chi Omega, the Director of Sustainability documents recycling and compost contamination and goes over the photos with the chapter. Although chapter announcements were the lowest ranked motivating factor (Figure 12), announcements are low cost and easy for Directors of Sustainability to implement.

Environmental education

A. Enforce semesterly sustainability presentation. One of the few requirements of the Director of Sustainability position is that they give a semesterly sustainability presentation. Although this is already a requirement, the VP of Sustainability needs to increase enforcement of this rule, because currently, there are still chapters that are not receiving the mandated presentations. Environmental education of members is essential because in my survey, a lack of awareness was frequently identified as a barrier to achieving sustainability in sororities. To overcome this barrier survey respondents indicated that environmental education and presentations would be beneficial. Environmental education focused on awareness and building an emotional involvement is a tool to help close the value-action gap and needs to me more thoroughly utilized in sororities (Dahlstrand and Biel 1997, Kollmuss and Julian 2002). Community based social marketing is likely to be most effective at addressing the value-action gap because it is targeted at addressing barriers to specific behaviors (Mohr-McKenzie 2000). To enforce the presentations, the VP of Sustainability could collect and review copies of each Director's presentation, require them to submit the date that they will be presenting, then, randomly visit chapter presentations.

B. Greek Wide Sustainability Newsletter. A Greek wide sustainability news-letter could provide a platform for education and promotion of the sustainability program. It could also highlight chapters and individuals that are doing an exceptional job and serve as a way to promote

community goals. The newsletter should be published at least twice per semester. Directors of Sustainability can be responsible for distributing the newsletter to their chapters.

Critique of UCB involvement with sorority sustainability program

UCB has a comprehensive sustainability plan, however they do not consider or support the sustainability programs in sororities. Through running their own sustainability programs in the dorms and dining halls, UCB inspires Directors of Sustainability. Five of the 11 Directors I interviewed got ideas for their chapter programs through seeing programs implemented on campus. The Kappa Kappa Gamma Director of Sustainability stated that "living in the dorms last year it was really cool to see their initiatives and how they were sorting waste." Despite being a source of ideas, none of the Directors of Sustainability that I interviewed felt that UCB was a resource for them to fulfill their initiatives in their position. The Alpha Phi Director of Sustainability stated "they [the campus] know[s] that there is a large Greek community and I think they fail to provide resources that can help…why don't they help us in any way if it is something that they value so much?" Setting, tracking, and implementing sustainability goals is extremely difficult (Shriberg 2002). As full-time students, Directors of Sustainability need the institutional knowledge and guidance of UCB to be able to better develop and implement sustainability goals. One study of Greek sustainability programs found a consensus that university support would go a long way toward convincing chapters to go green (Amin et al. 2008). I envision UCB supporting sorority sustainability programs through the following mechanisms.

Solutions to the lack of UCB involvement in sorority sustainability programs

Assistance in goal setting, tracking and implementation

A. Develop a Greek sustainability resources website. UCB has a wealth of knowledge about tracking, setting and implementing sustainability goals. To support the Greek system in their efforts to operate more sustainably, campus should support development of a Greek sustainability resources website. On this website, they could offer advice on setting goals, tips for reaching goals and educational materials. In addition, they should offer guidelines and certifications for green

facility operating and events. Another function of the website should be a platform to request sustainability outreach presentations and workshops. Potentially, willing professors and faculty could sponsor the website by being available for consultations with Greek sustainability leaders. Also, the website would serve as a platform to promote campus sustainability events and service opportunities. Universities already providing this form of online support for Greek sustainability programs includes North Carolina State and the University of Washington. The Greek sustainability website could be run through the Office of Sustainability and Energy or through the Student Environmental Resource Center. The Greek sustainability website offers a relatively low-cost way to support the pursuit of sustainability in Panhellenic sororities.

B. Greek Sustainability intern. At Indiana University, there is a designated Greek Sustainability Intern Position. The position was created to offer strategic planning and advice on ways chapters can decrease their carbon footprints in order to contribute to Indiana Universitiy's sustainability goals (Edelson 2013). Indiana University's program could serve as a model for UCB, in which a Greek sustainability intern would serve as a liaison between UCB, the Greek system VP of Sustainability and Directors of Sustainability. They could run the Greek sustainability website, conduct green certifications and give sustainability presentations and workshops, facilitating raised awareness as increased influence of campus initiatives. The Greek sustainability intern could be supported through the Office of Sustainability and Energy or the Student Environmental Resource Center. Benefits of this program at Indiana University, that would extend to UCB, include raised awareness and influence of campus initiatives (Edelson 2013).

C. VP of Sustainability outreach to campus. In the context of UCB's ongoing fiscal constraints and given history of disinterest in supporting Greek sustainability programs, obtaining budgetary support for a Greek sustainability website or internship position is unlikely in the short-term. In the meantime, the VP of Sustainability should actively seek all resources and support that are potentially available from the University. This could involve meeting with the directors of the Student Environmental Resource Center and the Office of Sustainability, as well as the Residential Sustainability Program or Cal Dining for advice.

My vision of the UCB Sorority Sustainability program mission statement, goals and events

The sorority sustainability program at UCB is on the right track to achieving sustainability, but it needs to set sustainability as a priority, support dedicated leaders, and consult with sustainability resources on campus. Adopting a version of the following mission statement, goals, and events would greatly propel the success of the sustainability program forward (Table 18). The Panhellenic community has already begun to work toward some of these guidelines. For example, in Spring 2018, the VP of Sustainability passed a recruitment regulation towards achieving zero waste. The regulation bans the use of plastic straws and requires chapters to use types 1 and 2 plastic, paper, or reusable cups. Additionally, chapters are required to sort their recruitment waste correctly, or be subject to fines.

I define a successful sorority sustainability program as one that has a clear mission statement, empowers members to make sustainable decisions through education requirements and outreach events, and sets and meets sustainability goals relating to education and waste, water, and energy use reduction, environmentally preferable purchasing, and sustainable food service practices. My definition of a successful sustainability program is based on the UCOP sustainable practices policy (Table 4), the UCB Residential Sustainability Program (Table 5), and the Cal Dining sustainability practices (Table 6). Similar to how the UCOP mandates and enforces the Sustainable Practices Policy, a successful sorority sustainability program would be mandated and enforced through PHC. Also paralleling the UCOP sustainability program where each campus must report to the UCOP annually, in a successful sorority sustainability program each chapter would annually reporting to the VP of Sustainability (Table 6). In a successful sustainability program, all aspects of chapter operations would be performed with the least amount of environmental impact. Examples of relevant sorority operations include apparel purchasing, recruitment, philanthropy, social events, housing and food service.

Table 18. Mission statement, goals, and events of a successful sorority sustainability program. Adapted from table 4, 5, and 6.

Mission Statement	Minimize the impact of chapter operations on the environment and empower Panhellenic community members with the knowledge and tools to lead sustainable lifestyles during their time at UCB and train members to champion and embody sustainability efforts beyond their time at UCB.
Policy	UCB Panhellenic Bylaws would require chapters to pursue the following goals.
Goal	**Description**
Waste goal	Achieve 95% landfill diversion rate by 2020
Water conservation goal	Reduce water use 20% by 2020
Decrease non-renewable energy consumption	Reduce energy consumption 20% by 2020 Implement solar panels on at least three chapter facilities by 2025.
Environmentally preferable purchasing	Assess all purchased products for alternatives that whose manufacture, use, and disposal results in relatively less environmental harm than comparable products
Sustainable food service	Serve 30% of meals meatless by 2020 Reduce food waste 20% by 2020
education	Biannual new and active member sustainability presentation that details chapter sustainability tools and how to interact with them, chapter sustainability goals and progress, and Panhellenic sustainability goals and progress.
Events	Zero waste recruitment. Annual community wide sustainability competition where chapters compete to see who can most reduce waste, water, or energy consumption.

Limitations

The findings from this study can be reasonably applied to sorority communities at other progressive universities of similar size and population demographics, particularly communities that have recently established similar Panhellenic Council and Chapter sustainability leadership positions within the last five years. Addressing the institutional and behavioral components of sorority sustainability programs through my research maximized the use of my resources and time. Technological adoption hinges upon institutional and behavioral factors, therefore investing in understanding those components of sorority sustainability programs was ideal. However, conducting sustainability audits would have been useful to create a baseline that future

improvements could be compared to. My research could have also been enriched by textual analysis of chapter house contracts, bylaws, and Panhellenic bylaws looking for how sustainability is or is not mentioned in these various documents. Conducting interviews with representatives from chapter national organizations would also have heightened my research of the institutional component of sustainability programs. The limitations of my study and lack of similar research indicate that there is ample opportunity for further research.

Future Directions

There are many directions for further research on Greek sustainability programs. Since I have focused on the institutional and behavioral components of sorority sustainability programs, research on the green-house gas emissions of chapter houses would be complementary. It would also be beneficial to conduct intervention research to assess what methods I have suggested are best at shifting environmental attitudes in the community. With sororities and fraternities being socially interlinked, conducting research on the state of fraternity sustainability programs would also be beneficial. Research on how to make sustainable partying successful would be both interesting and if a successful method was adopted, could significantly help shift the currently apathetic Greek attitude toward their environmental impact. Finally, a research project comparing attitudes in other forms of group living, such as student cooperatives, to Greek attitudes would provide insight into how to get more Greek members on board with supporting sustainability initiatives. Considering there are so few research projects into Greek sustainability programs, there are many opportunities for further research.

Conclusion

UCB sorority sustainability programs struggle due to many of the commonly found challenges to establishing sustainability within institutions. My research confirms that there are institutional and behavioral barriers to achieving sustainability that must be addressed to have a successful program. The barriers and pathways that I have highlighted are interconnected and a holistic and integrated approach is needed to overcome them. UCB is not taking an active role in sorority sustainability programs, however this can change. Nationally, Greek communities must

address their environmental impacts. In the face on impending environmental threat, universities have a responsibility to produce well-rounded individuals who are aware of their impacts on the environment. Greek sustainability programs have a unique ability to address this gap because they involve both housing and dining services. Sororities across the nation have the ability to decrease their environmental footprint and produce lifelong members that are forever conscious of their impact on the Earth.

ACKNOWLEDGEMENTS

Kurt Spreyer, Patina Mendez, Leslie McGinnis and Alison Ecker comprise the ESPM175 team that taught me what a thesis was, supported me through my research and writing process, and provided much needed snacks on multiple occasions. Their dedication and energy were central to my ability to complete this project. I especially want to acknowledge Kurt Spreyer for spending countless office hours with me providing editing, feedback, support and guidance. Kate O'Neill provided me with subject matter expertise and critical feedback. My peer review group, Thao Tran, Hanna Schoolmeester, Ryan Romero, and Brenda Gutierrez-Zamora, always let me bounce ideas off them, reviewed my work, and were inspirations through their own research and dedication. Ashley Sutton supported my research tremendously as the only other sorority member in the ESPM175 class. Ella Griffith, the 2018 Panhellenic VP of Sustainability, provided me with continued access to meetings and Greek sustainability events. Ella also facilitated my research through acting as a liaison to the Panhellenic community.

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APPENDIX A: Sustainability Leaders Interview Questions

Data collection objectives

- Understand the barriers and pathways to achieving sustainability goals in sororities at UCB.
    - Understand the relationships of the DOS to various groups involved in the implementation of goals.
        - Chapter members
        - Chapter housing boards
        - House mothers
    - Understand where DOS are getting support around setting and reaching goals.
        - Campus
        - Greening The Greeks
        - PHC Director
        - PHC in general
        - Housing boards
        - Maintenance managers
        - House mothers
        - Chapter members
        - Peer supervisors
    - Understand how is the DOS regarded in their chapter.
- Gauge a direction that my study could take to help the DOS meet their goals.
    - Basis for formulating chapter focus groups and surveys
    - Basis for formulating housing board focus groups and surveys
    - Basis for formulating house director interviews

Personal Information

1. What is your name?
2. What chapter do you represent?
3. What is your position and what are you responsible for doing?
4. How long have you been in your position?
5. What is your major?
6. What year are you?

1. Goals:

1. <u>What long-term goals (over the next 2-4 years) do you have as DOS for water, waste, and energy reduction?</u>
    a. Solar Panels → Do you have a plan to finance them? Any groups reaching out to help you achieve this goal?
    b. Measure and quantify sustainability practices→ Have you thought about this? What would you like to keep track of? How do you plan to sustain record keeping?
        i. Water usage → water bill? → how would you get access?
        ii. Energy usage → energy bill? → how would you get access?
        iii. Waste generation → conduct a waste audit → what would you need to do this every semester?

iv. Waste stream contamination
c. Eliminate all single use disposable items→
d. ?

2. <u>What short-term (over this and next semester) goals do you have as DOS for water, waste, and energy reduction?</u>
    a. Eliminate a certain single use disposable item
    b. Start a garden → what is the purpose of the garden? How did you think about this as one of your goals?
    c. Newsletter → what purpose of the newsletter?
    d. Have you set any quantifiable goals? → Why or why not?
        i. Reduce water usage by 10%
        ii. Decrease waste contamination by 10%
    e. How are you promoting personal development of sustainable behavior?
    f. Implement light switch sensors/timers
3. How did you develop these goals?
    a. Work with committee?
    b. You decided them?
    c. Did Berkeley sustainability plan inspire you? → are you familiar with Berkeley sustainability plan?

2. Goal Achievement Process:

4. Walk me through the process you go through when trying to accomplish one of the goals you described above?
    a. Talk to committee
    b. Work with executive member whose department you are in
    c. Work with house director/mom
    d. Work with housing board
        i. How does that usually go? What is your relationship with them like? Are they usually on board with your ideas?
5. What resources are available to you to help you achieve your goals?
        i. Campus
        ii. Greening The Greeks
        iii. Prior directors of sustainability → how are directors currently transitioned
        iv. PHC Director
        v. PHC in general
        vi. Your executive department member
        vii. Your exec board
        viii. Housing boards
        ix. Maintenance managers
        x. House mothers
        xi. Chapter members
        xii. A sustainability budget?
6. How is your position regarded in your chapter? What power/influence do you have?
    a. Is your position recognized nationally?
    b. Can you give points?

c. What is your relationship like with your chapter → How do you interact with them? How does your chapter respond to implementation of new programs or technology?
d. Sustainability Budget?
e. How were you transitioned into your position?

3. Barriers

1. What have you identified as your biggest barriers to accomplishing goals?
    a. Not enough resources?
    b. Not enough respect of your position?
2. How do you think these barriers could be overcome?
    a. More knowledge about how members, board members, and house mothers:
        i. Value sustainability?
        ii. What they know about sustainability? Edu. level
        iii. Their goals?
    b. Knowledge about how other houses are overcoming barriers?
    c. More resources available from:
        i. Campus
        ii. Greening The Greeks
        iii. Prior directors of sustainability
        iv. PHC Director
        v. PHC in general
        vi. Your executive department member
        vii. Your exec board
        viii. Housing boards
        ix. Maintenance managers
        x. House mothers
        xi. Chapter members
        xii. A sustainability budget?
    d. More support from prior directors of sustainability

APPENDIX B: Facility Managers Interview Questions

Demographic:

- What is your position?
- How long have you held the position?
- Why/ what motivates are you involved in your position?

What have you done and how does sustainability play into those and the future?

Priorities:

- What are your priorities at HCB president?
    - Financial →
        - Do you consider the financial benefits of adopting sustainable practices?
    - Think of short term low cost relatively benefit change
    - If they already have it ask how they made that decision….
        - What about the financial benefits of encouraging chapter members to adopt sustainable behaviors? (cheaper electricity, water, and garbage bills)
    - Facility updates →
        - What are the most recent facility updates you have made?
        - How do you consider sustainability when making facility updates?

Goals:

- What are your goals for the chapter?
    - How does sustainability fit into those goals?
- What sustainable innovations have you introduced?
- How did you decide on that?
- Do you have any sustainability related goals for the chapter?

Receiving of sustainability propositions:

- Have women (Director of sustainability/ House managers) proposed sustainability related changes to you in the past?
- How did you receive the propositions?

Concerns:

- What concerns do you when presenting with sustainability related propositions/when generally making changes in the chapter?
- How could propositions better be presented to you?

Motivations/ institutional reform:

- what do you think about the possibility of sustainability bylaws?
- How could bylaws be developed? What would that need to look like?
    - If not bylaws what do you think could be done to get chapters to uphold higher sustainability standards?
- What do you think about the possibility of _____ international setting sustainability standards for chapter houses?
- What do you know?
- Would knowing what other chapters are doing in terms of sustainability encourage you to implement more sustainable practices and technology?
    - Do you feel like you know what is happening in other chapters?

APPENDIX C: Panhellenic Advisor Interview Questions

Background:

- What is your position and role with the university?
- What is your educational background?
- How long have you been in your position?

Role of PHC:

- What is the role of PHC in the Greek community?
    - That is PHC's role outside of recruitment?

Campus Relationship:

- What does it mean when a sorority/fraternity are affiliated with the university?
    - How does that look in policy and practice?
- How is that recognition similar or different to the way the university recognizes a club like Greening The Greeks?

History of Sustainability Programs:

- When did the director of sustainability position (sustainability chair) become required through PHC?
    - How did it originate?
    - Who pushed for its creation?
    - Why was it created? What was the vision for the position?

How Is Sustainability Valued?

- Where does sustainability fall on your priority list?
- Do you have any sustainability goals for the community?
- What have you done in your position to promote/ support sustainability efforts?
    - How have you supported PHC VP Sustainability?
        - What is your relationship like with VP Sustainability?
    - Have you ever inspired projects or do you respond to what is brought to you?
- What is the PHC sustainability budget?

Future of Sustainability Programs: (process of achieving changes)

- Are you familiar with what happened with the sustainability bylaws last semester?
- What is your perception of what happened?
- In light of what happened with the bylaws, how do you think that sustainability programs could be developed sororities? What would be PHC's role?
    - Could a different set of bylaws be passed?
    - Would creating a pledge be realistic?
    - Is there another form of policy that could be developed?
        - How effective do you think each of these routes would be?
- One barrier that I have identified through my interviews with the DOS is that their position descriptions are very light or non-existent, how could PHC play a role in developing each chapters position description? Could they mandate it since the position is mandated through PHC originally?

Questions about PHC bylaws:

- In the PHC bylaws there is reference to calgreeks, university and municipal sustainability mandates that must be enforced by the VP of sustainability.
    - Are there any such mandates?
    - How could mandates be developed?
- There is also a requirement that the VP of sustainability write a formal evaluation for each semester.
    - Has this ever happened?
    - Who would enforce the VP's fulfillment of these expectations?

Greening The Greeks:

- Do you have any interaction with Greening The Greeks?
- Do you know who their advisor is?
    - Do they have any background in sustainability?
- Would it ever work to have SERC or someone from Cal dining or the dorm sustainability program advise them?
- What is their budget?

Barriers:

- What are the biggest barriers to achieving sustainability that you observe?

How do you think the sustainability program could develop?

APPENDIX D: Chapter Member Sustainability Survey

Chapter Member Sustainability Survey

Hi! My name is Jessica Redden and I am a member of the Panhellenic community. As an Environmental Sciences major, I am conducting a senior thesis project on sustainability programs in sororities. This survey will ask you a series of questions to better understand your perceptions and interactions with your chapter's sustainability program. Please answer all questions as honestly as possible.

The survey will take you about 10-15 minutes to complete.

Your responses to the questions below are completely anonymous. You do not have to answer any questions that make you uncomfortable reporting on.

Thank you for your participation!

1. Indicate how often you do the following:

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
Turn off the lights when you are done using them (1)	○	○	○	○	○
Take short showers to conserve water (2)	○	○	○	○	○
Avoid using single-use disposable items (3)	○	○	○	○	○
Use a reusable water bottle (4)	○	○	○	○	○
Recycle and compost at your chapter house (5)	○	○	○	○	○
Actively encourage water and electricity conservation in your chapter house (6)	○	○	○	○	○

2. How strongly do you agree with the following statements?

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
A clean environment is important (1)	○	○	○	○	○
Environmental issues are a major concern (2)	○	○	○	○	○
Americans should adopt less consumptive life-styles (3)	○	○	○	○	○
Preserving natural green spaces is important for human wellbeing (4)	○	○	○	○	○
My daily activities impact the environment (5)	○	○	○	○	○

3. How strongly do you agree with the following statements?

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I have a thorough understanding of environmental issues. (e.g. water conservation, biodiversity, etc.) (1)	○	○	○	○	○
I know how to correctly sort my waste (2)	○	○	○	○	○
I understand the benefits of recycling and composting (3)	○	○	○	○	○
I understand the factors driving climate change (4)	○	○	○	○	○
I understand the threat of ocean acidification (5)	○	○	○	○	○

4. Rank the following statements from 1 (the most) to 5 (the least) based on what would motivate you to improve your conservation practices. Drag statements below to order.

_____ Peers reminding me when I am not being conscious of my natural resource consumption (1)
_____ Signage posted in my chapter (e.g. waste signage, water saving signage) (2)
_____ Announcements at chapter meeting (3)
_____ More knowledge about the environmental impact of my behaviors (4)
_____ A reward system (e.g. points, meeting shout out) (6)

5. Rank the following statements from 1 (the most) to 6 (the least) based on what would motivate your chapter to improve their conservation practices. Drag statements below to order.

_____ A Panhellenic wide sustainability pledge (1)
_____ A Panhellenic wide sustainability competition (2)
_____ Your chapter's national level organization adopting sustainability requirements (3)
_____ Presentations at chapter meeting from UC Berkeley sustainability experts (4)
_____ An active Greek wide sustainability club (5)
_____ Panhellenic sustainability bylaws (6)

6. How much extra time would you be willing to spend at a weekly chapter meeting discussing house related sustainability initiatives?

○ None (1)

○ 5 minutes (2)

○ 10 minutes (3)

○ 15 minutes (4)

○ 20 minutes (5)

---

7. Are you willing to do the following:

	Definitely not (1)	Probably not (2)	Might or might not (3)	Probably yes (4)	Definitely yes (5)
Eliminate all single-use disposable items from your chapter's kitchenette (e.g. Zip-lock bags, sauce cups, plastic utensils, coffee cups, etc.) (1)	○	○	○	○	○
Take 5 minute showers to save water (2)	○	○	○	○	○
Talk to other chapter members when you see them being wasteful? (i.e. wasting water, sorting their waste wrong, or leaving the lights on, etc.) (3)	○	○	○	○	○
Allocate more chapter funds to sourcing recycled content paper products (i.e. paper towels, toilet paper, etc.) (4)	○	○	○	○	○

8. How many meals per week would you be willing to have meatless? (out of 15 meals per week)

- ○ 1 (1)
- ○ 3 (2)
- ○ 5 (3)
- ○ 7 (4)
- ○ 9 (5)
- ○ 11 (6)
- ○ 13 (7)
- ○ 15 (8)

9. Are you or have you ever been involved in an environment/sustainability related organization?

- ○ Yes (1)
- ○ No, but I am interested in joining one (2)
- ○ No, and I am not interested in joining one (3)

---

10. List all environment/sustainability related organizations that you have bene involved in. If you have never been involved in an environment/ sustainability related organization, write none.

_____

---

11. How have you been involved in your chapter's sustainability program? Check all that apply.

- ☐ I am/ was the Director of Sustainability/ Sustainability Chair (1)
- ☐ I am/ was on the sustainability committee (2)
- ☐ I attend sustainability events that my chapter holds (3)
- ☐ Other (please describe) (4) _____

12. How strongly do you agree with the following statements?

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
My chapter should operate as sustainably as possible, even if it costs more. (1)	○	○	○	○	○

13. How important is it to you that sororities meet the following goals?

	Very unimportant (1)	Unimportant (2)	Neither Important Nor Unimportant (3)	Important (4)	Very Important (5)
Have a zero waste recruitment (1)	○	○	○	○	○
Have zero waste chapter houses (2)	○	○	○	○	○
Have solar panels (3)	○	○	○	○	○
Reduce energy consumption by 15% (4)	○	○	○	○	○
Reduce water consumption by 15% (5)	○	○	○	○	○

14. What are the biggest challenges you see to achieving sustainability in sororities?

_____

15. What are the biggest challenges you personally face to practicing more resource conserving behaviors?

_____

16. How do you think sororities could improve their sustainability programs?

_____

17. How could you improve your personal resource conservation practices?

_____

18. Do you have any other insights about sorority sustainability programs that you would like to share?

_____

19. What Chapter are you in?

- ○ Alpha Chi Omega (1)
- ○ Alpha Delta Pi (2)
- ○ Alpha Phi (3)
- ○ Chi Omega (4)
- ○ Delta Delta Delta (5)
- ○ Delta Gamma (6)
- ○ Delta Sigma (7)
- ○ Gamma Phi Beta (8)
- ○ Kappa Alpha Theta (9)
- ○ Kappa Kappa Gamma (10)
- ○ Pi Beta Phi (11)
- ○ Sigma Kappa (12)
- ○ Zeta Tau Alpha (13)

20. What year are you at UC Berkeley?

- ○ Freshman (1)
- ○ Sophomore (2)
- ○ Junior (3)
- ○ Junior Transfer (4)
- ○ Senior (5)

---

21. How old are you?

_____

---

22. What is your major/minor? If you are not sure or do not have one write N/A.

- ○ Major (1) _____
- ○ Minor (2) _____
- ○ Major 2 (3) _____
- ○ Minor 2 (4) _____

---

23. What College are you in?

- ○ College of Chemistry (1)
- ○ College of Letters and Science (2)
- ○ College of Engineering (3)
- ○ College of Natural Resources (4)
- ○ College of Environmental Design (5)
- ○ Haas School of Business (6)

---

24. What is your ethnic or racial background? (Mark all that apply)

- ☐ Caucasian/White (1)
- ☐ Black/ African-American (2)
- ☐ Asian (3)
- ☐ Native Hawaiian or other Pacific Islander (4)
- ☐ Native American (5)
- ☐ Prefer not to say (6)
- ☐ Other (please specify) (7) _____

---

25. Are you of Spanish, Hispanic, or Latinx origin or descent?

- ○ Yes (1)
- ○ No (2)
- ○ Prefer not to say (3)

---

26. What gender do you identify with?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary (3)
- ○ Prefer not to say (4)
- ○ Other (please specify) (5) _____

---

27. What is your place of longest residence before coming to UC Berkeley? If you are international enter your country of longest residence.

- ○ City (1) _____
- ○ State (2) _____
- ○ County (3) _____
- ○ Zip Code (4) _____

---

28. Classify your hometown as one of the following.

- ○ Rural (1)
- ○ Suburban (2)
- ○ Small urban city (3)
- ○ Medium urban city (4)
- ○ Large urban city (5)
- ○ Other (please specify) (6) _____

---

29. For your home residence (not college residence), please classify your household economic status to the best of your ability.

- ○ Below the poverty line (1)
- ○ Between lower middle income and the poverty line (2)
- ○ Lower middle income (3)
- ○ Upper middle income (4)
- ○ Upper income (5)

---

30. Where do you live while at college?

- ○ Residence hall or dormitory (1)
- ○ Non-university student housing (The Berk, Wesley, etc.) (2)
- ○ Apartment complex (1-6 units) (3)
- ○ Apartment complex (6+ units) (4)
- ○ House (5)
- ○ Berkeley Student Cooperative (6)
- ○ Sorority or fraternity (7)

---

31. How many people do you live with? (Not including yourself)

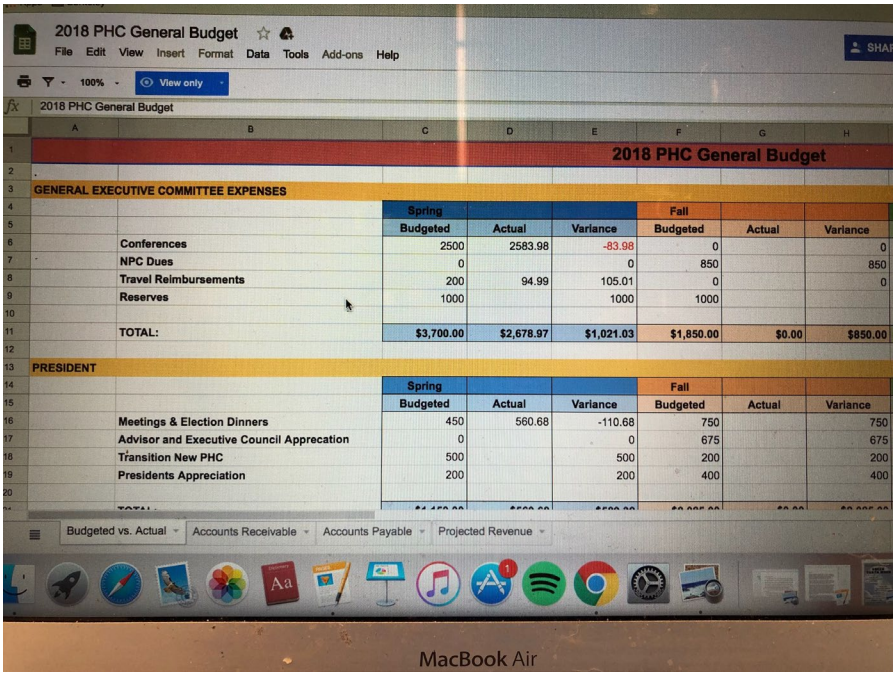
- ○ None (1)
- ○ 1-3 (2)
- ○ 4-5 (3)
- ○ 6-7 (4)
- ○ 8-9 (5)
- ○ 10+ (6)

---

32. Rate how you would consider your political beliefs on the spectrum of liberal to conservative.

- ○ Very Liberal (1)
- ○ Liberal (2)
- ○ Neither liberal nor conservative (3)
- ○ Conservative (4)
- ○ Very Conservative (5)

APPENDIX E: Screen shots of 2018 Panhellenic General Budget



2018 PHC General Budget

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2018 PHC General Budget

GENERAL EXECUTIVE COMMITTEE EXPENSES

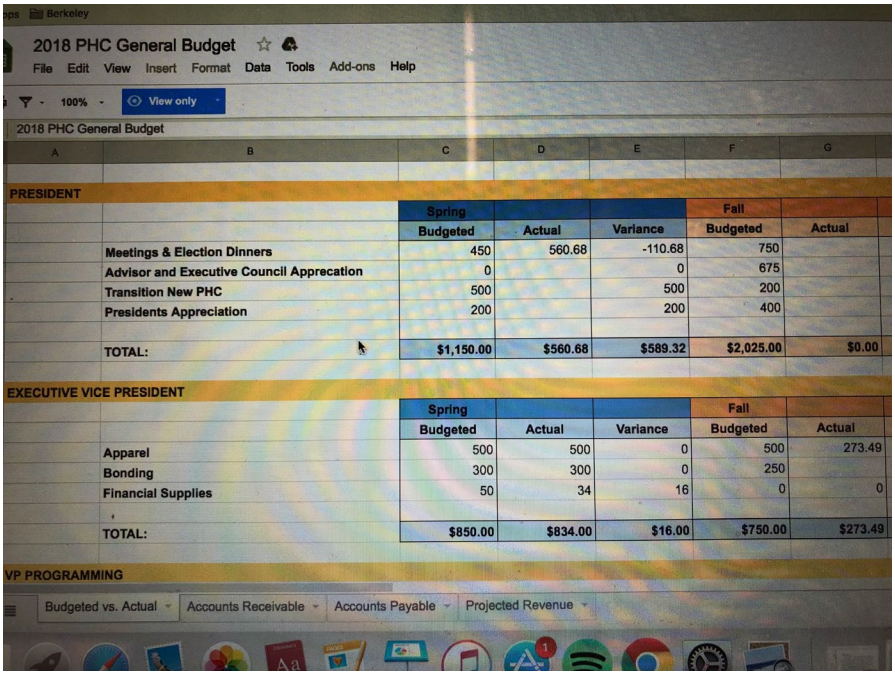
	Spring			Fall		
	Budgeted	Actual	Variance	Budgeted	Actual	Variance
Conferences	2500	2583.98	-83.98	0		0
NPC Dues	0		0	850		850
Travel Reimbursements	200	94.99	105.01	0		0
Reserves	1000		1000	1000		
TOTAL:	$3,700.00	$2,678.97	$1,021.03	$1,850.00	$0.00	$850.00

PRESIDENT

	Spring			Fall		
	Budgeted	Actual	Variance	Budgeted	Actual	Variance
Meetings & Election Dinners	450	560.68	-110.68	750		750
Advisor and Executive Council Appreciation	0		0	675		675
Transition New PHC	500		500	200		200
Presidents Appreciation	200		200	400		400

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue

MacBook Air



2018 PHC General Budget

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2018 PHC General Budget

PRESIDENT

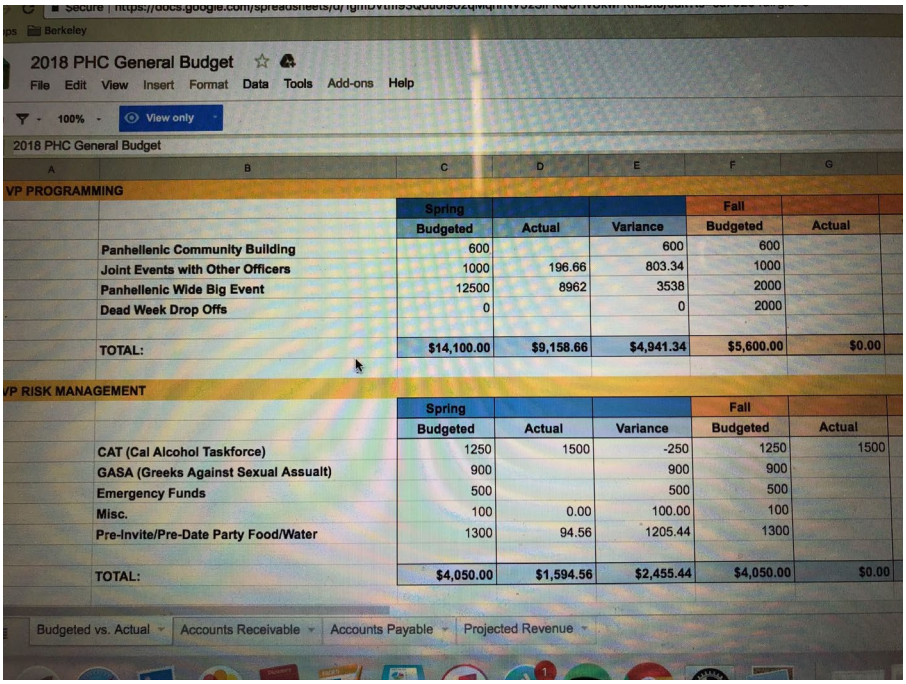
	Spring			Fall	
	Budgeted	Actual	Variance	Budgeted	Actual
Meetings & Election Dinners	450	560.68	-110.68	750	
Advisor and Executive Council Appreciation	0		0	675	
Transition New PHC	500		500	200	
Presidents Appreciation	200		200	400	
TOTAL:	$1,150.00	$560.68	$589.32	$2,025.00	$0.00

EXECUTIVE VICE PRESIDENT

	Spring			Fall	
	Budgeted	Actual	Variance	Budgeted	Actual
Apparel	500	500	0	500	273.49
Bonding	300	300	0	250	
Financial Supplies	50	34	16	0	0
TOTAL:	$850.00	$834.00	$16.00	$750.00	$273.49

VP PROGRAMMING

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue



2018 PHC General Budget

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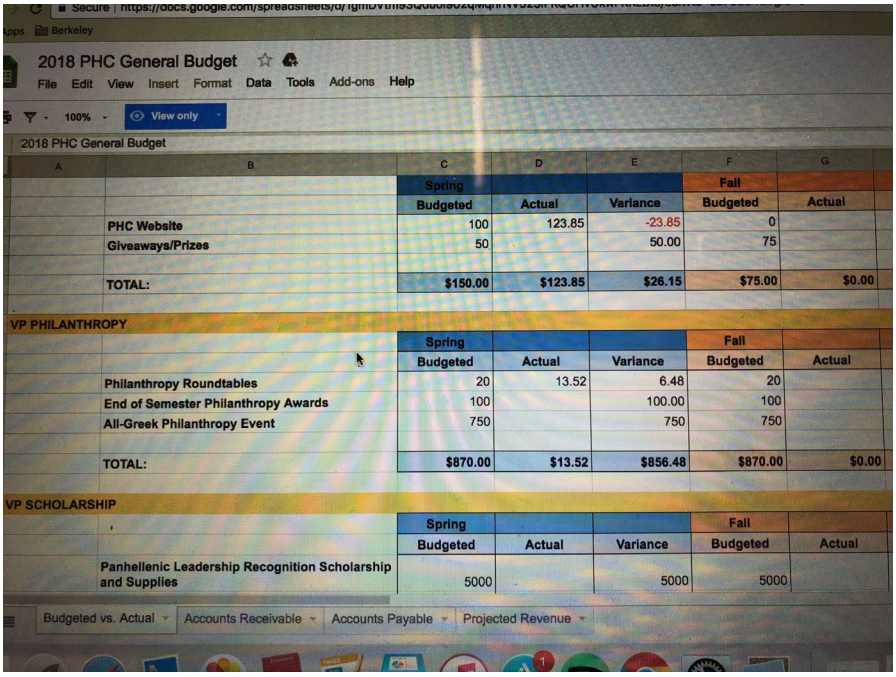
2018 PHC General Budget

		Spring			Fall	
		Budgeted	Actual	Variance	Budgeted	Actual
VP PROGRAMMING						
	Panhellenic Community Building	600		600	600	
	Joint Events with Other Officers	1000	196.66	803.34	1000	
	Panhellenic Wide Big Event	12500	8962	3538	2000	
	Dead Week Drop Offs	0		0	2000	
	TOTAL:	$14,100.00	$9,158.66	$4,941.34	$5,600.00	$0.00
VP RISK MANAGEMENT						
	CAT (Cal Alcohol Taskforce)	1250	1500	-250	1250	1500
	GASA (Greeks Against Sexual Assualt)	900		900	900	
	Emergency Funds	500		500	500	
	Misc.	100	0.00	100.00	100	
	Pre-Invite/Pre-Date Party Food/Water	1300	94.56	1205.44	1300	
	TOTAL:	$4,050.00	$1,594.56	$2,455.44	$4,050.00	$0.00

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue



2018 PHC General Budget

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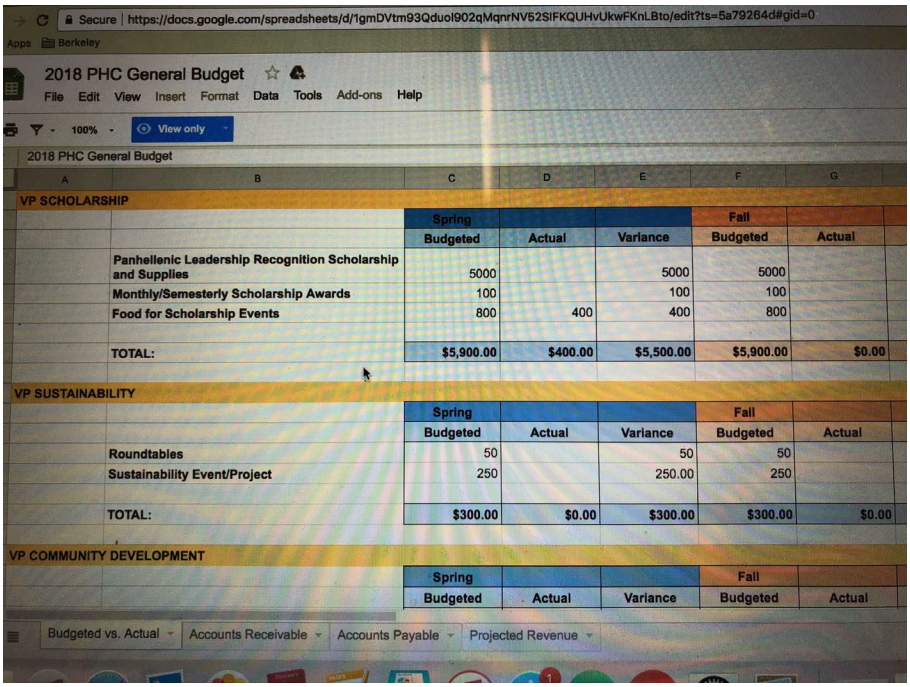
2018 PHC General Budget

		Spring			Fall	
		Budgeted	Actual	Variance	Budgeted	Actual
	PHC Website	100	123.85	-23.85	0	
	Giveaways/Prizes	50		50.00	75	
	TOTAL:	$150.00	$123.85	$26.15	$75.00	$0.00
VP PHILANTHROPY						
	Philanthropy Roundtables	20	13.52	6.48	20	
	End of Semester Philanthropy Awards	100		100.00	100	
	All-Greek Philanthropy Event	750		750	750	
	TOTAL:	$870.00	$13.52	$856.48	$870.00	$0.00
VP SCHOLARSHIP						
	Panhellenic Leadership Recognition Scholarship and Supplies	5000		5000	5000	

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue



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Apps Berkeley

2018 PHC General Budget

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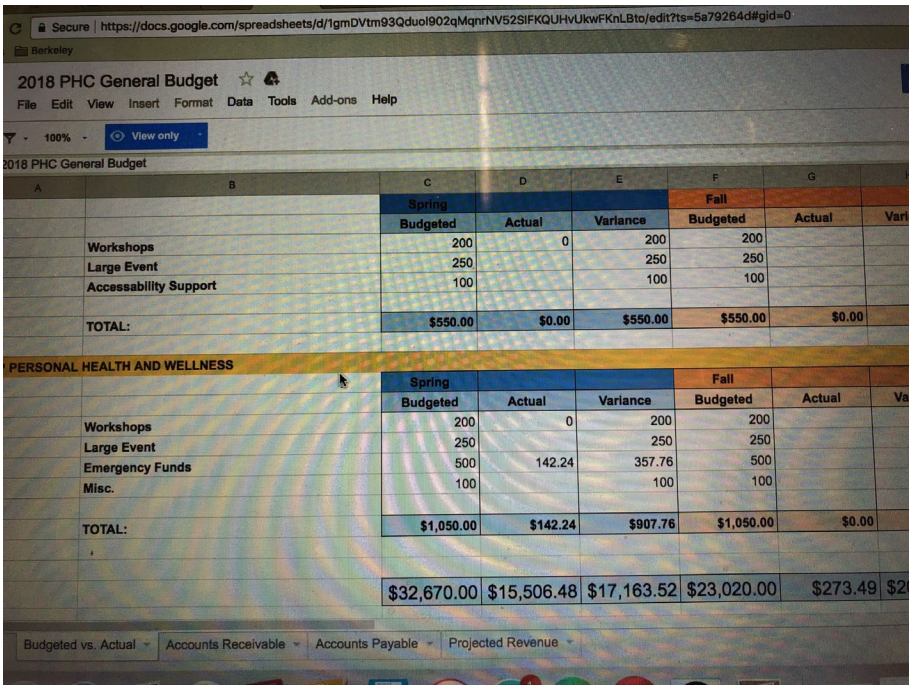
2018 PHC General Budget

		C	D	E	F	G
VP SCHOLARSHIP						
		Spring			**Fall**	
		Budgeted	**Actual**	**Variance**	**Budgeted**	**Actual**
	Panhellenic Leadership Recognition Scholarship and Supplies	5000		5000	5000	
	Monthly/Semesterly Scholarship Awards	100		100	100	
	Food for Scholarship Events	800	400	400	800	
	TOTAL:	**$5,900.00**	**$400.00**	**$5,500.00**	**$5,900.00**	**$0.00**
VP SUSTAINABILITY						
		Spring			**Fall**	
		Budgeted	**Actual**	**Variance**	**Budgeted**	**Actual**
	Roundtables	50		50	50	
	Sustainability Event/Project	250		250.00	250	
	TOTAL:	**$300.00**	**$0.00**	**$300.00**	**$300.00**	**$0.00**
VP COMMUNITY DEVELOPMENT						
		Spring			**Fall**	
		Budgeted	**Actual**	**Variance**	**Budgeted**	**Actual**

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue



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Berkeley

2018 PHC General Budget

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2018 PHC General Budget

		C	D	E	F	G
		Spring			**Fall**	
		Budgeted	**Actual**	**Variance**	**Budgeted**	**Actual**
	Workshops	200	0	200	200	
	Large Event	250		250	250	
	Accessability Support	100		100	100	
	TOTAL:	**$550.00**	**$0.00**	**$550.00**	**$550.00**	**$0.00**
PERSONAL HEALTH AND WELLNESS						
		Spring			**Fall**	
		Budgeted	**Actual**	**Variance**	**Budgeted**	**Actual**
	Workshops	200	0	200	200	
	Large Event	250		250	250	
	Emergency Funds	500	142.24	357.76	500	
	Misc.	100		100	100	
	TOTAL:	**$1,050.00**	**$142.24**	**$907.76**	**$1,050.00**	**$0.00**
		$32,670.00	$15,506.48	$17,163.52	$23,020.00	$273.49

Budgeted vs. Actual | Accounts Receivable | Accounts Payable | Projected Revenue