

afa ORACLE

THE RESEARCH JOURNAL OF THE ASSOCIATION OF FRATERNITY | SORORITY ADVISORS

VOLUME 7, ISSUE 2, FALL 2012

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The period of late adolescence and early adulthood is a critical time during which individual identity is developed. One fraternity recently implemented a developmental process that facilitated identity maturation within its members by emphasizing self-awareness and reflection. Utilizing a learning model as the core component of all aspects of its programming, the fraternity conducted research to determine the impact of its learning model on the development of self-awareness. This article provides data from three years of implementation that documents significant increases in this critical developmental competency.

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AN ASSESSMENT OF PANHELLENIC SORORITY MEMBER MEAL CONSUMPTION PATTERNS

BLAIR MIZE AND MELINDA VALLIANT

The purpose of study was to determine sorority members' frequency of meal consumption versus meals offered in sorority houses at a flagship university in the south and to compare the Body Mass Indices (BMIs) of sorority members who consumed less than six (<6) meals to those who consumed six or more (≥6) meals/week at their sorority houses. Another object of this study was to note the relationship between frequency of sorority meal consumption and adequacy of sorority members' diets in relation to MyPyramid. The sample consisted of 72 Panhellenic sorority members ages 18-22 year old at the time of participation. All members completed a "Questionnaire of Eating Behaviors" and a 24-hour dietary recall. Weight, height, and number of servings consumed of each MyPyramid food group were recorded. Members consuming ≥6 meals/week at their sorority houses had greater mean intake of each food group and lower mean BMIs than those consuming <6 meals. According to the results of this study, structured meals and meal times may help sorority members maintain a healthier weight.

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Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors advances the study of college fraternities and sororities through a peer reviewed academic journal promoting scholarly discourse among partners invested in the college fraternal movement. The vision of Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors is to serve as the premier forum for academic discourse and scholarly inquiry regarding the college fraternity and sorority movement.

Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors is published biannually. Past issues of Oracle are available on the AFA website.

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Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors accepts submissions focused on articulating research involving fraternity and sorority members at the collegiate, alumni, inter/national organization, and volunteer advisory levels. Manuscripts should be written for the student affairs generalist who has broad responsibility for educational leadership, policy, staff development, and management. Articles on specialized topics should provide the generalist with an understanding of the importance of the program to student affairs overall and fraternity/sorority advising specifically.

Research articles for Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors should stress the underlying issues or problems that stimulated the research; treat the methodology concisely; and, most importantly, offer a full discussion of results, implications, and conclusions. In the belief that AFA readers have much to learn from one another, we also encourage the submission of thoughtful, documented essays or historical perspectives.

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THE NECESSITY FOR RESEARCH ON FRATERNITY/SORORITY CULTURE

PATRICK BIDDIX, ORACLE EDITOR

The authors in this issue of Oracle ask us to consider the organizational and cultural contexts of fraternity/sorority involvement. Park challenges us to examine historical practices and norms within the larger fraternity/sorority community and how those shape the demography of student organizations. Reuter, Baker, Hernandez, and Bureau assess programming at the international organization level to demonstrate the potential benefits of aligning new member education programs with broader developmental outcomes. Long focuses on the involvement of alumni volunteers and campus-based professionals in helping create chapter environments conducive to study, deemphasizing alcohol use, and valuing academic achievement. Mize and Valliant call attention to chapter level changes that could improve healthy eating behaviors.

Highlighting the complexity of affecting change within these organizations (Biddix, 2004, Summer), each of the researchers offer recommendations for various levels of stakeholders. Each suggestion focuses on a distinct aspect of cultural influence mediated by organizational structure and behavior. Each offers applicable, direct, and implementable advice. Yet, this collection of recommendations underscores the need for research on how culture influences the fraternal environment – a consideration that can ultimately benefit our work to understand opportunities and challenges associated with involvement.

The study of fraternity/sorority culture is not a new theme in the literature, though it seems infrequently visited. Book-length considerations include Nuwer's (2001) treatment of hazing as a cultural problem in fraternal organizations, Robbin's (2005) portrayal of the new member socialization process in a sorority, DeSantis' (2007) look at privilege perpetuated by fraternal organizations, and more recently, Fink's (2010) consideration of the gender roles accentuated by single-sex fraternal organizations. Examples from peer-reviewed journals include Rhoads' (1995) examination of power and oppression in a fraternity chapter, Bev's (1998) analysis sorority women's decorating choices as an indicator of socialization and personal identity development, and Workman's (2009) look at drinking stories as a cultural artifact.

Certainly, there are other examples, though these represent a variety of perspectives on various cultural elements affecting the fraternity/sorority membership environment. Each of the previous studies enlightens a singular aspect of fraternity/sorority culture, suggesting the need for a more holistic, conceptual framework for standardizing how we approach research as well as evidence-based recommendations. Tierney (1988) suggested that a better understanding of organizational culture could allow us to:

- Consider real or potential conflicts not in isolation but on the broad canvas or organizational life;
- Recognize structural or operational contradictions that suggest tensions in the organization;
- Implement and evaluate everyday decisions with a keen awareness of their role in and influence upon organizational culture;

- Understand the symbolic dimensions of ostensibly instrumental decisions and actions; and
- Consider why different groups in the organization hold varying perceptions about institutional performance (p. 6)

The value of understanding culture between, within, and among fraternal organizations suggests meaningful value for researchers. As we strive to understand how these organizations “work,” it seems increasingly critical that we gain a better understanding of the multifaceted influences that can shape organizational culture. This would benefit researchers in structuring inquiry and interpreting results, as well as practitioners hoping to more directly relate results to their individual context. Tierney (1988) noted, “the most persuasive case for studying organizational culture is quite simply that we no longer need to tolerate the consequences of our ignorance” (p. 6).

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ASIAN AMERICAN WOMEN'S PERSPECTIVES ON HISTORICALLY WHITE SORORITY LIFE: A CRITICAL RACE THEORY AND CULTURAL CAPITAL ANALYSIS

JULIE J. PARK

This study examined 18 Asian American women's attitudes towards sororities at a predominantly White institution in the south. I use cultural capital and critical race theory frameworks to explain how immigrant identity and social class intersect with race to perpetuate racial divisions in historically White sorority life (HWSL). Participants identified two primary reasons for the lack of racial diversity in HWSL, the role of immigrant families and social class, both of which can be viewed as race-neutral explanations for why HWSL "coincidentally" remains divided by race. However, I demonstrate how race intersects with both immigration and social class to perpetuate social divisions in HWSL, resulting in complex insights for why such groups remain predominantly White in composition.

"What I saw was a lot of rich White girls and I just knew that I was never going to fit into that crowd and wouldn't ever really want to."

-Nora, not a member of a sorority, Korean American senior

For many decades, fraternities and sororities had formal exclusionary policies that barred non-White, and in many cases non-Christian, members from joining. By 1955, only one National Panhellenic Conference (NPC) sorority still formally banned students of color (Lee, 1955), but NPC groups remained racially homogeneous. Today, over 50 years later, Historically White Sorority Life (HWSL) remains racially homogeneous at many colleges (Milem, Chang, & Antonio, 2005), even though no InterFraternity Council (IFC) or NPC organization maintains any sort of formal exclusionary policy. Why does fraternity/sorority life often remain divided by race?

As the quote from Nora demonstrates, students can perceive HWSL to be an unwelcoming environment even without formal exclusionary policies. Also, explicit and subtler instances of racial bias make HWSL unwelcoming to many students of color (Schmitz & Forbes, 1994; Park, 2008). However, it is noteworthy that Nora did not just see HWSL as being the domain of just "White girls" but "rich White girls" (emphasis added). Her quote is an example of

how social class and race intersect in meaningful ways to shape students' sense of belonging, or lack thereof, in college, as well as their perceptions of peers. Relatedly, while race undoubtedly has an independent influence on why HWSL are racially divided, Critical Race Theory (CRT) contends that race intersects with other subordinate identities to foster racial stratification (Solórzano, 1998). Critical Race Theory offers an analytic lens to understand how race intersects with other facets of social identity (e.g., social class) to perpetuate racial divides in communities like HWSL.

The purpose of this study is to examine Asian American women's perceptions of HWSL in order to understand why racial homogeneity persists in HWSL. Participants included Asian American female undergraduates involved in sororities and those who were not; all attended a private institution in the Southeast, "Southern University," where 50% of undergraduate women join sororities. Participants identified two primary reasons for the lack of Asian American participation in HWSL—the roles of immigrant families and social class. At first glance,

these reasons appear to be race-neutral explanations for why HWSL remains divided by race. However, further analysis demonstrates how race intersects with both phenomena to perpetuate racial divides, resulting in complex insights for why HWSL remains predominantly White in composition.

BACKGROUND

Asian Americans may seem like a somewhat surprising group to study in order to probe the racial dynamics of HWSL. They are a diverse population, consisting of at least 24 ethnic subgroups, with varying levels of educational attainment (Hune & Park, 2009). However, their tenuous and inconsistent status as a racialized minority actually makes them a prime group in which to study the complicated dynamics of race in a supposedly post-racial society (Park, 2008). Stereotyped as the monolithically successful model minority, Asian Americans are supposed to be prime evidence that race is (or at least ought to be) irrelevant in U.S. society. Thus, demonstrating some of the more subtle ways that race continues to be salient for Asian Americans unveils complex dynamics that can help us understand how race continues to affect HWSL, U.S. higher education, and society-at-large.

Race, immigration, and social class play key roles in HWSL organizations. Multiple studies have found that fraternity and sorority life is divided by race (Chang & DeAngelo, 2002; Chen, 1998; Schmitz & Forbes, 1994; Park, 2008). Not only are White students more likely to join fraternities and sororities, after three years of participation they are significantly more likely to oppose interracial marriage and increase in levels of symbolic racism (Sidanius, Levin, van Laar, & Sears, 2008). They are also significantly less likely to have close friends of other races during college (Park, 2012). The most obvious and extensively researched divide is between Black and White students. Black students

formed the National Pan-Hellenic Council groups in response to formal racial exclusionary policies and pervasive racial segregation on American college campuses and within HWSL (Brown, Parks, & Phillips, 2005; Kimbrough, 2003). In one study from the 1990s, Black students perceived HWSL groups as being unwelcoming, and White members of HWSL groups expressed outright hostility at the prospect of Black students joining (Schmitz & Forbes, 1994).

The history of Asian American exclusion in HWSL is rarely discussed. However, the historical legacy of institutional discrimination is indelibly linked to the contemporary campus racial climate (Hurtado, Milem, Clayton-Pederson, & Allen, 1998). HWSL organizations explicitly barred Asian Americans from joining for years and fraternities held both “discriminatory clauses against Negroes and Orientals” (Lee, 1955, p. 93). The first Asian American sorority, Chi Alpha Delta, was founded in 1923 at the University of California, Los Angeles. Hernandez (2001, May 21) reported that even though “no written part of the Panhellenic Constitution restricted Asian Americans from joining the Greek society” (para. 17), “the Panhellenic Constitution did not allow Asians in Greek organizations” (para. 4). Even in these early years, racial divisions persisted in HWSL despite the lack of written exclusionary policies (Lee, 1955). Due to changes in immigration law post-1965, Asian American enrollment spiked in higher education in later decades (Teranishi, 2010). Many Asian American students are among the first in their families to be born in the U.S. or were born outside of the country (Chang, Park, Lin, Poon, & Nakanishi, 2007), and Asian American enrollment has risen at many institutions, including ones in the Southeast and Midwest where HWSL remains a strong aspect of campus culture. However, Asian American participation in HWSL remains low, possibly in part due to the decades when Asian Americans were officially barred from joining such groups.

In more recent times, HWSL has garnered attention in the media for explicitly racist acts or actions that demonstrate a severe lack of intercultural understanding. Offensive theme parties include ghetto theme parties like the “Compton Cookout” and the “Mekong Delta Party,” where (mostly White) students dressed up as American GIs and Vietnamese prostitutes (Whaley, 2008). Race is also relevant to HWSL in more subtle ways. Using a Critical Race Theory (CRT) lens, Park (2008) asked Asian American college women if they felt that race was relevant to HWSL. Most rejected the idea but observed that the more elite sororities at their institution were all White or almost all White in composition. [author omitted] argued that the women’s paradoxical viewpoints—asserting ways that race was relevant in HWSL but being hesitant to address it frankly—were reflective of a broader American tendency to downplay the significance of race.

No studies could be found that examined Asian American women’s experiences or perceptions of HWSL as immigrants or children of immigrants. Thus we have little knowledge about whether immigrant identity makes students feel like outsiders to HWSL or how such an identity might intersect with race and/or social class. Studies can be found that document the experiences of students with other racial identities. Research on Latino/a fraternities and sororities document that the groups provide a strong sense of belonging for students, many of whom are unfamiliar with navigating campus life as first-generation college students (Arellano, 2008; Olivas, 1996). Such groups can also support students’ ethnic identity development (Guardia & Evans, 2008). Arellano (2008) concluded that one reason Latino/a students joined such groups was because they could not afford the steep dues associated with HWSL groups, pointing to the influence of social class on HWSL organizations.

Socioeconomic status (SES) not only influences the general demographic portrait of stu-

dents who join fraternities or sororities, it also works as a delineator of status between organizations, often signifying the more prestigious organizations. Early studies observed that fraternities and sororities attracted students from wealthier backgrounds (Reiss, 1965; Schott, 1965). Because participants have to pay dues that range from several hundred dollars to over one thousand dollars depending on the institution, it is unsurprising that social class shapes participation. Granted, as a whole, access to higher education is already heavily influenced by class (Carnevale & Rose, 2003). Still, costs associated with fraternities and sororities likely discourage some students from joining. Social class also distinguishes sororities from one another. In her study of sororities on one campus, Risman (1982) found that higher status sororities were known for having wealthier members. In Chang and DeAngelo’s (2002) analysis, household income was not a significant predictor of joining a fraternity or sorority, but students who rated being financially well-off as an essential priority were significantly more likely to join.

THEORY

To elucidate findings, this paper draws on two theories, cultural capital theory and Critical Race Theory (CRT). In this section, I briefly explain both theories and how they help us understand stratification in fraternity/sorority life. First, the concept of cultural capital explains how HWSL perpetuates certain types of privilege, resulting in organizations that tend to be racially homogeneous. Cultural capital refers to the way that privilege and information about how to navigate worlds of privilege accumulate within certain subgroups due to the generational transference of resources, attitudes, or knowledge (Bourdieu & Passeron, 1977; Larreau & Weininger, 2003). This process contributes to the preservation of elite networks and the reproduction of social inequality. Cultural capital is manifest in sorority life through three

key means. First, membership into a sorority, particularly an elite sorority, perpetuates privilege by allowing members access to resources such as elite social networks both on campus and after college. Second, privileged membership is literally transferred through generations via legacy status, in which women whose mothers or relatives belonged to a sorority often receive some preferential treatment in the selection process. Third, legacies may have greater access to insider knowledge about how to navigate sorority recruitment. Women who come from families or communities where sorority membership is common are privy to the unsaid rules, social norms, and expectations that are key parts of sorority recruitment.

In perpetuating privilege, cultural capital reproduces elite status for some populations and perpetuates marginal status for others. As campuses have diversified, HWSL is often one venue in which the insiders—those who tend to be White, from wealthier backgrounds, and legacies—are more likely to stay “in” and outsiders—students of color, those from lower socioeconomic means, and those with little knowledge about how HWSL works—are more likely to remain outsiders. This study uses cultural capital to understand how ostensibly race-neutral phenomena like Asian Americans being less likely to be sorority legacies reproduce elite social networks that continue to exclude most students of color.

While cultural capital is a helpful framework, it does not necessarily push race to the forefront, nor does it meaningfully consider the intersection between race and other social identities. Cultural capital helps explain why Asian Americans are largely outsiders to sorority life, but so are low-income Whites, first-generation college students, and the like. Cultural capital is less adept at explaining the mechanics of exclusion that are specifically linked to race. This is where CRT is a particularly helpful tool. Key tenants of CRT include: 1) racism persists as a common and central component of U.S. soci-

ety; 2) race is socially constructed; 3) race and racism intersect with other forms of oppression to perpetuate marginalization; 4) the voices and experiences of people of color play an essential role in explaining racial dynamics (Delgado & Stefancic, 2001; Solórzano, Ceja, & Yosso, 2000). This article focuses most explicitly on the third tenant, which aims to display how race intersects with other identity categories to subordinate people of color, both the other tenants are relevant to the conceptualization of the study.

CRT argues that even though individuals use colorblind and race-neutral language, race and racism continue to affect people’s lives in contemporary times through subtle and complex ways (Delgado & Stefancic, 2001). This dynamic extends to collegiate life. In previous decades, blatant racial and religious discrimination characterized HWSL (Lee, 1955). Such formal exclusionary policies no longer exist, leading some to believe that race is irrelevant to contemporary HWSL: demographic differences among sororities must be attributable to coincidence, personal preference, or tradition. However, CRT argues that race and racism continue to be central organizing concepts in society, providing a lens to see how subtle messages centering on race, inclusion, and exclusion may influence sorority composition. For instance, in multiple studies, sororities perceived as more elite and exclusive tended to have fewer, if any, women of color, while sororities seen as less exclusive tended to have greater racial/ethnic diversity (Chen, 1998; Park, 2008). Hence, racial divisions in HWSL persist at many campuses despite the absence of formal exclusionary policies.

CRT is an especially pertinent tool to use to study Asian Americans, who occupy a somewhat inconsistent position on the racial spectrum, being both included and excluded in various spheres of society (Park, 2008). Due to the model minority stereotype and the sometimes status of Asian Americans as “honorary Whites,”

the illusion exists that race is irrelevant to their experiences (Tuan, 1998). This dynamic makes CRT a particularly powerful tool to challenge the presumption that Asian Americans are not affected by racialization in society. While CRT foregrounds the role of race in perpetuating social inequalities, it also emphasizes how race intersects with other subordinated identities (Solórzano, Ceja, & Yosso, 2000). In this study, I use CRT to reveal how immigrant identity and social class intersect with race, demonstrating how lines of privilege and exclusion are perpetuated in university life even in the absence of formal exclusionary policies. It should be noted that although the sample is made up of women, in order to focus the scope of the article, this article does not explicitly focus on the intersection between gender and other identity categories. Future studies will address how these intersections address the experiences of Asian American women.

METHODOLOGY

This qualitative study seeks to understand the phenomenon of Asian American participation, or lack thereof, in sororities and participants' perspectives on this phenomenon. (Merriam, 1998). Caelli, Ray, and Mill (2003) suggest researchers using a basic qualitative design identify the following: one's theoretical positioning, congruency between methodology and methods, strategies to establish rigor, and the analytic lens through which the researcher interprets data. These areas are identified and described below.

Theoretical Positioning

Theoretical positioning refers to “. . . the researcher's motives, presuppositions, and personal history that leads him or her toward, and subsequently shapes, a particular inquiry” (Caelli et al., 2003, p. 5). I am an Asian American woman who was not a member of a sorority but attended an undergraduate institution where

HWSL was prominent. Noticing that students of color are often underrepresented in sorority life at more diverse campuses, I became curious as to why Asian Americans were less likely to participate in HWSL, despite the ideas that Asian Americans are “honorary Whites” (Tuan, 1998). Thus, my past and present experiences, as well as my identity as a woman of color, shape my impressions of HWSL. While it is impossible for me to be a completely objective, impartial observer, if such a thing even exists, I do not necessarily believe that HWSL organizations should be unilaterally eradicated and see their potential for fostering leadership development, community service, and a sense of belonging for students. Like many, I am also aware of the potential for destructive behavior in such groups, especially in regards to alcohol abuse, hazing, homophobia, and sexism. Thus, I came to this study with my own perceptions of HWSL, and was curious to learn how both sorority and non-sorority Asian American women react to such organizations.

Congruency between Methodology and Methods

Because qualitative methodology is grounded in a non-positivist paradigm that suggests there are multiple social realities or at least no singular authoritative representation of reality (Rosaldo, 1993), I relied on participants' narratives as the primary source of data. CRT contends that race is socially constructed and that the complex dynamics of race are best understood through the voices of people of color (Delgado & Stefancic, 2001), lending further support to my decision to use qualitative methodology and methods. In 2003, I conducted semi-structured interviews with 18 Asian American undergraduate women at “Southern University” (SU, pseudonym), a private university in the Southeastern U.S. Almost half of SU undergraduates came from the Southeast and a little under half of female students participated in one of 14 sororities. SU is a majority White

campus. Asian Americans composed 6% of the undergraduate population at the time of the study and slightly under 2% of sorority women. There were no Asian American sororities at SU.

The SU registrar provided emails for all Asian American female undergraduates in 2003. There were 23 Asian American women active in SU's sororities at the time out of 1,315 total sorority women. I sent an email to all sophomore, junior, and senior Asian American students inviting them to participate in an hour-long interview. I selected the first nine non-sorority women to respond and all sorority members who responded to the email participated in the study. In order to recruit additional Asian American sorority participants, I relied on snowball sampling.

The final sample consisted of 18 Asian American undergraduates: nine sorority members and nine who had no sorority affiliation. They ranged in age from 19 to 23 and came from various Asian ethnic subgroups (two women of Japanese descent, six of Chinese descent, five of Indian descent, one of Pakistani descent, three of Korean descent, and one of Filipino descent). One woman was multiracial (Korean/White) and five were born outside of the U.S. None were international students. With the exception of one student, all were either first or second-generation Asian Americans; that is, they either immigrated to the U.S. with their families (first-generation or 1.5), or they were the first generation to be born in the U.S. (second-generation). One student was third generation, meaning that her grandparents immigrated to the U.S. Interviews ranged in length from 45-90 minutes.

During interviews, I asked students questions on their perceptions of HWSL and Asian American identity. Examples of questions included, "Why did you join sorority life (or not join sorority life)?," "Why do you think there are not many Asian Americans involved in sororities?," and "What type of role does race play in sorority life, if any?" I assigned pseudonyms to

all participants, the institution, and sororities in order to preserve confidentiality. All interviews were recorded and transcribed.

Analytic Lens and Approach

I used a combination of open coding and codes based on CRT principals during data analysis. Through open coding, I assigned codes to reoccurring themes that were then sorted into categories. I compared each code with the codes already in the category, as well as codes in different categories using the constant comparative method (Glaser & Strauss, 1967). The key categories that emerged through open coding—the roles of the family, SES, and immigration—were unanticipated; there were no questions in the protocol that directly asked about any of these issues. However, as I compared them with the categories related to CRT, I suspected that cultural capital theory could serve as a bridge that could link family, SES, and immigration to issues of race and power.

Strategies to Establish Rigor

Adhering to the philosophic assumption that there are multiple social realities and that meaning is subjective complicates the interpretation of another's narrative (Rosaldo, 1993). To strengthen the trustworthiness of the data, I asked participants to review a near-final draft of the manuscript and add comments on my interpretation of their narratives. Other than provide positive feedback, participants did not add any corrections or edits to my interpretations of findings. Also, in order to mediate my own role and identity as an outsider to sororities, I asked several graduate students who work with fraternity/sorority life and/or who are alumni of such groups to review the manuscript, asking them to identify areas where my interpretations and conclusions were not grounded in the data or were unwarranted. I incorporated most of their critiques and suggestions into the final paper. Naturally, there were limitations to the study. Because of the nature of qualitative re-

search, the findings should not be extrapolated to all Asian American women, sorority members or otherwise. The reader should also take the institutional context of SU as a predominantly White private institution into account. The intent of the study is not to produce generalizable findings, but to provide an in-depth analysis of participants' narratives that reveal insight into how intersections of race, immigration, and social class affect campus dynamics.

FINDINGS

Women cited Asian Americans coming from immigrant families and the dynamics of SES as key reasons why HWSL remained homogeneous. Some women discussed these factors as exerting an independent effect on HWSL, and I used a cultural capital lens to analyze their responses. Others connected the issues to race to interpret trends in HWSL and I make sense of their responses using CRT.

Family Matters: The Role of Immigrant Families

In discussing how immigrant identity came up in women's perceptions of sororities, I delineate how participants contrasted their identities as immigrants or children of immigrants with sorority legacies and outline women's comments on how legacy status (or lack thereof) influences access to insider information on sororities. Finally, I explore how immigrant family backgrounds intersected with race to shape perceptions of fraternity/sorority life as a White institution.

Legacy status. The issue of coming from an immigrant family often arose when women reflected on their status as first or second-generation Americans. They contrasted this status with their White peers, especially those who were sorority legacies (i.e., students related to members of the same sorority). Participants speculated that White women were more likely to participate in recruitment than Asian Ameri-

cans, particularly those who had immigrated to the U.S. or were the children of immigrants. Yuka, a member of a sorority, contrasted the two groups:

First hand, especially here in the South, there are a lot of legacies—White women—and you know about sororities when you grow up; I think that makes you aware of things like that. If you're second gen or you're first generation and your parents didn't go to university here, they have no clue that these things exist. I still have a hard time explaining to my parents what this thing is. It's definitely something that's not . . . in the realm of knowledge that we come from, when we go to universities.

Yuka concluded that White women were more likely to have mothers and other relatives who had been in sororities. Being a legacy generally gives women an advantage in the sorority rush process, as chapters foster loyalty through generational ties. Also, as Yuka stated, being a legacy can make you more "aware of things," like knowing that sororities exist and how one might navigate the system. In contrast, for Asian Americans, sororities were generally not in their "realm of knowledge" because most of their parents did not attend college in the U.S.

Toral, a member of a sorority, also emphasized how knowledge, or lack thereof, about fraternity/sorority life is transmitted generationally. With fraternity/sorority life being entrenched in tradition and Asian Americans being relative newcomers to U.S. higher education, Toral explained why it would make sense that the system was predominantly White, being a byproduct of the days when U.S. higher education was predominantly White:

I think that going Greek is a large part of tradition and family heritage. Especially with Asians, historically the Asians that are here are second generation. Their parents

came over; they're not familiar with the system. For instance, when it was established it was predominantly White . . . historically, there have been more Whites so they're going to have a higher percentage. So like your lineage and whether your parents and relatives impact it, that counts for a large portion. This is a huge generalization, but being second generation, parents of Asians are more strict because they're not as familiar with the culture and traditions they have here.

While she tied the current composition of HWSL to its establishment as a predominantly White group, she did not acknowledge the role that formal and informal exclusionary policies played in HWSL's history. She also speculated that Asian American parents would be less accommodating of sororities because they were unfamiliar with such traditions. Many participants contrasted this lack of knowledge to their White friends, as Christine, who was not in a sorority commented: "The difference in Greek life is huge compared to my friends versus me." While her friends were more knowledgeable about HWSL, Christine knew little about the system.

Insider knowledge. The lack of exposure to sorority culture that participants had due to their immigrant family backgrounds also affected their knowledge, or lack thereof, about how to navigate the recruitment process. Tammy, who joined a sorority, told me how she went into recruitment having no idea what sorority she wanted to join. I asked if she thought her rush experience differed from her peers. She responded:

That's definitely not normal. Girls definitely go into the situation knowing what house they want to get in. Some girls sit there for hours deliberating what house they're going to put down as their first preference.

While having a lack of insider knowledge did not deter Tammy from rushing and joining a sorority, Leena, a member of a sorority, suggested it might deter some Asian American women. I asked her if she had any ideas for why Asian American women were underrepresented in sororities at the university, and she answered:

Mmm probably they might feel rejection, or have a fear of rejection, feel like maybe they're not used to going through something like that. Doubtful that their mother or sister or cousin was in a sorority so they don't really know what the process entails. Maybe they don't see a value in it.

Unlike legacies, most Asian American women come to sorority recruitment not knowing how the game is played. This lack of knowledge might discourage Asian American women from going through sorority recruitment in the first place, or it might work to their disadvantage later on. One study examining Asian American women in sororities found that almost half of the Asian American sorority women interviewed (four out of nine) ended up joining through non-traditional methods, such as dropping out of recruitment and being offered a bid later on from a sorority scrambling to meet quota or going through recruitment as a sophomore (Park, 2008). It is possible that this pattern was attributable to Asian American women's lack of insider knowledge about navigating recruitment. As Tammy noted, most of her peers entered sorority recruitment with a plan, while most of the Asian American women in sororities that I spoke with took a more "go with the flow" approach to recruitment—jumping in at the last minute because their friends were going through recruitment and having few expectations. When they joined sororities, they tended to be sororities that were more diverse, most of which were seen as less elite. At SU, the three most elite sororities had no Asian American members. Because of their exclusive nature,

it is conceivable that insider knowledge and/or legacy status was even more essential to join these elite sororities, thus lessening the chances of an Asian American woman joining.

Even without considering racial dynamics, legacy status and insider knowledge are two ways that facilitate the transmission of cultural capital via elite sorority membership over time. Asian Americans are not the only ones being shut out—presumably lower-income women and first-generation White students—are also not privy to such networks. However, as we will see, race also directly influenced participants' views of HWSL.

Race, family, and immigrant identity. Under a cultural capital framework, Asian American women's immigrant families influenced their perceptions of and experiences with sororities in ways that could be construed as race neutral, albeit with implications for the racial composition of sororities. By race neutral, I mean that immigrant families' unfamiliarity with sororities deterred Asian American females is a phenomena with implications for the racial composition of sororities, but not one necessarily linked to race. However, race also directly intersected with women's identities as immigrants and children of immigrants, affecting perceptions of sororities. Diagnosing how race is significant in an arena like sororities is not so clear cut in the absence of explicit racial bias (Park, 2008). While a colorblind perspective can be used to explain away the role of race in participants' perceptions of sororities, CRT argues that race and racism are central to our societal structure. Thus, a CRT perspective would ask, how does race continue to affect sororities through intersections with participants' identities as first and second-generation Americans?

Women noted two ways that race intersected with their identities as first- or second-generation Asian Americans as explanations for the homogeneity of HWSL: their sense that sororities did little to reach out across race and

their perceptions of fraternity/sorority life as a White institution. First, they noted that sororities did little to pursue racial diversity despite many women of color's unfamiliarity with HWSL. Even though Anita joined a sorority, she commented on how she felt that sorority life did nothing to appeal to women of color:

The majority of people are White or whatever, but there's nothing that really caters to minority people. [Whites] grew up with wanting to be in a sorority. Whereas I knew that I never grew up wanting to be in a sorority or had that in the back of my mind in high school like, I want to be in a sorority. So I feel like it reaches out toward White people, and like it's already acculturated into them, but like for minority people who have never been Greek, their parents were never Greek, and don't necessarily want to be Greek, it's not necessarily reaching out to them. Like take it or leave it is how I see the Greek system here. If some minority kids want to rush, let them rush, but we're not necessarily doing anything like pulling them in because I feel like we need a special little push because we never had that in the back of our minds when we were growing up, that Mommy was a Theta or Mommy was a DG.

Although Anita was a member of a sorority, she was upfront in her interview that her sorority was more diverse because it was less elite, less selective, and hence more open to different types of women joining. Originally in the recruitment process, she had her heart set on joining an elite, all-White sorority. When I asked her what happened to her original plans, she laughed and expressed that her previous desire was naïve. She had actually dropped out during recruitment but then ended up joining later, and seemed to have a more critical outlook on the sorority recruitment process. As she explained in her quote on why HWSL tended to be homogenous, as the idea of being in a sorority be-

comes “acculturated” into many White women, the same process never happens for most of their Asian American peers. Differences between legacies and non-legacies are reinforced when such patterns parallel racial divides in sorority participation. Furthermore, in Anita’s eyes, sororities did nothing to counteract this trend. This perceived dynamic may have led to the reproduction of HWSL’s relatively homogeneous composition. While Anita still chose to join a sorority, these dynamics likely worked in tandem with one another to make sororities seem unwelcoming to many Asian American women.

Although Anita commented on why sororities at SU continued to attract mainly White students, Nora, who was not in a sorority, commented on the perception that fraternity/sorority life was a White institution:

I think there’s a social deterrence, because it’s perceived as a White institution there’s a hesitation to join, but also because there’s a lot of hesitation from parents and families. It’s not something their parents put pressure on them to do. For a lot of other college girls they’re legacies when it comes to being in a sorority, their mom was in it or there’s a certain status that goes with it that Asian women don’t have to have.

While Asian American parents were already unfamiliar with such groups, this unfamiliarity was exacerbated by perceptions of fraternity/sorority life as a White institution.

However, one of my participants, Laura, a third generation Asian American who was not a member of a sorority, suggested that race played a distinct role even apart from immigrant status in steering some Asian American women away from sororities. She talked about going home to Southern California and being offered letters of recommendations to join sororities from her mother’s friends:

I got offered letters to be a Gamma [pseudonym for elite sorority] at home and she was a very White-washed Asian American who tries to get in that whole elitist group. I was given offers to be in Sigma or a Gamma at home . . . Like, ‘you should really go Greek, dah-dah-dah. I’ll write you a letter.’ I was like, ‘Gamma, don’t do that’ . . . Usually Gammas are not quite Asian American.

Though as a third generation Asian American her mother’s social networks offered her access to sorority alumni, she still did not consider joining the elite Gamma, in part due to race. She summed up her reason: “Usually Gammas are not quite Asian American.” Granted, there were probably many women, Whites included, at SU who did not consider joining a sorority like Gamma, but Laura described Gamma in racialized terms even though her parents attended college in the U.S. and were familiar with fraternity/sorority life. While most first-generation American families are simply unaware of fraternity/sorority involvement, Laura’s story shows how perceptions of fraternity/sorority life as racially exclusive can persist even when families are acculturated into U.S. society.

Taken together, Anita, Laura, and Nora’s comments illuminate how HWSL can remain unattractive to women of color without anyone being explicitly racist. Instead, women described perceptions of HWSL as unwelcoming and being the terrain of White students. When HWSL does little or nothing to encourage students of color to join and many Asian American women’s parents are unfamiliar with the system, it is no wonder that many women of color continue to view HWSL as a “White institution.” Furthermore, the legacy system works to the benefit of White women, perpetuating an ostensibly race-neutral mechanism that reproduces Whiteness, intentionally or not.

The Relevance of Socioeconomic Status: “If You Don’t Have the Money, You Can’t Do It”

Just as women frequently commented on how being from immigrant families discouraged Asian American women from joining sororities, participants also frequently named SES as a reason for why HWSL was relatively homogeneous. Here, I address the general role of SES in HWSL. I note how the prominent role of money in HWSL was unappealing to immigrant families and end by showing how social class identity and race intersected in participants’ perceptions of HWSL.

Money matters. Some women felt that income was a stronger barrier to joining sororities than race. I asked Tina, who was not in a sorority, if she thought that the fraternity/sorority system was racially discriminatory. She responded:

No, I wouldn’t say that. I would just say it’s extremely selective. I don’t know if it’s discriminatory. Actually I’ve heard rumors that they look at our financial aid status or they look at such and such because they have access. Some people think it’s discriminatory. It’s more class, definitely.

Yuka, a member of a sorority, also suggested that socioeconomic diversity was more of an issue than race in the fraternity/sorority system: “I think diversity is more of a class issue than a race issue in the Greek system; it’s a high cost. A lot of people who drop out of the pledge class in my sorority; 100% were because they had a financial issue, not because they didn’t like it.” Tina and Yuka’s comments were common among participants.

Maryanne, who was not in a sorority, noted how the cost of joining a sorority was not limited to the membership fees, which ranged from about \$800 to over \$1000 a year at SU:

It’s like if you don’t have the money, you can’t do it. It’s not just dues; it’s things like buying t-shirts or buying Tupperware or all of these little things that if you don’t have the money, it’s going to be a huge pressure on you.

Given the high costs of joining a sorority even on top of dues, SES worked as a filtering system for sorority membership. Maryanne added that as a scholarship student, she could not justify the cost of joining. Even within the sorority system there were socioeconomic distinctions. Marissa, who was not in a sorority, observed how membership in elite sororities worked as a status symbol: “It’s basically a social standard, like economic. Sometimes like you show your economic situation by what sorority or fraternity you’re in.”

Familial perceptions of sorority costs. Besides money being a deterrent for many women of all races to join sorority life, participants commented on how the high cost of sororities deterred Asian American women due to their immigrant families’ unfamiliarity with the fraternity/sorority system. Pooja and Sunny, both members of sororities, suggested that Asian American parents had a hard time justifying the high cost of sororities given their limited knowledge about them. Pooja stated:

The money issue, it’s really expensive, because a lot of our parents aren’t from this country and they don’t really understand Greek Life. And probably, when you explain it to people who aren’t from this country it probably sounds ridiculous. So I can see why a lot of [Asian American women] wouldn’t rush because their parents would see it as something ridiculous, just a way to party and get drunk.

Sunny also concluded that many Asian American parents would not understand paying so much money for a social organization:

I think it has to do with a lot of our parents' influence just because I think in most cases it's probably unacceptable by our parents to join like a social organization and to pay that much money. I think most parents don't really see the point and then to even try to explain it just makes matters even worse. My parents, now that I'm a part of one, but they don't really understand like the whole—I mean, they're like "Oh, that's great. If you want to do it, then we'll support you." But I think a lot of parents they're like, "Oh, we're just giving you money to be with a bunch of girls." I think it's just really hard to explain and so it's a lot of trouble to deal with.

Even when Asian American women come from families that could afford to pay for a sorority, they felt that their parents might not see the value of paying so much for a social organization. In this way, the unfamiliarity of sororities for Asian American immigrant parents, the primary focus of the previous section, influenced whether they would be willing to pay for their daughters to join. The notion of habitus within cultural capital theory, a deeply ingrained way of how social class shapes dispositions, norms, expectations, and perceptions of opportunities, clarifies why even affluent Asian Americans might not join sororities (Bourdieu & Passeron, 1977). While higher education researchers have used the concept of habitus to explain how social class shapes students' norms and expectations around applying to college (McDonough, 1997), this study indicates that habitus also affects student experiences during college. For instance, to many of the women in this study, the high price of sorority membership seemed unreasonable either due to their own SES or their parents' unfamiliarity with sororities. Simply put, spending upwards of \$1000 to join a social

club was not seen as normal; it was not within their or their parents' frame of reference for how money is spent. However, women's norms and expectations around money were shaped not only by their actual family income but by their identities as immigrants or children of immigrants. Thus, even though some participants came from wealthier families, the idea of spending \$1000 to join a sorority still violated their assumptions about how money should be used, assumptions shaped by ethnicity, social class, and generational background.

In the prior two sections, cultural capital theory is helpful to understand the reproduction of elitism within HWSL. High costs deter low-income students and students whose families are unfamiliar with the system, leaving the system to be more accessible to legacies, the wealthy, and those with insider knowledge. The notion of "habitus," where HWSL membership is not seen as a normative practice by many families of color, also works to perpetuate homogeneity within HWSL. Once again, a cultural capital lens is helpful, but does not necessarily explain how racial, and not just socioeconomic, exclusion functions within HWSL. The next section explains how the distinct intersection between race and class influenced women's perceptions of HWSL.

Intersections between race and social class.

Intersections between class and race worked to deter women of color from sororities, largely by sending messages that they were unwelcome in HWSL. Participants described fraternity/sorority life as a White, wealthy organization, explicitly linking race and class. Interestingly, most of the women who commented on this issue were not members of sororities, suggesting that they were more aware of this linkage between race and class or found it more troubling. Nora, who was not in a sorority, recalled her perceptions of sorority life from her first year of college:

What I saw was a lot of rich White girls and I just knew that I was never going to fit into that crowd and wouldn't ever really want to. I think that was just what kind of really influenced me.

"Rich White girls" was a common descriptor among participants for either their impressions or stereotypes of the sorority system. While some participants, such as Maryanne, not in a sorority, commented earlier that sororities were seen as a "White thing," Nora noted the extra element of social class. It was not just rich girls or White girls who she associated with sororities, but a distinct image of "rich White girls" in which class and racial lines intersected. Jennifer, not in a sorority, also touched on issues of race and class in her observations of sororities:

I do think a lot of sororities; people see them as elitist and the White majority so people might feel uncomfortable with that. I think they're a lot of things that go with that, like socioeconomic status, type of background they're from.

From Jennifer's viewpoint, elements of race ("the White majority") and class ("elitist") influenced her view of sororities. While most of the sorority women that I interviewed acknowledged similar stereotypes about fraternity/sorority life, they noted that their sororities offered scholarships or special financial aid to help women join. They also offered their own participation as evidence that sororities were not just "a White thing." Still, Nora and Jennifer's comments showed how non-sorority women held clear perceptions about who was welcome in HWSL.

While Nora noted earlier that she could not see herself fitting in with such a crowd of "rich White girls," Marissa, not in a sorority, talked about how she simply felt unwelcome in sorority life at SU:

I mean, you're not welcomed at all, and even if you are, you still have to be in that same economic status. You have to have that same status, and most Asian families probably don't come to that standard. I mean, most Asians probably are first generation, second at most.

While other participants noted how the high cost of joining a sorority discouraged some women from participating, Marissa explained how the exclusion that some Asian American women already felt from fraternity/sorority life was exacerbated by the high costs of sororities or perhaps vice-versa. Regardless, she felt that most Asian Americans did not meet the socioeconomic standard for fraternity/sorority life.

Reading her quotation, I surmised that many of the Asian American women at SU likely came from relatively affluent backgrounds similar to many of the White students at SU, considering that low-income students of all races are underrepresented at selective institutions (Carnevale & Rose, 2003). While Marissa referenced SES as a deterrent to sorority membership, I sensed that the more salient issue was the first part of her statement, that she felt that Asian American women were not welcome in sororities at SU. Adding to this feeling of exclusion was the impression that joining a sorority demanded a certain amount of resources. The most obvious resource was finances, but joining HWSL also required a certain amount of cultural capital such as legacy status and insider knowledge that Asian Americans as "first generation, second at most" often did not have. Furthermore, the reputation of HWSL as being dominated by "rich White girls" deterred some Asian American women from even considering joining, showing how race and class can intersect to foster exclusion in campus communities.

DISCUSSION AND IMPLICATIONS

Overall, this study touches on various social forces that influenced participants' perceptions of HWSL and its lack of racial diversity. Women cited immigrant families and social class to explain the low diversity in HWSL. As illuminated by cultural capital theory, legacy status and insider knowledge can work over generations to perpetuate privilege for certain populations and exclude others. However, women also noted how such issues intersected with race to complicate and reinforce lines of inclusion or exclusion. While previous examinations of race in HWSL have focused primarily on the role that race alone plays in fostering feelings of exclusion for women of color (Chen, 1998; Schmitz & Forbes, 1994; Park, 2008) the current study adds to our understanding of how the additional factors of immigrant identity and SES interact with race on college campuses. CRT illuminates the continuing significance of race in a supposedly post-racial society, showing how race-neutral explanations for homogeneity ultimately link with issues of race, explaining in part the racial composition of HWSL. Both theories help explain how power and privilege are reproduced over generations along racial and socioeconomic lines.

CRT rejects ahistorical attempts to disconnect past historical injustices from present patterns of racial stratification (Solórzano, 1998). This aspect of CRT is critical to understanding how current phenomena such as the pattern of White women being disproportionately more likely to be HWSL legacies are the result of a system that was explicitly racially segregated for much of its existence. Decades later, there are no such discriminatory clauses on the books, but HWSL remains predominantly White on many campuses, generally reproducing the status quo of homogeneity. This paper elucidates some of the complex reasons why some current day students still feel unwelcome in such organizations even in the absence of such clauses, ex-

plaining how race intersects with the domains of immigration and social class to perpetuate social divides on campus.

This paper also contributes to the work on intersectionality between race, social class, and immigration. AsianCrit, a stream of CRT focusing on Asian Americans, asserts that Asian Americans are forever associated with foreignness (Chang, 1999). While the "forever foreigner" stereotype is one way that race and immigration intersect to continue to mark Asian Americans as racially distinct, my work points to a related concept—the "forever outsider." In this case, none of the women in my study described feeling excluded due to being stereotyped as foreign or non-American. Instead, their exclusion from HWSL and general outsider status was perpetuated by structures that reproduced the homogeneous demography of HWSL, such as the legacy system and other forms of cultural capital. While this dynamic was especially pronounced among women whose parents were immigrants and thus unfamiliar with fraternity/sorority life, it also took on a decidedly racial bent in the narrative of third-generation Laura, who expressed how feelings of racial exclusion can persist even when an Asian American student is not from an immigrant family. This paper adds to our understanding of the complex intersections between race and immigrant/outsider status that work to perpetuate racial divides. It also adds to our understanding of how intersectionality not only affects students of color and their sense of self (e.g., being a woman of color); it also affects their perceptions of White students and White student subcultures like HWSL. The phrase "rich White girls" may be based on a stereotype, but it speaks volumes about the social distance that some participants perceived between themselves and the realm of HWSL.

This study has significant implications for educators on campus in three realms. First, these women's stories add to our understanding of why fraternity/sorority life remains divided

among racial lines. As higher education institutions continue to diversify, these elite groups generally remain the domain of White students (Chang & DeAngelo, 2002). Such self-segregation worries researchers and practitioners, given that such groups can isolate White students from the documented benefits of cross-racial interaction (Sidanius et al., 2008). Also, fraternity/sorority life can hinder efforts to foster a healthy campus racial climate if certain populations feel excluded from participating (Milem et al., 2005). To limit the analysis of race in HWSL to issues of overt, explicit racism is overly simplistic; this study points to the more complex ways that race influences campus life. Participants' articulations of how their identities as mostly first and second-generation Americans intersected with issues of class and race provide a more nuanced understanding of fraternity/sorority life demography that can assist educators in understanding the racial dynamics of campus subcultures. CRT and cultural capital theory are powerful tools that educators can use to diagnose patterns of interracial dynamics and social reproduction on campuses, unveiling how race and privilege are manifest in subtle, everyday ways apart from blaring incidents of obvious prejudice or exclusion.

Second, while fraternity/sorority life has been eliminated at some campuses, it continues to play a prominent role at many institutions. Part of the draw of fraternity/sorority life is the connections that membership can offer. While fraternity/sorority life may be a symbolic bastion of privilege, there have been few studies that have examined the role of social class in student perceptions of fraternity/sorority life, let alone how these categories intersect with the social forces of immigration and race for newer generations of college students. Not only does social class stratify access to college in the first place, but fraternity/sorority life can foster divisions and privilege within campus communities once students actually come to college. It is easy for social class to go unrecognized, and

our conceptions of inclusive campus communities must take class into consideration. Furthermore, educators also need to consider whether university-sanctioned "pay to play" co-curricular opportunities are consistent with higher education's espoused values for inclusion and diversity. Granted, higher education as a system is already stratified by social class and race, but this study illuminates how the playing field in higher education is not only unequal at the point of access; university-supported co-curricular activities are additionally stratified by race and class, perpetuating a certain amount of inequality and privilege.

Finally, this study adds to the body of knowledge around first, 1.5, and second-generation (or "second-plus generation") Americans' experiences in higher education and society, with a specific focus on Asian American students. Previous works have examined Asian American students' experiences with student organizations such as religious, pan-ethnic, or cultural organizations (Kim, 2006; Museus, 2008; Rhoads, Lee & Yamada, 2002). Most of these studies suggest that Asian Americans use these groups to create dynamic articulations of ethnic identity rather than assimilating into the majority culture. Other recent work highlights the importance of family in immigrant and second-generation students' college experiences (Maramba, 2008). However, few scholars have studied second-plus generation Americans' encounters with and perceptions of predominantly White student subcultures, with the exception of studies addressing the broader campus racial climate (Loo & Rolison, 1986; Sidanius et al., 2008). Thus, this study contributes to our understanding of what happens when "newer" generations of Americans encounter an "older" American institution like HWSL. It also challenges educators to think about race beyond Black and White, recognizing the vast diversity of the college-going population.

Although first, 1.5, and second-generation Americans are entering college campuses in un-

precedented numbers, this influx of diversity has yet to transform fraternity/sorority life in meaningful ways on many college campuses. While there are no longer formal exclusionary policies banning students of color from HWSL, racial divides persist in part because of how race, class, and nativity interact to send messages about who is welcome and unwelcome in fraternity/sorority life. As noted earlier, the historically unequal configuration of HWSL begs serious questions about its congruency with higher education's value for inclusion and diversity. At the minimum, there are various routes campuses could take to making fraternity/sorority life more inclusive. At some universities, consideration of race needs to move from a Black/White binary to a more multicultural community that provides space for Asian American, Latino/a, Native American, and multiracial groups. Encouraging interactions between these groups could help break down some of the racial isolation that HWSL life is known for (Sidanius et al., 2008). Given participants'

comments on their lack of insider knowledge about fraternity/sorority life, fraternity/sorority life offices can work to demystify the HWSL recruitment process for students. Fraternities and sororities should also be cognizant of the powerful messages that certain images project; for instance, what do "ghetto" themed parties say about the inclusivity of fraternity/sorority life? And finally, frank conversations about money, social class, and fraternity/sorority involvement can benefit students of all races.

Overall this article adds to our knowledge of how racial divides are perpetuated in campus life through complicated intersections between immigrant identity, race, and SES. As both America and higher education continue to diversify, the question remains of whether fraternity/sorority involvement is equipped to deal with the changing demographics of university settings. While some traditions are certainly worth cherishing, fraternities and sororities must look to the future in order to ensure their relevance in the 21st century.

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A VALUES-BASED LEARNING MODEL TO IMPACT MATURATIONAL CHANGE: THE COLLEGE FRATERNITY AS DEVELOPMENTAL CRUCIBLE

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The period of late adolescence and early adulthood is a critical time during which individual identity is developed. One fraternity recently implemented a developmental process that facilitated identity maturation within its members by emphasizing self-awareness and reflection. Utilizing a learning model as the core component of all aspects of its programming, the fraternity conducted research to determine the impact of its learning model on the development of self-awareness. This article provides data from three years of implementation that documents significant increases in this critical developmental competency.

The period of late adolescence and early adulthood is a time in which individual identity development is actively shaped by a wide range of biological, cognitive, and psychosocial variables (Evans, Forney, Guido, Patton & Renn, 2010; Hamrick, Evans, & Schuh, 2002). During this critical time period, individuals are working to integrate a sense of self, refine the values that will direct their life trajectories, and practice the development of intimate relationships. The literature explicates the many dimensions of these developmental tasks and the dynamics that can either support or derail their accomplishment. Therefore, it is essential to create environments that nurture learning and contribute to positive identity development (Strange & Banning, 2001). To enhance the positive maturation of such capacities and the cohesion of stable identity, college-aged men need and can benefit from specific and supportive interventions (Harper & Harris, 2010).

There are many environmental contexts that might be utilized to provide experiences to enhance maturation. Among these, the college men's fraternity seems like a natural crucible given the historical emphasis on ideals that develop positive character and leadership. Unfortunately, evidence also suggests

fraternities have become compromised by a range of negative behaviors and activities which occupy the time and attention of administrators and create a negative impression of fraternity-based experiences (Bickel & Lake, 1999; Ellsworth, 2006). The college fraternity has potential to return to its initial idealistic aspirations and serve as a forum that positively influences young men cognitively, socially, and affectively (Asel, Seifert, & Pascarella, 2009; Harms, Wood, Roberts, Bureau & Green, 2006; Hayek, Carini, O'Day, & Kuh, 2002; Kelley, 2008; Pike, 2003; Roberts & Johnson, 2006). Such a reprioritization of mission and purpose would replace an emphasis on purely social activities with an investment in a range of educational and interpersonal experiences designed to facilitate maturational success. This reconceptualization of the college fraternity establishes it as a co-curricular organization aligned with the missions and goals of the broader higher education community.

CONTEXT

Lambda Chi Alpha, an international men's fraternity founded at Boston University in 1909, currently has approximately 200 chapters on college campuses across North America

and serves approximately 11,000 undergraduate members. The fraternity recently moved to embrace a mission focused on goals designed to facilitate the developmental maturation of its members along a wide array of developmental continua, which include inter-psychic and interpersonal benchmarks of identity maturation. Consistent with this sense of mission, Lambda Chi Alpha has created an experiential, educational model focused on fostering student development during college, making student experiences increasingly meaningful, evocative, and enriching (Hunter & Lutzky, 2009). This model expands the traditional fraternity emphases on education as a prelude to initiation and creates a set of experiences designed to foster ongoing individual development throughout the college years. Termed the Lambda Chi Alpha Learning Model (LCALM), this grounded approach has become the core component of all aspects of programming. Research has been conducted to determine the effect of its utilization on a range of developmental competencies. This article provides data from three years of implementation and investigation that suggests students in the fraternity chapters using the learning model are evidencing significant increases in self-awareness.

REVIEW OF LITERATURE

This section is an overview of literature focusing on student learning, identity formation, creating educational environments, and the means through which the LCALM has been established to facilitate related outcomes. The literature reviewed demonstrates the aspects of relevant research used to ground the LCALM model, serving as its conceptual framework.

Student Learning

Several areas of the literature are particularly relevant to the explication of the LCALM processes. These include the transformative

learning model (Mezirow, 1991; 1997; 2000), social learning theory (Bandura, 1977), and experiential learning (Kolb, 1984). The learning emphasized in this approach is not merely related to the acquisition of knowledge but more cogently focuses on the evolving sense of identity (Evans et al., 2010) and how the environment should facilitate such growth (Strange & Banning, 2001).

Transformative Learning

Merriam and Caffarella (1991) emphasized that learning occurs primarily through interaction in a continuing environment of interpersonal relationships (e.g. a college fraternity); recurring experiences influence the development of worldviews. Cognitively, students move from dualistic perspectives to multiplicity and relativism as they form epistemological foundations for meaning-making and for the prioritization of values and personal goals (Baxter Magolda, 2001; Perry, 1970). Interactions with others help individuals to examine what they have experienced and potentially to reform existing perceptions and organizing schemata. These interactions can therefore change the interior perceptual map and foster transformative learning (Baxter Magolda, 2001; Mezirow, 1991; 2000).

Mezirow (1991; 2000) described transformative learning as “potentially significantly” changing ideas that are no longer dependable or relevant. The individual reconsiders existing views of self and others based on the accumulation of new, generative experiences. Such processes occur during late adolescence and continue to be influential throughout young adulthood. As a result, perspective transformation occurs (Mezirow, 2000) and maturation follows (Cranton, 2006; Merriam & Caffarella, 1991; Mezirow, 2000). Perspective transformation is greatly determined by the influence of peers as role-models (Bandura, 1977; Cranton, 2006; Mezirow, 2000).

Social Learning Theory

Bandura (1977; 1986) believed people learned from observing others in the same environment. Individuals compare others' actions to their own and their previously held perceptions of appropriate behavior. These models, attributions, and related feedback create a sense of how to act in a select environment (e.g., as a member of a college fraternity). Such experiences are integrated into a sense of what is real, what is expected, and what one "knows" about the worlds of others and the place of self in that world. Individuals create meaning as a function of how they interpret this evocative intersection of the past in relation to experience in the present. In this way, epistemological beliefs may be reshaped. Affective components may also change. Moral development, tolerance for ambiguity, and commitment to social norms can be enhanced. The potential for positive norm development is thereby enhanced by experiential learning activities in this interpersonal environment (Bandura 1977; 1986).

Experiential Learning

Most students enter college conditioned to be passive recipients of knowledge. This perspective stems from prior educational experiences (Kolb & Kolb, 2005; Richlin, 2006). College educators can be more effective when they help students to assume control of and responsibility for learning (Kolb, 1984; Kolb & Kolb, 2005). Experiential learning is a primary strategy to pursue this desired outcome and can be practiced in the context of advising and supporting the operations of a college fraternity.

Experiential learning is the "process whereby knowledge is created through the transformation of [one's] experience" (Kolb, 1984, p. 41). Learning involves the integration of thinking, feeling, perceiving, and behaving (Kolb & Kolb, 2005) and occurs as a result of the individual interacting with others in the

environment. It is this core component of interaction which makes the experience central to this form of learning. Individual learners go through a cycle of concrete experiences, reflect on experiences, conceptualize experiences in the abstract, and then apply new constructions to develop understanding (Cranton, 2006; Kolb, 1984). Such experiences form a basis for observation and reflection. These observational and reflective processes then generate and/or transform perceptions and world views, providing the cognitive basis for "new implications for action [that] can be discerned" (Kolb, 1984, p. 209).

As the individual learns, he/she alternates experientially between opposing modes of reflection and action and between feeling and thinking (Kolb & Kolb, 2005). This process creates new or reaffirms existing approaches to decision-making and problem solving. Simultaneously, beliefs and values are created, integrated, and enterprised. This process is most effective when the individual engages it in an open-minded way, which allows for the simultaneous development of multiple perspectives and creativity (Cranton, 2006; Kolb, 1984; Mezirow, 2000). As Mezirow concluded, the ability of experiential learning to foster transformative, cognitive, and interpersonal construction is due to the central roles of introspection and self-reflection.

Komives et al. (2005) explained experiential learning as particularly powerful in helping college students to develop leadership skills. Such experiences can be salient when considering the environment of a college fraternity (Martin, Hevel, & Pasarella, 2012). Students learn to interact with others and to foster common strategies with which to accomplish shared goals. When successful, such processes positively influence self-esteem and a sense of social competence (Johnson & Johnson, 1999).

Identity Formation

The years of 18-24 appear to constitute a critical period for the development of a sense of self (Baxter Magolda, 2001; Erickson, 1968; Kegan, 1982; 1994) and for the differentiation of those values that will create both goals and the underpinnings of moral character (Evans et al., 2010; Kohlberg, 1975). Theories of the process of identity development have guided the field of student affairs for almost 40 years (Evans et al., 2010; Hamrick et al., 2002). Numerous developmental theories exist including psychosocial (focusing on affective and interpersonal aspects of one's development), cognitive (constructs which create a sense of understanding and knowing), self-reflection (a sense of how I see myself and how others view me), and integrative theories (those which connect each of the aforementioned types and typically incorporate environmental considerations) (Evans et al.). Experiences are internalized in a fashion that influences the individuals' existing sense of self and reciprocally determine the nature of future experiences. Most theories are explained through stages: progression through each stage is a function of the successful integration of experiences from the previous stage, often conceptualized around core developmental tasks.

Environment

Environments have a clear role as the context in which learning and development occurs and as the source of numerous contingencies influencing these developmental processes (Evans et al., 2010; Strange & Banning, 2001). Individuals identify commonly held values in the environment as one source of their own perspectives and beliefs (Strange & Banning, 2001). The values prioritized by some environments may be subjective, but widely held values do exist in all environments, including the college campus context. Typically, these values are aligned with broad societal values (Dalton, 1985; Nash & Murray, 2010).

Among the environmental variables that influence college students is the immediate peer group. This variable may be particularly powerful for the college men's fraternity (Astin, 1993; Strange & Banning, 2001). Astin identified the immediate peer group as those with whom the individual most strongly identifies. As a result of interactions, one's beliefs are influenced and possibly modified. Students move in and out of peer groups in the context of their college experience resulting in groups having differing levels of influence on learning and development. The peer group exerts a powerful influence over the individual especially during adolescence and young adult years. Astin observed that, "every aspect of the student's development... is affected in some way by peer group characteristics, and usually by several peer characteristics. Generally, students tend to change their values, behavior, and academic plans in the direction of the group's dominant orientation" (p. 363). Due to the unique environment of fraternities, the time spent with fellow members renders the population an especially powerful immediate peer group (Astin).

Student involvement was originally viewed as regulated by the student (Astin, 1993); however, researchers more recently have emphasized the role of institutions in connecting students to enriching educational experiences. Involvement has shifted to engagement, emphasizing the shared responsibility of all to support student success (Wolf-Wendle, Ward, & Kinzie, 2009). Strayhorn (2008) examined the relationship between engagement in educationally meaningful activities and perceived personal/social learning outcomes (e.g., values, character) among college students perceived or objectively measured. He found students involved in experiential learning tended to feel as if they had grown more than their counterparts who experienced passive learning; peer interactions were the greatest influence on learning. These findings are consistent with previous

research that the peer group is likely the most powerful influence on college students (Astin; Pascarella & Terenzini, 2005) and the environment selected by the student has significant impact (Strange & Banning, 2001).

The existing research describes the fraternity environment as a complex phenomenon (Asel et al., 2009; Jelke & Kuh, 2003) with both potentially positive and negative influences. Factors that negatively impact learning include alcohol misuse (Wechsler, Kuh & Davenport, 1996), homogeneity and a lack of appreciation for diversity (Asel et al.), and detrimental activities such as hazing (Ellsworth, 2006). Such activities interfere with learning and positive development (Asel et al.; Whipple & Sullivan, 1998). Positive influences within the fraternity environment include an emphasis on engagement (Asel et al.; Astin, 1993; Bureau, Ryan, Ahren, Shoup, & Torres, 2011; Hayek et al., 2002; Martin et al., 2012; Pike, 2003), allegiance to alma mater (Kelley, 2008), and participation in community service and leadership activities (Harms et al., 2006; Hayek et al.; Kelley; Roberts & Johnson, 2006). The college fraternity can be a forum in which learning occurs, although the results may be mixed (Asel et al.; Bureau et al.; Hayek et al.; Martin et al.; Pascarella, Flowers & Whitt, 2001; Pike; Whipple & Sullivan). Research on educational gains that may be attributed to fraternity membership suggested that the influence is multi-dimensional, complicated, and cannot be interpreted monolithically (Asel et al.; Hayek et al.; Pike).

The Lambda Chi Alpha Learning Model (LCALM)

The LCALM was informed by the developmental theories of Erickson (1968; 1980), Kegan, (1982; 1994), and Baxter Magolda (2001) and emphasizes Bandura's social learning theory (Bandura, 1977) and Kolb's model of experiential learning (Kolb, 1984; Kolb & Kolb, 2005). The LCALM uses experiences in

the fraternity environment to help members examine possible courses of action that will help them develop skills needed to be a good member and person. The LCALM emphasizes reflection through journaling. Through the journal, the member works to make meaning of his experiences. Sharing these experiences with others in the organization can help to influence the overall fraternity environment.

Reflecting

The role of reflection is considered to be central in facilitating the influence of LCALM and has been linked in the literature to a range of developmental contingencies that enhance the maturation of character and the development of leadership skills (Bandura, 1978; Komives, Owen, Longersbeam, Mainella, & Osteen, 2005). The act of reflecting varies from simply thinking about experiences to increasing awareness of thoughts, feelings, values, or actions to considering possible alternatives to existing worldviews (Bandura, 1977). Through reflection, individuals can reconcile personal and group approaches to regulating behavior and make judgments about those behaviors. Gradually, the person develops a sense of competence required for adaptation to the environment (Bandura, 1977). Through what Mezirow (2000) called "premise reflection" one examines long-held, socially constructed assumptions (e.g. gender roles of men), values, and beliefs about a phenomenon.

Critical thinking and reflecting on experience is essential to transformative learning (Cranton, 2006; Keeling, 2004; Mezirow, 1997). Ways of thinking are transformed through critical reflection on our assumptions, interpretations, beliefs, and habits of mind or points of view (Mezirow). From this review, the individual is able to reaffirm or revise his/her ways of acting with others (Cranton). New knowledge is then applied in future contexts (Merriam & Caffarella, 1991). Throughout the process, self-initiative is pivotal.

Researchers have found that students engaging in reflective activities report increased self-awareness, self-confidence, and feelings of empowerment to recreate their own self-concept and to clarify values (Roberts, 2008). Komives et al. (2005) and Roberts explained the importance of reflection as a key component in the development of future leaders and suggested strategies for incorporating reflection into leadership education as well as mechanisms for its assessment. These results indicate reflection is important, and those who work within educational organizations, in this case a men's fraternity, have a responsibility to create environments that support critical reflection.

Meaning Making

Reflection is followed by a period of meaning making in which individuals journal around a series of structured exercises to understand the significance of the experience for themselves and their relationship to others. The LCALM emphasizes meaning making as a process in the learning continuum where reflections are placed within the context of self. This occurs through guided journaling. Putting thoughts and feelings into words allows for a bridging function to connect the cognitive and affective, the private and shared, and internal and external functions. Meaning making allows for individuals to see how the past continues to influence the present.

Students construct meaning through observations and interactions with the world around them. Meaning making occurs as a result of efforts to comprehend the essence and significance of events, relationships, and learning, to gain understanding of themselves in a larger context, and to experience a sense of wholeness (Nash & Murray, 2010). Students make sense of and interpret experiences in relation to previous experiences. Further, students' values influence their behavior and provide the basis for making ethical judgments (Nash &

Murray). Through reflection and meaning making, students develop a clearer sense of who they are in relation to their own values and who they are in relation to the values of others in the larger world. This not only consolidates an important sense of personal identity but also develops an understanding of the position of self in relation to others who may have differing values and world views (Keeling, 2004). There is no one way to make meaning; however, interventions by educators are important to help students make sense of themselves and their relationships with others (Keeling, 2004; Mezirow, 2000; Nash & Murray).

Self-reflective journals are one of the most common reflection strategies due to the ease of implementation and potential depth of response (Jarvis, 2001; Lukinsky, 1990; Merriam & Caffarella, 1991; Roberts, 2008). Journaling helps students become reflective learners as they record personal stories about experiences and observations and as they consider their increased ability to identify and articulate the issues about which they are learning (Cranton, 2006; Jarvis, 2001; Lukinsky, 1990). Through this process, they increase self-awareness (Cranton, 2006; Hatcher & Bringle, 1997). The format and structure may vary from free stream-of-consciousness writing to a guided examination of specific events. For example, DiPaolo (2008) examined the experiences of six fraternity members during a leadership institute. Through individual journaling and group reflection, participants reflected on how their experiences shaped their thoughts on leadership.

Sharing

While individuals can make meaning on their own, structuring opportunities for sharing new ideas with peers allows students to place their sense of self in relation to external others. Common perceptions and beliefs become normalized when shared with others, contributing to a sense of community. Sharing

then becomes a process to help individuals use their understanding to successfully navigate their environment. As the final component of the LCALM, sharing becomes a pivotal process for consolidating personal knowledge and understanding and for integrating new understanding based on perspectives and feedback from others.

Chickering and Gamson (1987) defined good practice in undergraduate education in terms of a process that “develops reciprocity and cooperation among students” (p. 3). A way to increase the propensity for cooperation is creating environments in which sharing knowledge is expected. Conducting reflection activities and then sharing thoughts with the group helps students to co-create knowledge and revise previous worldviews (Bandura, 1977; Cranton, 2006; Nash & Murray, 2010; Chickering & Gamson). From these interactions, participants sense how their identity is similar to and different from others around them (Baxter Magolda, 2001; Baxter Magolda & King, 2004). Such self-awareness serves as a launching point for ongoing learning and identity development (Chickering & Gamson) and for the maturation of respect and mutuality in the environment of the fraternity.

METHODOLOGY

Longitudinal Study Process

During the 2006-2007 academic year, Lambda Chi Alpha initiated a psychometric research study and pilot implementation effort to evaluate the efficacy of its (then) newly developed LCALM and redeveloped educational curriculum. The organization committed to a ten-year investment of resources to evaluate the self-awareness of its members at various points during their participation in the fraternity. The organization is now in year four of that commitment. Since implementing LCALM and redeveloping educational curriculum for distribution to all undergraduate

members during the 2007-2008 academic year, undergraduate chapters have incorporated the model to varying degrees. This has allowed Lambda Chi Alpha to evaluate the influence of the LCALM by comparing member scores on a self-awareness inventory between those implementing the model and those not using it.

The researchers hypothesized that individuals who utilized the LCALM would show significantly greater growth in the development of self-awareness than those who did not make use of the model. In addition, the researchers hypothesized organizational changes consistent with the degree to which the LCALM was implemented, e.g., mean scores would continually increase commensurate with the degree of implementation.

Operationalization of the Lambda Chi Alpha Learning Model

Lambda Chi Alpha staff designed the LCALM with the intention of facilitating the maturational development of its late adolescent members. Operationalizing the LCALM in such a way that was both appealing to students and simple to implement required that Lambda Chi Alpha reconsider its approach to new member development and approach the process as more of an orientation than a simple education program, requiring additional resources and materials for both participants and educators. This process produced an eight-week new member development process that utilizes the LCALM to acclimate members to Lambda Chi Alpha’s Seven Core Values, making up the acronym LDRSHIP (loyalty, duty, service & stewardship, honor, integrity, and personal courage). One core value is explored per week, with the eighth week providing participants the opportunity to make meaning of the entire new member development process. A detailed overview of the eight week program curriculum is available from the first author by request.

Survey Participants (Subjects)

Participants in this study consisted of 4,024 undergraduate males enrolled at approximately 200 colleges and universities throughout the United States and Canada. All of the participants were undergraduate members of Lambda Chi Alpha at the time of their participation in this study and received no compensation. Survey participants either completed this study as new associate members (newly affiliated, non-initiated members) or newly initiated members. Subjects were between the ages of 18 and 26 ($M=18.94$, $SD=1.23$) for the associate survey and 18 and 28 ($M=19.34$, $SD = 1.28$) for the initiate survey.

INSTRUMENTATION

Member-Level Data

To measure self-awareness of members, Lambda Chi Alpha administered the Self-Consciousness Scale developed by Fenigstein, Scheir, and Buss (1975). This measure has demonstrated excellent psychometrics elsewhere in emergent adulthood samples (Fenigstein et al, 1975; Turner, Carver, Scheier & Ickes, 1978). The Self-Consciousness Scale is a 16 item self-report inventory, scored on a four-point Likert scale with one (1) being extremely uncharacteristic and four (4) being extremely characteristic. It is widely used in the literature and provides a relevant comparison sample group for college freshmen and college-aged men. The researchers were able to use the Self-Consciousness Scale to measure the efficacy of the organization's curriculum and LCALM in terms of this aspect of the maturational development of its members.

Chapter-Level Data

To investigate a potential correlation between the LCALM and the development of self-awareness among individual participants, the researchers collected data on the degrees to which the LCALM was utilized by the local

chapter in which the participant is a member. The LCALM implementation data were collected by members of Lambda Chi Alpha's professional staff, Educational Leadership Consultants (ELCs), who rated each chapter during bi-annual visits. This process allowed the researchers to understand the levels to which chapters were implementing the organization's educational curriculum, and, specifically, the LCALM. Examples from the 27 question evaluation system included:

- Does the chapter utilize the Seven Core Values in bid discussions?
- Is the chapter's associate member development curriculum organized around the Seven Core Values?
- Does the chapter utilize experiential learning (associates actively participate in an experience related to a core value) as part of associate member development?
- Is the process of reflection and meaning-making explained to the associate members?
- Do the associate members reflect on their experiences and make meaning of them?
- Do associate members share their reflections and the meaning they made weekly during weekly debrief (share and discuss) sessions?

Once the ELCs collected this data, it was input into a report, which was shared with the chapter and stored electronically at Lambda Chi Alpha's headquarters. Once chapter visits for an academic year concluded, Lambda Chi Alpha staff inputted these data into a spreadsheet to measure curriculum and LCALM implementation. A binary scoring system was used with responses of "yes" to a question on the system equaling one (1) point and an answer of "no" resulting in a zero (0). Since the rating instrument had a total of 27 questions, the maximum score a chapter could receive was 27, with the minimum score, 0. Data was

then entered into an aggregate data file and sorted for analyses and comparison purposes to understand which chapters most fully implemented Lambda Chi Alpha's curriculum and the LCALM.

Individual Member Data Collection

Administered internally by Lambda Chi Alpha staff during the 2007-2008 and 2008-2009 testing periods, and in 2009-2010 through Scantron Corporation, newly associated members and recently initiated members were sent the Self-Consciousness Scale (Fenigstein, Scheir, and Buss, 1975) through emails. Each potential participant was told the surveys were anonymous and individual identities would not be recorded or reported. The recipients of the survey are initially reported to the fraternity through standard forms that record association and initiation data. The participants are then assigned a unique identification number. Only these numbers are used to ensure that consistent data from the same participant are appropriately recorded and analyzed. No further identification is available at any point during data collection or analysis. Data regarding the chapters to which individual members belonged were collected; however, the only utility for that data lies in the stratified sample comparison.

Candidates were given two weeks to complete the survey. If the survey was completed, the participant responses were then logged in the database. If the survey was not completed, individual candidates received an email reminder to participate in the survey process. After three weeks of non-participation, the survey link was terminated and the individual was no longer eligible to participate in the survey. This same process was replicated for newly initiated members. Capturing data from new associate members and newly initiated members allowed the researchers to measure baseline levels of self-awareness prior to participation in the organization's curriculum and evaluate at the

conclusion of the new member development process.

Group and Individual Member Data Comparison

At the conclusion of the academic year, Lambda Chi Alpha staff identified chapters most completely implementing the curriculum evaluated by the ELCs. Chapters in each cohort for the 2007-2008, 2008-2009, and 2009-2010 academic years were identified as the following groups:

1. Ten highest scoring chapters, in terms of curriculum and LCALM implementation as determined by evaluations conducted by the ELCs (TBI)
2. Upper quartile, as determined by evaluations conducted by the ELCs (TBTop50)
3. Lower quartile, as determined by evaluations conducted by the ELCs (TBBottom50)
4. Aggregate set, all Lambda Chi Alpha chapters (TBAAggregate)

Once the aforementioned chapter groupings were identified, individual data were organized and placed into the appropriate groups. Thus, if an individual survey participant (new associate member, newly initiated member or both) was a member of a chapter identified in the group, his survey scores were combined with other individuals from chapters who were organized as a sample group. Sample group means were then identified and compared to one another, as well as the aggregate mean to determine the maturational development of survey participants and its correlation to participating in Lambda Chi Alpha's educational curriculum and the LCALM.

Due to the complexity of the research and to the context and delivery of the surveys utilized, there is the possibility to lose potential subjects due to errors in data collection or the choice by large groups of subjects to not participate in the study. Examples of such errors include the lack of correct email address reported at the point of association or lack of timeliness in reporting of association and initiation, which interfered with appropriate and timely points for data collection. A second limitation is the large number of subjects who completed only one of the two survey administrations, possibly skewing the results by limiting the opportunities for full pre/post intervention analysis.

A third limitation involves potential cultural differences among individuals in the sample. Researchers have demonstrated that cultural variation can be associated with differing levels of self-awareness, specifically when comparing Eastern cultures to a North American sample (Heine, Takemoto, Moskalenko, Lasaleta, & Henrich, 2008). However, demographic data such as race and ethnicity were not available for analysis in the current study. Consequently, we cannot be sure whether or not culture played a role in influencing levels of self-awareness among our sample. Finally, the results of our preliminary and novel study must be interpreted with caution due to the limited nature of the data analysis. Statistical analyses to test the significance of mean differences between the non-aggregate groups were not conducted. Future research should investigate the significance of such mean differences. For example, t-test analyses could be supplemented by a more robust statistical technique (e.g., ANOVA) to measure the significance of mean differences between aggregate groups.

Independent data sets from the three sample populations TBI, TBTop50, TBBottom50, and the aggregate population, TBAggregate, were compared at the points of association and initiation to determine levels of change in self-awareness of Lambda Chi Alpha's members over time. Additionally, the influence of the LCALM was assessed by comparisons of means across the stratified samples. The data were also compared across the three years of the study to evaluate for similarities or differences in the sample populations in order to ensure the consistency of our data for the analyses conducted.

Scores were reported for each participant as a total score based on the participant responses to 16 questions, which could be rated from zero to four on a Likert-Type scale. Due to the adjustment of the scores to prevent response bias, some items were scored in the opposite direction of others (four represents a lower degree of agreement with the item than one). In other words, some items utilized reverse scoring. The maximum score for the survey would therefore be 64, with a range of 16 to 64 as possible scores.

Analysis of Sample and Aggregate Population Mean Scores from Association to Initiation

In each subject group, data demonstrated positive changes for independent samples from the point of affiliating with Lambda Chi Alpha (associate) and the beginning of the LCALM intervention to the points where subjects concluded their association and the LCALM intervention (initiate). This allowed for a pre-post- intervention analysis design.

2007-2008

The 2007-2008 data showed subjects from the TBI chapters achieved a self-awareness

mean score of $M = 40.58$ ($SD = 4.49$, $n = 26$) at association and a mean score of 41.63 ($SD = 3.76$, $n = 19$) at initiation, producing a positive change of 1.05 . A slightly larger positive change of 1.13 was shown by the subjects from the TBBottom50 (associate $n = 52$, $M = 40.92$, $SD = 4.58$; initiate $n = 58$, $M = 42.05$, $SD = 4.93$), while lesser positive changes were shown by subjects from the TBAggregate (associate $n = 209$, $M = 40.56$, $SD = 5.13$; initiate $n = 334$, $M = 41.55$, $SD = 5.07$) and TBTop50 (associate $n = 85$, $M = 41.40$, $SD = 4.49$; initiate $n = 88$, $M = 41.94$, $SD = 4.34$). Analyses comparing means of the TBI, TBTop50, and TBBottom50 association and initiation groups were not conducted due to often small and/or largely discrepant sample sizes. However, analysis of the TBAggregate data demonstrated significant increases from association to initiation, $t(541) = 2.199$, $p < .05$. Assumptive reasons for this finding will be discussed in the limitations of this paper.

2008-2009

The 2008-2009 data showed slight positive changes on self-awareness mean scores from association to initiation for each of the four subject groups. The associate TBI group had a mean score of $M = 44.06$ ($SD = 5.15$, $n = 87$) while the initiate TBI group had a mean of $M = 44.41$ ($SD = 5.17$, $n = 32$), yielding a net mean difference of 0.35 . The TBTop50 associate group had a mean of $M = 43.53$ ($SD = 4.87$, $n = 327$) while the initiate group had a mean of $M = 43.98$ ($SD = 4.91$, $n = 127$), yielding a larger mean difference of 0.45 . The TBBottom50 associate group was observed with a self-awareness mean score of $M = 43.77$ ($SD = 5.38$, $n = 158$) while the initiate group had a mean of $M = 44.61$ ($SD = 5.14$, $n = 64$), yielding a larger yet, mean difference of 0.84 . Again, none of these means were analyzed for within-group differences. However, within-group analyses comparing the means

of the TBAggregate group across the two data points indicated significant increases from association ($M = 43.21$, $SD = 6.43$, $n = 779$) to initiation ($M = 44.09$, $SD = 5.08$, $n = 370$), $t(1147) = 2.309$, $p < .05$.

2009-2010

In 2009-2010, larger changes from association to initiation on self-awareness mean scores were noted for each of the four subject groups. Most notably, the subjects from TBI chapters demonstrated a positive change from association with a mean of $M = 43.61$ ($SD = 5.36$, $n = 175$) to initiation with a mean of $M = 46.41$ ($SD = 4.12$, $n = 41$) yielding a mean difference of 2.8 , which represents the largest positive change obtained in the current investigation. Subjects from the TBBottom50 chapters showed a positive change of 2.18 from association ($M = 42.72$, $SD = 5.13$, $n = 397$) to initiation ($M = 44.90$, $SD = 5.95$, $n = 79$). Almost equal levels of change shown by subjects from chapters identified as TBTop50 (associate: $M = 43.79$, $SD = 5.36$, $n = 574$; initiate: $M = 45.43$, $SD = 4.59$, $n = 159$) and TBAggregate (associate: $M = 43.28$, $SD = 5.38$, $n = 1764$; initiate: $M = 44.89$, $SD = 5.16$, $n = 574$), yielding mean differences of 1.64 , and 1.61 respectively. In summary, these data offer strong support for the hypothesis that participation in Lambda Chi Alpha fraternity programming and the LCALM intervention during the period from association to initiation increases members' self-awareness. Further, subjects from chapters most completely implementing in the LCALM intervention show the greatest positive change, followed by the TBTop50, TBBottom50, and TBAggregate subject groups. A within-group analysis comparing the means of the TBAggregate groups showed significant increases from association to initiation, $t(2336) = 6.293$, $p < .001$.

Analysis of Sample and Aggregate Population Mean Scores over Time

Another observation of analysis from the data not only reflects the positive change for each individual from association to initiation but also demonstrates significant increases in overall mean scores at the point of initiation across the three years of the study (2007-2008 to 2008-2009 and 2009-2010). The largest increases in the point of initiation scores across the three years of the study are again found in the TBI subject group, which can be observed in Figure 1.

Mean scores increased from 41.63 in 2007-2008 to 44.41 in 2008-2009 to 46.41 in 2009-2010, a 6.68% increase from year one to year two of the study, a 4.50% increase from year two to year three of the study and a total increase of 10.3% across the three years of the study. The other large and consistent increases in point of initiation scores across the three years of the study are found within the TBTop50 subject group (found in Figure 2). This group evidenced mean scores of 41.94 in 2007-2008, 43.98 in 2008-2009 to 45.43 in 2009-2010, a 4.86% increase from year one to year two of the study, a 3.30% increase from year two to year three of the study and a total increase of 7.68% across the three years of the study. Both the TBBottom50 and TBAggregate evidenced similar increases in mean initiate scores from year one to year two of the study, with only slight changes from year two to year three of the study. The TBBottom50 scores increased from 40.92 in 2007-2008 to 43.77 in 2008-2009, an increase of 6.96%. However, the scores decreased in 2009-2010 to 42.72, resulting in a net increase of only 4.40%. The TBAggregate scores increased from 40.56 in 2007-2008 to 43.21 in 2008-2009 to 43.28 in 2009-2010, an increase of 6.53% from year one to year two of the study, and a net increase of 6.71% across all three years of data. These data again support the impact of the LCALM on levels of self-awareness among all subjects.

The two subject groups most fully participating in LCALM (TBI and TBTop50) showed not only the largest increases in scores from year one to year three of the study but also replicated progressive percentage increases in mean initiate scores from year one to year two.

The results of this study demonstrate the positive impact of Lambda Chi Alpha's educational programming and, specifically, of the LCALM intervention on the development of self-awareness. The mean degree of improvement coupled with the degree to which the LCALM was implemented suggests that these changes can be most directly attributed to the intervention itself.

DISCUSSION AND IMPLICATIONS

The current investigation evaluated the capacity for the LCALM to foster growth of self-awareness in a sample of college-aged men within in the context of an international men's fraternity. The LCALM is a specific learning model grounded in research from a number of fields including social learning (e.g., Bandura 1977; 1986), experiential learning (e.g., Kolb 1984), and identity development (Baxter Magolda, 2001; Erikson, 1968). Consistent with predictions, the researchers observed a systematic increase among individuals most utilizing the LCALM relative to their counterparts utilizing the LCALM less so.

These findings support the value of a specific learning model in the development of self-awareness among late adolescent males in the undergraduate, collegiate fraternity environment. Additionally, this study suggests the value of a developmentally focused educational curriculum, as developed by Lambda Chi Alpha, in supporting the maturation of this critical developmental capacity. No other literature uncovered has utilized this methodology to evaluate the efficacy of a specific learning model intervention, nor was any literature identified that empirically demonstrated the impact of

participation in an educational curriculum or learning model intervention within the context of an undergraduate college fraternity on the growth and maturation of its members.

In addition to the empirical support noted in the data analysis, numerous anecdotal reports also support the efficacy of the LCALM. Members from Lambda Chi Alpha chapters that most completely implemented the LCALM not only evidenced the largest increases in the development of self-awareness from association to initiation, but also evidenced the largest increases in mean point of initiation scores across each year of the study. In other words, each new cohort evidenced higher scores than the previous cohort. Considering the context of the undergraduate fraternity in which this study was conducted, this finding is consistent with research literature on transformative learning and the influence of peer groups. Research on transformative learning indicates that learning primarily occurs through continued interactions of interpersonal relationships (Merriam & Caffarella, 1991), while Astin (1993) describes how the immediate peer group (i.e., the fraternity) can shape one's beliefs, values, and behaviors.

Results from this study emphasize the positive impact of the LCALM and its process components in facilitating the development of self-awareness among late adolescent males. This model operationalizes recommendations from authorities (Harris & Harper, 2010) regarding the specific needs of men in this age group for support, mentoring, and developmentally focused educational interventions. The significant role of guided reflection and the opportunity to share thoughts, feelings, and emotions in a "safe" environment of peer and adult mentors is perhaps the greatest reason the LCALM had a positive impact on subject groups.

In a broader sense, the results of this study support the existing data about the continued malleability of factors related to the formation

of the self during this critical developmental period. The targeted approach demonstrated in this research addresses how a range of positive influences can change an individual's capacity to introspect and become more self-conscious. The implications of this finding are exciting in demonstrating that this core capacity can be altered in a relatively brief period, in a fashion which increases the individual's ability to thoughtfully engage all the developmental processes which rely on the examination of one's inner experience and its relationship to others in the external world. By extension, this study extends numerous findings regarding individual development which indicate the centrality of self-awareness in the development of a broader sense of one's identity in the world. It supports the importance of this construct in many theories of student development and personal maturation.

Further, consistent with research literature on maturational development (e.g., Bandura, 1978; Erickson, 1968; Kegan, 1982; 1994) this study supports the importance of reflection as a core component in the development of self-awareness, which relates more generally to a consolidated sense of self. As Socrates observed centuries ago, the examined life offers opportunities for meaning not available when self-examination is neglected. The results of this study would further suggest that the development of an integrated and consistent sense of identity is an additional positive outcome that derives from reflective self-awareness.

In addition, these data support the role of symbolization through writing and speaking as a vehicle by which identity is integrated. Both interpersonal (e.g. Baxter Magolda, 2001) and cognitive models (e.g. Kohlberg, 1975) of identity formation emphasize the central role of intellectual processes internally developed and interpersonally shared as the consensual schemata on which the architecture of identity evolves. The LCALM combines internal meaning making with interpersonal communication

to provide the consolidating force for meaningful self-awareness and therefore for the meaningful evolution of the sense of self. These theoretical notions are broadly documented as important variables in the existing literature but seldom investigated in a fraternal setting or specifically addressed to the developmental tasks of late adolescents so central to the lives of college men.

After years of published literature challenging the social value of the college fraternity (e.g., Wechsler, Dowdall, Davenport, & Castillo, 1995; Wechsler et al., 1996; Wechsler, Kuo, Lee, & Dowdall, 2000), it is significant to note and to substantiate with empirical data that this environment can serve as a positive developmental influence. These data make clear that the college fraternity can foster positive factors to support the maturation of its members in a fashion which has broad implications for personal maturity and capacity to assume a positive role in broader society. It is reassuring to find research support for more than a century of anecdotal evidence. Fraternity membership, when directed along the lines described in this study, can help young men to grow into fuller, healthier, and more mature adults and can provide the environment which facilitates positive personal development.

This research also underscores the positive potential of peer influence in fostering growth. Many models have called for the availability of peer role models to enhance personal adjustment and development. In particular, the sharing/mentoring aspects of the LCALM substantiate how these peer influences can reinforce and consolidate maturational accomplishments correlated with the development of positive identity in college-aged men. Further, it presents a model for meaningful and authentic communication which the stated values of the college fraternity should evoke but which stereotypic environments often thwart. When men can talk openly with other men about their inner-experience, their values

and vulnerabilities, and their unique perceptions of the world they co-inhabit, extremely valuable processes which enhance individual maturation are potentiated. This social domain is the unique crucible of fraternal experience but one which has been seldom engaged for the purpose of promoting self-awareness.

These findings suggest developmentally focused educational programming and learning interventions and, specifically, the LCALM and curriculum developed by Lambda Chi Alpha staff, can be a positive force in supporting maturation among college-aged men, particularly as related to the capacity for introspection and self-awareness. This approach to the collegiate fraternity and male student development also provides a vehicle through which developmental journeys can be positively impacted and allows for the role of the fraternity to evolve beyond that of social in nature.

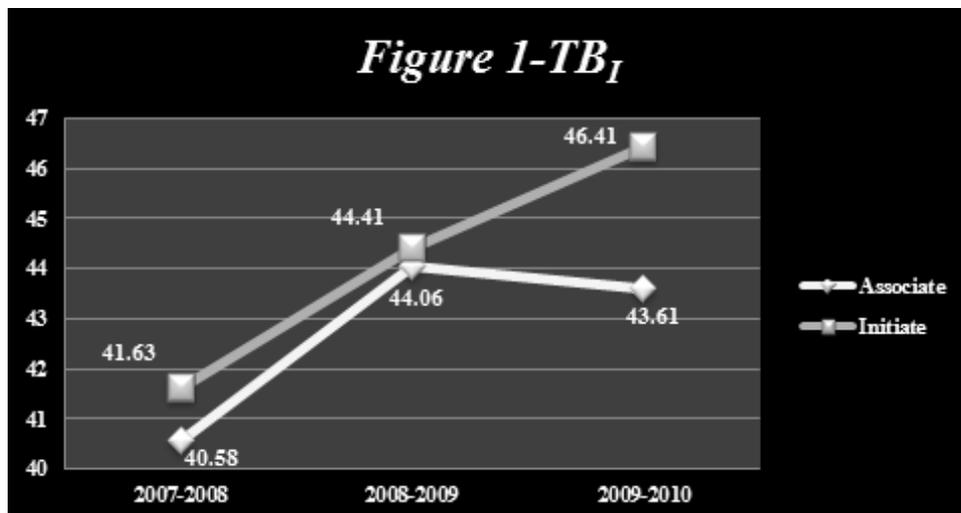
To help realize the full capacity of the LCALM to positively influence emergent adulthood men, these findings call for additional research to determine the impact of this model on other developmental competencies and to clarify the elements and mechanisms that are responsible for the changes documented. Findings may also hold promise for applications in endless settings where adolescents and young adults meet in an interpersonally interactive environment with positive mentoring relationships. Future research is therefore advised to investigate the feasibility of one such education model in other contexts.

CONCLUSION

At a time when the undergraduate, collegiate fraternity is garnering increasing attention for negative attributes, harmful effects, and perpetuation of the hegemonic masculinity amongst the socio-ethnically privileged, there is an increasing need for interventions like the LCALM and for research to demonstrate the

efficacy of such educational programming and learning models. An intervention such as this not only reconceptualizes the role and mission of the undergraduate collegiate fraternity but also potentiates its ability to positively influence its members, the greater college campus, and all of society. The model demonstrates that the interpersonal environment of the

college fraternity can be effectively used as a developmental crucible to foster growth and maturation among its members. The impact of such a finding can well be amplified with collaboration among faculty and administrators as well as fraternal movement stakeholders who share a common interest in the development of character, leadership, and personal maturation among all the students who we serve.



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A MULTIVARIATE ANALYSIS OF THE RELATIONSHIP BETWEEN UNDERGRADUATE FRATERNITY/SORORITY INVOLVEMENT AND ACADEMIC PERFORMANCE

LARRY D. LONG

This study explored the relationship between potential time commitments of fraternity and sorority members and academic performance. A secondary analysis of data collected using the Fraternity/Sorority Experience Survey revealed statistically significant relationships between cumulative grade point average and chapter involvement, engagement in academic activities, part-time work, and alcohol use. Chapter involvement, engagement in academic activities, and part-time work were positively associated with academic performance. Alcohol use was negatively related to academic performance. Implications for practice include establishing a culture of academic achievement in fraternal organizations, minimizing the use of alcohol, identifying and approaching academically at-risk members, and establishing initiatives to support the academic achievement of fraternity members.

Active engagement in the academic and social environments of a college campus has been positively associated with student persistence (Pascarella & Terenzini, 2005; Tinto, 1993). Students who are involved in student activities and frequently interact with students and faculty members are more likely to remain in college until graduation compared to students who are disconnected from the college experience. In particular, previous research indicates involvement in student governing associations, cultural organizations, and academic honoraries have positive effects on persistence (Baker, 2008). However, in regard to the relationship between student activities involvement and academic performance, the research is not clear. Some researchers have found a positive relationship between student activities involvement and academic performance (e.g., Baker, 2008; Derby, 2006) and some have found a negative relationship (e.g., Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Yin & Lei, 2007). Within the fraternity/sorority context, the research is limited and varied, as well. More research on the impact of fraternity or sorority membership on the academic performance of college students is needed to develop practices to support student

academic achievement. The results of this study add to the literature on student persistence and academic performance and have direct implications for student affairs professionals who work with fraternity and sorority members. The findings may assist these professionals in ensuring fraternity and sorority members are academically successful during their college career.

This study examined the relationship between the level of involvement in a fraternal organization and the academic performance of fraternity and sorority members at a large research institution in the Midwest. The researcher conducted a secondary analysis of a dataset collected using the Fraternity/Sorority Experience Survey.

REVIEW OF LITERATURE

Student retention is a problem for many colleges and universities across the United States (Kuh, 2007). The six-year graduation rate for students in the 2001 cohort who attended public and private institutions was 53.3% and 63.7%, respectively (Graduation Rates, 2008). The greatest percentage of student withdrawal tends to occur after the first year. Retention

rates decrease more gradually for sophomores, juniors, and seniors. To help students persist until their sophomore year, many colleges and universities devote resources to first-year experience programs (Jamelske, 2009). These programs are guided by theories on student persistence that generally state academic success is a function of time and effort (e.g., Astin, 1999; Tinto, 1993). In his classic work, *Leaving College*, Tinto (1993) used Durkheim's theory of suicide to explain student attrition. Tinto's theory suggests students leave college (voluntary withdrawal) because they are inadequately integrated into the academic and social environments of an institution. Institutional commitment is strengthened when students engage in educationally purposeful activities and are socially connected to the academic environment (Harper & Quaye, 2009).

Tinto (1993) described the concept of involuntary withdrawal. Involuntary withdrawal occurs when a student fails to meet the academic demands of a college or university and usually happens when students do not place enough emphasis on their academics. For instance, students, who are involved in multiple student organizations, might fail out of school for not completing their assignments. Astin (1999) noted this dilemma in his involvement theory. The researcher stated the "psychic and physical time and energy of students are finite" (p. 523) and faculty members compete with other activities for students' time. Successful students are able to balance their academic commitments with their social and work commitments. This balancing act, however, may be a problem for students who are overcommitted.

Student Engagement

First-year experience programs are meant to increase student engagement, which is the amount of time and effort students put into their studies and educationally purposeful activities (Kuh, 2007). Educationally purposeful activities involve behaviors that positively influ-

ence student development. Studying (Kuh et al., 2008; Rau & Durand, 2000), interacting with peers (Amenkhienan, 2000; Pascarella & Terenzini, 2005; Tinto, 1993), and interacting with faculty members (Amenkhienan, 2000; Dixon, 2003; Pascarella & Terenzini, 2005; Yang, 2001) are behaviors that promote academic success. Comparatively, working more than 20 hours per week, (Dundes & Marx, 2006; Kuh et al., 2008) and consuming alcohol (Musgrave-Marquart, Bromley, & Dalley, 1997; Porter & Pryor, 2007; Rau & Durand, 2000; Wielkiewicz, Prom, & Loos, 2005) are negatively associated with student academic performance. These activities may distract students from the academic environment.

Involvement and Academic Performance

Research on the relationship between involvement and academic performance is varied. Baker (2008) studied the relationship between campus involvement and the fall GPA of first-year, underrepresented college students using a multi-institutional dataset. The researcher found no relationship between the amount of time students dedicated to campus activities and GPA, however there was a relationship between GPA and the type of activity in which students engaged. Involvement in political organizations was the strongest, positive predictor. Kuh and his colleagues (2008) studied the academic performance and persistence of first-year college students at 18 institutions using the National Survey of Student Engagement. The researchers found a negative relationship between the number of hours respondents engaged in co-curricular activities per week and first year GPA.

Yin and Lei (2007) studied the impact of campus involvement on hospitality students enrolled at a state university in the Midwest and found a negative correlation between academic performance and involvement. Derby (2006) studied the involvement and academic performance of community college students. The researcher found that involved community college

students tended to have higher grade point averages, were more likely to persist, and were more likely to graduate compared to students who were not involved. To explain this finding, the researcher suggested it is possible the involved students were just better students. Research conducted by Hernandez, Hogan, Hathaway, and Lovell (1999) supports the conclusion that the impact of student involvement on academic performance is inconclusive. The researchers conducted a review of literature on the topic and found that studies tended to use varying definitions of involvement. Moreover, some studies explored differences in academic performance, whereas others assessed differences in student development or learning.

Fraternity/Sorority Membership and Academic Performance

Research exploring the academic impact of membership in a fraternal organization is not clear. DeBard and his colleagues (2006) studied the difference in the academic performance of affiliated and non-affiliated first-year students at a mid-sized public institution in the Midwest. The researchers found a negative association between fraternity/sorority membership and GPA. In a follow-up study using a multi-institutional dataset, DeBard and Sacks (2010) found a positive, but weak association between fraternity/sorority membership and academic performance. The researchers did not provide an explanation for the contradictory finding.

Aside from academic performance, researchers have found that fraternity and sorority members tend to be more engaged in the academic environment (Pike, 2003) and engaged in more academically challenging tasks (Hayek, Carini, O'Day, & Kuh, 2002) compared to their non-affiliated peers. While the latter findings support Astin's theory of involvement, more research on the impact of fraternity and sorority involvement on student learning is needed. Limited or no research has explored the influ-

ence of part-time work and alcohol use on the academic performance of fraternity and sorority members.

Previous research on the relationship between student involvement and academic performance has had several limitations. One limitation is that researchers tended to focus on sub-populations, such as first-year students or underrepresented students (e.g., Baker, 2008; DeBard et al., 2006; Kuh et al., 2008). Another is that researchers tended to dichotomize involvement. These researchers generally compared the academic performance of involved students and students who were not involved (e.g., DeBard et al., 2006; Derby, 2006; Grubb, 2006; Hayek et al., 2002; Pike, 2003). Since the level of involvement differs for each student, assessing the impact of a student's involvement on his or her grade point average using different levels of involvement may be more telling. Due to the extended time commitment that higher levels of student involvement can require, it is plausible that higher levels of involvement are associated with a decrease in academic performance. The current study sought to assess the direction of this relationship.

METHODOLOGY

Overview of the Dataset

Survey data collected by a large, public, four-year research institution in the Midwest were used for the study. The institution will hereafter be referred to as Midwest University (MU). The institution was predominantly White (90%) and enrolled about 15,000 undergraduate students and 2,000 graduate students in 303 academic programs. MU was home to 1,175 fraternity and sorority members, who represented ten traditionally historically White fraternities, 11 traditionally historically White sororities, and seven multicultural fraternities and sororities. The fraternity/sorority community was predominantly White and female.

Selection of Data and Variables

The data were collected using the Fraternity/Sorority Experience Survey (FSES), an instrument that is commonly used to assess the experiences of fraternity and sorority members on a college campus. The Center for the Study of the College Fraternity (CSCF) at Indiana University in Bloomington, Indiana produced the FSES. According to the CSCF Web site, "The survey measures factors influencing chapter and Greek [sic] community support of intellectual and leadership development, values integration, and positive relationships" (CSCF, n.d.). The instrument had more than 300 response items pertaining to areas such as recruitment, chapter affairs, housing, alcohol use, academics, and personal growth and development. The FSES is currently undergoing validation (CSCF personal communication, October 16, 2012).

Sampling Approach

The Greek Life staff at MU administered the FSES during a formal meeting of the fraternal organizations. New members and initiated members attended this meeting. The Greek Life staff followed up with members who were not present at the meeting, which enabled the staff to attain an 86% response rate.

Demographics

The dataset consisted of responses from 1,011 participants. Because the recruitment practices and traditions of the multicultural fraternal organizations differed from those of the traditionally historically White fraternities and sororities, the researcher decided to remove the respondents from the seven multicultural fraternal organizations from the analysis ($n = 23$). Non-initiated respondents ($n = 84$) were also removed since only initiated respondents were instructed to complete the involvement measures of the FSES. After controlling for missing values using listwise deletion, the final sample size was 828 participants. The sample consisted of 286 male members (35.5%) and 542 female

members (64.5%). The ages of the respondents ranged from 18 to 25 years. The class distribution was 24.8% first-year students, 31.4% second-year students, 25.1% third-year students, and 17.1% fourth-year students. About 1.6% of the respondents reported they had completed five or more years of undergraduate study. The ethnic distribution of the sample was 1.0% African-American, 0.5% American-Indian, 0.7% Asian-Pacific Islander, 1.2% Chicano-Latino-Hispanic, 94.4% Caucasian, and 0.1% Middle Eastern. About 0.7% of respondents identified themselves as Other and 1.3% identified themselves as Multiracial. Based on institutional data, the distribution was representative of the fraternity/sorority population at Midwest University.

Dependent Variable

The dependent variable, GPA, was the self-reported cumulative grade point average of the respondents at the time the survey was completed. The respondents were instructed to report their GPA using the institution's plus-minus letter system as a guideline. About 30.2% of the respondents self-reported having an A average, whereas 57.1% self-reported a B average, and 12.7% self-reported a C average. According to institutional records, the average cumulative GPA for the fraternity/sorority community was 3.00, the equivalent of a B average.

Independent Variables

Four independent variables were used in the study: chapter involvement, alcohol use, study, and work. Chapter involvement was measured from a question that asked, "To what extent do you consider yourself to be involved in the activities of your chapter?" Respondents could answer with "Not at all involved," "Only slightly involved," "Moderately involved," "Very involved," and "Deeply involved." Alcohol use was measured using a question that prompted respondents to report the average number of drinks they consumed per week. The original FSES item produced continuous data. The scale of the

question item was converted to an ordinal scale by using the following categories: 0 drinks, 1-4 drinks, 5-9 drinks, 10-14 drinks, 15-20 drinks, and 21 or more drinks. Study was measured with a question that prompted respondents to report how many hours per week they spent on academic activities such as studying, reading, writing, and doing lab work. This FSES item also produced continuous data. Similar to alcohol use, the scale of the question item was converted to an ordinal scale. The following categories were used: Fewer than 6 hours, 6-9 hours, 10-14 hours, 15-19 hours, and 20 or more hours. The fourth independent variable, work, was measured using the following question: "How many hours per week do you work?" The response categories were "None," "Fewer than 10 hours," "10-20 hours," "21-39 hours," and "40 or more hours." The researcher collapsed the first two categories because they were not mutually exclusive. The researcher also collapsed the last two categories because only two respondents indicated they worked 40 or more hours per week. This resulted in the following three categories: Fewer than 10 hours, 10-20 hours, 21 or more hours.

Control Variables

The control variables for the study were gender, parental education, and White. Research indicated women tended to have higher grade point averages compared to men (Allen, Robbins, Casillas, & Oh, 2008; DeBerard, Spielmans, & Julka, 2004; Miller, Danner, & Staten, 2008; Wielkiewicz et al., 2005) and men tended to consume greater amounts of alcohol compared to women (Capone, Wood, Borsari, & Laird, 2007; Cashin, Presley, & Meilman, 1998; Fairlie, DeJong, Stevenson, Lavigne, & Wood, 2010; Miller et al., 2008; Paschall & Saltz, 2007; Theall et al., 2009). Using gender as a control variable accounted for these differences. Parental education was used as a control variable to account for the differences in work patterns. Students who had parents with higher levels of education most likely received more fi-

nancial support and were able to spend more time on student activities. White, a measure of race, was included as a control variable in the model, however the researcher did not expect the variable to influence the results. This was because only 5.6% of the respondents in the sample were non-White.

Statistical Approach

The dependent variable, GPA, had an ordered interval scale, with C as the lowest response category and A as the highest response category. To analyze the relationship between the academic performance of the respondents and their engagement in a fraternal organization, alcohol use, academic activities, and work, the researcher used an ordinal logistic regression analysis. Logistic regression is useful for predicting the value of a dependent variable from one or more independent variables (Foster, Barkus, & Yavorsky, 2006). Ordinal logistic regression is a special case of logistic regression that can be used when the dependent variable has ordered categories (Kleinbaum & Klein, 2000). When conducting logistic regression analyses, one obtains a Chi-Square (χ^2) value for the goodness of fit of the model and beta (b) values (also known as regression coefficients) for each independent variable. A significant χ^2 value indicates that, collectively, the independent variables are significant predictors of the dependent variable. The beta values are used to determine if an individual independent variable is a significant predictor of the dependent variable. The null hypothesis of no relationship is that the beta value is equal to zero (Kleinbaum & Klein, 2000). Moreover, the exponentiated beta value is equal to the adjusted odds ratio (OR) associated with an independent variable (i.e., $e^b = \chi^2.718 \hat{\chi}^b = \text{OR}$). Odds ratios enable one to determine the change in odds of falling in one category of the dependent variable as one changes from one category of the independent variable to another. This is commonly referred to as a one-unit change in the independent variable.

ANALYSIS AND RESULTS

Predictors of High Academic Performance

Table 1 presents the results of the ordinal logistic regression analysis. The regression model was statistically significant, $\chi^2(7) = 58.60, p < .001$. The findings indicated that being involved in chapter activities was related to high academic performance as measured by cumulative grade point average, $b = .166, OR = 1.181, p = .026$. A one unit increase in the level of chapter involvement increased a student's odds of earning a high cumulative GPA by a factor of 1.181. This means the odds of earning an "A" cumulative GPA were 18.1% higher for a student who was "Only slightly involved" compared to a student who was "Not at all involved." Figure 1 shows the predicted probabilities of earning a cumulative grade point average of A, B, or C as a function of chapter involvement. The figure shows that the probability of earning an A cumulative GPA increased with higher levels of chapter involvement, thus supporting the finding that chapter involvement was positively related to academic performance.

Similar to chapter involvement, involvement in academic activities ($b = .193, OR = 1.213, p$

$< .001$) and working part-time ($b = .262, OR = 1.300, p = .019$) were related to greater odds of earning high grades. Increasing study and work by one unit increased the odds of earning high grades by 21.3% and 30.0%, respectively. Being male and consuming large quantities of alcohol were negatively related to GPA. Men were 41.0% less likely to earn a high cumulative GPA compared to women, while a one unit increase in alcohol use lowered the odds of earning a high GPA by 11.7%.

As expected, there was no statistically significant relationship between White and GPA, $b = .026, p > .05$. Race/ethnicity might have a greater impact on academic performance in heterogeneous cultures.

Academic Performance by Student Type

To understand the relationship between chapter involvement and academic performance further, the researcher calculated predicted probabilities of earning a cumulative GPA of A, B, or C by four student types: leader, scholar, partier, and worker. These types were influenced by the research of Kuh, Hu, and Vesper (2000) and show the probability of succeeding academically for students who primarily focus

TABLE 1

Logistic Regression Model Predicting Cumulative GPA

Variable	b	SE	Z	eb
Chapter involvement	.166*	.075	2.224	1.181
Alcohol use	-.124*	.055	-2.250	.883
Study	.193***	.054	3.542	1.213
Work	.262*	.112	2.342	1.300
Gender	-.529**	.161	-3.276	.590
Parental Education	.177*	.084	2.109	1.193
White	.026	.306	0.085	1.026

* $p < .05$; ** $p < .01$; *** $p < .001$.

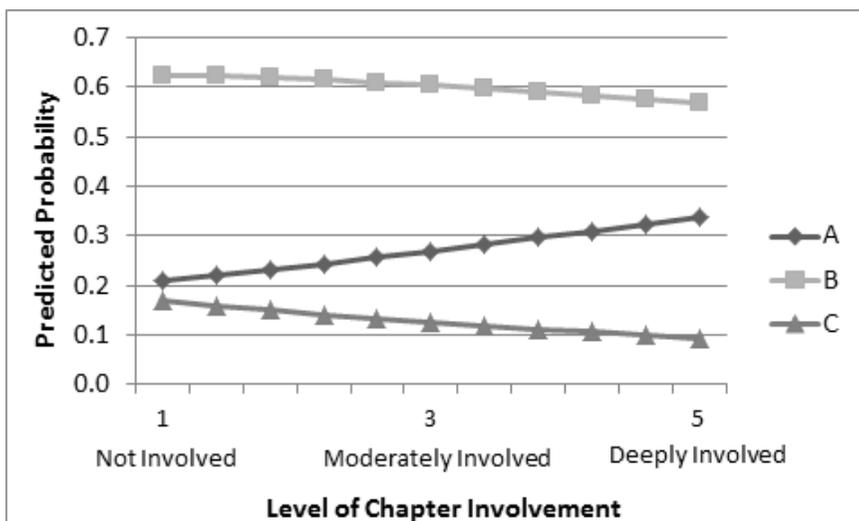


Figure 1. Predicted probability of earning a cumulative GPA of A, B, or C by chapter involvement.

on one of the four time-use measures. A description of the student types can be found in Table 2.

The leader student type was characterized by a high degree of chapter involvement and average levels of alcohol use and study. With the other variables held at their mean, a male “leader” had a 23.5% chance of earning an “A” cumulative GPA and a 61.7% chance of earning a “B” cumulative GPA. In comparison, a male “partier” only had a 9.1% chance of earning an “A” cumulative GPA. The scholar student type had the highest probability of earning high grades for both males and females. The results indicated that involved fraternity and sorority members had high probabilities of succeeding academically. The results of all four student types by fraternal membership are displayed in Table 2.

SUMMARY DISCUSSION

This study sought to assess the relationship between four involvement measures and academic performance. This study differed from other studies on the topic by looking at the re-

lationship of different levels of involvement on cumulative GPA. Significant relationships were found between academic performance and chapter involvement, studying, working part-time, and alcohol use. Students who were more involved in their chapter and in academic activities were more likely to have a high cumulative GPA compared to students who were less involved in these activities. This supports previous research that found positive relationships between campus involvement and academic performance (Baker, 2008; DeBard & Sacks, 2010; Derby, 2006).

A negative relationship was found between alcohol use and academic performance. Students who self-reported consuming higher quantities of alcohol were more likely to have lower cumulative grade point averages compared to students who consumed smaller quantities. Research outside of the fraternity/sorority context found a negative relationship between alcohol use and academic performance (Musgrave-Marquart et al., 1997; Porter & Pryor, 2007; Rau & Durand, 2000; Wielkiewicz et al., 2005). The results of the current study in-

Table 2

Predicted Probabilities of Cumulative GPA by Student Type

Student Type	Fraternity GPA			Sorority GPA		
	A	B	C	A	B	C
Leader	.235	.618	.147	.343	.565	.092
Scholar	.292	.594	.114	.412	.518	.070
Partier	.090	.559	.351	.143	.615	.241
Worker	.178	.625	.197	.269	.605	.126

Note. Leader type: chapter involvement (Very involved), rest (mean); Scholar type: chapter involvement (Only slightly involved), alcohol use (1-4 drinks per week), study (20 or more hours per week), rest (mean); Partier type: chapter involvement (Only slightly involved), alcohol use (21 or more drinks per week), study (less than 6 hours per week), rest (mean); Worker type: chapter involvement (Only slightly involved), alcohol use (5-9 drinks per week), study (less than 6 hours per week), work (21 or more hours per week), rest (mean).

dicare alcohol use is also negatively related to academic performance for fraternity and sorority members.

The researcher of the current study is not aware of previous research on the relationship between the part-time work and academic performance of fraternity and sorority members. The current study revealed a positive relationship between part-time work and academic performance. As suggested by Dundes and Marx (2006), working might positively influence academic performance by influencing members to prioritize their schedules.

IMPLICATIONS FOR PRACTICE

This study has several implications for practice. While the suggestions that follow may be of use to campus-based professionals, organization staff, and alumni/ae advisors (hereafter referred to as advisors) in the support of fraternity and sorority members, they are not quick fixes that will work on every campus. Advisors should assess the fraternal experience of the students at their institution or within their organization before designing specific interventions.

Establish an Academic Environment

In a study of high performing fraternity/sorority communities, Jelke (2001) found the best performing communities had high academic standards. The current study revealed that engaging in academic activities, such as studying, reading, writing, and doing lab work, was the strongest predictor of academic performance. Campus-based professionals should foster an academic environment within fraternities and sororities to promote the academic success of members. Alumni/ae volunteers might consider encouraging the use of on-campus resources, developing a workshop on good study habits, and enforcing quiet hours in chapter houses.

Minimize Alcohol Use

Alcohol use was negatively related to academic performance. Advisors should work to reduce the use of alcohol as a social bond by emphasizing social activities that do not include alcohol. Initiations and the receipt of a mentor (big brother/big sister) can be celebrated with group dinners or by attending a sporting event or concert, for example. Advisors should also educate members of the negative effects of alcohol use. Active approaches such as presenta-

tions and workshops and passive methods such as display boards and table tents may be useful. While advisors may not be able to prevent students from consuming alcohol, advisors can be integral in decentralizing the role of alcohol in fraternal activities.

Identify and Approach Academically At-Risk Members

Alumni/ae volunteers and campus-based professionals interact with a variety of fraternity and sorority members. These volunteer advisors are most able to identify undergraduate members who may be directing too much of their attention toward chapter or social activities. Volunteer advisors should approach these students and help them understand that their academics, not extracurricular involvements, should be their top priority. Alumni/ae advisors might also identify academically at-risk members by requesting midterm grade reports from members.

Establish Initiatives to Support Fraternity Members

The findings from the study showed male members tended to have lower grade point averages compared to female members. Research also indicated that college men were less likely to persist and graduate compared to college women (Harper & Harris, 2010). Advisors working with fraternities should develop support initiatives to ensure the academic success of fraternity members. Alumni/ae volunteers and campus-based professionals may consider collaborating with on-campus academic and student services departments, such as tutoring centers and career and academic advising offices. Collaborative initiatives between fraternal organizations may also be beneficial.

FUTURE RESEARCH

The researcher attempted to model the relationship between some time commitments of

fraternity and sorority members and academic performance. While the model presents one view of the complex relationship, other models should be explored. In addition to the measures used in the current study, a model incorporating other common time commitments of fraternity and sorority members, such as performing community service, socializing, and sleeping, might present a more complete view of the fraternal experience. Future studies should also explore the relationship between involvement in multicultural organizations and academic performance. Members of multicultural organizations were not included in the current study. Last, while the design of the present study differed from previous research by taking different levels of involvement into consideration, the research approach still assumed a linear relationship between involvement and the academic benefits of involvement. Future studies should assess if there is a threshold where involvement ceases to produce positive gains.

LIMITATIONS

The findings of this study should be interpreted in light of the study's limitations. First, the research was correlational in nature. One cannot assume that increased chapter involvement causes fraternity and sorority members to succeed academically. Second, because the sample involved students attending one large, public, research institution in the Midwest, the findings may not be generalizable to other campus contexts. Future studies on the relationship between academic performance and student engagement should use data collected from multiple institutions. This could be accomplished by analyzing the aggregate results of the FSES. Third, the study focused on the experiences of students who were members of traditionally White fraternities and sororities. The findings are not generalizable to students who are members of multicultural fraternities and sororities. Lastly, the categories of the dependent variable

were not exhaustive. The research instrument did not have response categories for grade point averages below a "C-." This is because male college students were required to have earned at least a 2.3 cumulative GPA to join a fraternity (Academic Success, n.d.). Women at Midwest University were expected to have earned at least a 3.0 GPA to join a sorority. Moreover, MU students with a cumulative GPA below 2.0 were placed on academic probation and students who had a cumulative GPA below 2.0 for two consecutive semesters were academically dismissed. Even though these stipulations limit the likelihood of a fraternity or sorority member having a cumulative GPA below a "C" average, future studies should use exhaustive response categories.

CONCLUSION

Despite these limitations, this study contributed to the extant literature on the experiences of fraternity and sorority members by shedding light on the relationship between membership in a fraternal organization and academic performance. The results of this study suggest fraternity/sorority involvement can positively influence the scholastic endeavors of college students. Campus-based professionals, organization staff, and advisors can support the academic success of fraternity and sorority members by establishing a culture of academic achievement in fraternal organizations, minimizing the use of alcohol, identifying and approaching academically at-risk members, and establishing initiatives to support the academic achievement of fraternity members.

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AN ASSESSMENT OF PANHELLENIC SORORITY MEMBER MEAL CONSUMPTION PATTERNS

BLAIR MIZE AND MELINDA VALLIANT

The purpose of study was to determine sorority members' frequency of meal consumption versus meals offered in sorority houses at a flagship university in the south and to compare the Body Mass Indices (BMIs) of sorority members who consumed less than six (<6) meals to those who consumed six or more (≥6) meals/week at their sorority houses. Another object of this study was to note the relationship between frequency of sorority meal consumption and adequacy of sorority members' diets in relation to MyPyramid. The sample consisted of 72 Panhellenic sorority members ages 18-22 year old at the time of participation. All members completed a "Questionnaire of Eating Behaviors" and a 24-hour dietary recall. Weight, height, and number of servings consumed of each MyPyramid food group were recorded. Members consuming ≥6 meals/week at their sorority houses had greater mean intake of each food group and lower mean BMIs than those consuming <6 meals. According to the results of this study, structured meals and meal times may help sorority members maintain a healthier weight.

The Body Mass Index (BMI) of the average American is increasing (Flegal, Carroll, Ogden, & Curtin, 2010). As a result, the nation is moving further away from the goal of decreasing the national average BMI (Garrow & Webster, 1985; Racette, Deusinger, Strube, Highstein, & Deusinger, 2008). In many Americans' lives, new lifestyles are formed during young adulthood. The lifestyles such individuals choose may help or hinder the country's chances of reaching the goals specified in Healthy People 2010 and Healthy Campus 2010. Groups of Americans between ages 18 and 29 have shown the greatest average weight gain in recent years compared to other age groups (Racette et al., 2008; United States Department of Health and Human Services, 2000).

With a new level of independence also comes a change in the young adult's food environment. The many changes related to meal planning, food purchasing and food preparation that commonly occur during young adulthood may contribute to the weight gain or weight loss in such individuals. College students' eating be-

haviors have been frequently studied. When individuals come to college, they acquire a new level of freedom and control over their lifestyles (Cilliers, Senekal, & Kunneke, 2006; Dinger, 1999). According to Pliner and Saunders (2008), the effects of lessened parental control on diet, greater variety of food choices, and increased emphasis on social events can eventually lead to weight changes in college students. Excessive weight gain or loss may also be due to harmful dietary practices such as avoidance of certain foods coupled with excessive dieting, unhealthy snacking, and skipping meals (Harless, Koch, & Slapar, 1996).

A growing number of studies have been conducted on meal plans, nutrition knowledge, restrained or unrestrained eating habits, and eating behaviors of the general college student population as related to their BMI and overall body image; however, little is known about college students' adherence to current dietary guidelines or the reasoning behind the various eating patterns of this population (Kolodinsky, Harvey-Berino, Berlin, Johnson, & Reyn-

olds, 2007). According to the College Health Risk Behavior Survey and the National College Health Assessment, many college students are not meeting suggested dietary and physical goals from their freshman through senior years of college (Centers for Disease Control [CDC], 1997; The American College Health Association, 2005). One study also stated that less than one-third of college students studied reported consumption of the recommended amounts of fruits and vegetables (Racette et al., 2008).

Although college students, at times, face barriers to acquiring all foods necessary to comprise a balanced diet each day, the avoidance or restriction of certain foods or food groups can lead to nutrient and energy deficiencies over time. Students must learn how to overcome as many barriers as possible and to choose nutrient rich foods without high fat content (Hiza & Gerrior, 2002). Strong, Parks, Anderson, Winnett, and Davy (2008) found first and second year college students living on campus consumed less fruits, vegetables, whole grains, and fiber than the recommended amount. Their snacks consisted of chips, crackers, and sweets that could be easily stored in a residence hall room. Students failed to regularly purchase fresh fruits or vegetables reportedly due to their short shelf lives. Many students in this study also skipped breakfast or ate "on-the-run." Throughout this study, students attempted to incorporate more of these food groups into their diets; however, they often failed to monitor their intakes of energy and fat. Clement, Schmidt, Berriaix, Covington, and Can (2004), using a sample of 116 college women, showed that those who did not regularly skip breakfast were more likely to be healthy and physically active. They also consumed less fatty, energy dense foods such as doughnuts, pizza, and french fries. Those who consumed high fat diets also drank less water and more juice and sodas; additionally, they had higher BMIs and had worse overall health statuses (Clement, Schmidt, Berriaix, Covington, & Can, 2004).

College eateries often offer "all-you-can-eat" dining, a setting which potentially encourages unhealthy food choices and overeating due to continuous availability of larger portion sizes and an increased variety of food. In contrast, when college eateries sell items "a la carte," students typically purchase less food due to financial or other factors; however, "a la carte" style does not always facilitate a balanced diet (Pliner & Saunders, 2008). "A la carte" style dining is often set up with various food stations. Long lines at stations sometimes make getting a variety of foods too time consuming for busy students (Strong et al., 2008).

College students often have little or no cooking experience, leading them to resort to consumption of processed or fast food items rather than eating at home (Haberman & Luffey, 1998). Foods served at on-campus dining facilities and other environments away from home are often lower in nutrients and higher in fat and energy than those prepared at home (Kolo-dinsky et al., 2007). Although some restaurants make nutrition information available online, few have nutrition information readily available in the establishment. Researchers have noted that students may under- or overeat for extended periods if they do not know the amount of energy they are consuming versus the amount their bodies require (Pliner & Saunders, 2008). When patterns of over-consumption develop, weight gain is the result (Lee, 2009).

By increasing the availability of healthy foods such as fruits, vegetables, and low fat items, students' consumption of these are likely to increase. Pliner and Saunders (2008) recommend making nutrient-dense foods easily identifiable in university food service areas to encourage healthful eating (2008). Some students believe they would be less likely to purchase unwholesome foods if they were made less convenient (Strong et al., 2008).

Researchers believe eating habits can be heavily influenced by the group or groups of which a student is a member. Although no direct

correlation has been established, it is possible that gender groups, college athletic teams, sororities, and various ethnicities sometimes push members to maintain a certain weight or size (Schulken, Pinciario, Sawyer, Jensen, & Hoban, 1997). Such expectations are often unrealistic, leading members to feel forced to turn to extreme weight control practices (Hoerr, Bokra, Lugo, Bivins, & Keast, 2002). Though little research has been conducted with these organizations, sorority women may be influenced to adhere to certain methods of weight maintenance based on the degree other members emphasize the importance of a certain body type. Additionally, they may be led to believe that their adherence to such an ideal will affect their status within the sorority (Schulken et al., 1997).

College women in general are at increased risk of developing poor eating habits and disorders due to a higher frequency of dieting and obesity (Koszewski, 1996). College sororities are subgroups that warrant significant attention concerning members' nutritional knowledge and eating behaviors due to the large number of women who are active in them (Schulken et al., 1997). Previous research (Allison & Park, 2004; Schulken et al., 1997) has revealed that some sorority women feel pressure to conform to a certain body shape or size in order to be accepted by other members of their organizations. Many questions have arisen regarding whether or not sorority women are more likely to develop disordered eating patterns or weight management issues upon joining a sorority (Allison & Park, 2004). On a larger scale, research has pointed to a need to study sorority women's eating patterns and diets in relationship to USDA's national recommendations for daily food consumption.

Although few studies specific to this population have been conducted in relation to eating behaviors, sorority members comprise a subgroup often perceived to be prone to utilize

various weight management and weight-loss strategies. For example, dieting methods such as excessive exercise, food avoidance, and purging have been reported as acceptable in various sororities (Schulken et al., 1997). A previous study by Hoerr et al. found sorority members more frequently avoiding high fat foods, taking diet pills, and experiencing extreme weight concerns when compared to nonmembers (2002).

Sororities span across U.S. colleges and universities; however, little research has been conducted to study the effects, if any, of sorority life on members' nutrition-related thoughts and practices. On many campuses, including the one that was subject to the present study, members of sororities are required to purchase meal plans for meals to be served by the sorority that include breakfast, lunch, and dinner Monday through Thursday and breakfast and lunch on Friday. A total of fourteen meals are offered during a typical week; however, attendance at breakfast is consistently low at the university subject to the present study. Sorority members may choose to skip breakfast or eat at home or "on-the-run." Although the cost of the meals is paid at the beginning of the semester, members' attendance at meals is often not required. Meals at sorority houses are most often served buffet style, and each member may serve herself as much or as little of each item as she chooses. Members at the sorority houses in the southern university investigated do not have access to nutrient analyses on their menus. As the body of evidence showing inappropriate eating behaviors in young adults grows, sororities are important subgroups of this population to analyze. Information about sorority members' adherence to dietary guidelines and the reasoning behind their eating patterns is virtually nonexistent; therefore, this study was performed in an effort to acquire knowledge regarding eating behaviors of sorority members in order to know the ways in which they could be improved.

METHODOLOGY

Overview of the Dataset

Data from 72 Panhellenic sorority members were obtained for analysis in this study (Table 1). Members were Caucasian females ranging from 18-22 years of age at the time of participation. Members were recruited through announcements in classes and weekly sorority chapter meetings. Attempts were made to recruit a diverse sample from each of the nine Panhellenic sororities on campus.

Overview of the Instrument

All components of the investigation were conducted in a quiet, private setting in the Nutrition Laboratory and were approved by the Institutional Review Board. After providing informed consent, each member was asked to complete a 62-item Questionnaire of Eating Behaviors that was developed by the primary investigator. The questionnaire was designed for the purpose of examining sorority members' diet and weight management practices and various influences on their food choices. Prior to beginning the investigation, the questionnaire was pilot-tested using a convenience sample of sorority members. Sorority members who participated in pilot-testing were asked to assess the clarity and flow of the questionnaire. Sorority members involved in pilot-testing were excluded from participation in the present study. The questionnaire included 26 fill-in-the blank and qualitative questions, 6 true/false statements, 1 ranking item, 7 multiple selection questions, and 1 rating item. These questions asked about

eating behaviors, including number of meals and cues to eat more or less, what factors influence food choices, dietary attempts at weight loss, peer influences on food selection and perceptions of the meals served in their sorority house. Each member's height, age, and school classification was self-reported. Members were allowed unlimited time to complete the questionnaire.

Next, members were asked to complete a 24-hour dietary recall interview detailing their food and beverage consumption during the previous day (Monday-Thursday). Dietary intake data were analyzed using Nutrition Data System for Research (NDSR) software version 2009, developed by the Nutrition Coordinating Center (NCC), University of Minnesota, in Minneapolis, MN. This program provides a detailed nutrient profile with accurate calculations for each food item specified in members' dietary recalls (Schakel, 2001). Although this program is not routinely used in analyzing sorority member diets, it was a vital component in analyzing each member's 24-Hour Dietary Recall. With the use of the multiple-pass system supported by NDS-R, the chances of a more accurate picture of members' actual food and beverage consumption may have been recorded.

Each dietary recall was conducted following a day when three meals were available at the member's sorority house. The 24-hour dietary recall provided a general representation of the types and amounts of foods members consume on a daily basis. A Food Amounts Handbook provided by the Nutrition Coordinating Center in Minneapolis, Minnesota was available to assist

Table 1

Member Demographics

Variable	Number Observed	Mean	SD	Min.	Max.
Age	72	20.10	1.12	18.00	22.00
Height	70	64.81	2.40	60.00	71.00
Weight (in pounds)	69	132.67	17.15	97.00	178.00
BMI	70	22.46	2.86	16.86	29.13

members in estimating the amount consumed of a certain food (2009). Members who reported atypical consumption were asked to reschedule their appointments in order to allow for the assessment of a more “usual consumption” pattern. Specific data of interest gathered from the 24-hour dietary recall included numbers of servings of the following items: grains, protein, fruits, vegetables, dairy, and fats. This data was compared to the MyPyramid recommendations for women ages 18-23.

After completion of the Questionnaire of Eating Behaviors and the 24-hour dietary recall, each member was weighed on a scale calibrated according to the manufacturer’s instructions. Finally, each member’s BMI was calculated using her measured weight and self-reported height. BMI was calculated by dividing weight in kilograms by height in meters squared (Garrow & Webster, 1985).

All items on the Questionnaire of Eating Behaviors were coded with a number and/or letter and entered into a spreadsheet. Members were categorized into < 6 meals per week or ≥ 6 meals per week consumed at the sorority house. This number was selected as it represents half of total meals available for consumption by members each week. Next, data were analyzed using Stata statistical software (2007). Frequencies of responses regarding the number of meals consumed at the sorority house during the week were reported. Means and standard deviations were reported, and T-tests were performed comparing the mean BMI of members who consumed ≥ 6 meals per week to those who con-

sumed < 6 meals per week. Additionally, a t-test was performed comparing members reported consumption of food groups compared to nutritional needs as defined by the MyPyramid guidelines. Statistical significance was set at $p < 0.05$.

ANALYSIS AND RESULTS

The mean BMI of members consuming six or more meals per week at their sorority houses was 22.1. The mean BMI of members consuming less than six meals per week at their sorority houses was 24.1 ($p = .02$) (Tables 2-4).

According to members’ 24-hour recalls, the mean energy intake of those consuming ≥6 meals/week at their sorority houses was approximately 1,958 calories compared to an average of 1,483 calories consumed by those who reported eating <6 meals/week at their sorority houses ($p = .044$) (Table 5). Energy consumption data includes all of members’ reported food and beverage consumption. More research is needed to determine the reasoning behind the significantly higher mean energy intake but significantly lower mean BMI in the subgroup consuming ≥ 6 meals per week at their sorority houses.

The MyPyramid recommendation for women ages 18-23 for fruits is two cups per day. According to members’ 24 hour dietary recall, average consumption of fruit was 1.20 ± 1.66 cups; therefore, members did not meet their fruit needs according to the Food Guide Pyramid.

Table 2

Demographics for Members Consuming ≥6 Meals/week at Their Sorority Houses

Variable	Number Observed	Mean	SD	Min.	Max.
Age	59	20.10	1.09	18.00	22.00
Height	58	64.83	2.42	60.00	71.00
Weight	57	130.86	16.12	97.00	178.00
BMI*	58	22.11	2.63	16.86	28.73

*Denotes variables that are significantly different from group of members consuming <6 meals/week at their sorority houses

Table 3*Demographics for Members Consuming <6 Meals/week at Their Sorority Houses*

Variable	Number Observed	Mean	SD	Min.	Max.
Age	13	20.08	1.26	18.00	22.00
Height	12	64.75	2.41	61.00	70.00
Weight	12	141.27	19.94	111.00	173.00
BMI*	12	24.12	3.43	19.43	29.13

*Denotes variables that are significantly different from group of members consuming ≥ 6 meals/week at their sorority houses

Table 4*Body Mass Index of Member Subgroups**

Group	Number Observed	Mean \pm SD	[95% Conf. Interval]	
≥ 6 Meals	58	22.11 \pm 2.63	21.42	22.801
<6 Meals	12	24.12 \pm 3.43	21.95	26.30

Note. * $p = 0.0256$

Table 5*Mean Energy Consumption of Member Subgroups**

Group	Number Observed	Mean	SD	[95% Conf. Interval]	
≥ 6 Meals	59	1957.80	799.57	1749.43	2166.17
< 6 Meals	13	1482.69	484.31	1190.03	1775.36
Total	72	1872.01	771.86	1690.64	2053.39

Note. * $p = 0.0437$

It is also recommended that women ages 18-23 consume two and a half cups of vegetables per day; however, members' 24-hour dietary recalls showed an average consumption of 2.68 \pm 2.11 cups per day; therefore, the majority of members met the recommended intake of vegetables. Interestingly, the subgroup of members who consumed <6 meals per week at their sorority houses did not meet the MyPyramid recommendations for vegetables, consuming 2.44 \pm 1.96 servings.

Overall, members consumed the MyPyramid-recommended 6 ounces of grains (6.25 \pm 3.45 ounces); however, when divided into subgroups, the mean grain intake for the group consuming < 6 meals at the sorority house per week fell below the recommendations due to an

average of 4.66 \pm 3.64 ounces.

MyPyramid recommends consuming 3 cups of dairy on a daily basis; however, the overall mean dairy intake was 1.68 \pm 1.14 cups. This level of reported intake suggests that members do not consume adequate amounts of dairy products.

Women ages 19-23 should be consuming 5½ ounces per day of protein (meats and beans), and 18 year old women should be consuming 5 ounces in the same time period. According to members' 24-hour dietary recall, average consumption of protein was 4.55 \pm 2.94 ounces; therefore, members did not meet their protein needs according to the MyPyramid guidelines.

Finally, MyPyramid recommendations are for the daily consumption of 5 and 6 teaspoons

of oils for 18 year olds and 19-23 year olds, respectively; however, the overall mean fat/oil intake was 3.05 ± 2.83 teaspoons. This level of reported intake suggests that sorority members do not consume adequate amounts of oils on a daily basis.

The mean food group intake from members' 24-hour dietary recalls shows that the members in this study failed to eat a balanced diet according to the MyPyramid guidelines due to their inadequate consumption of fruit, dairy, protein, and fats/oils (Table 7). No statistically significant differences were found between members who ate ≥ 6 meals per week and those who ate < 6 meals per week at their sorority houses. In fact, average food group intakes were generally higher for those who reported eating ≥ 6 meals at their sorority houses, although statistically insignificant. Those who reported eating ≥ 6 meals per week also had a higher consumption of grains than those who ate < 6 meals, which is statistically significant at $p = 0.10$ level but insignificant at the $p = 0.05$ level.

As a part of the questionnaire, members were asked about the various obstacles preventing them from consuming a greater number of meals at their sorority house. Table 6 shows the frequency and percentages of members' responses to each statement. Each member was allowed to select all applicable statements. Although the percentage of health-related statements chosen was higher (26.39% versus 22.04% of selected non-health related statements), the highest-ranking obstacle marked by members was "I do not like what is being served at that meal," and the fourth-highest ranking obstacle was "I do not like the lack of nutrition labels and the unknown nutrition content of the food." Interestingly, 53.8% of those consuming < 6 meals reported the lack of nutrition labels and unknown nutrition content of the food as obstacles to meal consumption; this statement was the second-highest ranking among this subgroup. In members of both subgroups, mean percentages of health-related statements select-

ed were higher than mean percentages of non-health-related statements (Table 6).

DISCUSSION

Women join sororities for a variety of reasons, some of which include: opportunities for social interaction, leadership development, and community involvement (Allison & Park, 2004). Members' organizations often become a component of their identities throughout their college years and beyond; therefore, it is important to support the development of healthy eating behaviors throughout the time each member is active (Allison & Park, 2004). Eating at a sorority house provides opportunities for social interaction during meals. Members who reported consumption of ≥ 6 meals per week at their sorority houses were more likely to meet the MyPyramid recommendations, have higher overall mean calorie intake, and lower mean BMIs.

Multiple studies report lower BMIs in individuals who exhibit less dietary restraint; therefore, members who reported eating more meals at their sorority houses may exhibit lower levels of restraint than those who eat fewer meals at their sorority houses (Klesges & Isbell, 1992; Lowe et al., 2006; Moreira, de Almeida, & Sampaio, 2005; Stewart, Williamson, & White, 2002). More research is needed to determine whether or not such a correlation exists in this population.

Although nutritional analysis of meals served at sorority houses and other foodservice establishments were not performed, some of the meals served at sorority houses and elsewhere are likely not balanced according to MyPyramid guidelines. Consistent with previous studies of college students, many members included in the sample failed to meet MyPyramid guidelines (CDC, 1997; Racette et al., 2008; The American College Health Association, 2005). Failure to meet MyPyramid guidelines may be related to barriers selected by members on The

Table 6*Obstacles to Eating at Sorority House*

Response	Frequency	Total Percentages	≥6 Meals consumed	< 6 Meals consumed
I have a class that conflicts with meal service.	35	48.61	47.5%	53.8%
I live off campus.	28	38.89	35.6%	53.8%
I do not like what is being served at that meal.	52	72.22	72.9%	69.2%
My close friends aren't eating there for that meal.	6	8.33	6.8%	15.4%
I do not have time.	24	33.33	32.2%	38.5%
I feel self conscious if I eat there.	3	4.17	3.4%	7.7%
I do not have transportation to and from the sorority house.	0	0.00	0%	0%
I want to get the most for my money.	11	15.28	16.9%	7.7%
I do not like the lack of nutrition labels and the unknown nutrition content of the food.*	26	36.11	32.2%	53.8%
The food seems like it is low quality.	17	23.61	23.7%	23.1%
I do not like the times food is served.	20	27.78	28.8%	23.1%
It is inconvenient.	9	12.50	8.5%	30.8%
I do not have to time to eat a meal.	4	5.56	6.8%	0%
I am not able to use nutrition labels to choose which foods I will eat.*	12	16.67	11.9%	38.5%
There is a lack of available parking.	21	29.17	25.4%	46.2%
Other	7	9.72	11.9%	0%
None of these	1	1.39	1.7%	0%

*Denotes a health-related statement.

Questionnaire of Eating Behaviors; however, the provision of meals at sorority houses may eliminate some of the barriers faced by other college students and young adults. Furthermore, service of meals at sorority houses may reduce the frequency of meal-skipping and eating “on-the-run” in sorority members.

In sorority houses, nutrition information is not always available for meals served; therefore, many members fail to monitor their energy and fat intakes. For this reason, Dinger (1999) proposed that healthy food choices should be offered consistently, and members should have access to the nutritional information of the foods

served in their sorority houses. By providing this information, sorority members who frequently consume meals at their houses would have the opportunity to make better food choices for weight maintenance. The availability of healthy choices and nutritional information may also encourage sorority members to eat at their sorority houses more frequently.

FUTURE RESEARCH

Additional research is needed to determine whether or not sorority houses are offering all of the components of balanced meals accord-

Table 7*Mean MyPyramid Servings Consumed by Members as Reported in 24 Hour Dietary Recall**

MyPyramid food groups	MyPyramid Recommendations	Total Sample (Mean ± SD)	≥ 6 Meals (Mean ± SD)	< 6 Meals (Mean ± SD)
Grains	6 oz.	6.25 ± 3.45	6.60 ± 3.34	4.66 ± 3.64*
Vegetables	2 ½ cups	2.68 ± 2.11	2.74 ± 2.16	2.44 ± 1.96*
Fruits	2 cups	1.20 ± 1.66*	1.21 ± 1.76*	1.16 ± 1.11*
Dairy	3 cups	1.68 ± 1.14*	1.78 ± 1.18*	1.24 ± 0.82*
Protein	Age 18: 5 oz. Age 19-23: 5 ½ oz.	4.55 ± 2.94*	4.73 ± 2.92*	3.73 ± 2.98*
Oils	Age 18: 5 ts Age 19-30: 6 ts	3.05 ± 2.83*	3.04 ± 2.40*	3.08 ± 4.41*

*Denotes values are lower than the recommended minimum number of MyPyramid servings.

ing to MyPyramid Guidelines. More research is also necessary to determine the influence serving and dining styles in sorority houses (i.e. buffet, a la carte, etc.) can have on members' intake at meals. The subgroup reporting consumption of ≥6 meals at their sorority houses had a lower mean BMI but a higher mean energy intake; therefore, future studies focusing on energy intake and BMI in relation to the levels of dietary restraint and/or physical activity of sorority members may be beneficial. According to the results of this study, structured meals and meal times may help sorority members maintain healthier, lower BMIs.

LIMITATIONS

Procedures were followed to ensure the accuracy of the data; however, this study had some limitations. Members consisted of a convenience sample of volunteers from each of the nine sororities at the institution. The sample consisted of a greater number of members reporting consumption of six or more meals per week at their sorority houses than members reporting consumption of less than six meals per week at their sorority houses. Although attempts were made to recruit an equal number of members from each sorority, some sororities may have been underrepresented in this investigation.

Members were required to complete a

twenty-four hour dietary recall following a day during which three opportunities were given to eat at their sorority houses. With only one day of food and beverage consumption reported, some records may not be a true representation of the member's usual diet. Twenty-four hour dietary recalls rely on members' self-reported food and beverage intake; as a result, some members may have over- or underestimated their food and beverage consumption during the previous day. With immediate recall, most people tend to underestimate their actual food consumption, and this problem may be increased with twenty-four hour dietary recalls among college females. Since few of the members prepared their own meals, they did not know specific ingredients in each item consumed at their sorority houses or elsewhere.

In addition to the twenty-four hour dietary recall, members completed the "Questionnaire of Eating Behaviors;" however, this questionnaire was not validated. In future studies, using a validated questionnaire would strengthen the results.

CONCLUSION

The college years are a time of transition into adulthood. Students become more independent, and they experience more freedom and control over making their own decisions.

As a result, a healthy diet is sometimes not a priority compared to convenience, social obligations, and other factors. Sororities that serve meals are in a unique position to influence the health choices of members by offering and communicating healthy food options in an appealing social setting. In order to ensure healthy meals

that meet current dietary guidelines are served, individuals such as house mothers or directors and chapter leaders should receive education on planning and communicating healthy meals.

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