# CampusClub: Designing for a Hyperlocal Social Media App for College Campuses

Digital Humanities 199 Research Report

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#### **Abstract**

This study aims to explore how user-centered design and technology can be leveraged to develop a sense of community on college campuses by presenting and evaluating CampusClub, a hyperlocal social media app that functions as a student organization directory and posting board for campus events. We follow the methodology of user-centered design (UCD) in designing and evaluating the app. To define the requirements for the system, a user interview is conducted with 5 participants to learn about their challenges and motivations when navigating student life. From these interviews, personas and user scenarios were created to facilitate the design process. A low-fidelity prototype of the app in the form of wireflows was created and evaluated before a high-fidelity prototype in the form of interactive screens were developed. To evaluate the high-fidelity prototype, a user preference test was conducted to gather final feedback for the app design. A verbal questionnaire was also given to the user preference test participants to gather feedback on specific features of the app. The study suggests that the involvement of students (in terms of participating in organizations and attending campus events) is a significant predictor of their sense of community. It is also found that several social patterns are more important in apps such as CampusClub than others. These social patterns are Activity Stream, Identifiable Community, and Contact List. The final outcome of the study shows that most participants found CampusClub to be useful, especially if they had them in their freshman year.

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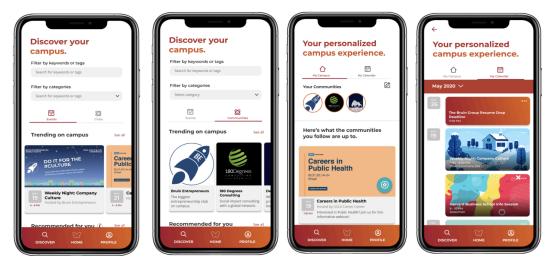
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# 1. Introduction

University students often have trouble finding communities in college because of the large student body. Many find communities within student organizations, but students find the process of searching for these organizations overwhelming and the existing tools to be inadequate, making it difficult to access information and find organizations and events suited to the student's preference. Thus, students tend to resort to unofficial resources such as word of mouth and social media.

CampusClub is a mobile app designed to help college students find their communities by providing an interactive directory of student organizations and a posting board for campus events with social media elements. Students are able to quickly get a sense of what is available as well as interact with student organizations and their peers. The target audience for CampusClub is college students who are looking for events to attend and organizations to join, or student leaders who want to promote their organizations or events. Using the students of University of California, Los Angeles (UCLA) as case studies, this research paper outlines the design process of the app and communicates the findings regarding the requirements from the student body for such an app.

Figure 1: Screenshots of key pages of the CampusClub app



This paper is structured as follows: Section 2 presents related work and literature about this topic; Section 3 outlines the design problem and hypotheses; Section 4 gives a brief overview of the methodology in the study; Section 5 describes the methods used in more detail and the findings from each of the method; Section 6 discusses the findings and Section 7 presents the conclusion and next steps.

# 2. Previous Work and Literature Review

#### 2.1 Previous Work Review

To currently find information about available student organizations and campus events, there are four tools available to UCLA students. Note that this list is not a full representation of what students utilize for obtaining information. Rather, this list is restricted to technology systems such as websites and mobile apps.

- 1. **Facebook:** Students currently find information through Facebook Events circulating in their News Feed. Students are also a part of class groups such as "UCLA Class of 2020" and "Transfer Students of UCLA". This is the most prominently used technology since most students are already on the platform. However, Facebook is not a college-specific system. There is also no complete list of the student organizations at UCLA, thus users must actively search for an organization or stumble upon them by chance.
- 2. **Raftr:** Raftr is a mobile app designed to show a student's "life in college" in one place, essentially a hyperlocal social media platform geared towards colleges. Its advantages include having a list of upcoming Club Events and a Calendar feature, making it possible for students to be aware of all the events happening on campus. Reviews of the app suggest that these are features most appreciated by users. However, the organization of information can be overwhelming and appear cluttered as the feed is not personalized to the user. In addition, no student organizations are officially listed. Thus, students do not know how to join these communities outside of attending events that show up in the app.
- **3. Official Student Organizations Directory:** This is the official list of all the registered student organizations at UCLA. It has some limited filter functionality. There are no personalized recommendations for the users, and the design is unappealing and impersonal. It is also not updated with the organizations' most recent activity or social media and website links. Some of the organizations listed are inactive, making it an inaccurate source for students.
- **4. Oncampus.us:** This website is a recent student project that modernizes the official student organizations directory. It has a filter functionality that allows students to sort by their interests, topics, and the popularity of organizations. It also shows more details for each community, such as how often they meet and the application process for each organization. However, it is a static directory that does not show recent club activities and

events held by the organizations. Students do not have accounts, thus there is no way to personalize the experience of using this website.

Table 1: Summary of the feature analysis of existing systems

Name of System	Event listings	Organization listings	Interactive /Static	Filter and search function
Facebook	Yes, but random and sporadic	Limited. Some organizations have Facebook pages but they are not consolidated in a searchable list	Interactive	No
Raftr	Yes	No	Interactive	No
Official Student Organizations Directory	No	Yes, but not up to date	Static	Yes, but not intuitive and overwhelming
OnCampus	No	Yes, but not exhaustive	Static	Yes

#### 2.2. Literature Review

Loneliness in university students has been widely observed in academic research (Bauer & Rokach, 2012; Ozdemir & Tuncay, 2008). Ozdemir and Tuncay (2008) conducted a study of 721 university students where 60.2% of the participants claimed to be "clinically lonely" with 81% of the participants identifying "social interaction" as an essential need during their university education. Prezza et al. (2001) found a relation between loneliness and a sense of community, which is defined as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together". Despite the importance of instilling a sense of community in universities and the increasing use of technology in education, there is a lack of research in linking the two. Many studies focus on discussing mobile apps, instructional technology, and social media for learning and classroom purposes (Wai et al., 2016; Wagler, 2015; Baird & Fisher, 2005). However, there are only few works exploring how technology can be used to improve the sense of community within university campuses.

A form of a hyperlocal social platform is proposed to foster this sense of community among university students. Metzgar, et al. (2011) defines hyperlocal media operations as "geographically-based, community-oriented, original-news reporting organizations indigenous to the web and intended to fill perceived gaps in coverage of an issue or region and to promote civic engagement". Hyperlocal social platforms aim to "emphasize their focus on bounded geographical communities" (Lopez & Farzan, 2015), and a user study conducted by Hu et al.

(2013) revealed that community members found it easier to get relevant information through a hyperlocal platform which aggregated local information from Twitter in one page than the Twitter platform itself.

To inform how such a system might be designed, a review of literature on the design of social media apps was conducted. In the book Irresistible Apps, Lewis (2014) lists six social patterns, features that are defined to "offer (users) a chance to interact with others": activity stream, broadcast, contact list, identifiable community, identity shaping, and item sharing. These patterns, however, need to be used wisely and according to the specific target audience of the technology. Kietzmann et al. (2011) also lays out seven building blocks of social media: identity, conversations, sharing, presence, relationships, reputation and groups.

This study proposes the use of a social media-like directory of student organizations in the form of a mobile app, which will act as a hyperlocal social platform where students can interact among themselves and find communities to join. I will explore how this app might be designed to improve a student's perceived sense of community in their college campus and explore what social patterns are the most valuable to students in this context.

# 3. Design Question & Hypotheses

The design question that will drive the research is summarized as the following: "How might we design a mobile app that would increase the user's sense of community in college campuses?" The research aims to identify what needs matter most to students in this context and which social patterns identified by Lewis (2014) are the most likely to increase this sense of belonging, so the findings can be applied to the design of future systems for this purpose. There are several hypotheses that are established prior to conducting the research.

A research conducted by Lounsbury & DeNeui (1996) found that college students who are involved in fraternities and sororities are known to have a greater sense of community, and thus predicted to be less lonely. If we define the term "involved students" to be students who are active in being a part of organizations and attending campus events, my first hypothesis is: (1) Involved students will have a greater "sense of community" on campus. Building on top of the first hypothesis, Lewis (2014) argues that social patterns should be used wisely and specific to its target audience. Thus, some social patterns might play a bigger role in empowering students to join organizations and attend campus events. My second hypothesis is: (2) Some social patterns are going to be perceived as more useful than others by students.

# 4. Methodology Overview

To answer my design question, I prescribe to the User-Centered Design (UCD) methodology and utilize User Experience (UX) design research methods. UCD is a process that advocates spending "considerable effort on (user) research and analysis before the development (of a system) begins" (Silva da Silva, et al., 2012). UX design research methods can also be referred to as "design thinking" methods, which consist of five stages: (1) empathizing, (2) defining, (3) ideating, (4) prototyping, and (5) testing (Chasanidou et al., 2015).

To develop empathy, field study in the form of interviews is conducted with the aim of collecting information about users' needs, challenges, and motivations. The information collected is used to create user personas ("characters" that represent users) and scenarios to outline the different user journeys. From this exercise, the requirements for the system are defined and ideated.

The next stage is rapid prototyping, which is defined as the "quick formation of visual and experiential manifestations of concepts" (Liedtka & Ogilvie, 2018). Low-fidelity prototypes are created by hand-drawn sketches and in later stages using Whimsical, an online prototyping tool. These prototypes are presented to users for evaluation. From the low-fidelity prototype, a high-fidelity prototype is created and again presented to potential users for a round of usability testing. During the testing, a questionnaire is verbally given to participants to assess the perceived effectiveness of certain features in the prototype in creating the desired outcome of having our users be more involved on campus.

# 5. Methods and Results

## 5.1. User Interviews

#### 5.1.1 Method

One-on-one interviews via Zoom are conducted with 5 UCLA students. These interviews focus on (1) how much student organizations play a role in a student's community, (2) how students view student organizations and events, and (3) the tools used by students to discover student organizations and events. In addition, their feelings, perceptions, and motivations while going through these topics are noted. The participants of the interviews have the following backgrounds:

• Freshman, male, Business Economics major. Ambitious, professionally driven, eager.

- Freshman, female, Global Studies major. Organized, an international student, lived in several countries before coming to college.
- Sophomore, female, Economics & Communications double major. Social and driven.
- Senior, female, Neuroscience major. Quirky, quiet, introverted.
- Senior, female, Cognitive Science major. A student leader, very involved on campus.

To analyze the interview responses, an affinity wall was used to group together similar responses and identify patterns. The interviews reveal the motivations behind behaviors and the user journeys regarding student organizations and events.

#### 5.1.2. Results

First, I learned that students join organizations to develop their interests and find a community. To choose which organizations to join, students consider both their professional and recreational interests. Four out of five participants mentioned that they wanted to choose something based on "what they want to do in the future". However, all five participants also mentioned that they wanted to "explore new things", suggesting the exploratory nature of this process. For some participants, they cited specific interests that prompted them to join certain organizations, like wanting to "continue dancing". The social aspect of clubs are also highlighted by all participants. For example, a participant states that "it would be so much harder to make friends without clubs." When asked about how much of their current friend groups stemmed from relationships found at student organizations, the average answer across 5 participants was 65%.

The second finding is that students feel very overwhelmed while navigating the discovery process. All participants described the process to be intimidating and stressful primarily due to the lack of information and transparency. One participant mentions that joining clubs in college feels like an "elite process" where you need to be "in the know". Another participant thinks that there are too many clubs and that "(she didn't) know which clubs (she) wanted to look for".

Third, students want a holistic view of the organizations before they get involved. This means, in addition to the scope of the organizations' activities, students are also interested in learning about the organization's culture, diversity within the organization, the personalities of members, and in case of professional organizations - the placement of the members after graduation. A participant describes that he tries to attend events and interact with club members before getting involved to gauge if he fits in with the organization's culture. The emphasis on culture is consistent with the students' expectations of building relationships with members outside of club activities and finding a community within the organization.

Our final finding is students find it challenging to get a full picture of what is happening on campus in terms of events. Students cited the use of social media like Facebook and Instagram as

well as word of mouth to find out about events. However, all of the tools mentioned are passive tools that do not allow for a systematic way to filter and actively search for events. Hence, several participants expressed concerns about how they might be missing out on events that are beyond their personal network.

These insights from the user interviews are used to inform the next stages of the design process, from persona building to the creation of the high-fidelity prototype of the app.

# 5.2. Persona and Scenario Building

Personas are created to represent a type of user and to give designers and developers concrete understanding of the motivations and pain points of users. For the CampusClub design, 4 personas were created based on the previous user interviews: (1) The Eager Freshman, (2) The Rising Star, (3) The Introverted Artist, and (4) The Student Leader. Each one embodies a distinct personality with differing priorities who will interact with the system in a different way. For each of the persona, a scenario for when they might use the app is outlined. In this section, an example of The Eager Freshman persona and its scenario is provided:

Figure 2: The Eager Freshman Persona



**Scenario:** Michael is a freshman that has just gotten admitted to UCLA. He is very excited and anxious at the same time to start his college career. He wants to make sure that he is ready and can get up to speed. A month before UCLA starts classes, Michael logs into CampusClub and browses through the clubs on campus. He follows a lot of business and running clubs. He learns

through the "Trending on Campus" function which are the "big, competitive clubs" and what he needs to do to prepare himself to get accepted by them. When he arrives at UCLA, he knows which clubs he wants to talk to during the Enormous Activities Fair, and even recognizes some of their members. Michael does not feel as lost, and transitions into campus easily. He even ends up joining some of the clubs he followed.

# **5.3.** Low-Fidelity Prototype

#### 5.3.1. Method

The low-fidelity prototype of CampusClub was a wireflow created on Whimsical, a web-based prototyping tool. This prototype incorporates the findings from the interviews and incorporated the personas and scenarios created from the exercise above. The low-fidelity prototype consists of five flows: (1) Onboarding, (2) Discovering Events, (3) Discovering Organizations, (4) Managing Organizations and Events, and (5) Editing Profile.

The wireflow evaluations were conducted via Zoom with two participants, who also participated in the first round of user interviews. The flows were presented to the participants and the participants were asked to provide comments. Between evaluation sessions, relevant feedback from the previous evaluation was incorporated, ensuring the design to be iterative. The goal of the evaluation was to test high-level concepts (features, etc.) and gather user preferences.

RSVP List - Going Discover and explore events Go to the discover tab right after you sign up Discover Clubs Discover Events **Events Page** Would like to see the . Oliver Wang
Class of 2020 Message Jennifer Blu Class of 2020 not need to see the 0 Student's Profile 2 **Events Page** he questions that you asked so fa re too broad, how can you m the beginning, asking more about hat clubs are you involved in right w? Clubs you're interesting in? A 2 27 27 to post, makes it more of a hassle for clubs. Why not integrate with Facebook?

Figure 3: Screenshot of the wireflows and the notes made during evaluation session:

#### 5.3.2. Results

First, both participants felt significant pressure when choosing their interests in the Onboarding flow. The interests will inform the recommendations of organizations and events that the app will generate for the student, thus participants expressed the tendency to want to choose all options displayed because of a fear of missing out on interesting organizations or events.

Second, during the Discovering Events flow, a participant expressed confusion regarding the filter tool, which at this stage allowed users to input a fuzzy search using a search bar as well as more guided filtering by activating one or multiple categories under the search bar. Displaying the hierarchy of the search function clearly as well as the preciseness of the categories are areas that needed work. For the Discovering Organizations flow, the confusion with the filter and search function was more prominent. Participants expressed the more urgent need to be able to search for relevant organizations effectively and are dissatisfied with the current categories presented (arts, leadership, career, recreation, and academic) as they were too broad.

Third, in the Managing Organizations and Events flow, a participant also expressed the desire to not only be able to add the events into an in-app calendar but also to her personal calendar (e.g. Google Calendar) as it was necessary to view the events in the "context of her life". Participants display a tendency and desire to save events and application alerts (for club recruitments) to the in-app calendar to refer to later. The complete control of their calendar, such as being able to delete events, was also a desired feature expressed by participants. In addition, a participant who is a student leader mentions the need for easily accessing the organization pages which she is in charge of so she can make updates conveniently.

Fourth, both participants also made references to the Facebook Events feature, and thus they expected the app interactions to behave similarly. To respond, some design corrections will be made such as adding a link to the Facebook Event page and using similar icons as Facebook's (e.g. a star to indicate interest) to fit the users' mental model of the app.

Overall, the findings show the importance of making the in-app onboarding process less overwhelming as possible, taking special note that the task itself is already daunting for most students. The importance of a well-designed information architecture that allows for an effective and easy-to-use filter and search ability is noted as well. Lastly, it is crucial to help users to understand the content of this app in the context of their lives, which means enabling them to view in-app events in their existing schedules and leveraging the tools that they already use like Facebook.

# 5.4. High-Fidelity Prototype

#### 5.4.1. Method

After incorporating relevant feedback from the wireflow evaluations, a high-fidelity prototype was made using Figma in the form of interactive screens designs. Six user preference tests were conducted to gain more feedback and identify design errors and possible improvements. The test consists of twelve tasks, such as "how might you explore the events available in the upcoming week?" Two of the tests were conducted in-person where the prototype was displayed on a phone, and four of them were conducted through Zoom where the participant shared their screen as they interacted with a web-based prototype. The six participants for the user preference test are as follows:

- 1. Senior, female, UCLA student, Biology major.
- 2. Senior, female, UCLA student, Business Economics major.
- 3. Senior, female, UCLA student, Cognitive Science major.
- 4. Senior, female, UCLA student, unknown major.
- 5. Senior, female, UCLA student, Neuroscience major.
- 6. Alumni, male. Former UCLA student, Economics major.

After accomplishing a task, the participants were given one or more statements related to the task or the screen that they are on. For example, some of the statements are: "Through the Discover Events page, I feel like I have enough information to decide what events I would like to explore further" AND "Through the club page, I can get a holistic understanding of what the club is like in terms of culture, people, and club activities." Participants are asked to choose whether they "Strongly Disagree", "Disagree", "Neutral", "Agree", or "Strongly Agree". Their answers are recorded in terms of numbers where "Strongly Disagree" maps to 1, and "Strongly Agree" maps to 5. The participants were given a total of 20 questions.

## 5.4.2. Results from Questionnaire

Responses to 19 of the questions in the questionnaire (n=5) were used in a multiple regression analysis with three variables: "sense of community" (community), "willingness to get involved" (involvement), and "sense of being informed" (informed). As stated in the beginning, "being involved" is defined as joining organizations and attending events. 3 of the questions are mapped to "sense of community". 7 questions are mapped to "sense of being informed", and 9 questions are mapped to the "willingness to get involved." The dependent variable in this analysis is the "sense of community" and the independent variables are "willingness to get involved and "sense of being informed".

Table 2: Parameter Estimates output for the multiple regression analysis of questionnaire result

Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence
Model		В	Std. Error	Beta	t	Sig.	Lower Bound
1	(Constant)	.847	.558		1.517	.269	-1.554
	senseofbeinginformed	.314	.116	.332	2.704	.114	186
	willingnesstojoin	.527	.075	.859	6.997	.020	.203

Using the standardized coefficients from the table, the results from the analysis reveals the following model:

[community] = 0.33[informed] x 0.86[involvement]

The coefficient for the sense of being informed (informed) is 0.33 (p = .11) and the coefficient for willingness to get involved (involvement) is 0.86 (p = .02). This indicates that only the "willingness to get involved" variable is a significant predictor for the sense of community of students. The results mean that 1 unit increase of the student's willingness to get involved will increase the student's sense of community by 0.86.

# 5.4.3. Results from User Preference Test

The analysis of the observations from the user preference is summarized in the table below. For each observation, the reasoning is extracted from the interview notes, and the current state and the next steps are noted.

**Table 3: Summary of observations** 

Observation	Why?	Current State	Next Steps
Participants wanted more specific categories to express their interests	Users rely on the categories provided by the app to provide them guidance. Participants were overwhelmed with broad categories and felt pressure to choose all of them	Current categories are social, hobbies, sports, leadership, professional, service, humanities, arts, and STEM	More user research is required to see what is the best way to group the organizations and events on campus
2. Users tend to explore organizations and events through categories first before searching for specifics.	Users intuitively want to get the overall landscape of the information first before searching for their specific interests, to ensure they do not miss out on anything	"Search by keywords or hashtags" is at the top and "search by categories" is below. Only one type of filter can be applied at a time, and only one category can be selected at a time	Present "search by categories" as the main search function (at the top) and allow for multiple selections of categories for more advanced searching

3. Participants did not feel that the culture of the organization is adequately communicated in the organization's page	Culture is something difficult to portray in an app through written text. Users tend to want to interact with the members and attend events to find out about the culture	The organization's page shows the written description about the organization ("About"), list of recent events ("Events"), and members ("Members")	Include a link to the organization's website, and allow to import an Instagram feed at the bottom of the "About" page
4. There was a tendency for participants to click "interested" on events so it would be highlighted/saved, although they have a low possibility of attending	Users have the intention of revisiting the events later and further select which ones will be put in their personal calendars.  The MyCalendar feature functions as a place to "save" interesting events for later reference	Events which the user's indicated interest (clicked "Interested" or "Going") will show up in the user's MyCalendar page. The calendar is a display of the events in chronological order.	Show with more emphasis the two action items a user can take for an event: Adding it to their personal calendar (e.g. Google Calendar) or Delete
5. The information displayed on homepage (MyCampus) is not intuitive to most participants	Users do not understand the difference between "My Communities" vs. "Clubs I follow"	At the top of the page, users can see circular logos of organizations they are officially a part of, labeled "My Communities". The rest of the page displays the events hosted by the clubs they follow in chronological order	A redesign of this screen is needed with input from users. Initial steps can be to replace the circular logos with square logos to be consistent with the imagery of organizations in the Discover flow
6. Participants expressed criticisms for the design and the effectiveness of the MyCalendar page	Some reasons include the graphics for events are distracting from the important information, it does not show the events in the context of the user's personal schedule, and the user may not check the CampusClub app every day.	The saved events are displayed in chronological order with a unique, randomly generated graphic for each event. The event pages here look visually different from the unsaved events. Users can scroll through the events they have saved in chronological order	A redesign of this feature is needed with input from users. Some ideas from users currently are to allow color coding of events and eliminating the graphics in event cards to prevent distractions

The test also revealed weaknesses in the design, both in visual or interaction. Some examples of the weaknesses include: the lack of option to skip when the user is being asked to enter the organizations they are a part of (freshmen will not have any); not being able to remove a community after entering it during the onboarding flow; lack of visual feedback after clicking "Going"/"Interested" on an event, and not having a visual separation between past events and upcoming events in an organization's event page. Despite these, the participants gave positive feedback about the concept of the app. For instance, when asked for overall feedback, some participants expressed that they wish they had an app like this when they were freshmen.

# 6. Discussion

In the beginning of this research paper, two hypotheses were established. Although the study is not able to falsify or prove any of these hypotheses, it can provide a sense of validation and direction for further research. The first is as follows: (1) Involved students will have a greater "sense of community" on campus. The multiple regression analysis indicates a statistically significant relationship between students' level of involvement with their sense of community. This means when designing for a system that has an objective of increasing this sense of community, we need to prioritize design decisions that can encourage students to take action and become involved, be it in terms of joining organizations or attending events.

For CampusClub, we need to prioritize design decisions which will ensure that users do apply to the organizations they discover on the app and attend the events that they have saved. From the study results, it appears that users are generally satisfied with the information transparency and discoverability of organizations and events. However, the second part of the app that deals with event and organization management receives less attention in the study and users find the interface of these pages less intuitive. This is an area to be worked on since the study proves that it needs to provide not just information, but encourage students to take action.

The second hypothesis is as follows: (2) Some social patterns are going to be perceived as more useful than others by students. The six social patterns defined by Lewis (2014) are activity stream, broadcast, contact list, identifiable community, identity shaping, and item sharing. Each response for the questionnaire given in the user preference test maps to a score of 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The outcome reflected in the statements which the users are agreeing or disagreeing with are seen as desirable behaviors that will help students become more involved (e.g. "I am more likely to attend an event.") Each question is also mapped to a certain feature of the app, which can then be mapped to the aforementioned social patterns. Thus, by averaging the results for questions, it was found that the top ranked features are Activity Stream (Discover Events, Event Page), Identifiable Community (Discover Organizations, Filter & Search, and Organization Page), and Contact List (list of members in organization). This finding holds the second hypothesis favorable, especially since some social patterns such as Item Sharing seems to not be relevant to the user requirements.

Some limitations of the study include the small sample size of the studies and possible biases due to the demographic of the participants. For instance, for the multiple regression analysis for the questionnaire data, there were only 5 data points. To take the result of this analysis further, an enhanced survey with more participants will be needed. Moreover, the participants of the final user preference test and the questionnaire were senior students or alumni who are already

removed from their experience as underclassmen. One of the participants was also constantly involved from the user interview to the final user preference test, which may provide some bias in terms of how she perceives the intuitiveness of the app.

# 7. Conclusion

The UCD approach has allowed an iterative design process that incorporates user input in each version of the design. The study reveals the core motivations, needs, and pain points that students experience when trying to find their sense of community on campus. As shown from the results, the reaction of participants to CampusClub was quite positive. Despite several design-related comments, participants expressed desire to have a tool such as CampusClub and confirmed that they would find it helpful, especially in their first year of college.

This paper begins with the question: "How might we design a mobile app that would increase the user's sense of belonging in college campuses?" From this research, it is suggested that joining student organizations and attending campus events are important in growing their sense of community. This is apparent from the participant's desire to get involved, expressed in the first round of user interviews, and the various factors that students consider before committing to a student organization (e.g. culture, diversity, activities, etc.). The study reveals that being involved on campus is a significant predictor of a student's sense of community, and the best social patterns that can be incorporated to a system to encourage this behaviors are Activity Stream, Identifiable Communities, and Contact List.

From their feedback for CampusClub, students place a big value in having tools to actively search for events and organizations with effective filter and search function, getting adequate information to make decisions, and having the means to manage their schedule of events and meetings to facilitate their involvement. These high-level requirements can be solved with technology and should be considered by universities when designing internal systems for their student body to use. This research proposes a novel way of using technology in higher education that is not related to learning, yet arguably just as important, and hopefully encourages further studies in this direction and adoption from university administrations.

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