

Class Confessions: Restorative Properties in Online Experiences of Socioeconomic Stigma

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ABSTRACT

In this paper, we examine stigma related to class identity online through an empirical examination of Elite University Class Confessions (EUCC). EUCC is an online space that includes a Facebook page and a surrounding sociotechnical ecosystem. It is a community of, for, and about low-income and first generation students at an elite university. By bringing in a community that learns and engages with users' socioeconomic struggles, EUCC engenders unique restorative properties for students experiencing class stigma. EUCC's restorative properties foster new ways of understanding one's stigmatized identity through meaning-making interactions in a networked sociotechnical system. We discuss how EUCC's design shapes the nature of user interactions around class stigma, and explore in depth how people experience stigma differently through the restorative properties of EUCC.

Author Keywords

Stigma; low-SES; low-income; identity; networked publics; social networking sites; restorative properties.

ACM Classification Keywords

H.5.3. Group and Organization Interfaces: Web-based interaction

INTRODUCTION

On March 22, 2015, First Generation and Low Income Association (FGLIA¹), a student organization from an elite U.S. University, launched a Facebook page that is part of a sociotechnical system we refer to as "Elite University Class Confessions" (EUCC¹). In addition to its Facebook page, EUCC is comprised of multiple social technologies such as Tumblr, Twitter, Google Docs, email, etc. through which Elite University students engage in issues surrounding class stigma on campus. EUCC's most active and widely used platform is their Facebook page, on which students who self-identify as first generation (e.g., the first in their family to attend college) or low socioeconomic status (SES) share

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deidentified personal confessions around poverty-induced challenges. According to its posted mission statement, EUCC's purpose is to highlight different experiences people on campus have related to class, first generation status, and other intersectional identities.

EUCC allows users who feel stigmatized to engage in difficult conversations without personally identifying themselves. Confessions on EUCC often contain sensitive information that identifies the posters as part of a stigmatized group. These "stigma symbols" can lead to social judgment in traditional identifiable communication [29]. To post confessions on EUCC, posters submit private messages to the administrators either through EUCC's Tumblr or Facebook page. Administrators then filter and moderate the content to ensure it meets community rules, primarily around privacy and anonymity for all posters. Posts are then published in their original and unedited forms with an attached auto-incremented number indicating the order in which the message was received (see Figure 1).

There is little HCI work investigating online experiences of socioeconomic stigma. Through this paper, we contribute to HCI by highlighting the combination of design, human-interaction, technology practices, and norms that offer restorative properties for users who feel marginalized in their social community. We introduce the concept of *restorative properties*, or semi-stable sociotechnical arrangements that enable specific opportunities for action, reflection, and communication in relation to stigmatized identities. Together, we find that restorative properties influence the experiences of posters, commenters, and readers around class stigma, ultimately fostering a new experience and understanding around stigmatized issues for users.

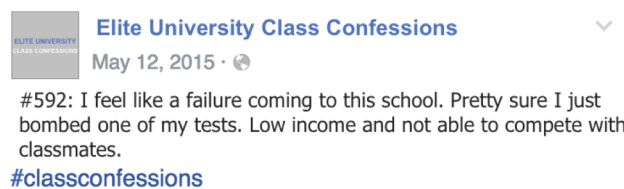


Figure 1. An example class confession post on the Elite University Class Confessions (EUCC) Facebook page.

¹ We use alternate names for the student group and university to avoid inadvertent identification. Similarly, we altered all screen shots and quotes in small ways to reduce potential for backtracing these data through online search.

BACKGROUND AND RELATED WORK

Being Low-SES at Elite Institutions

Low-income students face a multitude of class-based challenges as they start college [30,49]. At Ivy Leagues like Elite, lower SES students enter an environment dominated by a peer group endowed with relatively greater social, cultural, and economic capital [42,58]. Some low-income students must keep up with classes while struggling to afford the next meal, juggle several work-study positions, and financially support families back home [4,19].

Given the taboo nature of income-related hardships in the context of an elite institution, low-SES individuals often feel unable to disclose, share, or seek advice around such issues [4,30,37]. These students who are unable to discuss their life experiences report more loneliness and anxiety because of it [4,16,30,37,47–49]. Confronted with such feelings of isolation and fear of exposure [29,30], students are often cut off from others from whom they could seek support in either on or offline formats.

To “fit in”, many lower income students at elite institutions attempt to socially and culturally adapt to people and institutions [42,58] different from those they encountered in the past. Yet, such process of identity assimilation can trigger feelings of shame, alienation, ambiguity, and displacement [30,47,49]. In fact, research has shown that low-income boys living in more affluent neighborhoods exhibit greater behavioral problems than those growing up in poorer communities [46]. In another study, low-income students experienced more psychosocial problems as the percentage of peers with middle- or high-income or college-educated parents increased [17]. Simply put, these studies suggest “kids living in poverty see themselves—and their prospects—differently when they're surrounded by other children who have more than them” [5]. In this paper, we bring into relief how an online community that arose around low-income students at an Ivy League institution offers alternative views to these prospects around class stigma.

Experiences of Stigmatized Identities

Goffman defines stigma as an attribute that differentiates and classifies a person negatively within a particular identity category. This difference can “socially discredit” a person by separating the individual from what is “felt to be ordinary and natural”, rendering the different person as a “less desirable kind” [29]. This classification does not reside in a person [15,29,37], but rather in the conditions of interactions [7] through which that attribute is perceived and experienced [4,28,29,43] in a social group. Similarly, Mead’s seminal work on the nature of self demonstrates that one’s understanding of self arises from interacting with others [43]. According to Mead, people derive their identity from the relationship developed with those within their social space [43]. Identity formation is a process of responding to the “organized attitudes of the others” in relation to the “I”, ultimately forming the expected “Me” in the community to which the individual belongs. [43]

Identity is thus not an inherent trait possessed by a person, but instead is routinely and reflexively understood by that person depending on their history, activities, and social context [26,27]. Unsurprisingly, the variety of social contexts that people inhabit cause tensions between different selves that emerge in each [26], requiring management of conflicting identities that is often difficult in modern sociotechnical systems [41]. While online spaces were once seen as platforms for identity experimentation [55,59], such behavior is no longer the norm online. Current social media platforms often rely on single user identifiers, making it difficult for people who wish to express stigmatized parts of their identities to fully engage in mainstream SNS (social networking site) [2,6].

In this study, we examine how a stigmatized identity (low-income) co-exists in tandem with a seemingly incongruent identity (Elite University student), particularly as experienced in an online sociotechnical space. We outline the restorative properties of this space that influence this experience.

Outsiders Finding Support on SNS Communities

HCI researchers have explored safe SNS communities for stigmatized individuals in various contexts. Prior research demonstrates that SNS interactions can help first generation and low-income students in their process of identity work when transitioning to college [45]. Others have shown how anonymous college confession boards function as an avenue of interaction and support for socially stigmatized students on campus [6].

While online support groups for stigmatized individuals take on various forms and shapes, molded to fit the needs of the users and their struggles, many of them share similar characteristics. First, membership barriers can be high. Interaction and disclosure within marginalized groups can enhance trust bonds among members, while legitimizing and strengthening group membership and identity [39,50]. Yet, these online spaces are sometimes designed to be exclusive for members who feel separation from those who do not share, or are not familiar with, their stigmatized identities. For example, Autcraft is an online community for children with autism and their families, built around a semi-private Minecraft server and SNSs such as Facebook. To join, a user must first complete an application declaring having autism or being a friend or family member of someone who is already a member [53]. Another example is Vive Les Roses!, an online pregnancy and mothering support group whose organizers deliberately keep the group small, private, and unknown to the general public [40].

Second, safe online spaces for stigmatized individuals often enable a separation of identities: one that is revealed to the support group where the user’s stigma is known and discussed in exchange for help, and one outside of the support community where the person tries to conceal their stigma in everyday life. For example, sexual abuse survivors use temporary technical identities called “throwaway”

accounts instead of their primary Reddit accounts to seek support and engage in first-time disclosures of their experiences [2]. Moreover, some Instagrammers use “separate” or “secret” accounts to find one another through hashtags related to stigmatized topics (e.g., #depression), forming ad-hoc support groups [3].

Such qualities of SNS support groups may be necessary to ensure protection from unwanted exposure. In fact, without them, it can be difficult for stigmatized persons to participate or receive online support in networked publics [8,9], like Facebook. A networked public is a space constructed through networked technologies and “the imagined collective that emerges as a result of the intersection of people, technology, and practice” [8,9]. Because managing public and private boundaries in collapsed contexts is complicated on networked publics [8], SNSs can be difficult spaces for users to share experiences related to their stigmatized identities. For example, transgender individuals who wish to receive support from friends through a networked public such as Facebook experience great distress synching their complex stigmatized identities with their Facebook accounts [31].

However, while rare, it is also possible for SNS support groups to enable congruence between one’s stigmatized identity (e.g., low-income) and one’s larger social context (e.g., Elite University student), and to do so with relatively low barriers of entry. In this paper, we analyze one such community to examine the restorative properties of a safe online space for outsiders that challenges prior notions of typical online support groups. EUCC is a unique online space that provides a safe community for posters while at the same time pushes the stigmatized community into a highly open and networked public on the SNS.

METHODS

There are 37 university-based Class Confession pages on Facebook in the US, including the one at Elite University, which had 77,682 people “talking about this” (a real-time statistic count for keywords entered in the Facebook search bar) at the time of our data collection. As an Elite University alumnus, the first author was able to gain access to EUCC’s founders, organizers, posters, and readers. In this section, we describe the research site, data collection and analysis methods used in this work.

EUCC and its Sociotechnical Ecosystem

Elite University’s First Generation and Low Income Association (FGLIA) created EUCC in 2015. FGLIA is an approximately 500-member student organization with a board consisting of 10 students. “FGLIA” is used interchangeably on EUCC by posters and commenters to denote “first generation and low-income”, or to refer to the student organization that founded EUCC. Although EUCC was first launched as a Tumblr page, FGLIA realized the greater population of Elite University did not use Tumblr regularly. In March 2015, this prompted FGLIA to transition the confession board to Facebook, where more Elite students

were socially active online. In its first year the EUCC Facebook page had 969 posts and 6705 Facebook likes. While EUCC is not solely restricted to the school’s student population (e.g., alumni, parents, professors, and prospective students have also posted anonymously), the majority of posts are authored by current students who self-identify as low-SES.

In sum, EUCC includes several social technologies, people, processes, and policies forming a sociotechnical ecosystem [54]. Posters and commenters communicate using email, private instant messages, Google Docs, and other technologies in combination with Facebook, Tumblr, and Twitter. Thus, while our data primarily originate from EUCC’s Facebook page, we consider the full sociotechnical ecosystem, when discussing the experience of stigma in this online space.

EUCC’s sociotechnical system also includes substantial human involvement in the process of publishing anonymized posts. Posters who wish to make confessions on EUCC send their confessions in the form of a private Facebook message to one of two student moderators. These two moderators, who are often first generation and low-income students themselves, are elected every semester by vote from the organization’s members and board. Moderators oversee the Facebook page by collectively managing the publication, aggregation, and interaction of the anonymized posts.

Data Collection

Using Facepager, a Facebook-approved third party app for generic data retrieval through Facebook’s API, we extracted all posts and comments (all publicly viewable) from EUCC’s first year period (March 2015 – March 2016) on Facebook (969 posts). Our data include both anonymized confessions submitted by posters and announcements made by EUCC administrators. Of the 969 posts, 633 posts had comments, with the longest thread including 20 comments. Each confessional post was published by the Facebook page administrator and only identifiable by its publication number. However, commenters are identifiable by their Facebook account name. Hence, during the data extraction process, we gathered comments without collecting the commenter’s Facebook account name.

Additionally, the first author conducted four semi-structured interviews with FGLIA members, including three who helped create EUCC. In this paper, we refer to all interviewees using pseudonyms. The first and second interviewees graduated the year prior to data collection, but were an important part of EUCC’s early founding process. The third interviewee served as one of the two Facebook page moderators, managing the publication process of incoming confessions at the time of this writing. The last interviewee was an active user of EUCC who also helped coordinate on/offline activities through the Facebook page.

All four interviewees self-identified as either first generation or low-income and were between the ages of 21-25.

Interview questions focused on understanding the motives and processes for using, creating, and managing EUCC. Interviews were conducted between January and May 2016 using video-chat and phone calls, lasting from 45 to 70 minutes. We recognize the limitation of our interviews, which consist primarily of EUCC organizers. However, our main analysis is based on the large corpus of posts and comments, and it is not possible to contact the posters without revealing their identity through the moderators. Hence, we find this tradeoff to be reasonable for the purpose and scope of our analysis.

Data Analysis

We approached our primary data through a grounded inductive coding process [56]. The first author used memoing and mapping techniques to identify emergent themes and patterns. One such pattern indicated changes in the way posters personally perceived or experienced class stigma on EUCC. To further understand the nature of these changes, we used axial coding to delve into the text with more depth [56]. We then performed discourse analysis [25] on a subset of selected texts to analyze the languages that serve as evidence for EUCC's influence on the posters' experience of being low-SES. Discourse analysis is a form of textual analysis that involves identifying patterns, relationships, and values in textual data [25]. Then, we identified, grouped, and analyzed EUCC's sociotechnical designs that shape people's interactions on the platform. The authors met regularly throughout to collaboratively analyze data and to generate and organize themes.

RESULTS

We first describe the sociotechnical configurations that shape the nature of interactions on EUCC. Then we identify EUCC's restorative properties through which posters' experiences of stigma change.

Sociotechnical Features Shaping Interactions

In this section, we present the sociotechnical configurations of EUCC that shape the interactional relationships among posters, commenters, readers, and FGLIA organizers.

1. Moderated Anonymity

On EUCC, anonymity prevents connecting low-income identities with Elite University student identities. Such anonymity fosters openness and honesty when discussing stigmatized identities. For example, one poster confesses how the same disclosure in an identified context led to social ostracism among friends:

#110: I have had sex for money to pay for food and housing over winter breaks. Rather than working 15hrs in work study, I can work for 2 and make twice the money. I told one of my friends about it and she ended up telling my entire group of friends. They did not understand and stopped talking to me after almost 2 years of friendship.

EUCC allows posters like #110 to share such sensitive content while shielding themselves from the potential risks they may face without anonymity. Such sharing in turn can

open the minds of other users in a manner that facilitates new forms of support. Readers who encounter this post on EUCC may not realize beforehand that fellow campus students sometimes engage in sex work to make ends meet, thus experiencing stigma both for being low-SES and a sex worker. Furthermore, while the poster was met with negative responses from friends when confessing in person, the anonymous post itself gained 42 Facebook "Likes", which are often experienced as gestures of support [11] on EUCC.

Anonymity also allows posters to discuss the background assumptions behind stigmatized aspects of their identities. Providing an avenue to discuss how individuals personally experience social attributes as stigma enables users to detail the specific ways in which these attributes shape daily interactions with others. For Tyler in #589, the anonymity afforded by EUCC gives him the space to talk about his identity and vent about the background contexts through which others see him:

#589: I hate telling people about my struggles. I would not even be using EUCC if it was not anonymous. People look at you differently when they know you're poor. You suddenly go from "damn Tyler is smart and cool" to "damn Tyler is smart for a poor kid", "fuckin Tyler out here gettin that social mobility", "big homie Tyler finna be the first to graduate in his family", "Tyler out here facing adversity". Stop it. Treat me normally. I'm still Tyler. Just Tyler. Not poor Tyler. Not rich Tyler. Just Tyler. (real name not Tyler)

The anonymity afforded by EUCC gives the poster the ability to continue to be "Just Tyler" among his friends and acquaintances in identified settings, while enabling him to engage explicitly with his low-SES identity in a safer space. On EUCC, he can be recognized as being low-SES, yet "still Tyler". Here we see how EUCC users can strategically make visible certain identities, or portions thereof, while protecting others through the anonymity enabled by the platform and surrounding policies.

2. Anonymous Requests & Identifiable Responses

On EUCC, posters are anonymous while commenters are identifiable through Facebook accounts. This configuration allows exchange of multiple forms of social support.

In certain social settings, a request for information can leave the asker vulnerable. For example, requests may carry information that associates the person requesting help with their stigmatized identities (e.g., mental health, financial advice, etc.). Asking for help can be especially difficult for low-SES students due to lack of knowledge, connections, resources, and shame [10,23,36]. However, EUCC's anonymity allows posters to make broad requests from a wide variety of people while disclosing their potential ignorance and stigmatized identities to only a small group of moderators. For example, one poster anonymously seeks information on mental health support groups, identifying as multiple intersectional stigmatized identities—a transfer

student, someone struggling to keep up with the workload, and a person with mental health challenges:

#MentalHealth #837 Being a recent transfer student has been a challenge. It's even harder when you feel like a freshman getting used to college life in the city. It is tough finishing the semester knowing I am under credits and suffering from depression and anxiety. Can anyone recommend any support groups on campus I can join? Or just any advice? I want next semester to be better.

Posters can receive informational support directly through EUCC. However, other types of support also emerge. For example, multiple types of support are evidenced in the responses to post #837, including private messages:

Comment 1: I am also a transfer student to this school as well. Please private message me if you feel comfortable doing so. It's tough here and my first year was the worst, but it can get so much better.

This response demonstrates both network support (demonstration that the person receiving the support is a part of a group who face similar challenges) and emotional support (empathy and caring) [18]. Two anonymous posters chatting back and forth online are also likely to exchange esteem support, such as compliments [18]. However, tangible support requires further identification, often only possible after the building of trust through deidentified interpersonal communication [18]. In this scenario, the poster can act upon the offered help or not, enabling him/her to decide whether to receive support without the risk of being exposed to the whole EUCC audience or to the commenter in an interpersonal interaction. This approach privileges the original poster's agency and anonymity, made possible by the assemblage of human and technological actors at play.

On the other hand, commenters' identification exposes them to a degree of vulnerability. We have no way of knowing how many people would offer help—even just in the form of commiseration—in the face of a different sociotechnical system that offers anonymity for commenters as well as posters. We speculate that some may not comment directly on EUCC's Facebook page due to their own concerns about being visible by their Facebook account name.

Another response to the post above (#837), however, gives insight into how multiple types of support can converge in a comment from someone willing to be made vulnerable:

Comment 2: Your school health plan should cover on-campus counseling sessions for free. I went to the counseling center every week and it has helped me manage similar issues you are dealing with – depression, anxiety, moving here from another country. I had to give it some time until I clicked with my counselor, but it definitely helped me. It could be helpful for you too. Good luck!

Commenter 2 offers informational, emotional, and network support from personal experience. The commenter also discloses sensitive identity information that echoes mutual

understanding and background similar to the poster. In offering advice, the commenter reveals a variety of stigma identifiers all in the service of supporting the poster who remains anonymous. These self-disclosures further contribute to perceived network support and a sense of belonging that may help change the nature of interaction through which posters experience social stigma.

3. Enforcement of Accountability

Prior research links anonymity to less accountability, more disinhibition [57], and more support seeking [2] in online spaces. However, anonymity and accountability in tandem enable protection and an atmosphere of safety on EUCC. In the context of EUCC, a safe atmosphere implies a space where a poster's personally identifiable information is not traceable to the disclosure's content. It also means that in this space, posters can reasonably engage in frank discussions on difficult topics with moderators preventing harassment from the audience. Hence, EUCC moderators work to ensure safety and accountability by explicitly and manually deidentifying posts. At the same time, they know who the posters are and can hold them accountable for deviations from the norms and policies of the community. The administrative policies as posted highlight the delicate balance the people who run the system must strike. They seek to maintain anonymity, enable free expression, and protect against unintended disclosure by others:

POSTED BY ADMIN: Hi there! EUCC was created to give people a platform to share experiences relating to their socioeconomic status. We strive to have anonymity in all aspects of this page. We hope that you will do the same as well. That being said: we will NOT tolerate people posting other people's names on posts or outing people. If you comment something like "Oh, this person is actually named..." we will automatically DELETE the comment and BAN you. Anonymity is paramount to us and we will not tolerate people who try to violate that.

This message demonstrates that anonymity is actively realized in this sociotechnical space. This kind of work could not be supported through human organization nor technological design alone. To achieve the appropriate balance between anonymity and accountability, EUCC makes use of a variety of platforms, procedures, and policies. For example, Tumblr is known to explicitly support multiple pseudonymous identities [52], while Facebook frequently extolls the virtues of the accountability of "real names" [32]. Somewhere in between these extremes sit a variety of other platforms and services used by EUCC, such as email, Google docs, and so on. It is this ecology of approaches and tools that enables EUCC to employ moderated anonymity as a powerful workaround to overly restrictive or overly open approaches of any one of these systems.

For example, nine months after EUCC launched, posters submitted multiple requests for help regarding housing over winter break. In response, EUCC organizers connected students who needed housing with those willing to provide

it. However, Eddie, a former FGLIA board member notes, “this was especially tricky”, because “there were a lot of people here and there who needed help, offering help”, but “no systemized way of matching them together”. Furthermore, this matching required identification and risk of exposure. To manage these risks, organizers created a Google Docs survey to recruit student helpers, asking them to provide contact information (including university ID), what kind of space was offered, for how long, and why the helper was offering the space:

Can you share a little about yourself? Why are you offering space? It often makes people feel more comfortable reaching out if they know a little about the person they're contacting for help.

Volunteers were made visible to posters through a Google Spreadsheet that organizers shared directly with those in need after receiving an email requesting housing assistance. This mechanism allowed posters to contact individuals while remaining anonymous to the rest of the community.

FGLIA board members then leveraged these same data alongside a Change.org petition to convince the school housing administration to change winter housing policy. Eddie describes how FGLIA used multiple platforms to show how existing housing policies were affecting students:

A big aspect of this was that people saw online how many people were in danger over winter break...I do think that there is something wrong with the way we [the school and campus community] are handling lower income students. EUCC and FGLIA have brought attention to that.

Using a variety of platforms to organize and match collective help with those who need it increases volunteers’ accountability while minimizing risk for requesters who prefer to be anonymous. Similarly, EUCC’s location within Elite provides an additional layer of accountability, as does the location of other class confession sites within their universities. System administrators reassure posters that their content is by and for the community with policies and procedures surrounding who can post, from where they can post, and so on. For example, in response to one such line of inquiry, EUCC responds:

... using a tracking tool to see where our visitors are coming from (Statcounter), 19/20 of the last people to visit EUCC were on Elite University wifi or visited our page while in [city]. Thus, we are not very worried. Edit: You’re still submitting anonymously! We are only able to see what wifi you’re using/the city you’re in.

In practice, these rules are hard to enforce and narrow the scope of the anonymity afforded by EUCC. However, they do provide some level of assurance regarding who might reasonably post and read the content. FGLIA ensures that the platform, through the work of those who maintain it, is accountable to the needs of those who use it.

4. Unique Identifiers and Moderator Involvement

Posts are displayed using numeric unique identifiers through which the community creates threads of response of both identifiable comments and anonymous posts. However, different opinions can spark backlash and direct attacks in these threads. To manage these risks, moderators sometimes interject as one of the commenters and refer to specific post numbers to mediate different perspectives. In some cases, moderators also express their personal opinion by directly participating in the conversation:

Comment 19: As one of the EUCC moderators, I am excited at the rightful push-back and perspective provided to #679. However, as #681 explains, #679 relates to class inequality, which is why it was posted...we promote respectful discussion on this page, but respectful does not equate with filtering or not posting posts which are not the most supportive of disadvantaged students/what we want to hear.

In this comment, the moderator participates in the conversation thread by taking a specific side by noting the “rightful push-back” against post #679. Instead of appearing in the thread as “Elite University Class Confessions”, the moderator chose to write the comment through her Facebook account name. Revealing and leveraging both her identity as a fellow student and role as a moderator, the moderator does not seem to shy away from editorializing in the process of intervening among commenters.

In another example of active moderation, poster #506 defends her own personal choices as a low-income person:

#506: just because I’m low-income doesn’t mean I can’t own nice things. I wear Michael Kors, Calvin Klein, and other designer brands, because I’m really good at finding deals for \$20 and less. However, I’m ashamed to wear nice clothes because I’m afraid that it will add to this image of welfare queen that people seem to have of me.

Another poster responds to this post with criticism by choosing to make him/herself anonymous by posting a new post rather than a comment that would reveal the user’s account name. Furthermore, the response post is published only after a moderator inserts an addendum in parentheses to clarify the intentions of allowing a potentially negative and conflicting response:

[Posting to help illuminate stereotypical attitudes and misconceptions people have towards lower income people]

#511: @506 I mean you’re not a welfare queen, good for you for finding deals, but honestly maybe if you saved some of that money and spent less on designer clothing, you could add to your savings to get out of the lower class.

Posters can also use their unique identifier to refer back to themselves from a previous post yet still remain anonymous. Unique identifiers on EUCC work to facilitate interaction between posters, or between past and present versions of the same poster. Further, they offer a single-use yet persistent identity that allows meaningful dialogue to occur without

identification, thus enabling them to fully engage in the context in which their stigma is conversed:

#531: @511 this is the person who posted 506. I shop once a year to replace old items not appropriate to wear anymore, spending \$100-150 max. Even if I saved \$150 a year, it's not enough for tuition, rent, health insurance, or anything that would help me "get out of the lower class".

At times, disagreements on EUCC also engender perspective-taking, in which the thread of comments exposes both the poster, commenters, and readers to new and diverse viewpoints. The original #506 confession produces two comments while 14 commenters respond to response post #511. Among them, several provide counter-perspectives to the follow-up poster #511's stance:

Comment 3: Why do the poor constantly have to justify their wants and desires? Because I'm poor I can't have anything nice? I "always" have to be in saving mode? Do you realize how that can break a person? Do I sacrifice my spirit simply b/c I was born in a different class than you? Some might say I'm being too hard about \$20 of clothing but it's not just clothing. People judge because I dare keep nice things I have earned in better times. I had a sweet job for one year and bought myself a Coach wallet from the outlet as a gift to myself. I still have that wallet. I carried it with me while I was homeless. I remove my food stamp card from it with pride. Other people judge me for it; why am I on food stamps if I can afford Coach? They don't know the whole story and quite frankly, they may still judge me even if they did. But that wallet is a sign of better times and I'm not going to stop using it just because it makes others uncomfortable about class lines.

Comment 14: Spending money on "designer clothing" (which I'm sure here refers to something from banana republic, not Versace) IS a way of lifting yourself out of poverty. Being well dressed and well groomed changes the way people perceive and interact with you. Being poor is not just the suffering of hunger, it's also the pain of being a second class citizen.

According to Vince who helped found EUCC, "[people] sometimes have no idea what the reality of low-income means". Publishing incoming posts that seem to directly attack original posters can serve as a way to highlight such ignorance as well as a diversity of perspectives. In fact, our findings indicate that rich dialogue on conflicting perspectives can potentially raise awareness towards the different facets of class stigma.

Moderator involvement in filtering comment threads is reported to increase the quality of discussion as evidenced in news organizations sites [20], which may be impactful here. However, we leave it to future research to determine whether findings from broad audience news sites with anonymous moderators might apply to a tightknit community with known moderators. Unique identifiers and thoughtful moderation allow interaction among users in this community

that engenders diverse perspective-taking. This can challenge existing attitudes and encourage dialogue around stigmatized identities that was not possible before.

Restorative Properties of EUCC

In this section, we bring attention to EUCC's restorative properties. Restorative properties offer users alternate understanding and experiences of their stigmatized identities by interacting with others on EUCC. In our data, low-income students attribute alternative and more positive interactions around their stigmatized identities to EUCC. Using their "confessions", we analyze EUCC's restorative properties and how the sociotechnical space fosters positive experiences around socioeconomic stigma on campus.

Creating a Community of Outsiders in a Networked Public

Poster #265 confesses to have "gotten to a point where I just walk into class and hate everyone at Elite" when he/she is "surrounded by others who constantly talk about the vacations they've been on, how great their birthday was, or how they ate out for every meal last week".

The persistence and scalability of online networked publics [8] can push the experience of other people's "vacations" and "birthdays" into the poster's SNS spaces in the form of photos and check-ins from their social ties on Facebook. For Michelle, a low-income student at Elite, Facebook updates from peers sharing pictures of Spring Break trips and check-ins to expensive restaurants once made her feel isolated and disconnected as an Elite student. Scrolling through her Facebook newsfeed made her believe most Elite students were "richer than me for sure", and "probably have nothing in common with me", or "don't get my issues".

Facebook, where low-income students are connected to other Elite students, can amplify feelings of being an outsider. However, EUCC deliberately carves out a space in a highly networked SNS page, allowing stigmatized individuals to find people with mutual experiences through social ties as an Elite student:

#665: EUCC is the best thing to ever happen at Elite. Before, I was absolutely overwhelmed by students' wealth and immediately felt ashamed of my mediocre background. This forum gives me so much hope. Where are you all? Let's hang out. Immediately. #classconfessions

Prior to EUCC, many students felt alone in their struggles, assuming they were one of the very few dealing with class stigma on campus:

#286: I am an older non-traditional student and before reading everyone's confessions I felt so disconnected from the campus. I had no idea there were so many other people struggling like me. I don't feel so alone in my journey now.

Being able to look at confessions from other students echoing familiar experiences helps some like poster #286 to realize that fellow Elite students might identify with his/her difficulties. Knowing there are "so many other people" by simply reading through EUCC posts mitigates the poster's

sense of isolation and disconnect as an Elite student. Another poster echoes how a similar assumption changed through EUCC:

#189: I attend meetings for FGLIA but there's only maybe 20-30 people per meeting. It made me think that there were honestly only 20-30 other people on campus dealing with the same problems as I am. Thanks Class Confessions, because now I see there is a whole entire silent group of people in my shoes who are just invisible <3 thanks for bringing a voice to the community that can't/don't want to/are too tired to attend the meetings.

Many posters confess how social risks make it “difficult” and “shameful” to engage in face-to-face and identifiable offline interactions. Prior to EUCC, this made finding a community of like-minded students challenging. However, we show in this work how EUCC’s online presence helps provide visibility and voice to an otherwise invisible community of people with a stigmatized identity.

Expressing Separate Incongruent Identities in Tandem

At a place where posters are under constant pressure of not fitting into the socio-cultural prestige that comes with wealth and education, the opportunity to talk about being an Elite student, but one that is also “low-income”, “homeless”, or “international” is rare [30,37]. However, on EUCC, posters who experience class struggles while attending Elite routinely express separate, incongruent, and intersectional identities not typical for an average Elite student:

#578: I send my social worker from the homeless shelter updates on my grades after every semester. It's a good way to keep in touch and to let him know I am still living my dream. I am not sure that's a common thing to do at Elite.

Posters like #578 may be unable to discuss on-going life experiences incongruent with his/her Elite student identity on identifiable social media platforms used by other Elite students. On Facebook, people tend to share primarily positive content [12,35,44] rather than information related to their stigmatized identities. This “positivity bias” [51] can make it harder to share experiences that might be perceived poorly by their connections who seem to “[have] it all figured out”:

#799 Before discussions on Class Confessions, I thought every other student on campus had it all figured out and I was the only one struggling with talking to professors and finding food. Now I know I'm not the only one with issues of not fitting and being low income.

As a first generation or low-income student, issues such as “struggling to talk to professors” or “finding food” may be kept silent, especially because one is also an Elite student. With EUCC, these students can talk about such incongruent identities and experiences without feeling like an outsider to the campus community.

Overcoming Limitations of Exchanging Physical Help

Finding a physical venue of interaction is difficult for low-SES students at Elite, in part because “people experience a lot of shame with [being low-income on campus]”, according to Ari. Ari, who serves as one of the two current moderators and is an active member of the FGLIA board, describes how shame became salient at a campus coat drive:

A lot of people were embarrassed to get coats even if they needed it. They asked us to meet elsewhere. There is that shame at [Elite] that is elevated at an unhealthy degree, especially when you are surrounded by so much privilege.

This particular event required people to pick up donated coats at a public space on campus, thereby identifying themselves as people in need of such support. At a place like Elite, spaces where students can be identified by others as low-income can be daunting, especially for those who do not wish to disclose their SES status. EUCC, on the other hand, functions as an avenue where users can minimize their identity exposure to a few people and still receive tangible help if they choose to act on it. Responding to posters who express specific needs, commenters offer posters material support, ranging from feminine products, textbooks, and food to monetary donations and housing. One commenter who wished to help posters who could not afford to eat during finals week is also mindful of their identities as low-income students:

In case people are worried about their identity being revealed, I'm totally happy to handover money or food to one of the FGLIA crew and you guys just handle it, or I'm also happy to handle the logistics and you can let them know that I'm a hermit grad student so I won't know anyone from their social circle anyways.

Such correspondence between posters, commenters, and organizers work together to enable stigmatized students to receive help from a wider audience of people at Elite who may otherwise be difficult to reach. In return, posters can find tangible support and connect with “people who get it”:

#WhatHasChanged #798 Since last year, I have found people who get it (thanks, FGLIA!). I have also found tangible support I didn't know existed. Meals and emergency housing! I had no idea this support existed.

Individual and collective help from networked ties also makes posters feel more positive about themselves in relation to their class identity on campus. The “organized attitude” [43] felt through FGLIA and EUCC allows one poster to embrace his/her identity as a first generation student:

#796 The gratitude I have for FGLIA. I am inspired by FGLIA members making these resources available for students here at Elite through EUCC. Because of FGLIA, I have embraced being a first generation student. Thank you

EUCC provides an alternative space and setting through which exchange of support can take place. Not only does this hybrid on/offline exchange help provide material and

tangible assistance that are often desperately needed by first generation and low-income peers on campus, but also assist students in embracing their stigmatized identities.

Opening Perspectives

On EUCC, dialogue around class issues and stigmatized identities routinely takes place. Such discussions can raise awareness as well as challenge biases against socioeconomic stereotypes. Together, these conversations provide new perspectives through which people understand stigmatized attributes:

#405: Reading the Confessions has unsettled me: both b/c I realize how much the 1-5% can learn from the lower-income people, but also b/c I realize how much the lower-income people have to learn about the 1-5%. I was born "lower-income", but not anymore. Life isn't easier up here, life is life, and life's hard. We must work to keep it. But ppl up here do need to realize what runs their "easy" lives. Who are the ppl who made ur clothes & built ur house?

Here, the poster brings authority to the post by speaking as someone who has been both poor and rich. Discussion around socioeconomic issues is diverse and often conflicting. Further, by raising awareness about the struggles faced by low-income students, EUCC pushes the exposure of low-SES and first generation issues beyond its immediate population, enabling new forms of perspective-taking from those with privileged backgrounds:

#380: I was talking to a wealthy student on campus that reads the Confessions page. They were shocked at the number of low-income students on this campus and called the EUCC page 'enlightening.' (They also told me that they've talked with their friends about ways to help their classmates.) Here's to the empathy we are helping others realize. I'm proud of everyone that reads/posts on this page.

As shown in this example, EUCC may potentially educate and influence how some non-low-SES people (e.g., EUCC commenters and audience members) view low-income stigma and their own privilege in relation to it.

Engagement with the broad EUCC and FGLIA communities may also inform how people think about addressing class issues. The community provides a variety of new mechanisms to connect with those who need support. Interactions between people of different classes also enable students to learn from and empathize with each other:

#539: I swiped in [meals for] a couple of people today, because I always have plenty of swipes I never use. They messaged me a few minutes later thanking me for giving them what will be their only meal for the day. I don't think I've ever felt so many things at once in my entire life. I take so many things for granted, like extra spending money and extra meal swipes. But if I can offer help and make anyone's life a little easier, that's all I really need.

Offering meal swipes at campus dining halls is one of the most common responses to EUCC posts that confess to

hunger on campus. This poster shares what it is like to have engaged in such exchange with another poster. In essence, EUCC pushes the difficult experiences of stigmatized individuals into a highly networked and public SNS space involving and exposing personal struggles of socioeconomic stigma to social ties who may not have similar experiences or challenges like poster #539.

DISCUSSION

In this work, we show how EUCC's combination of sociotechnical features (moderated anonymity; anonymous requests and identifiable responses; enforcement of accountability; and unique identifiers and moderator involvement) shapes user interactions around stigma. We also introduce the concept of *restorative properties*, which we define as semi-stable sociotechnical arrangements that provide users specific opportunities for action, reflection, and communication in relation to their stigmatized identities. We present restorative properties both as a new analytical construct for HCI and social computing researchers, and as a strategy for online support groups whose members may benefit from experiencing stigma in different ways. By using this approach, communities can provide an interactive space for both those who share a stigmatized identity and their broader peer group.

Integration of Disparate Social Memberships

Marginality refers to "human membership in more than one community of practice" [1]. Alluding to Robert Park's "marginal man", Bowker and Star describe a stigmatized person as someone who has "double vision by virtue of having more than one identity to negotiate" [7], like the posters on EUCC. Similarly, Stone refers to those who inhabit multiple disparate identity categories as "boundary creatures" with a heightened sense of vision [55]. Through these lenses, we see how stigmatization occurs through multiple memberships in disparate communities where an individual must frequently switch between the norms of each community [7,33].

Throughout our data, posters express that they do not belong on campus with their fellow Elite students whom they assume to be different from themselves. Membership in one group is described in these posts as mutually exclusive to the other. EUCC, in effect, challenges this perception. EUCC grounds the locus of discussion and expression of marginalized statuses *within* a common membership identity as Elite students. We see this in the way posters discuss incongruent identities in tandem, implying rightful belonging in both seemingly separate groups.

Here, there is a sense of integration in identity memberships for posters who are able to discuss and express a stigmatized identity (low-income) in relation to a non-stigmatized identity (Elite student). This is a significant departure from existing online support groups that partition those with stigmatized identities away from others to discuss issues related to their stigma privately [21]. While membership exclusivity in these safe online spaces may be necessary for

protection of personal identity [53] or strengthening of group identity [39,50], it can also foster separation rather than bridging of those who are in the marginalized circle and those who are not.

Past HCI literature on online support groups has shown that admitting to a negative identity online within a shared identity group increases trust, reduces stigma, and acts as a membership card for that group [24]. EUCC, conversely, expands the group membership boundary to include not only marginalized individuals, but the larger campus community of Elite students. This is critical, because true membership in the context of EUCC does not mean just being part of a low-income community or just being an Elite student. It means being both.

Tangible Help & Belonging Through (In)visibility

Prior studies have demonstrated that exchange of emotional or informational support is more frequent than tangible assistance [13,14,22] in computer-mediated support groups. Other ways of soliciting tangible support online require revealing personal hardship using real names. However, our findings indicate that the sociotechnical configuration of anonymous requests combined with identifiable responses helps users overcome constraints in asking for and providing tangible help through EUCC. Commenters' names are visible, increasing these volunteers' accountability (as well as vulnerability), but also the ease of coordinating help with a specific poster. For some, this changes how they view their ability to help those within the EUCC community. In addition, these interpersonal exchanges help some posters view peers whom they previously considered outsiders to their struggles, as empathetic students willing to provide help through EUCC.

Furthermore, EUCC's scalability [8] as a networked public helps provide visibility and voice to an otherwise invisible community of people with a stigmatized identity. Outsiders are, by definition, spread out across a population and do not feel a part of the larger community. Due to shame and persistence of identities in a real-name SNS or face-to-face interaction, it is difficult to foster community around stigmatized identities. Thus, discussions about class issues at Elite are either highly visible in public contexts or largely invisible in personal interactions between close friends. However, EUCC emerges as a hybrid on/offline community allowing stigmatized people to come together and identify as part of a group without having to come out personally as part of that group.

Opening Perspectives as A Source of Learning

Poverty is often distant from and irrelevant to people who do not experience it first-hand, particularly in increasingly stratified and homogenous social media feeds [60]. As shown in our findings, there is a lack of knowledge and understanding towards what it means to come from a different socioeconomic status.

On EUCC, posts are given unique identifiers that foster multiple threads of response, exposing the posters, commenters, and readers to new and diverse viewpoints. This fosters education and engagement that can potentially alter the contextual understanding of stigmatized identities on campus. This increases awareness of the underlying assumptions that perpetuate class stigma on campus.

In contrast, learning about stigmatized experiences of those within a user's immediate community is limited on SNS support groups formed through Reddit [2] or Instagram[3], because these groups do not engage external audiences who are unfamiliar with the stigma. On Yik Yak, stigmatized users are exclusively grouped by location proximity or topic [6,34] rather than focused on a specific stigmatized identity. Grouping people geographically can allow a local group identity to emerge [34]. However, such a broad grouping limits the opportunity for interaction and discussion of particular stigma-related issues across different social groups, which helps disparate identities become congruent for marginalized users.

Bringing an outsider into a larger circle of people who may not necessarily identify with the same stigmatized statuses is risky. Yet, the restorative properties that characterize EUCC provide an artful integration between different social worlds to form an ongoing and stable relationship that transcends existing boundaries. Thus, EUCC serves as an opportunity for learning and education across different social groups [38] without placing the burden of education on the marginalized students. EUCC is an example of a sociotechnical system that leverages this difficult balance well.

CONCLUSION

EUCC is a sociotechnical system that includes the people, policies, and practices of Elite University and the FGLIA organization as well as the infrastructure of a variety of technological platforms. This unique combination of human and technical actors provides a venue and structure for producing, experiencing, and learning about stigma. The aggregation of practices we encounter on EUCC, therefore, informs our scholarly thinking about stigma in light of ever evolving sociotechnical systems. By creating the conditions under which stigmatized disclosures and exchange of support could take place in a sociotechnical system, EUCC offers restorative properties that give posters a sense of belonging and affinity. While motivating sociotechnical designs that take users' stigmatized identities into consideration is no easy task, we argue through this work that restorative properties can affect change in the social context through which people experience stigma.

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