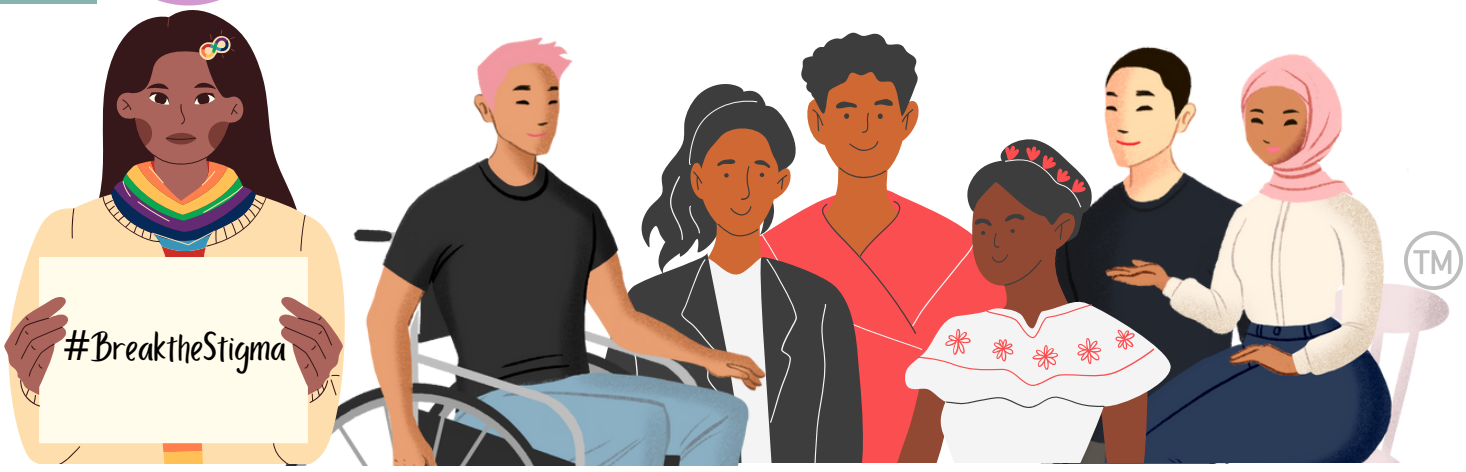
FACILITATOR REPORT

Addressing the Mental Health Needs of Historically Marginalized Graduate and Professional Students



Created by the
Engaging the Academy team

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DEDICATION

We dedicate this report to our students and colleagues from historically and currently marginalized communities who suffer from mental health conditions, and to those who, unfortunately, died too early because of the lack of effective mental health services available in higher education.

ACKNOWLEDGEMENTS

We would like to thank all the stakeholders and student/patients who participated in our capacity building project.

Table of Contents

Executive Summary	1
Background	2
Our Project	5
Our Facilitator Team	7
Deliberating About the Mental Health Needs of Students	8
Information Gathering	9
Step 1- Framing Sessions	10
Step 2- Issue Book	12
Step 3- Deliberative Democracy Forums	14

Table of Contents

Deliberative Forum Findings	15
Common Ground	27
What We Learned About Deliberation	28
What We Learned About Effective Mental Health Services	29
What We Learned About Dismantling Oppressive Structures	31
What We Learned About Communities of Care	33
Resources for Graduate and Professional Students	35
Team Members	36
References	38

Executive Summary

The long-term objective of the Engaging the Academy is to develop the capacity of graduate and professional students, faculty, staff, on- and off-campus healthcare providers, and administrators to **engage in patient-centered outcomes research and/or comparative effectiveness research (PCOR/CER).**

In October 2023, the leadership team recruited and trained a total of ten stakeholders to facilitate the Framing Sessions and Deliberative Democracy Forums (DDFs). The trainees self-identified as either historically marginalized graduate and professional students (HMGPS), allies intimately connected to the graduate student community, and/or members of our leadership team. They included undergraduate and graduate students, as well as recent graduates, in the humanities, social sciences, and STEM fields. The facilitator team conducted three framing sessions with a total of 22 participants from across the United States. Participants had diverse roles, including graduate and professional students (*n*= 9), staff members (*n*= 5), postdoctoral scholars (*n*= 3), faculty members (*n*= 3), and healthcare providers (*n*= 2).

After we analyzed the data from the framing sessions, we organized five virtual DDFs, one per each of the five UC campuses recognized as Hispanic-Serving Institutions (HSIs). We present findings from three forums, one at UC Davis, one at UC Merced, and one at UC Santa Cruz. Two scheduled forums were not included due to a lack of participation from diverse stakeholders. A total of 32 stakeholders, including graduate and professional students (*n*=24), staff members (*n*= 6), and faculty members (*n*= 2) attended the forums. The majority of stakeholders (*n*=13) prioritized structural-level interventions as the focus of future research on HMGPS mental health.

Participants talked about the need to conceptualize graduate and professional students as students/patients, and not as employees.

Findings from our project highlight the need for future PCOR/CER to address issues of ineffective and inaccessible mental health services, oppressive academic structures, and lack of communities of care.

Background

Why focus on the mental health needs of HMGPS?

The World Health Organization (WHO) identifies college student mental health as a global public health priority (Cuijpers et al., 2019). Research indicates about 20-50% of graduate and professional students report experiencing mental health conditions including depression, anxiety, and burnout while attending graduate school, and that the severity and frequency of these issues is six times greater than the general population (SenthilKumar, 2023). In a global survey conducted in 2017 by a leading multidisciplinary science journal, Nature, with approximately 6,320 PhD students, about 36% of the sample reported seeking help for anxiety and/or depression perpetuated by their time in academia (Woolston, 2019). Moreover, the pandemic has reportedly worsened the mental health conditions of graduate students and the current scenario worldwide is alarming. For example, a 2020 survey of more than 15,000 graduate students at nine research universities in the United States found that anxiety symptoms rose 50% compared with 2019 (Burton & Cao, 2022).

Many of the distressing factors that negatively impact the mental health of graduate students include financial constraints, conflicts with supervisors, and discrimination (Charles et al., 2020). However, there are not enough empirical studies exploring the unique mental health needs of HMGPS.

HMGPS are conceptualized as graduate and professional students who have experienced oppression and discrimination in diverse stages of their lifetime, including students from racial and ethnic minoritized communities, low-income students, first-generation college students, rural background, LGBTQIA+, students with disabilities, undocumented and DACAmented students, international students, and/or students suffering from the intergenerational transmission of inequality.

Background

Members of our team collaborated in two exploratory studies:

The Social Connectedness project. This pilot project was funded by Healthy Campus at the University of California, Riverside and led by Evelyn Vázquez, PhD., M.S.. Using photography, HMGPS documented their levels of social connectedness, emotional well-being, and mental health in the context of graduate and professional education. Findings from the project indicated that **HMGPS experienced structural vulnerability linked to low social status in higher education, financial burden, and hostile and toxic academic environments** (Vázquez & Cheney, Forthcoming).

Furthermore, findings highlight the social and structural factors contributing to social isolation and poor mental health among **HMGPS, including stigmatizing attitudes around mental health, and the absence of a safe space to talk about mental health and a confidential space to obtain professional help**. Participants highlighted the key role played by social and structural factors in creating hostile environments that harm their living conditions, mental health, and emotional well-being.

As one participant, who was battling chronic health conditions and attended weekly doctor's visits, explained, "As a graduate student, I struggled to balance my work and my health. For 4 years, I never told my advisor about these struggles." (Jess, Female, Social Sciences)

Background

The Healing the Academy project. This pilot project was funded by the National Institute of Minority Health and Health Disparities through a pilot award via the UCR Center for Health Disparities Research and led by Evelyn Vázquez, PhD., M.S. This project was informed by community-based participatory approaches. We formed a shared governance structure, a steering council. This council was formed by diverse stakeholders (e.g., students, staff, faculty, and healthcare providers).

The team created a cross-sectional survey to explore the relationship between academic environments and mental health disparities in HMGPS. Participants were affiliated with a public research institution in the Western United States. The sample included n = 98 participants. Most students self-identified as first-generation college students (70%) and as members of underrepresented and/or vulnerable communities (73%), including racial or ethnic minority, LGBTQIA+, rural background, immigrant, or refugee. Furthermore, participants had low income (22%), and 44% experienced food insecurity, and 7% had been homeless during graduate school.

About 51% of respondents reported feelings of isolation and 67% reported that graduate school had negatively impacted their mental health. Additionally, results of the hierarchical regression analysis (Vázquez et al., 2022b) revealed hostile academic environments along with lack of sense of belonging significantly predicted higher levels of depression (β= 5.23, p<0.05, β= 6.01, p<0.05 respectively), anxiety (β= 2.56, p<0.05, β= 3.33, p<0.05 respectively), and suicidal ideation (β= 1.67, p<0.01, β= 1.96, p<0.01 respectively), and poorer quality of life (β= 1.67, p <0.01, β= 8.68, p<0.05 respectively).

Findings from the Social Connectedness and the Healing the Academy projects informed the Engaging the Academy project.

Our Project

This is a capacity-building project that aims to engage patients and stakeholders in activities promoting two-way capacity building and follow PCORI-investigator recommendations for successful engagement by building relationships, defining expectations, establishing communication, developing guidelines, co-learning, facilitating dialogue, and valuing contributions. The long-term objective of this project is to develop the capacity of graduate and professional students, faculty, staff, on- and off-campus healthcare providers, and university administrators to engage in patient centered outcomes research and/or comparative effectiveness research (PCOR/CER).

We proposed three aims to meet this objective:

- **Engage key stakeholders** (e.g., student patients, researchers, healthcare providers, and university administrators) in a collaborative governance structure and a mental health taskforce
- **Build stakeholder capacity** to engage in patient centered outcomes research and/or comparative effectiveness research (PCOR/CER) through co-learning activities focused on HMGPS mental health and patient-centered and partnered research
- **Conduct deliberative democracy forums** to prioritize research on the mental health needs of graduate students from historically marginalized communities and convene research workgroups to prepare for future PCOR/CER

These aims were and continue to be accomplished through several activities:

- Trainings on patient-centered and partnered research
- A virtual PhotoVoice gallery and exhibit
- Mental health educational workshops
- Podcast series on the mental health and well-being of HMGPS
- Framing sessions
- Deliberative democracy forums
- Research working group

Our Project

This project is a collaboration between academic researchers at the University of California, Riverside (UCR) School of Medicine, the University of California Graduate and Professional Council (UCGPC)--a university-led student organization, UCR Health, and community organizations including Solid Ground Wellness in Recovery, which is a women-owned and minority-run outpatient substance abuse facility for teens and transition age youth (16-25) in Riverside, California.

Our project is guided by two structures that ensure shared governance, the Steering Council (SC) and the Mental Health Taskforce (MHT). Members from these structures represent diverse stakeholders groups and roles including, academic, healthcare, and other non-teaching departments within the University of California system, from diverse campuses including UC Davis, UC Irvine, UC Los Angeles, UC Riverside, and UC San Diego.

In June 2022, we started the Engaging the academy project. This project was funded by an Engagement Award from the Patient Centered Outcomes Research Institute (PCORI). The purpose of this project is to begin laying the foundation for future partnered patient-centered research to address the unique mental health needs of HMGPS. Through this award, we have sought to build relationships and capacity among diverse stakeholder groups, including graduate and professional students, healthcare providers (on- and off-campus), postdoctoral scholars, faculty members, staff (e.g., graduate program coordinators), and administrators, across the University of California education system and the United States.

We value the expertise, lived experiences, and thoughts our stakeholders have provided to give meaning to their understanding of the unique mental health needs in HMGPS.

Our Facilitator Team

We would like to thank all the facilitators involved in the deliberative democracy forum training, data collection, analysis, and interpretation:

- Gabriela Ortiz, Ph.D. Candidate, UCR Department of Anthropology
- Amanda Scott-Williams, Ph.D. Candidate, UCR School of Education
- Nelly Cruz, Ph.D. Candidate, UCR School of Education
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- Smita Jandir, UCR College of Natural and Agricultural Sciences
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Deliberating About the Mental Health Needs of Students

Deliberation is based on deliberative democracy theory, which holds that informed, well-reasoned input from individuals of diverse backgrounds is critical to decision making (Kingston, 2012). This approach engages diverse stakeholders in a collective weighing of issues or possible solutions intended to reach consensus or general agreement on collective action (McLeod et al., 1999; Vázquez et al., 2022a).

We used this approach to create a neutral space that is void of power imbalances where participants could: 1) share and learn about differing viewpoints, 2) find a shared sense of purpose, and 3) build consensus for decision making.

While there are several approaches to deliberation, we used deliberative democracy forums (DDFs) because its design allows for identifying patient-centered health priorities and initiating community mobilization around collectively defined solutions (Cheney et al., 2018).

DDFs follow a structured process that involves naming the issue, framing the issue, developing an Issue Book, and conducting forums that put diverse stakeholders in the same space to deliberate the pros and cons of alternate choices.

Information Gathering

From October 2023 to February 2024, we gathered information via a post-event survey on stakeholder and patient-centered recommendations for future research on the mental health of HMGPS. Our recruitment was intentional, we recruited participants from diverse cultural and ethnic backgrounds, lived experiences, and/or different roles in higher education.

In October 2023, Dr. Evelyn Vázquez provided a Facilitator 101 training session with the ten facilitators to develop skills on group facilitation and data analysis.

Our data collection and analysis involved three steps. We first conducted Framing Sessions with participants from across the United States. Second, after analyzing the data from the framing session we wrote the Issue Book along with our facilitator team. Once we had the Issue Book, we conducted the Deliberative Democracy Forums via Zoom with three UC campuses designated as Hispanic-Serving Institutions (HSIs).

We conducted three Framing Sessions with a total of 22 participants. During the Framing Sessions, participants were asked to sort the 33 unique items identified in the post-event surveys into three or four piles. Members of the leadership team conducted cultural domain analysis via Anthropac (Version 4.98) and identified four clusters. These four issues informed the development of an Issue Book. Facilitators named the four clusters and were also involved in data analysis and in the development of the Issue Book.

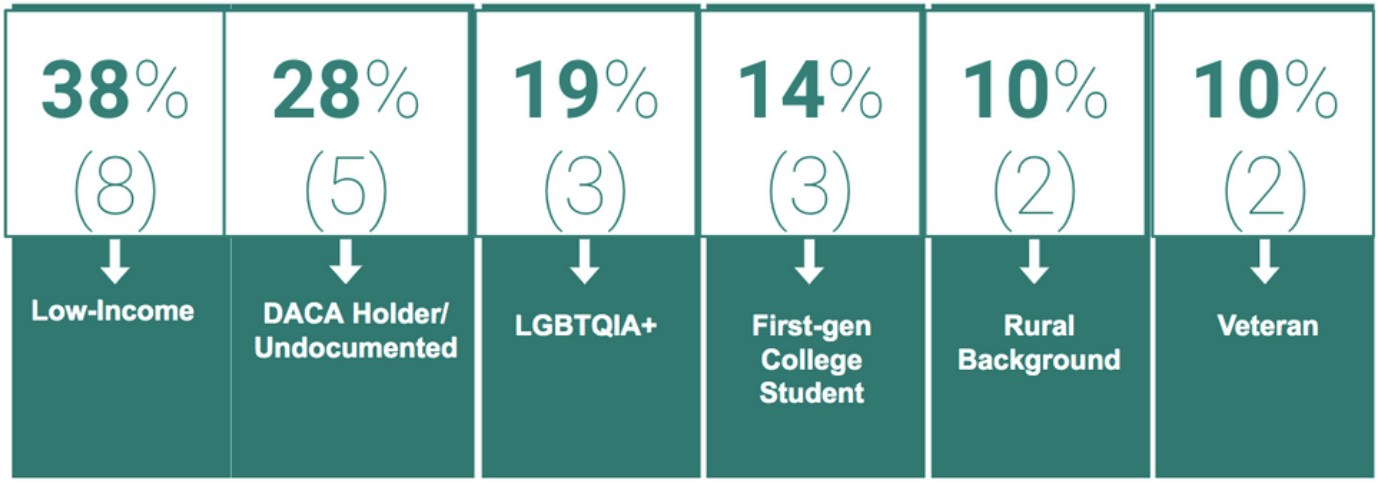
Following the framing sessions, the Engaging the Academy team carried out the DDF process. The forums were designed to answer the question, **“Which health issues are most important for your community to collaborate in addressing?** Participants were asked to read the Issue Book prior to their participation in the forum. A total of 32 diverse stakeholders engaged in discussing the pros and cons of conducting future patient-centered research on the above four topics and prioritized them.

Step 1: Framing Sessions

We invited stakeholders from across the United States to participate in one of the three farming sessions we organized. During the framing sessions, participants in the main session were asked to sort the 33 unique items identified in the post-event surveys into three or four piles.

A total of 21 participants completed the socio-demographic survey. Participants included graduate and professional students (*n*= 9), staff members (*n*= 5), postdoctoral scholars (*n*= 3), faculty members (*n*= 3), and healthcare providers (*n*= 2). A total of 14 participants identified as female and 7 as male. A total of 11 participants self-identified as Latinx or Hispanic, 5 as White, 3 as Asian, 3 as Mixed-race, 1 as Black or African American, and 1 as Indigenous Native American/Alaskan Native. Additionally, 17 participants were located on the West Coast, and 2 participants were located on the South-West and North-East coasts.

Figure 1. Framing Sessions Stakeholder Social Identities/Positionalities

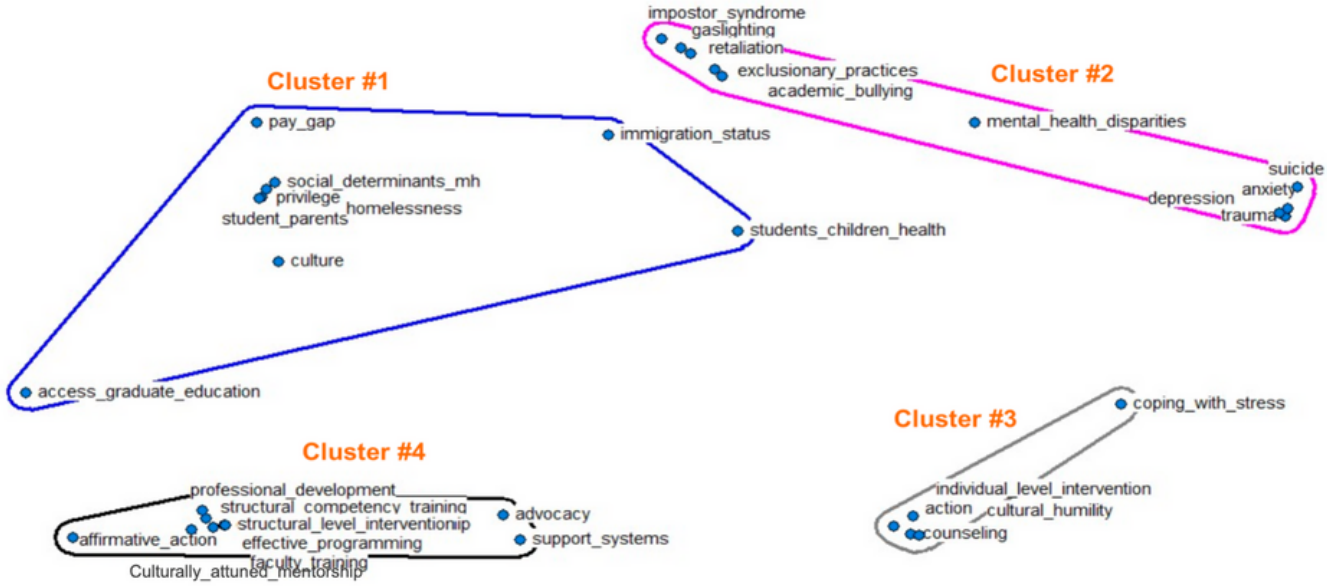


We conducted cultural domain analysis (CDA) via Anthropac (Version 4.98), an analytic program designed to identify underlying relationships between items into meaningful group clusters.

Step 1: Framing Sessions

CDA examines how members of a group, who share a culture, characterize parts of that culture through cognitive domains—defined by a set of words, phrases, or concepts that symbolize an idea. CDA is multi-step and involves the collection of unstructured and open-ended recommendations to elicit words and brief phrases that characterize the domain. We identified four clusters in Anthropac (Version 4.98):

Figure 2. Clusters



Facilitators named the clusters:

Cluster #1- Social determinants of mental health
Cluster #2- Mental health disparities
Cluster #3- Individual level intervention
Cluster #4- Structural level intervention

These four clusters, referred to as Issues, guided the development of the Issue Book as well as deliberations during the forums.

Step 2: Issue Book

The Issue Book include background information on the topic of deliberation and outline the alternate solutions. The information is intended to be neutral, nonpartisan, and non-prescriptive, with the ultimate goal of providing enough information and knowledge about the topic that forum participants can meaningfully engage in deliberation. The facilitators team and leadership team members with expertise in DDFs developed the Issue Book. As indicated below, for each issue we presented background information based on the literature, recommendations from stakeholders (including student/patients), and interpretation of the framing session data. We used the following questions to prompt deliberation:

- **Why should we focus on [name of issue]?**
- **What are existing strengths and resources in our community that can be used to conduct future work on [name of issue]?**
- **What are some of the barriers to conducting future work on [name of issue]?**

Step 2: Issue Book

Here we outlined the background information for each issue.

For **Issue #1 Social determinants of mental health**, participants learned about the determinants that encompass a myriad of factors rooted in the social, economic, and environmental conditions in which individuals live, work, and interact including income, education level, employment, and housing. These factors significantly influence access to resources, opportunities, and support systems individuals can have.

For **Issue #2 Mental health disparities**, participants learned about experiences of discrimination, microaggressions, and systemic barriers within academic settings contributing to increased mental health risks for HMGPS. Participants were informed that mental health disparities among HMGPS can be explained by intersectionality (Crenshaw, 1989), a framework that points out how the intersection of group-based identities can increase the risk and exposure to discrimination and marginalization.

For **Issue #3 Individual-level interventions**, participants learned about stakeholder recommendations to promote accessible mental health resources that are specifically designed to address the unique challenges experienced by HMGPS. Some examples include targeted counseling services with culturally sensitive professionals; culturally sensitive mentorship programs; supportive role models; peer support groups; a platform for sharing resources and fostering a sense of belonging.

For **Issue #4 Structural-level interventions**, participants learned that structural-level interventions involve addressing structural issues within higher education institutions, including structural racism, classism, and sexism. According to our stakeholders, these interventions may require anti-racist training for administrators, faculty, staff (including on and off campus health providers), and students; the reevaluation of academic curricula to include perspectives from marginalized communities; addressing structural vulnerability (Gupta, 2018), inadequate income, food and housing insecurity, academic bullying, gaslighting, harassment, microaggression, and discrimination that HMGPS are exposed to and that increase the risk for poor mental health.

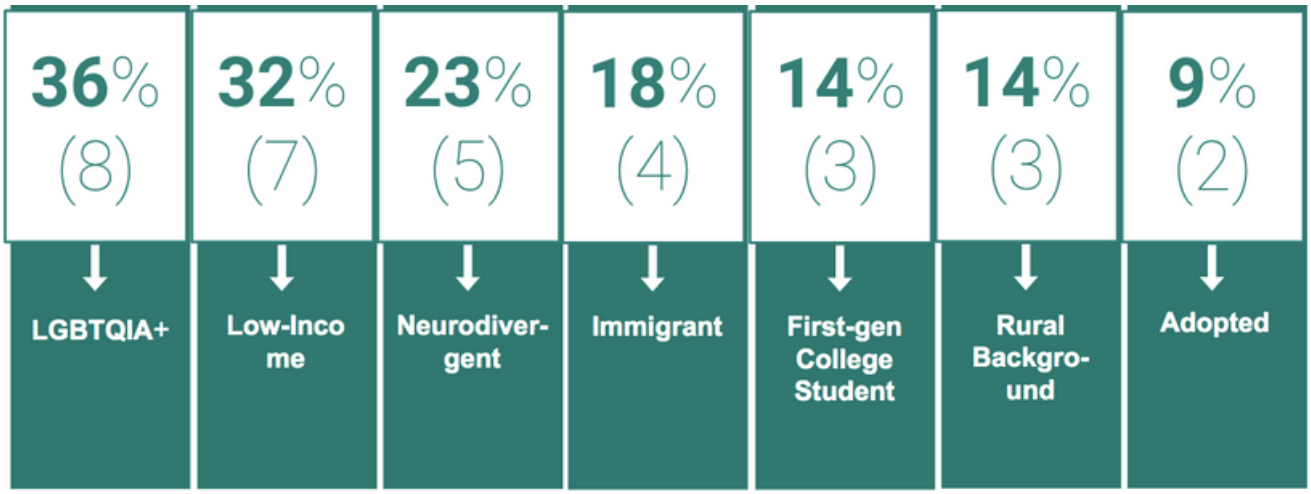
Step 3: Deliberative Democracy Forums

During the forums, participants deliberated the four identified issues provided recommendations for future PCOR/CER research. Through small-group discussion (via breakout rooms) and large-group discussions participants shared their thoughts on reasons to focus future research on each of the topics included in the Issue Book, they also talked about existing strengths, resources, and barriers to conduct research on each of the topics included in the Issue Book.

Representatives from each group reported on key ideas discussed during small-group deliberation. The deliberations were audio recorded, transcribed, and analyzed using content analysis. Trained team members identified and interpreted the themes and patterns across the deliberation sessions. The findings allowed for an iterative data analysis that informed a collective perspective on further research topics in HMGPS mental health.

A total of 32 diverse stakeholders participated in the forums and 22 completed the sociodemographic survey. A total of 24 graduate and professional students, 2 faculty, and 6 staff members attended the forums. A total of 15 participants identified as female and 7 as male. A total of 11 participants self-identified as White, 6 as Asian, 5 as Latinx or Hispanic, 2 as Mixed-race, 1 as Native American or Alaska Native, and 1 as Black of African American.

Figure 3. DDF Stakeholder Social Identities/Positionalities



Deliberative Forum Findings

Below we organized the findings from group deliberations by the questions used to prompt deliberation, which included reasons to focus on the issue, strengths and resources related to the issue, and barriers to conducting research on the issue.

Issue 1: Social Determinants of Mental Health

Participants discussed the critical need to examine the environmental factors determining HMGPS mental health as students navigate their intersectional identities in the context of higher education. Participants discussed how the social structure can impact their views and beliefs around mental health as well as their access to mental health services. Thinking about the social determinants of mental health and systemic solutions requires the acknowledgement of the intersectional disadvantage of HMGPS. One male participant commented,

> We need to think about sort of the normalization of emotional abuse in the presence of power relationships in academia... Because this is a competitive field there are skills that you need to be able to get through this. But sometimes there is normalization of progress or advancement or in a program; so for example your advisor says, “If I can do it why can't you?”. So there's kind of these broader expectations but as the Ph.D. goes on, it can get worse in terms of these things, so if you are not privileged you can face challenges. So, as a non-white, non-able-bodied person, for instance, you might be disadvantaged which means that we see in some cases the poor retention of non-white students.

In addition, participants highlighted the unique structural challenges faced by international students such as lack of accountability from the institutional level to feel supported. International students experience issues with immigration and visa status, on top of the demands of grad school, lack of understanding and flexibility on behalf of advisors, all of which contributes to academic abuse.

Strengths: Participants shared several strengths within the community that could support future work on social determinants of mental health. These included mental health counseling that is available through the university insurance, UC SHIP; the cultural centers that support students from diverse communities; the ombudsman office; and a strong graduate advisor network on campus. Participants also listed as a strength the University Interfaith Council (UIC) on campus that seeks to integrate spirituality with academic life and promote tolerance, peace, and understanding of all faiths and spiritual traditions. One male participant shared, “we thought that a strength of the structures on campus is that it being on campus makes it more accessible.”

Additionally, participants recommended conducting community needs assessments on campus to determine the resources available and also to identify the additional support and services needed. For example, one male participant stated,

> I wonder if it is possible to do a survey by school or by department and try to get a feel for what the community is like in that department. Are you able to chat with faculty? Are you able to chat and be friendly with other graduate students, or are there any really notable experiences that deter you from being really involved with your department and the activities that they might post? This I think would be kind of geared towards trying to look at this within the department level.

Barriers: Participants shared that although there are mental health resources and services on campus (e.g., Counseling and Psychological Services), these resources are not enough particularly because of the limited number of therapists, psychiatrists, case managers and the limited number of sessions they have. Participants also mentioned the lack of accessibility (e.g. high co-pays, lack of public transportation, having to seek support off-campus). Participants emphasized that being directed to seek support off-campus was a major barrier.

Furthermore, several of the existing resources tend to mostly be geared towards undergraduate students and do not address the unique needs of HMGPS. Participants encouraged institutions to find solutions that do not put the education responsibility back on the marginalized groups. For example, one female participant mentioned, “disproportionately, the burden of educating on social determinants falls on faculty women of color, or other intersectional groups that have less power within this situation and will experience more potential issues.”

Participants also called out academic institutions for talking about diversity on campus but being unclear on steps undertaken to support the diversity, instead of it being a factor that helps them to save face. For example, one female participant stated,

> At the UC campuses that are Hispanic Serving Institutions there can be a tendency for faculty and staff to engage in color-blind racism and say, “Well, we have such a diverse population of [name of the group] so we must be diverse and must be good in terms of diversity and not have to act on it and learn more and improve.

Issue 2: Mental Health Disparities

Participants emphasized the need to address mental health disparities as a social justice issue because those disparities impact HMGPS in all areas of their lives including academic performance, sense of belonging, and finances and infrastructures. Several examples of such disparities were discussed including financial barriers, discrimination from graduate school administrators and advisors, lack of accessibility, and differences between campuses and departments on the level and consistency of care and treatment offered to graduate students. HMGPS with different intersectional identities experience mental health disparities differently, especially in a diverse state like California. One female participant commented,

> Everyone's struggles are different, and not everyone can handle the same type of work loads. Yet we are expected as graduate students to kind of all follow the same kind of standards, and these standards are also often unattainable. And so policy can help with fixing these things; but it doesn't really look at the different reasons as to why mental health is an issue for people, and we can't solve the issue just with one blanketed thing. We need cultural competency and diversity of counseling that is available to [us] and it is lacking at the moment. And the lack of faculty of color is a major issue, and students can't necessarily relate to all of their staff and members of their committees

According to the participants, the lack of representation of faculty, therapists, and counselors of color is a major issue that affects the mental health of HMGPS and reproduces health disparities among these students.

Strengths: Participants shared several resources available on campus that can help to decrease mental health disparities including, resource centers in general, accessibility offices, cultural centers as well as student-led preventative safe spaces. For example, one female participant mentioned in her department students can check in every two weeks, recognizing the personal and academic challenges the students may have. Although done without funding or institutional support, this method was considered very valuable. Adding to it, one male participant commented,

> Some of the most effective mental health resources on our campus have come from student-run organizations. I work for students who created a group focused on equity and mental health. They have done a good job creating an environment conducive to mental health, and the faculty in this department have bought into it. However, expecting graduate students to do this themselves is not a complete solution.

Some participants mentioned the services available on campus via Counseling and Psychological Services (CAPS). Participants also discussed the different workshops offered on campus on the topic of mental health that attempt to address the existing stigma among different ethnicities and races surrounding mental health. Additionally, while talking about existing strengths, one female participant stated,

> I think the strength for conducting research on campus [on the topic of mental health disparities] is just that you have a very diverse group, and a large group, all going through the same thing; so maybe that would kind of lend itself to research because of the nature of the university.

Barriers: In terms of barriers, participants discussed how the existing structures on campus need to be more interconnected and work more efficiently. Accessibility issues often contribute to feelings of isolation among HMGPS as they don't have a way to build community, furthering the existing disparities. For example, one female participant mentioned,

> I feel like the university could improve, especially in [terms of its] accessibility services, to help work with students. Because I feel a lot of students, at the undergraduate and graduate level, are coming to campus from local areas and from backgrounds where you might not have had the same access to assessment services or mental health services before coming to the university. So, the fact that we have CAPS on campus and the accessibility services on campus and that it is not actually serving students is really concerning. I feel like they could do a lot better, especially with the accessibility services at both the undergraduate and graduate levels, and have [more] professionals on campus.

Participants also mentioned the different organizational structures and climates that might not be able to respect the diversity among graduate and professional students, which might further the existing mental health disparities. For example, one male participant mentioned, "Students might feel they are checking off a diversity box for the university by receiving a particular award or admission. This creates institutional and individual barriers to mental health depending on perceptions and location".

Issue 3: Individual-level Interventions

Participants described individual-level interventions as crucial, boots on the ground interventions that provide a more holistic and culturally sensitive approach to support graduate and professional students. Participants shared that universities might not always know how to advertise the existence of resources and services to graduate students. Participants highlighted the importance of mental health care and individual tailored responses, particularly in the absence of immediate systemic and structural solutions. Participants discussed individual-level interventions acting as a vex that can be pipelined into becoming systemic interventions. One male participant commented,

> One of the other things we talked about was holistic support. So not just focusing on academic advancement and not only the return on investment, right? Sometimes thinking about students as humans; so student's well-being is often an indirect benefit. But of course, funding is tricky. So individual-level support is key, and what I think what we are saying is we need more of that support. I think, again, the difficulty with individual services is even if they were brilliant for every single student, we are still throwing them into the sea full of sharks.

Participants highlighted the role of advisors and mentors in graduate school and recommended HMGPS connecting with mentors and having one solid person that understands, supports, and is empathetic with them.

Strengths: Existing strengths that can support future work on individual-level interventions include faculty and peer-to-peer mentorship programs, and support groups, as well as additional supports such as the Planned Educational Leave Program (PELP) which allows students to take a temporary leave of absence in case of emergency situations. Additionally, campuses also have diverse and supportive staff members employed at graduate division and psychological services centers who can provide mentorship to navigate challenges experienced in graduate school. These resource centers on campus offer workshops to students, faculty and staff on basic skills like time management, task prioritizing etc. Participants also provided recommendations on strategies that they have utilized and found to be helpful in their graduate school journey. For example, one female participant stated,

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> One of the things that my department has begun to implement are these student mentor expectation documents, including identifying your committee earlier in the process, within your first year; identifying your committee to kind of broaden your support network and to acknowledge that your faculty or Principal Investigator (PI) or mentor is not the sole person that you can or should be relying on throughout this process. So kind of emphasizing the importance of building your support network.

Barriers: Participants shared that while universities provide individual-level interventions to support students, these interventions are often not talked about as much, which leads to not many students knowing about them. For example, one female participant mentioned,

> I really felt like I wish I was able to find resources on [name of the campus] that really supported me throughout my graduate school tenure and not just in my sixth year. And I know that is not the case for all graduate students, but in some capacity, it's kind of felt like a saturation of opportunity, and it really took some, I think introspection, to acknowledge that I could try a group or try a mentorship program and, like, try things on and see what fits, and what works for me. And that evolved throughout my graduate school tenure. So, kind of changing the language or norms around participation in these opportunities.

With respect to the existing resources such as PELP, participants raised concerns about their feasibility. For example, utilizing PELP can lead to graduate students losing access to healthcare, and having to navigate bureaucracy of the system when they decide to return eventually, which can discourage them from pursuing their graduate studies. One male participant commented,

> I think individual-level interventions are the fastest way to kind of start to solve some of the problems because it is often times just a person reaching out to another person. Usually that's often the advisor and they have some kind of solution or some fix like talk to this person or this is what you can do. But sometimes it is also kind of inefficient in the sense that [it is a] systemic problem and lots of graduates have these issues and not everyone is fortunate to have an advisor that can help them in that regard. And so you know on one hand, it is the fastest quickest way to try to solve a problem but on the other hand it just doesn't really reach out to that many folks.

Issue 4: Structural-level Interventions

Participants suggested several reasons for focusing on structural-level interventions, emphasizing the need for community accountability to ensure that the academic institution is providing a welcoming and nurturing environment to graduate students. Participants discussed the need to provide anti-racist training series and professional development opportunities to administrators, faculty, and staff members, to create a cultural and mindset shift in academia.

During the forum, multiple participants emphasized the need to break the “I went through hell so they should too” mentality. Additionally, participants promoted the idea of making resources and services accessible to all, irrespective of the need, and providing more community and professional support on campus regarding neurodiversity and disability. One female participant talked about the unprecedented opportunity that the University of California system has, she said,

> The structural-level interventions are more of a preventative action and they are very slow acting but it is one of the most impactful things that we can do because it is targeting group problems that would solve issues that we may not have today if it weren't for the systems. And structural interventions are complementary to many of the other types of interventions; and also, it is really important that we, as a university, do things that the rest of the universities kind of follow because the UC is so big and kind of influential so it is really important that we start with that.

Participants also stressed on the need to employ diverse staff and faculty so that students see themselves represented in different parts of the university but also so that change, and further education, can be implemented to change our structural level interventions.

Strengths: There are a number of strengths within the university settings that can be leveraged to carry out future research on structural-level interventions. For example, there are existing mandatory trainings in which graduate student staff gets the opportunity to interact with each other and discuss ways for supporting educational excellence and diversity. For instance, the [name of the unit] at UC Davis provides anti-racist teaching workshops and workshops to support first-generation students. Participants also discussed the availability of resources such as the Ombudsman office that students can approach to receive mediation support by having difficult conversations and finding a common ground in case of conflicts. One female participant said,

> There's been a lot of teaching-related workshops offered through the [name of the unit] that can train us as graduate student teachers [on] how to better support our undergraduate students, like anti-racist pedagogies, inclusive pedagogies, how to support diverse students, that sort of thing. But I wonder if there's an equivalent for faculty and if there is, how many faculties actually make use of it? Maybe newer faculty do mentorship trainings. But I'd be curious to know when the last time was that someone did a mentorship training if they had been here for a while.

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Barriers: Participants listed the lack of adequate resources and consistency across campuses and departments as a potential barrier to conducting future research work on this topic. Participants pointed out that faculty are not trained in the same way as graduate student employees and even the provided mandatory pedagogy training series are not up-to-date and do not address the current needs of students. One male participant talked about poor mentorship as one of the structural factors that affect the mental health of HMGPS:

> Another [recommendation] would be addressing the really gargantuan issue of mentorship. I myself have tried to take elements of [name of the campus]'s mentorship structure and guidelines for faculty and pitched it to the grand committee and the chair, and say, "Hey, can I bring this to a faculty meeting? Is this something that we can adopt? Can we make it mandatory?" We are seeing that only 50% of our faculty are actually meeting with their grad students to talk about their academic success. Are there any inventions that we can explore for this? So, I think having support for that kind of mentorship initiative would be really helpful.

Lastly, participants emphasized the issues of lack of funding to build a system to address the unique mental health needs of HMGPS and improve the services and resources available. One female participant commented,

> A lot of this type of education [structural-level] can take a long time and have a lot of resources that need to be put into it. Someone can go to a million diversity trainings and still not self-reflect; and so that can be a barrier. And not everyone wants to change their ways or learn different things, right? Status quo exists for a reason. Another thing could be issues around tenure especially with folks that are talking about bullying and poor mental health from faculty.

Common Ground

Immediately following deliberation, we shared a post-event survey with the forum participants. A total of 22 participants responded to the survey. One of the questions included in this survey was, **“After participating in the discussion today, I think future research on the mental health needs of graduate and professional students should focus on [name of the issue].”** Participants were asked to choose between Issue # 1 Social determinant of mental health; Issue #2, Mental health disparities; Issue #3, Individual-level interventions; and Issue #4, Structural-level interventions.

The majority of participants (*n*= 13) voted for Issue #4 “Structural-level interventions”. A total of 5 participants voted for Issue #3, Individual-level interventions as the most important research topic. Lastly, 3 participants voted for Issue #2, Mental health disparities. None of the participants voted for Issue #1, Social determinants of mental health.

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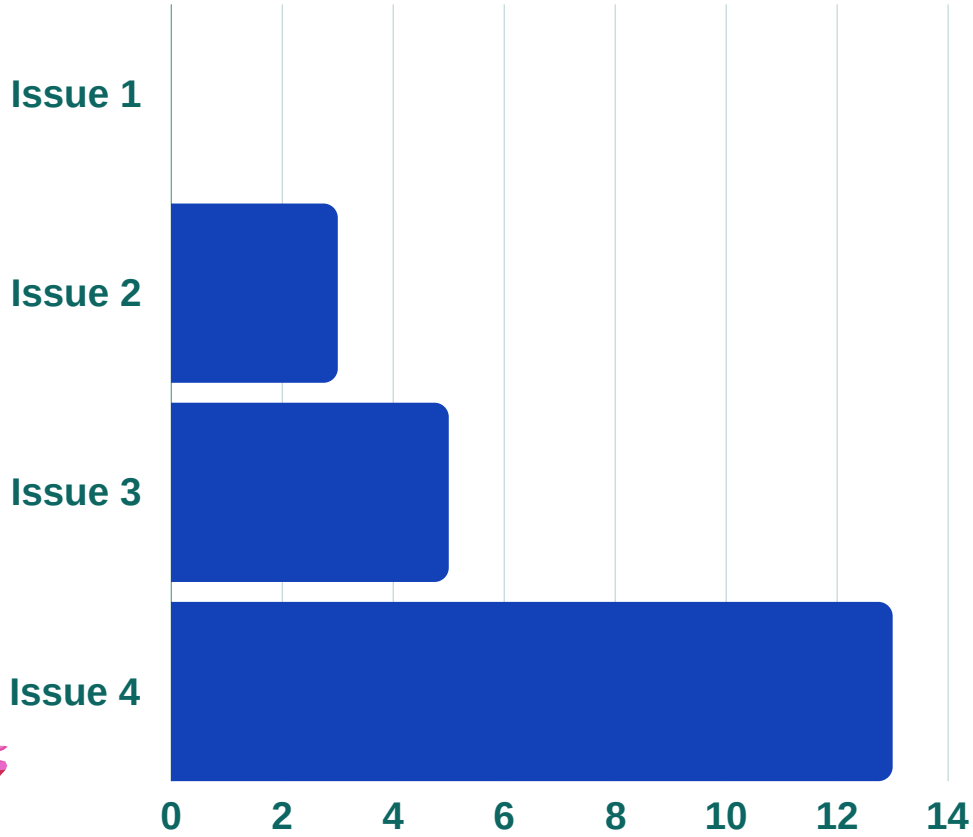


What We Learned About Deliberation

Several patterns emerged through the discussions across the forums suggesting that future research should incorporate issues of structural-level interventions, particularly those aimed to promote collective action and transformation in the fields of mental health and higher education. These themes emerged within all the four issues and each small-group deliberation as part of participants' reasons, the strengths, and potential barriers to future research on historically marginalized graduate and professional students.

Effective mental health interventions were discussed in three main areas:

1. Improving mental health services available on-and-off campus
2. Dismantling of oppressive structures
3. Fostering communities of care

What We Learned About Effective Mental Health Services

Participants advocated for more accessible, affordable, and effective mental health resources and services for everyone. Participants also talked about the need to conceptualize graduate and professional students as students/patients, and not as employees. By changing its conceptualization, the institution, then, can increase the funding, services, and resources available to HMGPS. In addition, across the forums, participants emphasized the need for institutional accountability and innovative approaches in higher education and patient-centered care. One female participant shared,

> There needs to be more connection across all departments. And there needs to be more support especially, with CAPS. We kind of talked about how… I am not totally sure how many counselors they have right now, but if I am thinking of from the past year, it is maybe four or five counselors for the whole university. And that just seems like they are very overburdened, especially over the past couple of years when I think a lot of people were in crisis on campus. And I think that is a barrier to structure-level interventions. It is like not enough infrastructural support.

Some of the structural-level interventions discussed during the forums include increasing access to information about the services and resources available to all students; increasing access to long-term mental health care on campus; promoting affordable, available, and accessible services (on- and off- campus); increasing community and professional support for people with disabilities and/or neurodiversity.

Additionally, participants highlighted the need for more and diverse therapists and professionals available in CAPS. One female participant said,

> As grad students we [tend to] get quickly redirected off campus because on campus services is too small for a graduate student population. There is not a lot of mental health support services with therapists or like psychiatrists or even case managers so oftentimes we get directed off campus

Moreover, participants talked about the important role of cultural centers and how these centers should also focus on hiring and retaining behavioral health professionals who can provide culturally and linguistically diverse services needed for HMGPS.

Similarly, participants encouraged academic institutions to increase significantly the representation of faculty, staff, administrators, and healthcare providers of color and from low-income backgrounds on board because the majority of the current body are White, able-bodied, cis-gender, and/or from wealthy backgrounds.

What We Learned About Dismantling Oppressive Structures

Participants talked about the importance of acknowledging historical, social, and contemporary harms in higher education (e.g., structural racism, sexism, and ableism) to intentionally work towards undoing them. For instance, participants discussed the need to provide anti-racist training series and culturally-aware professional development opportunities to faculty and staff members. According to the participants, these trainings can help to foster cultural changes in academia to break the status quo.

Participants talked about the necessity to change the culture and leadership styles promoted in higher education, particularly to dismantle structural racism. One male participant shared,

> [Participant's name] was also thinking about housing and socioeconomic factors and addressing those and considering those part of the structural factors. That is obviously a huge issue here; so I think it gets back to, how do you change the culture of a space? When there are mandates or changes that the university wants to happen, it is very top-down. But when there are mandates or changes regarding anti-racism stuff, then sometimes it feels like a little bit more bottom-up. That disparity and prioritization alone, I think, is ridiculous.

One faculty member appreciated the existing diversity training resources on campus. He shared,

> We did have something at [campus name] called C-training that was supporting educational excellence and diversity. It was a full day course with various other members of the faculty that was about supporting educational equity for diversity. And they actually found that to be incredibly helpful and I don't know if that has been more broadly disseminated, but I think it would be incredibly helpful for folks if it was so.

Participants also talked about the need for more institutional and community accountability to ensure that the academic institution is providing a welcoming, respectful, and nurturing environment to graduate and professional students. Finally, a male participant talked about the relationship between structural-level and individual level interventions. The participant shared,

> I just want to say that although I agree with everything that [another participant] said about the systemic interventions, I feel like we need to have either a multi-level approach to systemic and individualized at the same time or we need to do it individually. Because systemic interventions will take a long time to be in place. We always have so many bureaucracies, and barriers to implementing the changes right? We have a lot of people who are adamant that their status quo is working. Like "I have gone through school for this, or I have worked in this university for 20-30 years, this is how everybody does it, why do we need to change it?" So, we need to find a way to deal with the mental health issues that people have today. If we have to pick one out of the four [I'd go with] individualized for that reason. But yes, a lot of the issues that we have individually [are] exactly because the system is not working well. So, it is a very complicated issue.

Participants discussed the importance of promoting resources such as the Diversity, Equity, and Inclusion (DEI) offices on campus. Participants recommended increasing individual advising appointments at the DEI office so HMGPS can access them to talk about the struggles and challenges experienced in graduate school. Participants also hailed some of the steps already undertaken within the UC system to better support on-campus diversity including hiring more staffing and directors for the DEI offices that were not previously available. Following the recommendation of participants, structural-level interventions must be intentional and focus on mental health disparities linked to exclusionary practices, academic bullying, gaslighting, and harassment, retaliation in the workplace, and impostor syndrome. Participants also talked about the need to intervene as soon as possible to decrease the prevalence of psychological trauma, depression, anxiety, and suicidal ideation among HMGPS.

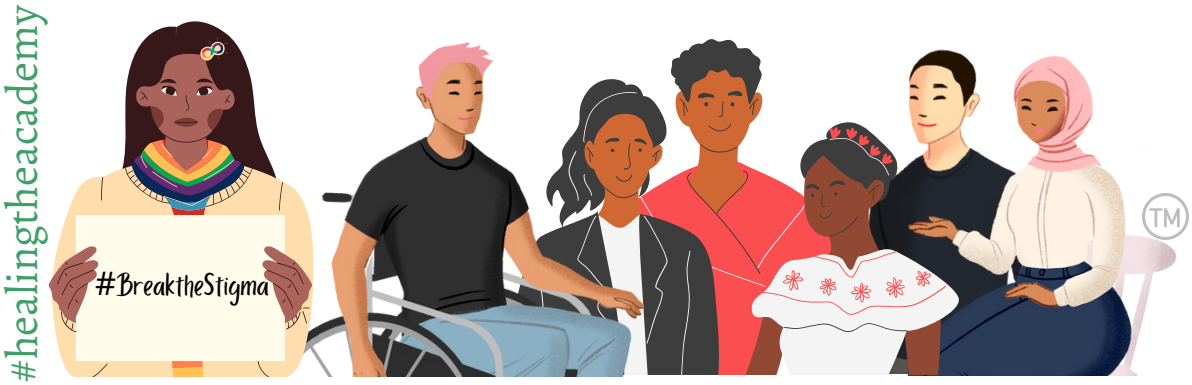
What We Learned About Communities of Care

Participants talked about the need to prioritize the mental health and emotional well-being of HMGPS. One way to do it is by fostering a culture of health (Cheney et al., 2023) and communities of care within higher education institutions.

One key aspect of fostering communities of care is having a sense of shared responsibility to address the structural factors that harm the mental health of HMGPS. Shared responsibility requires cross-sector collaborations between different stakeholders, academic disciplines, divisions, and departments, (e.g., campus leadership, UCGPC, and the University of California Office of the President). These collaborations may increase the awareness, trust, and use of the mental health services and resources available for graduate and professional students.

In addition, one female participant commented, “I think we have to take into consideration how the larger system in the specific social-cultural background of students can impact their views and beliefs around mental health and how they feel comfortable getting support.”

Participants advocated for more funding for mental health services that resonates with HMGPS. For example, some students may prefer or need professional counseling, others may need trauma-informed care, others may prefer religious or spiritual counseling, and/or others may prefer to connect with students or staff from the same cultural or ethnic background.



Participants also discussed how the complexities and multiple group-based marginalized identities of graduate students should be taken into consideration for providing appropriate care and support to students. For example, students are balancing doing research, taking classes, and having families and children. One female participant commented,

> They [students] feel they have a lot of eggs in the basket when it comes to the university being their employer, providing health insurance, and housing. Dealing with mental health challenges, they might feel the need to push through because it's how they make their livelihood. Facing challenges, they hesitate to be vocal with their advisors, fearing they might be labeled as unmotivated or troublemakers. Resources like counseling are available on campus but being more vocal about support and how life challenges can happen is important. University departments and offices can be so siloed that people don't find out about resources. It's important to find out how students learn about these things [resources], whether through advisors, student organizations, or other channels.

Participants shared that in order to address the unique mental health needs of HMGPS, higher education institutions must 1) diversify the mental health services available (on and off campus), 2) disrupt and dismantle toxic and hostile academic environments because they reproduce health disparities, and 3) guarantee the existence of safe spaces and communities of care that nurture the mental health, sense of belonging, and emotional well-being of HMGPS.

Despite the challenges that may hold up conducting research on social determinants of mental health, mental health disparities, individual-level interventions, or structural-level interventions, we anticipate that future research would increase the identification of effective and feasible mental health services available on-and-off campus, it will help to dismantle oppressive structures, and it will foster cultures of health and communities of care to address the unique mental health needs of HMGPS.

Resources for Graduate and Professional Students

We encourage stakeholders to share updated and culturally sensitive information about mental health and well-being services available for graduate and professional students at their institutions.

The following national- and university-level resources are proposed to support their mental health and emotional well-being.

National resources

- National Suicide Prevention Lifeline (Available in English and Spanish) 1-800-273-8255, website: https://suicidepreventionlifeline.org/
- SAMHSA's 24/7 National Helpline 1-800-487-4889, SAMHSA's National Helpline: https://www.samhsa.gov/find-help/national-helpline
- The National Alliance on Mental Illness (NAMI): http://www.nami.org/
    - NAMI's StigmaFree pledge: https://www.nami.org/Get-Involved/Pledge-to-Be-StigmaFree

UC resources

- UC Riverside Undocumented Students Program (951) 827-3808 https://usp.ucr.edu
- UCI DREAM Center https://dream.uci.edu/
- Gauchos for Recovery, peer-based recovery program for substance-use and addictive behaviors https://adp.sa.ucsb.edu/gfr
- Davis and Davis Health LGBTQIA Resource Center https://lgbtqia.ucdavis.edu/
- San Diego LGBT Resource Center https://lgbt.ucsd.edu/
- UC Davis Veterans Success Center https://veterans.ucdavis.edu/

Team Members

Following is a list of all the members of our Steering Council, Mental Health Taskforce, and leadership team who contributed to the development of this project. The information provided below includes council member names, school/department of association, and their academic or professional role.

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- Dawn Loyola, Ed.D.- Director of Graduate Student Advising, UCR
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- Gwen Chodur, Ph.D.- UC Davis

Mental Health Taskforce (MHT):

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- Hayden Schill Hendley, Ph.D.- Assistant Professor of Teaching, UCR, Former UCGPC President (2022-23)
- Soraya Zarook, Ph.D.- Former graduate student, UCR
- Yi Zhou, Ph.D- Former graduate student, UCR
- Toshia Yamaguchi, MD.- Clinical Professor, UCR School of Medicine
- Jessie Bridgewater, Ph.D.- Former graduate student, UCR, Former Graduate Student Association (GSA) President (2022-23)
- J Selke- Graduate student, UCR
- Matthew Kersting- Graduate student, UCR
- Jose Alvarez- Graduate student, UCR
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Leadership team:

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- Community engagement lead/MHT co-lead: Ann Cheney, Ph.D., MA., Associate Professor, UCR SOM

Co-Learning Activities

Visit our Linktree

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linktr.ee/engagingtheacademy

1) PATIENT-CENTERED RESEARCH TRAINING SERIES

- Community-Based Participatory Research 101- Available here
- Ethics in Patient-Centered Research- Available here
- Comparative Clinical Effectiveness Research- Available here

2) VIRTUAL PHOTOVOICE GALLERY-

- Virtual galerry- Available here

3) MENTAL HEALTH EDUCATIONAL WORKSHOPS

- Mental Health 101- Available here
- Structural Factors and Mental Health Disparities- Available here
- Setting Limits and Boundaries- Available here
- Building Community through Stories

4) PODCAST SERIES- AVAILABLE HERE

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