



CSGrad4US 2024 Annual Evaluation Report

Erin Carll, PhD

Center for Evaluation & Research for STEM Equity (CERSE)

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CENTER FOR EVALUATION & RESEARCH FOR STEM EQUITY

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Executive Summary

In Year 1 of CERSE's evaluation of the CSGrad4US program, CERSE completed a variety of evaluation activities. These included the following surveys and focus groups:

- Pre-Survey: 51 mentees (of 64, 80%)
- Post-Survey: In process
- Coaching Feedback Survey
 - 44 mentees (of 64, 69%)
 - 20 coaches (of 24, 83%)
- Focus Groups:
 - 14 fellows attending the IDEALS Workshop (in-person, three focus groups)
 - 13 coaches (virtual, two focus groups)

Results indicated that mentees and fellows benefitted substantially from the program, receiving a variety of supports. Most mentees intended to apply to multiple graduate schools and met with their coaches regularly. Most mentees were satisfied with their communication with coaches and the Mentoring Program Leadership (hereafter “program leadership”), and praised other program activities they participated in.

Most fellows who participated in focus groups were thriving in their graduate programs and brought beneficial skills from their work experience into their programs. At the same time, several fellows experienced challenges in graduate school, related to a loss of income, interpersonal sacrifices needed to participate in graduate programs, and sometimes difficulties with the administration of their stipends and/or with identifying an advisor or research area.

Many coaches generally reported positive experiences mentoring students and perceived the program as useful to many participants, although some found the workload perhaps unsustainably heavy. They noted individual students had unique needs for support and pointed out some limitations in their ability to advise students aiming for admittance in labs, disciplines, and institutions they are less familiar with.

Recommendations

Based on feedback from mentees, fellows, and coaches, the CSGrad4US program can consider the following recommendations (more details are included in the text below, with recommendations in **orange**):

- **Clarify the offerings and expectations of the program.** For example, clarifying the requirements of the program with prospective mentee applicants may help them make more informed decisions about participating. Further, mentees, fellows, and coaches would all like more guidance about what is permissible within the program (e.g., what qualifies as a CISE graduate program or research focus). An FAQ may help address some of this. Offering guidance about an appropriate level of support to request from coaches can help participants take full advantage of the program and help coaches manage their workload. Further, being explicit about program flexibilities (e.g., with following the schedule of tasks) can help participants succeed based on their individual needs.
- **Identify ways to help coaches further manage their workload.** For example, it may help to encourage coaches to meet with mentees in a group, if desired, to limit their meeting load. Another approach may include matching coaches with mentees with various levels of research experience. Since mentees with more experience may need less support, this may help balance the workload across coaches.
- **Share additional information and resources, if program capacity allows, and/or remind participants and coaches about where to access these resources.** Mentees would like more information about what different disciplines are. Mentees and fellows would like more information about the realities of graduate school and how to select graduate advisors, especially closer to the start of fellows' graduate programs. Some mentees also requested specific resources, for example, a list of schools where CSGrad4US fellows matriculated and the fellows' contact information "(if they're willing to share it)", and a single shared Google calendar with all events listed.

Evaluation Focus

The following evaluation questions (EQs) and methodologies guide CERSE’s evaluation of the CSGrad4US evaluation:

Evaluation Question	Evaluation Data Used
1. To what extent are coaches, area advisors, coach coordinators and the CSGrad4US Mentoring Program Leadership able to deliver the program to participants as intended?	Project team check-ins All other data sources
2. How do participants and coaches perceive the clarity, relevance, informativeness, and overall quality of the program components?	Coaching Feedback Survey Focus Groups
3. How effective is coaching and mentoring for supporting participants to (1) get accepted into a graduate program, (2) succeed in their first year, and (3) persist into their second year?	Pre/Post Fellows surveys Outcomes Survey Focus Groups
4. How do participants compare to other students at a comparable stage of their graduate programs in terms of their graduate experience and intentions to persist in their programs?	Data Buddies comparison analysis using pre/post survey data
5. What personal and program factors are associated with the strongest outcomes for program participants?	Pre/Post Surveys Focus Groups

Descriptions of the evaluation activities are below, along with a timeline for data collection.

Evaluation Activities

Pre-Post self-report Fellows surveys (Year 1, Year 2): These self-report surveys will be run in Fall at program entry and again in the spring, ideally after participants have received notice about their graduate school applications. Surveys will focus on the Fellows’ goals, aspirations, confidence to succeed, intentions to persist and results of graduate school applications. If any Year 1 participants deferred graduate school applications, Year 2 surveys will obtain information about applications and acceptances.

Coaching Feedback Survey: At the end of the 12-week coaching program, mentors and Fellows will be asked to describe the amount, quality, and types of coaching and mentoring support they received/gave and give feedback on the program’s successes and opportunities for improvement.

Focus Groups: These questions will enhance understanding of the impact of the program and opportunities for improvement, collecting rich data on program experiences. Fellows

and coaches will be asked to participate in focus groups in years 1 and 2. A semi-structured protocol will be used that allows for tangential discussion on emergent topics.

Outcomes Survey: In the third year of the fellowship, participants will be asked to complete this survey to help understand how successful the Fellows are in their programs and if CSGrad4US is meeting its goals.

CRA Data Buddies Comparison: A comparison group of graduate students will be surveyed as part of the CRA Data Buddies Survey, a national survey of graduate students in computing disciplines conducted by CRA CERP. CERP will provide CERSE with the Data Buddies questionnaire for the inclusion of relevant items in the Annual Outcomes Survey. CRA CERP will also provide CERSE with de-identified Data Buddies data to use as a comparison group for analysis. The comparison group will include students in their third year of graduate school who returned to school after working as well as students who came directly from an undergraduate or master's program.

Data Collection Timeline

Years 1 and 2

- Pre/post Fellows surveys in both year 1 and year 2 with longitudinal analysis (surveys analyzed after the post-survey is run)
- Coaching Feedback Survey for mentors and participants
- Focus Groups: Coaches focus group (2) and Participant focus groups (2) in year 1 and 2.
- Annual reports, data briefs as appropriate
- Check-ins with project team for monthly/formative feedback

Years 3-5

- Outcomes Survey for participants at the end of the third year of their fellowship
- CRA Data Buddies comparison analysis (CERP provides de-identified data for CERSE use)
- Monthly Check-ins with project team/formative feedback
- Annual Reports

Evaluation Results

EQ1. To what extent are coaches, area advisors, coach coordinators and the CSGrad4US Mentoring Program Leadership able to deliver the program to participants as intended?

The program was largely administered as intended, with mentees and fellows receiving various forms of support and gaining substantial benefits from the program. All but two mentees (95%) indicated on the Coaching Feedback Survey that they intended to apply to graduate school, the overwhelming majority of whom planned to apply to at least four schools. At the same time, some fellows faced substantial difficulties with the administration of the program or experienced stress when determining what graduate programs and areas of study are permissible within the CSGrad4US.

Mentees received many kinds of support, which varied based on mentees' needs.

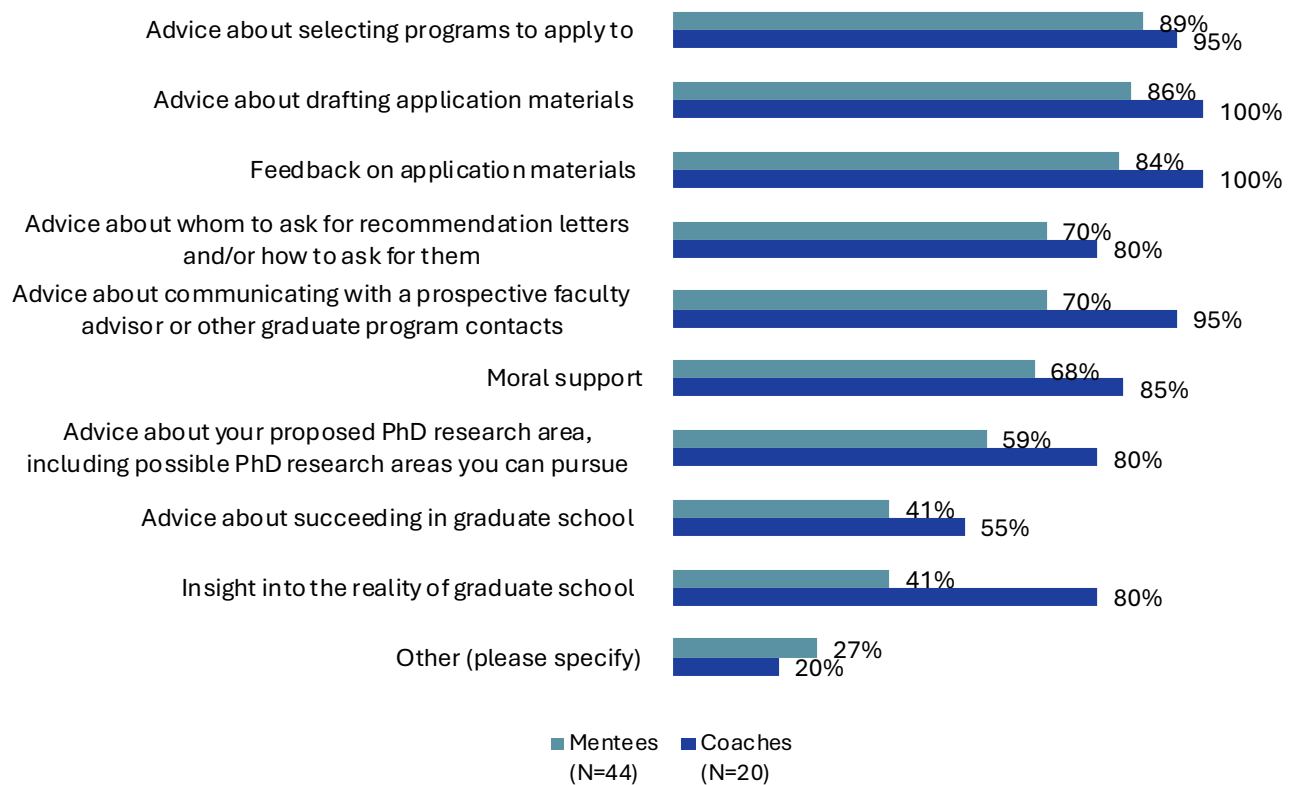
The Mentoring Program facilitated a coaching program through which the mentees were matched with a coach with whom they met regularly and who provided a variety of support with the graduate school application and selection process. Additionally, the program leadership held group mentoring sessions, information panels, and office hours. Additionally, they responded to mentees' questions via email and provided a Canvas page with resources and for submitting materials, as well as a Discord server for mentees and fellows to connect and share information about applying for graduate school and other aspects of the graduate program experience.

Program leadership intended for the coaches to provide mentees with several forms of support, as outlined in **Figure 1** (page 8). Analysis of the Coaching Feedback Survey responses from mentees and coaches revealed some minor differences in the proportions of respondents who agreed that coaches provided each type of support. Whereas 41-89% of mentees who took the survey reported that their coaches provided them with each type of support, these numbers were 55-100% for the coaches. Whether these discrepancies represent disagreement about the same mentors is unclear from the data; the coaches who worked with the mentee survey participants may not perfectly correspond with those exact coaches who responded to the survey. If there is disagreement within the same coach-mentee pairings, however, this may represent differences in memories or understandings of what the types of support can or should look like. The differences in results may also result from some coaches providing different support to different mentees, which some coaches reported in focus groups they had done. Multiple people shared variation in their mentees' needs, including students who needed help narrowing their interests to a research topic as well as others who did not seem to need any help from the coach. As one coach shared:

“They did have different needs, so I found myself filling in different roles. [For] some of them, [it] was more technical – figuring out the process and sort of answering questions about how the materials need to look. Other times it was more mental health support, sort of like “You can do it. Do it!” But [for] all of the others, [it] was about honing in on their research interest and figuring out the right school for them.”

Figure 1.

The Majority of Mentees Received Most Types of Support from Coaches



Some respondents also shared forms of coach support beyond those categories outlined in **Figure 1**. One mentee shared on the survey that a coach had offered to facilitate professional network connections, while multiple coaches shared in focus groups that they put mentees in touch with colleagues and a small number of coaches also shared on the survey that they provided emotional support or offered advice about communicating with a recommendation letter writer. While most of the coaches who responded to the survey reported providing all types of support, some coaches shared during one of the focus groups that it appeared that some other coaches focused largely on preparing job market materials without giving much attention to the “meta structural” questions about graduate

school. As one person shared, **“I think there were some coaches that were very focused on the paper statements and making them as good as possible as opposed to anything else like fit or connection or network.”** Another coach added,

“I think that there were a lot of others that were really focused on helping with sort of the meta structural – this is what graduate school is [...] this is why you're applying in this way, this is why you're putting these things in your statement, this is how you find the program that you're interested in. And I think [this] was what was intended by the program.”

On the Coaching Feedback Survey, 25% of respondents entered the coaching program without having a research area they planned to pursue in graduate school and 73% of these individuals had identified such a research area, which demonstrates the program is helping these students take this crucial step toward developing a research agenda.

Some fellows faced administrative challenges in their graduate programs.

Multiple fellows reporting that their departments did not have experience with a CSGrad4US fellowship in the past and there were challenges with receiving payments and classifying the fellows. Multiple students reportedly had delays in receiving their stipend and other fallout arose as well (e.g., having to pay tuition, not being able to register for classes). One student shared that, **“the extra kick on top was they did not consider me a graduate student, because they have a separate designation for fellows, but I wasn't a fellow because my money hadn't come in so I couldn't get parking or register for classes.”**

Coaches, mentees, and fellows requested additional information and resources.

One challenge that some coaches raised during the focus groups centered around not having sufficient information to support mentees. For one, they received emails that were better suited for the leadership team and **it would have been nice to have more information about the “ins and outs and the intricacies of the CSGrad4US program itself,” for example through a tutorial or FAQ.** On the Coaching Program Survey, **some mentees and coaches would reportedly appreciate streamlining who to contact on the leadership team to refer mentees.**

Coaches, mentees, and fellows also requested additional resources. **Coaches would appreciate a resource outlining the rules of the program and the terms of coaching; and resource sheets with information about institutions of higher education (CIP codes, rankings, acceptance rates);** fellows and coaches both raised confusion about what is covered within the CSGrad4US program (what qualifies as CISE, etc.). **Mentees requested some additional information and resources as well, including information about what different disciplines are, a template for what to look for in schools, a list of**

schools where CSGrad4US fellows matriculated and the fellows' contact information "(if they're willing to share it)," and a single Google Calendar with all events that can help mentees keep up. Fellows requested more guidance about what to look for in advisors and more information about the realities of graduate school, especially closer to the time that students entered their programs.

Coaches also raised in focus groups that they sometimes struggled with guiding mentees with respect to emailing faculty – whether and when it is appropriate to do so seems to vary across discipline, institution, faculty, and student. Based on feedback from coaches and fellows, it seems multiple mentees used email outreach to learn about schools or to **"shop for advisors,"** with some reporting benefits of this practice. At the same time, some faculty are not open to receiving such outreach. When reaching out, several coaches noted the importance of crafting targeted emails that demonstrate a knowledge of the faculty you're contacting, because coaches frequently receive emails from people that suggest the sender does not know that person's research (e.g., it says they are interested in machine learning and the coach does not work on that). **One coach suggested it would be helpful if the CSGrad4US program can help change the culture in departments so that they are more transparent about whether it is appropriate or expected that prospective applicants email faculty directly.**

It can also be challenging, coaches noted, to guide students, regarding what different institutions are looking for, especially if they are in a different field or subfield. If programs could share expectations around contacting faculty and even more information about the admissions process (what they're looking for and what the timeline is for decisions), that would help.

Coaches suggested a more flexible timeline for the Coaching Program.

Some coaches differed on how much structure they felt was beneficial for their mentees. On one hand, some coaches felt like they did not need the schedule and were capable of supporting the students where they are in their unique process. For example, one coach shared, **"One of the early weeks was like 'outline personal statement.' And [the mentees] all were like 'Here's the statement I submitted for this. I'm starting from that.' And it was like I don't know why we would go back to an outline instead."**

For some coaches, the timeline was too rigid and imposing and one coach suggested that the deadlines were unnecessarily onerous for a student. This last coach shared,

"I appreciate that for some students having all that structure would be extremely valuable, but maybe having an option making it clear that you're not a bad person if the timeline doesn't work for you – you know that the program can still work and you're still an appreciated participant in it."

This suggestion seems like an appropriate solution that will provide the guidance for those who can benefit from it, while making it clear that it is okay to deviate from the deadlines based on the mentees' needs.

Coach workload varied and additional guidance may be helpful alleviate overloaded coaches.

There were differences in terms of how many mentees coaches thought were appropriate. One shared that **“If they were all like the ones I had, I could have worked with eight. Okay, but obviously listening to other people [...] it's very different.”**

Multiple shared that working with three was a substantial amount of work or would be unsustainable without having a reduced load in their department.

“It was a massive amount of work. I don't think I was quite prepared for it. The expectation of meeting one hour with each mentee a week is a lot especially given that there's asynchronous work that needs to be done like reviewing materials and giving detailed feedback. And I actually think the students thought it was quite a bit as well, because some weeks they had to cancel on me and be like “I just can't this week.” So, I think better expectation setting up front would have been helpful, and I definitely cannot take more than three.”

On the other hand, one individual thought having at least three is necessary to make it worthwhile, given **“what economists call ‘minimum efficient scale.’”** Since the needs of the mentees seemed to vary in part based on past research experience, **it may be helpful to take this into consideration when matching mentees and coaches, with the goal of balancing the research backgrounds of coaches' mentees.**

Some coaches suggested that they met with mentees as a group and that helped reduce the time they spent in meetings, while others suggested that would be beneficial moving forward. While one person shared this may make particular sense vis-à-vis general advice that they gave to all students, another coach shared that their mentees also gave each other feedback on their materials. This may work particularly well if mentees have a range of experience and all participate in the group meetings (at least one coach shared an experienced researcher did not attend that coach's group mentoring sessions).

Encouraging coaches to meet with mentees as a group, as appropriate, may help them keep their workload manageable.

There are additional aspects of expectation setting that may be reduce the burden on coaches while also alleviating confusion for mentees. **A small number of mentees requested clearer guidelines about how to engage with a coach – for example, what is appropriate to ask of a coach and what good reasons to visit their office hours might**

be. It might also be helpful to share a suggested number of meetings. Some mentees also expressed a desire to meet with their coaches more often – a suggested frequency of meetings can either indicate to these mentees’ coaches that they should be more available or can signal to the mentees that their expectations are unrealistic. Among those who responded to the Coaching Feedback Survey, most mentees and coaches (79%) attended at least four meetings. A substantial portion of mentees (40%) met with their coaches at least seven times and roughly two-thirds of coaches (65%) attended at least seven meetings with all their mentees (it is unclear whether these were one-on-one meetings).

EQ2. How do participants and coaches perceive the clarity, relevance, informativeness, and overall quality of the program components?

Mentees, fellows, and coaches shared positive feedback about the Mentoring Program’s components. Funding was considered widely valuable and made graduate school applicants “**low risk**” for the programs they apply to. A small number of coaches also highlighted the prestige of the program as being beneficial for CVs or for making graduate program applicants more desirable.

Coaches are a highlight of the program.

There was substantial praise especially for the coaches. Most people found the guidance from their coach to be clear, relevant, informative and high quality, although a small number neither agreed nor disagreed with each adjective and one person strongly disagreed that it was informative and high quality (**Figure 2**, page). The overwhelming majority (88 of mentee Coaching Feedback Survey participants were satisfied (18%) or very satisfied (70%) with the communication from the coach. Three respondents were dissatisfied with the communication from their coach. On the mentees’ version of the Coaching Feedback Survey, all but two respondents (18/20) to a question about the best part of the Mentoring Program directly or indirectly pointed to the coaches as being particularly helpful. Many comments pointed to specific types of support respondents received from coaches - especially guidance and feedback regarding putting together application materials. Mentees also appreciated encouragement, accountability, and moral support, and reported improved confidence with the application process.

Multiple fellows suggested during focus groups that they had gotten beneficial feedback from their coaches or that they were interested in connecting with their coaches again, though few were still in touch with their coaches at the time of the focus groups. Some suggested this is because the coach’s work did not align particularly well with what they were doing, or because they got busy with graduate school.

Some mentees and fellows had a desire for connecting with more mentors – for example, getting to meet with multiple mentors in a group, or having rethinking coaches if research areas adjust. This may be impractical given program resources and coach capacity, but

there may be ways to provide access to more coaches, for example, through an office hours event.

Most mentees also appreciated other aspects of the Mentoring Program, when they participated in them.

Survey participants also reportedly liked faculty and student network of support as well as the panels. One fellow shared, **“I love it. I am grateful. It’s been pretty much entirely positive to be a part of this. I feel like I have the autonomy, freedom to do what I want. That’s invaluable to me. I’ve mentioned I’ve made really strong friendships already, so I’m just really grateful for the program.”**

The overwhelming majority (90%) of mentee Coaching Feedback Survey participants were satisfied (45%) or very satisfied (45%) with the communication from the project leadership team. Most respondents who used resources found them clear, relevant, informative, and high quality (**Figure 2**, page 14). This included the guidance they received through the group mentoring sessions clear, CSGrad4US panels, office hours, emails with the project leadership team, and the Discord server, as well as the materials provided on Canvas.

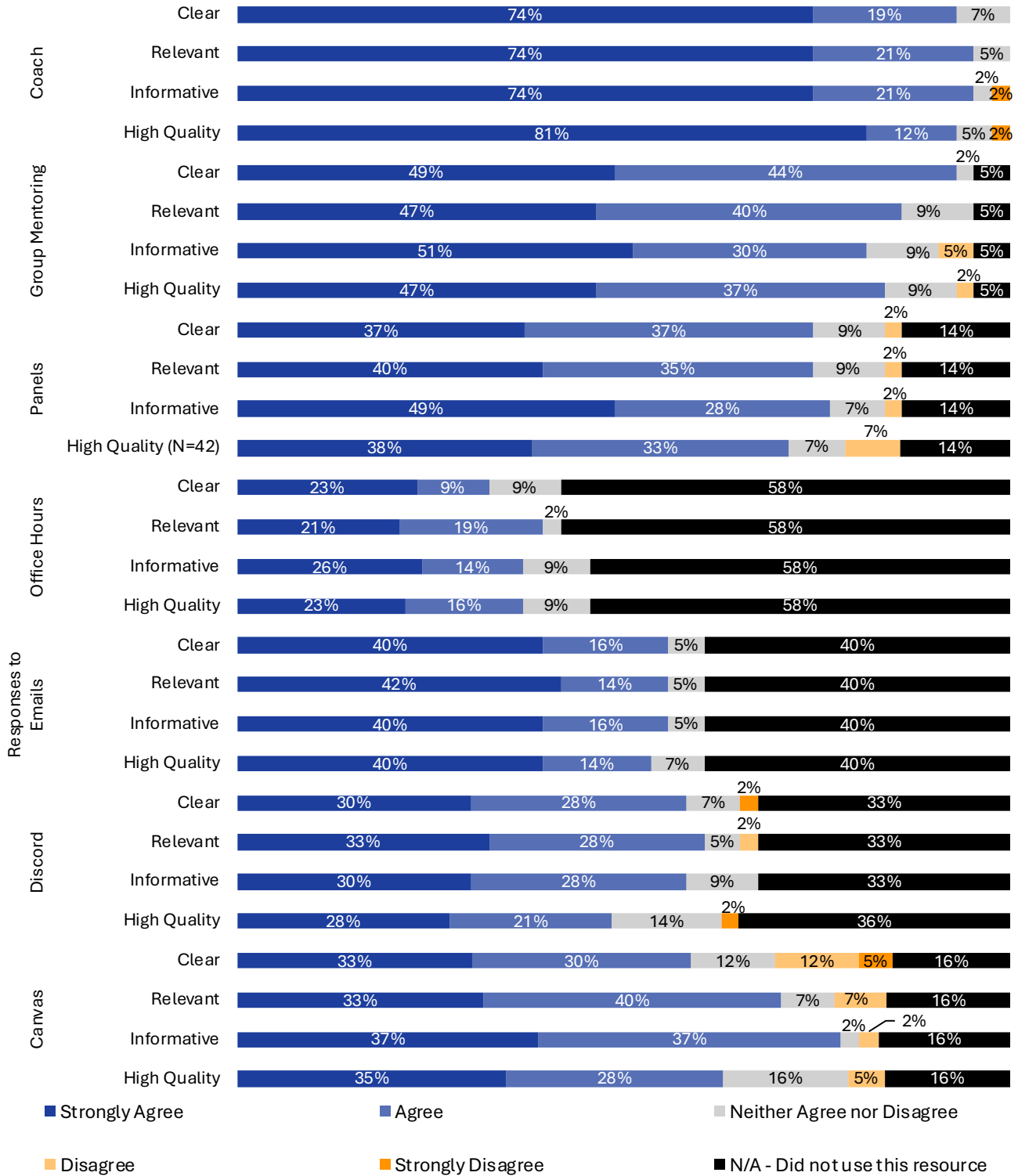
While the cause of this is impossible to assess from the data, resources that required initiation from mentees (office hours, emailing the leadership team, and Discord) were used less than other resources. This may - for some participants - be due to their discomfort accessing these offerings. **It may help to clarify the usefulness of these resources and how to meaningfully engage with them, and to encourage participants to take advantage of them in written materials and emphasizing this during group sessions.**

Mentees and coaches share constructive feedback about Canvas and Google Docs.

The online file storage system came up multiple times as having room for improvement. A small number of mentees shared difficulty navigating Canvas and Google Docs and thought they could be better organized for locating documents more easily. Several Coaches also indicated through the survey and focus groups that they rarely used Canvas, especially during the process of drafting application materials, when they found using Google Docs to be more seamless. As one coach shared, **“I think, for some students having all the materials and the syllabus spelled out on Canvas is just super useful in terms of tracking what they’re doing, reading what they’re doing. But then, when they went to writing things in drafts, it was much easier to use Google Docs.”** Some coaches and mentees reported not using Canvas at all.

Figure 2.

Mentees Shared Mostly Positive Feedback about Resources They Used (N=43 Unless Otherwise Specified)



EQ3. How effective is coaching and mentoring for supporting participants to (1) get accepted into a graduate program, (2) succeed in their first year, and (3) persist into their second year?

Coaches drew some direct lines between some positive outcomes of the program. On the other hand, while Fellows also shared positive outcomes, they did not directly suggest that the program was the cause of these outcomes.

Coaches find the program successful and that some mentees with “unrealistic expectations” of graduate school do not ultimately pursue graduate school.

Coaches pointed out that the program is successful in supporting participants to be admitted to graduate programs, though this is not always the schools mentees are hoping for, and results may not yield as many admittances as the coaches expect. Some coaches reported struggling to convince mentees to apply to schools beyond the top programs, suggesting that these mentees may have been too quick to dismiss strong second- or third-tier programs.

A small number of coaches noted how much work graduate program applications can take. One coach shared that they recommended some mentees take on execute small research projects to gain experience if they had not participated in formal research in the past. This coach shared that these particular mentees did not go on to enroll in graduate school and raised the possibility that this may have **“turned them off,”** along with life circumstances (e.g., not wanting to lose their salary). This reflected a broader trend that arose in survey and focus group responses, in which coaches described some mentees as not having accurate expectations of what graduate school entails and some suggested **doing more work on the front end to communicate this to potential CSGrad4US applicants (e.g., releasing a list of items necessary to apply to graduate school or asking a related question on the application).**

Fellows reported experiencing a range of adjustments to graduate school.

Fellows described transitions to graduate school that were beneficial, challenging and neutral. Specifically, some discussed being more engaged and happier as students, difficulties losing the substantial incomes and respect that they had earned in industry, and ease or difficulties finding people to work with. Some students also pointed out the more open-ended, self-driven nature of the work as being something new, since many tasks in their previous positions were more concrete and included a team of people working on the same goals.

Most fellows reported having good support networks, often within their programs.

Fellows varied somewhat in terms of their comments about support structures. Most fellows in the focus groups shared that they felt well supported in their programs and had

good networks. Some who did not feel connected to other students in their programs shared that they had support network outside of their programs in the location of their institutions so they had a support network nonetheless. Students varied in terms of whether they knew or connected with other CSGrad4US fellows. Some reported having no other fellows at their institutions while others knew one or two fellows, and others still had small groups of fellows that they were in touch with. Some of these relationships Had become very close, although it seemed that these relationships usually represented a relatively small proportion of the fellows support networks. Some students had partners they lived with, and or who lived a several hour car ride or a plane ride away, and they discussed needing to make an effort to connect, socially with other students in the departments, which they each did, although they differed in terms of how successful they felt those efforts were. While many fellows had strong support networks, multiple mentees shared on the Coaching Program Survey a desire to connect with their peers more. For example, one person shared that more sustained community building from the beginning and throughout might be worth forgoing some other programming.

Coaches also appreciated being able to connect with other coaches and one shared a desire for more opportunities to meet in small groups with other coaches to build relationships and share good practices and lessons learned.

The majority of fellows reported making good research progress and confidence that they would finish their graduate programs.

Some fellows were doing research before they even started their programs and had one or multiple publications out. At the same time, some students struggled to find a lab to work with and did not feel supported in identifying an advisor. **Indeed, some students suggested that the CSGrad4US program further emphasize information about how to identify or choose appropriate labs and advisors, including what to watch out for as potential red flags and what might be green flags.** People who were less confident that they would complete their degree shared that they were not sure if their GPA or other work would be sufficient for them to remain in their program and/or mentioned not feeling like they ‘needed’ to finish their PhD or that it was the most important thing to them. A small number of these students mentioned that maybe it would stop making sense in terms of the research working out or whether they were enjoying the program.

EQ4. How do participants compare to other students at a comparable stage of their graduate programs in terms of their graduate experience and intentions to persist in their programs?

To fully answer this evaluation question, CERSE will compare the results of the outcomes survey to Data Buddies data. This will take place in the third year of the fellowship, after the Outcomes Survey data are collected and Data Buddies data are provided.

Fellows stood out from many of their non-CSGrad4US peers based on skills, perspectives, recency of time in the classroom, and life stage.

Some insights related to this question did, however, arise during focus groups with the CSGrad4US fellows, in which students identified perceived benefits and drawbacks regarding how they differed from other graduate students. These comparisons generally related to the time fellows spent in industry and/or away from formal educational programs. Specifically, students shared various skills they brought with them that they may not have had without having worked in industry. They pointed to skills related to big-picture thinking, setting up and executing research projects (including regarding designing data architecture), making practical decisions about how to get through projects in a manageable time and with a manageable scope, the awareness and professional experience to stand up for oneself when expectations of them are unreasonable, and a sense of perspective that allowed them to limit stress that arises from issues in graduate school (the “fires” may be bigger and more frequent in industry).

At the same time, some fellows and coaches pointed out that there are losses that may arise from taking time off between programs. Some fellows felt like they experienced a loss of the foundational knowledge needed to succeed in their programs. For example, one student shared that, because they had forgotten much of what they had learned from undergraduate math courses, they spent substantially more time on their homework than other students perhaps did, and this took a lot of time away from their research. Another fellow felt stress about a qualifying exam and shared that they believed they were spending much more time preparing for it than students who had gone straight to graduate programs from their undergraduate degrees.

An additional differences that fellows felt between themselves and other students, particularly those coming directly out of undergraduate programs or masters programs that immediately followed undergraduate programs, included feeling like they were at different life stages, and some fellows shared they were perceived differently, either as people who perhaps know more than they do, or as people who know less than they do.

EQ5. What personal and program factors are associated with the strongest outcomes for program participants?

Overall, mentees, fellows, and coaches reportedly considered the program helpful. It may be too soon to tell which program factors are especially useful, though the coaching program does stand out for supporting mentees’ graduate school applications.

Coaches shared that positive outcomes were available for any mentees committed to a PhD and benefits were particularly strong for mentees with some forms of social or academic marginalization.

During focus groups and in response to the survey, coaches shared positive outcomes for program participants who were committed to completing their PhD and at a life stage conducive to participating in the program. If this was the case, coaches argued, any mentee could benefit. Multiple coaches suggested that the program was particularly useful for mentees with disabilities, those who had other forms of social marginalization, and/or who may have lost the support structures of being in an undergraduate program.

Coaches reported that some mentees took substantial time to narrow an area of focus, perhaps seemed to be in the program for the wrong reasons (e.g., not to let others down), or waffled about whether they want to apply for graduate school at all. Coaches were split about whether it may be appropriate to make it clear that mentees can and should leave the program if it is not a good fit for them. On one hand, this can give mentees the permission they need to move onto something else. However, for other mentees who are not sure, this may encourage them to leave before giving it sufficient thought.

There were also some participants who ‘did not seem to need’ the coaching component of the program. These students had research experience and sometimes already worked with the lab they were planning to work with in graduate school. Some coaches pointed out that these mentees still benefitted from the program funding, with one suggesting perhaps they would have been better suited for the NSF GRFP program.

There were some participants who decided not to pursue graduate school or to enter a graduate program after being admitted. Often, the loss of income or their job was ultimately impractical. Some coaches shared that some mentees made arrangements to keep their jobs, perhaps with a leave of absence, but this did not end up working out administratively. One person shared,

“Last I heard, [...] nobody could figure out how to let [them] do [the program and continue working.] I think that’s really unfortunate. If we’re going to go after this kind of population, I personally think this program has to have some flexibility. I talked to everyone I could think of to talk about it and I think nobody knew what to do and it just got dropped.”

Coaches also raised that some mentees had families that influenced their commitment to graduate school. It also came up that, for some mentees, having families precluded mentees from returning to school. A small number of coaches further shared during focus groups that some mentees substantially limited their graduate program scope from a geographic perspective, although the mentees in question typically found programs in the places they were seeking to study.

Finally, coaches varied in terms of whether they thought it might be helpful to encourage students to apply to graduate programs without a committed advisor. While this could help some students get their foot in the door, one fellow who was admitted without an advisor shared struggles that they had faced finding an advisor who would take them on. Further, a coach warned against this for the same reason, based on personal experience. Without an advisor, or a TA or RA assignment, **“there was no one on the faculty who needed to care about who I was or what I was doing.”** This may not imply any changes with how CSGrad4US advises mentees, fellows, and coaches regarding how participants should enroll in graduate programs, though this tension may be informative as the program continues to evolve moving forward.