

Mathcamp Community Survey, 2021: Results and Analysis

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for the MFOA Board and the Mathcamp community

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Contents

Introduction	iv
Executive Summary	v
About the Mathcamp Community Survey	vii
Reporting the survey results: our goals and our approach	viii
1 Overall program environment	1
1.1 Did Mathcamp participants feel safe, comfortable, and welcome?	1
1.2 Campers who did not feel safe at Mathcamp	3
1.3 Who else was unhappy and why?	4
1.4 Summary and discussion	5
2 Sexual harassment and sexual assault	6
2.1 Introduction: Assessing the prevalence of sexual harassment and sexual assault at Mathcamp	6
2.2 Harassment, assault, and other offensive conduct by Mathcamp staff	8
2.3 Harassment, assault, and other offensive conduct by Mathcamp students	9
2.4 Self-reported effects on respondents of sexual harassment, assault, and other offensive conduct	11
2.5 Mathcamp’s institutional response to sexual harassment and assault	14
2.6 Reporting sexual harassment and assault	17
2.7 Summary, discussion, and comparison to other institutions	21
3 Camper-staff interactions at Mathcamp	23
3.1 Positive and negative interactions	23
3.2 Physical contact between staff and campers	28
3.3 Boundaries	31
3.4 Summary and discussion	34
4 Other topics	35
4.1 Mathcamp traditions	37

4.2 Identity-based experiences	38
4.3 Reflections in hindsight	38
4.4 Summary and discussion	38
5 Conclusions and next steps	39
Appendices	42
A Results for Additional Survey Questions	42
A.1 Camper-staff interactions during the year	42
A.2 Offensive conduct	46
B Survey response rate	50
B.1 Response rate by role and years at camp	50
B.2 Response rate by gender	52
C Suspected response error	54

Introduction

At Mathcamp, we strive to follow Rule 1 ("Be excellent to each other") at all times. Part of following Rule 1 is to solicit feedback from camp participants each summer, reflect on what they tell us, and then act to make Mathcamp the best place it can possibly be.

But after almost three decades of operation, we felt that it was time to look at Mathcamp through a broader lens, especially in view of some specific concerns recently brought forward by members of our community. We recognize that Mathcamp is not apart from the real world or immune to its challenges. So in 2021, we conducted a survey of all participants from the past 25 years of Mathcamp, to find out whether there were members of our community who felt uncomfortable, unwelcome, or unsafe at Mathcamp, with a particular focus on camper-staff interactions. The survey included a section on sexual harassment and assault; we felt it was important to address these topics directly, to make sure that we were not missing any serious issues.

The overarching questions that guided the Mathcamp Community Survey were:

- In what ways do Mathcampers feel safe, comfortable, and welcome? In what ways do Mathcampers feel unsafe, uncomfortable, or unwelcome? Which factors contribute to these experiences?
- What is the prevalence of sexual harassment, sexual assault, and other offensive conduct at Mathcamp?
- How well does Mathcamp respond when issues arise at camp, and how do students and staff experience that response?
- How do participants perceive Mathcamp's culture of interaction between students and staff, both during the program and in hindsight?

We see the results of this survey as a guide for policy and practice for future years of Mathcamp. We are grateful to experts at the [Center for Institutional Courage](#), especially Marina Rosenthal, for consulting on the survey design and the preparation of this document.

This report, and the steps towards which it guides us in the future, would not have been possible without the participation of over 400 members of the Mathcamp community. We are immensely grateful to all the campers and staff who took the time to respond to our survey and to share their experiences and their viewpoints.

We think it is important for everyone to remain involved in helping make Mathcamp a better place, and we continue to be open to feedback. You are welcome to reach out to us if you have questions or concerns that you would like to talk through. The best way to contact us is via [this link](#), which will allow you the option to keep your identity private (if you wish), while still enabling us to reply to your feedback and questions.

Mira Bernstein, MFOA Board Chair
Marisa Debowsky, MFOA Executive Director

Gregory Burnham, MFOA Board Member
Yvonne Lai, MFOA Board Member
David Savitt, MFOA Board Member and Vice-Chair
Daniel Zaharopol, MFOA Board Member

Executive Summary

In this section, we give a brief summary of our main findings and of our next steps. The body of the report presents the survey results in great detail, since our goal was to be maximally open with the Mathcamp community. Each topic among the findings is then recapitulated more fully in the "Summary and discussion" sections at the end of Chapters 1–4, and next steps are discussed in Chapter 5. The full text of the survey itself can be found [here](#).

The Mathcamp Community Survey was addressed to everyone who attended or worked at Mathcamp in the past 25 years. We received 440 responses, representing almost a quarter of all camp participants, with higher response rates among more recent participants (Appendix B). More than half of the survey respondents wrote comments, which added up to almost 90 pages of text. In addition to reporting the full survey results (representing a quarter-century of Mathcamp's history), our analysis in this report gives special emphasis to the experiences and perspectives of campers who attended Mathcamp within the past six years. We refer to these 152 respondents as "recent campers" throughout this document.

The survey had two parts: one dealing with issues specific to Mathcamp's atmosphere (such as examining the culture of camper-staff interactions), and another adapted from a standard instrument to assess the prevalence of and institutional response to sexual harassment and assault. Measuring the prevalence of sexual harassment and assault is a complex process that is usually approached in one of two ways. One strategy is to ask participants directly whether they have been sexually harassed or assaulted. The other is to ask whether they have experienced specific offensive behaviors that may fall under the broad category of sexual harassment or assault, such as unwanted advances or gender-based harassment (e.g. offensive remarks, sexual jokes). We elected to use both strategies, in order to capture both the full spectrum of participant experiences and the participants' own interpretations of those experiences.

Findings

- The vast majority of the 440 survey participants felt safe, comfortable, and welcome at Mathcamp. (Chapter 1)
- 3 respondents (0.5%), including 2 campers and 1 staff member, reported sexual harassment or assault by a member of the Mathcamp staff. When asked about specific offensive behaviors, 1 additional staff member reported conduct by a fellow staff member that may fall under the broad category of sexual harassment. (Section 2.2)
- 6 respondents (1.5%) reported sexual harassment or assault by a camper. (One of these respondents was also among the 3 who reported harassment by staff.) Offensive behaviors by campers, ranging from offensive remarks to sexual jokes to unwanted advances and physical contact, were reported by 22% of respondents (17% of recent campers). (Section 2.3)
- The most common type of camper offensive conduct reported by participants was "sexist, homophobic, heterosexist, or transphobic remarks". For 10% of respondents (i.e. almost half of those who reported offensive conduct at Mathcamp), this was the only one of the eight offensive behaviors queried in the survey¹ that they reported experiencing at Mathcamp. (Section 2.3)
- There was a substantial reduction in non-verbal offensive conduct (such as unwelcome sexual or romantic advances and unwanted touching) reported by recent campers relative to respondents from previous years, which cannot be fully accounted for by the fact that Mathcamp was virtual in 2020 and 2021. (Section 2.3)
- When asked about Mathcamp's institutional response to issues of sexual harassment and assault, 22% of respondents (and 24% of recent campers) did not think that Mathcamp made it clear how to report sexual harassment and assault; this presents a clear call for improvement in Mathcamp's systems. Aside from the issue of reporting, 3% of respondents disapproved of Mathcamp's handling of issues related to sexual harassment and assault. (Section 2.5)

¹The full list of offensive behaviors used in the survey can be found in Section 2.1.

- Respondents who had been campers at Mathcamp overwhelmingly described their interactions with Mathcamp staff as beneficial; 4% of campers reported an interaction with a staff member that had impacted them negatively, either at the time or in hindsight. The community shared thoughtful reflections on the merits and utility of platonic physical contact at camp, and expressed broad support for maintaining the flexibility for staff to offer hugs for emotional support to campers when consent is appropriately obtained. (Chapter 3)
- Respondents shared a variety of attitudes towards camp traditions, encompassing the potential for shared bonding as well as the risk of alienation. 11% of respondents (5% of recent campers) said there had been specific Mathcamp traditions that had made them uncomfortable in some way. (Chapter 4)
- 6% of respondents (5% of recent campers) reported negative identity-based experiences. The vast majority of survey comments described positive identity-based experiences, with particular emphasis on the welcoming environment for LGBTQ+ students and staff. (Chapter 4)
- The changing social mores both within Mathcamp and in the ambient culture were particularly evident when we asked respondents about reflections in hindsight. 18% of respondents (7% of recent campers) said there were aspects of the Mathcamp atmosphere that they enjoyed at the time but were uncomfortable with in retrospect. Most of the related comments described community norms in the 2000s and early 2010s. (Chapter 4)

Next steps

Following this period of reflection, the MFOA Board and Camp Directors have taken the following actions (Chapter 5):

1. Improving guidelines and training for staff regarding staff-camper physical contact, in particular attending to questions of consent, power differentials, and gender dynamics.
2. Improving guidelines and training for staff regarding the need to draw appropriate emotional boundaries in interactions with campers.
3. Improving education for campers and staff about policies and practices at camp, including expectations around consent and boundaries, and direct, clear reporting procedures when something goes wrong (including sexual harassment, other forms of discrimination, or any other issues that may arise).
4. Improving follow-through procedures after an incident has been reported, with particular attention to communication throughout the process as well as after the situation has been resolved.

Looking towards the future, our ongoing work is to maintain Mathcamp's spirit of openness and trust, while at the same time making sure that everyone feels safe, comfortable, and welcome; to respond appropriately when challenging situations arise; and to continue to invite and welcome feedback from our community, which will shape Mathcamp for years to come.

About the Mathcamp Community Survey

The Mathcamp community survey was administered online between November 10 and November 30, 2021. The survey link was emailed to all 1,429 participants for whom we have email addresses in our database. Participants who were minors were notified of the existence of the survey, but the link itself was emailed to their parents to ensure parental consent. The full text of the survey can be found [here](#).

The survey was anonymous, and we intentionally limited the demographic data that we asked for, in order to preserve anonymity. Participants were not asked to specify the precise years when they were at Mathcamp, but only a range of years (1993–2000, 2001–2007, 2008–2015, and/or 2016–2021). They were also asked about their gender and their role at camp (camper, staff, or both).

We received responses from 440 participants: 150 women, 260 men, 24 genderqueer individuals, and 6 respondents who did not specify their gender. This represents **23%** of those who attended or worked at Mathcamp between 1997 and 2021 (including those for whom we do not have email addresses). Among participants who attended or worked at Mathcamp in 2016 - 2021, the response rate was **42%**. A detailed analysis of response rate by years at camp, gender, and role (camper vs staff) can be found in Appendix B. The appendix also addresses several other technical matters related to the data analysis, such as how we coded respondent gender.

In each section of the survey, respondents were given an opportunity to provide more details or comments in a free-response question. 241 respondents (more than half the total) took the time to write comments, which added up to 89 pages of text! We deeply appreciate their time and the perspectives that they have shared with us.

Reporting the survey results: our goals and our approach

Throughout our analysis of the survey results, we followed a two-step strategy. First, we looked at the big picture: the distribution of responses for each question in the entire sample and in various subsamples of interest, as well as the overall trends in the survey comments (free-response questions). In the second step, we examined in greater detail the surveys of those who had given negative or critical responses to specific questions, with a particular focus on their comments (when available). Our goal was to better understand the nature and causes of the respondents' dissatisfaction, so that Mathcamp can try to address these issues in the future.

The survey respondents were not a random sample of those who have attended Mathcamp in the past 25 years, and we have no way of knowing how representative they are of that population. If 90% of survey respondents agreed with some statement about Mathcamp, this *suggests* that a large fraction of alumni and staff would probably agree as well, but it is impossible to quantify how many, even approximately. Therefore, our analysis in this document is purely descriptive, with no attempt at statistical inference: no error bars, no claims of statistical significance.

The experience of recent campers in particular captures insights into the current state of the program. But Mathcamp's history and trajectory matter, too, making the perspectives of participants from earlier years vital as well. Therefore, for each question in the survey, we report the distribution of responses in the sample as a whole (N=440), as well as in two subsamples:

- **Recent campers (N=152):** campers whose first year at Mathcamp was 2016 or later (including those who later became staff);²
- **Minors (N=53):** Respondents who were under 18 at the time of the survey, a good proxy for those who are still eligible to return to Mathcamp as campers.

For some questions, we also report the results separately by respondent gender or camp role (camper, staff, or both). Much of the time, however, it is difficult to disentangle staff and camper perspectives in the data, since 20% of camper respondents have also been staff at Mathcamp.³

In most questions on the survey, the respondents were asked to indicate whether they agreed or disagreed with a certain statement. Sometimes "agree" was a positive response, indicating satisfaction and/or approval. For other questions, "agree" was a negative or critical response. In most graphs in this document, positive responses (whether "agree" or "disagree") are displayed in green, neutral in yellow, and negative in red.

In most sections of the survey, participants had to indicate whether they agreed (resp. disagreed) with each statement "strongly" or only "somewhat". Survey methodology research suggests that the choice between these two options often reflects the overall response style of each individual participant, rather than a meaningful difference; in other words, one person's "strongly" is another person's "somewhat".⁴ For this reason, researchers often combine the results of such questions into a simple dichotomy: "agree" vs "disagree". In this document, we report the complete range of responses for every question. However, for our more detailed analysis, we have chosen to focus on those who gave explicitly negative responses,

²2016 is an arbitrary cut-off: no major changes in Mathcamp policy or practice took place between 2015 and 2016. When we asked for demographic information in the survey, we divided all the years of Mathcamp into four roughly equal "bins", and 2016 - 2021 was the most recent of these. We define "recent campers" to be campers who attended Mathcamp *only* during this time period (not before).

³Overall, 7% of campers have gone on to become staff at Mathcamp, but this group is over-represented in our sample because of their very high response rate. See Appendix B for more details.

⁴Böckenholt, U. (2017). [Measuring response styles in Likert items](#). *Psychological Methods*, 22(1), 69–83

rather than those who gave "somewhat" positive ones. We did try to look for patterns and trends that distinguished those who "strongly agreed" from those who "somewhat agreed" with specific statements, but were unable to find any.

When reporting results, and particularly when summarizing respondents' comments, we have attempted to strike a balance between giving sufficient detail and ensuring the privacy of respondents and other parties. We do not cite the text of any free-response question directly in this report, because survey participants were promised that their comments would not be used verbatim.

Because we went through the negative responses in detail, we discovered a few cases where a participant's response to a certain question directly contradicts their responses to other questions and/or to their own explicit statements in the comments, and thus appears more likely to be the result of a careless error. We did not remove these respondents' data, but we have flagged them in our analyses. See Appendix C on response error for more details and discussion.

Chapter 1

Overall program environment

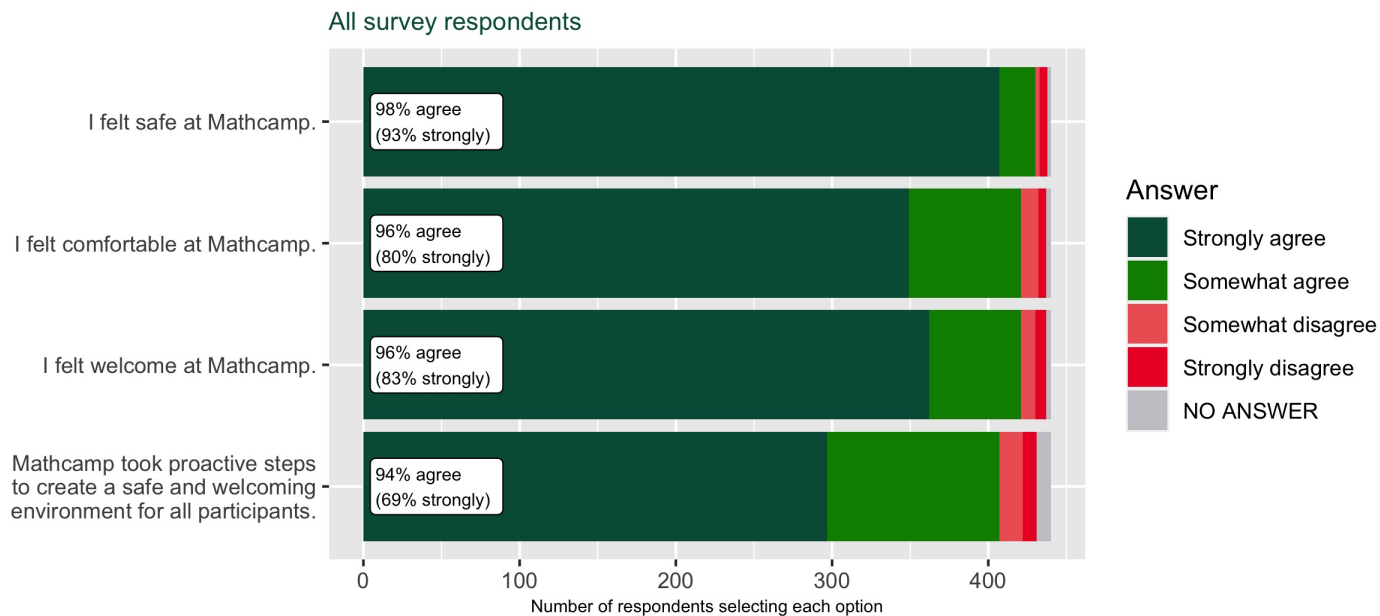
1.1 Did Mathcamp participants feel safe, comfortable, and welcome?

All survey participants were asked:

How well do the following describe your experience at Mathcamp?

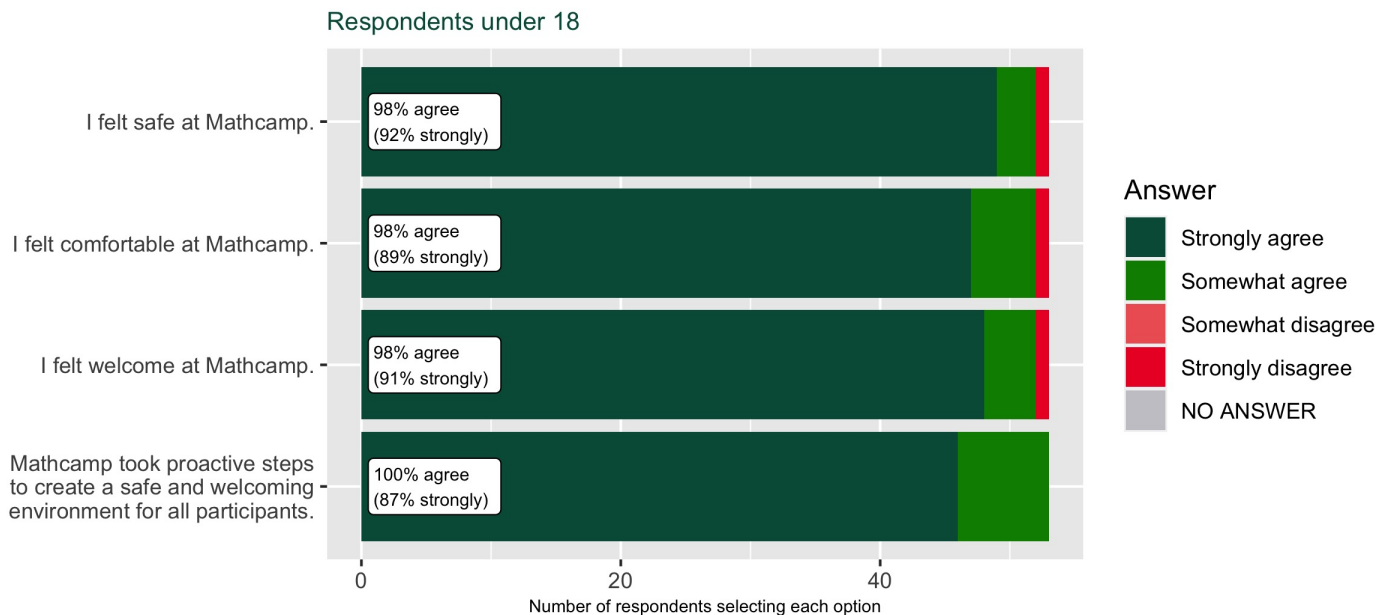
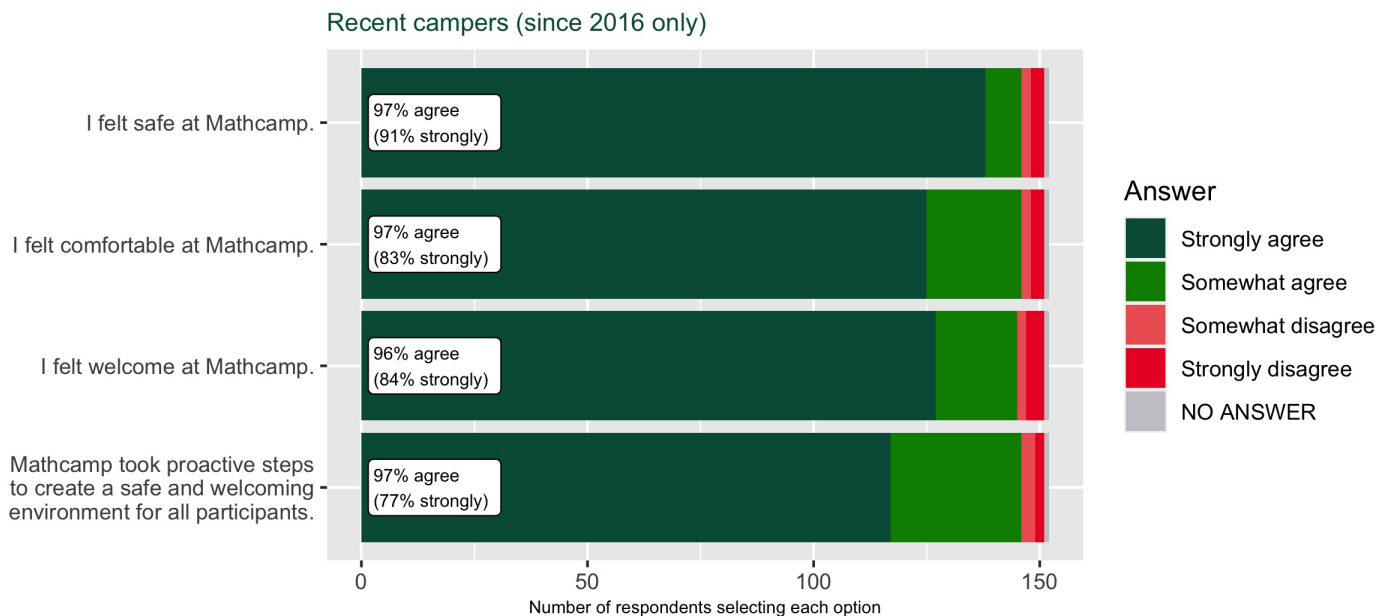
- *I felt safe at Mathcamp.*
- *I felt comfortable at Mathcamp.*
- *I felt welcome at Mathcamp.*
- *Mathcamp took proactive steps to create a safe and welcoming environment for all participants.*

Summary of responses:¹



¹Throughout this document, when the results for several questions are grouped together, the graphs display data for everyone who responded to at least one of the questions in the group. However, the percentages in the distribution of responses for each question are out of all the people who answered that specific question (i.e. not including those who answered other questions in the group but left this question blank).

Because Mathcamp is continually evolving, we are particularly interested in the experiences of camp participants from recent years. Therefore throughout this document, in addition to reporting the data for the entire survey sample, we also display the results separately for two subsamples: campers whose first year at Mathcamp was 2016 or later (whom we refer to as "recent campers") and respondents under 18.



The graphs above show that a large majority of survey participants felt that Mathcamp succeeded in creating a safe and welcoming environment, as also attested by numerous positive comments.

- **414 out of 440 respondents (94%)** agreed with feeling safe, comfortable, and welcome at Mathcamp, and **316 respondents (72%)** agreed "strongly" with all three statements.

In addition, there were **4 respondents (1%)** who marked "strongly disagree" for all three statements due to what we believe was a careless error. These respondents' answers to the rest of the survey were uniformly and emphatically positive, and we suspect that they had actually intended to mark "strongly agree" for all three questions. See Appendix C on response error for more details.²

²Throughout this report, whenever we suspect a response error, we allude to it in the text, but make no modifications to the data underlying

- Among recent campers, **145 out of 152 respondents (95%)** agreed with feeling safe, comfortable, and welcome at Mathcamp, and **113 respondents (74%)** agreed "strongly" with all three statements. In addition, we believe that **3 recent campers (2%)** marked "strongly disagree" for all three statements due to a careless error, where they had meant to mark "strongly agree" (Appendix C).
- Among respondents under 18, all but one agreed with feeling safe, comfortable and welcome at Mathcamp. The remaining respondent was one of those whose response we believe was due to a careless error (Appendix C); in fact, this respondent specifically wrote in his comments that he was very happy at Mathcamp and had experienced no problems at all. **43 out of 53 respondents under 18 (81%)** agreed "strongly" with all three statements.

We now take a closer look at the surveys of those who disagreed in order to better understand what went wrong in those instances.

1.2 Campers who did not feel safe at Mathcamp

There were **3 campers** who disagreed with the statement "I felt safe at Mathcamp".³ In their surveys, these respondents indicated that they had experienced sexual harassment at Mathcamp and were unhappy with how Mathcamp had handled the situation. They also reported negative experiences and strong dissatisfaction in many other sections of the survey.

Two of these respondents report being sexually harassed and assaulted by a member of the Mathcamp staff:

- A female camper from 2001 - 2007 reports being pressured into a sexual and emotional relationship by a male staff member, with continuing harassment after camp was over. She did not report it to Mathcamp at the time; she believes that some staff were aware of what was happening at least to some degree, but no one approached her to talk about it. She feels that Mathcamp did not exert sufficient oversight and mishandled the situation.
- A male camper from 2016 - 2021 reports being sexually harassed and assaulted at Mathcamp. He reports experiencing persistent unwelcome sexual and romantic advances, as well as unwanted sexual touching, perpetrated by both a staff member and a camper. He gives no details about these experiences and does not say whether he reported any of them to Mathcamp.

The third respondent in this group is a female camper from 2016 - 2021. In her survey, she describes being sexually harassed by a male camper in an incident of indecent exposure. After she notified the Mathcamp staff, the offending camper was expelled immediately. However, the respondent expresses disappointment with the level of follow-up about the situation with her and her parents.

We appreciate the courage it took for the survey respondents to share these difficult experiences. Mathcamp is deeply committed to the safety of all participants, and we are working to improve our policies to ensure that every camper and every staff member can feel safe at camp. (See Chapter 5 for more on our next steps.)

Because the Mathcamp Community Survey was anonymous and we must respect the anonymity of the respondents, we cannot address any specific situations based on survey responses alone. The survey text encouraged all participants who indicated that they had been sexually harassed or assaulted at Mathcamp to make a [formal report](#), which would allow us to respond directly. We continue to encourage anyone who has not felt safe at Mathcamp to bring their concerns forward, either by making a report or by using [this contact form](#), which allows us to respond even to anonymous submissions.

the figures. Thus, for example, the figures in this section show one respondent under 18 who strongly disagreed with feeling safe, welcome, and comfortable at Mathcamp, even though we believe his response was due to a careless error.

³Not including the 4 respondents who we believe marked "strongly disagree" in error to all three questions in the first section of the survey; see discussion in Section 1.1 and Appendix C.

1.3 Who else was unhappy and why?

Disagreement with *"I felt safe/comfortable/welcome at Mathcamp."*

18 out of 440 respondents (4%) disagreed with one or more of these three statements:⁴

- **4 respondents** said they had not felt safe at Mathcamp. 3 of them were the campers mentioned in Section 1.2. The fourth has been at Mathcamp for many years as both a camper and a staff member (starting with the period 2001 - 2007, ending with 2016 - 21). He marked "somewhat disagree" for feeling safe, but "strongly agree" for feeling both welcome and comfortable. This respondent answered very few other questions and left no additional comments.
- **14 respondents**, including 1 recent camper, agreed with feeling safe at Mathcamp, but disagreed with feeling comfortable and/or welcome. Issues that these respondents raised in their comments included:
 - From a female camper: Impostor syndrome and not feeling like part of the "in" crowd. (Later in the survey, this camper also reported being sexually harassed by a fellow camper.)
 - From a male camper: Mathcamp's permissive attitude to consensual romantic relationships between campers;
 - From a male camper: The camp environment being insufficiently welcoming to neurodivergent individuals;
 - From a male camper: feeling unwelcome at a Mathcamp reunion.
 - From a female staff member: Mathcamp's openness to discussing sensitive topics with campers, such as mental health, neurodivergence, gender, and sexuality, expressing concern that campers may not be mature enough to handle such conversations; also, the tension between Rule 1 ("being excellent to each other") and setting boundaries.

None of the issues was raised by more than one person. The sole recent camper who somewhat disagreed with feeling comfortable and welcome at Mathcamp left no comment.

Disagreement with *"Mathcamp took proactive steps to create a safe and welcoming environment."*

24 out of 431 respondents (6%) disagreed with this statement: 9 strongly and 15 somewhat.⁵

Among recent campers, **5 out of 151 respondents (3%)** disagreed with the statement: 2 strongly and 3 somewhat.

19 of the 24 respondents who disagreed with the statement (including 3 out of the 5 recent campers) said that they personally had felt safe, welcome, and comfortable at Mathcamp. Issues that these respondents raised in their comments included:

- (3 respondents) "Nose functions" and other games that sometimes violated personal space (see Chapter 4);
- (1 respondent) Camp traditions that could feel unwelcoming (see Chapter 4);
- (1 respondent) Several staff members being given second chances after concerns were raised about their job performance;
- (1 respondent) Negative attitudes regarding religion;
- (1 respondent) The general need for more consent education to deal with common issues that arise among teenagers.

None of these comments were from recent camp participants (2016 or later).

⁴Not including the 4 respondents who we believe marked "strongly disagree" in error. There were also **4 respondents (1%)** who left one or more of the three questions blank.

⁵We suspect that 2 of these respondents may have marked "Strongly disagree" in error; see Appendix C for details.

1.4 Summary and discussion

The vast majority of the 440 survey respondents reported feeling safe, comfortable, and welcome at Mathcamp.

3 campers indicated that they had not felt safe at Mathcamp. Their descriptions of their experiences, which involved sexual harassment and assault, are summarized in Section 1.2. We encourage anyone who has experienced sexual harassment or assault or who has not felt safe at Mathcamp to bring their concerns forward, either by making a [formal report](#) or by using [this contact form](#), which will allow you to keep your identity private (if you wish), while still enabling us to reply.

In addition to the 3 campers who reported feeling unsafe at Mathcamp due to sexual harassment, one long-term staff member disagreed "somewhat" with feeling safe at Mathcamp, though he strongly agreed with feeling both comfortable and welcome; he provided no further details. 14 other respondents (3%), including 1 recent camper, indicated that, although they had felt safe at Mathcamp, they had not felt welcome and/or comfortable. Specific concerns described in the comments were feeling unwelcome at a Mathcamp reunion; feeling excluded socially; discomfort with Mathcamp's permissiveness toward consensual romantic relationships between campers; and feeling unwelcome as a neurodivergent person. None of these concerns was raised by more than one respondent.

407 respondents (94%) agreed that Mathcamp takes proactive steps to create a safe and welcoming environment. Among those who disagreed, concerns included discomfort with some camp traditions (especially nose functions⁶), staff being given second chances after concerns were raised about their job performance, perceived negative attitudes toward religion, and the general need for more consent education. Among these topics, discomfort with camp traditions was noted by 4 respondents; none of the other concerns were brought up by more than one person.

⁶See Section 4.1.

Chapter 2

Sexual harassment and sexual assault

2.1 Introduction: Assessing the prevalence of sexual harassment and sexual assault at Mathcamp

Measuring sexual harassment and other unwanted sexual experiences is a complex process that can be approached in several different ways. The first challenge is in defining sexual harassment itself. Although legal definitions of sexual harassment exist, these set a high threshold of what “counts” as harassment. Limiting questions to a legal definition tends to underestimate the prevalence of unwanted encounters that fall below the legal threshold but are still inappropriate or distressing. Research scientists therefore typically use more expansive definitions, in order to capture the full spectrum of experiences that might fall under the general category of sexual harassment, including sexual coercion, unwanted sexual attention, and gender harassment. Sexual coercion, also known as “quid pro quo” sexual harassment, is the implication of a better outcome should the recipient be sexually compliant. Unwanted sexual attention involves offensive and unwanted verbal and nonverbal behaviors, such as comments about appearance or repeated requests for dates. Gender harassment involves hostile or demeaning commentary or actions based on gender. Our intention in designing the survey was to study this broader set of interactions.

The second challenge to assessing the prevalence of sexual harassment is methodological. One common technique involves asking participants directly whether they have been sexually harassed or sexually assaulted. The benefit of this method is that it captures a participant’s subjective perspective on whether such an experience has occurred. The other common technique involves asking participants if they have experienced any items on a list of behaviors that describe sexual coercion, unwanted sexual attention, and gender harassment (the three categories of harassment detailed above). The benefit of this method is that it captures the widest range of participants who have experienced behaviors that might be classified as sexual harassment, whether or not they themselves believe they have been sexually harassed. For the purposes of the community survey, we elected to include both forms of measurement, to capture participants’ own understanding of their experience as well as the full range of possible sexual harassment that may have occurred.

Survey participants were first asked if they had been in a situation where a member of the Mathcamp community had engaged in any of the following behaviors:

- *Made offensive sexist, homophobic, heterosexist, or transphobic remarks;*
- *Repeatedly told sexual stories or jokes that were offensive to you;*
- *Sent, posted, or spread unwelcome sexual comments, jokes, pictures, or rumors;*
- *Made unwanted attempts to establish a romantic or sexual relationship with you despite your efforts to discourage it;*
- *Continued to pursue you even though you said "no";*
- *Implied you would be treated better if you were sexually cooperative;*
- *Touched you in a way that made you feel uncomfortable;*
- *Touched you in a sexual way that you did not want; (examples: kissing, touching the private parts of your body)*

For each item on the list, participants had the option of marking "A camper did this", "A staff member did this", or both.

In what follows, we will refer to this list of behaviors collectively as "offensive behaviors" or "offensive conduct". The list was adapted from two standard and well-validated measures of sexual harassment and assault.¹ The standard measures are much longer and more detailed; we condensed or excluded items that elicited an unusable amount of detail to prevent participants from needing to disclose information that would not ultimately provide added benefit to the survey or community.

Participants were asked separately about offensive conduct that they experienced during Mathcamp itself versus offensive conduct by members of the Mathcamp community during the academic year. This report describes the data on offensive conduct by campers only during the summer, since Mathcamp has no control over interactions between students outside of camp. On the other hand, reports of offensive conduct by Mathcamp staff are included whether the conduct occurred at camp or outside of camp. Although staff members are not employed by Mathcamp between summers, informally they still retain their authority in the eyes of many campers, especially those who are still in high school. Mathcamp therefore has a responsibility to ensure that staff interactions with campers are appropriate even after camp is over.

Some less common types of harassing behaviors were not captured by our survey. For instance, one of the campers in Section 1.2 ("Campers who did not feel safe at Mathcamp") reported experiencing indecent exposure, which did not fit under any of the categories in our list. Conversely, we also know that not every instance of offensive conduct reported by our survey respondents constituted sexual harassment. Respondents who answered "yes" for one or more of the behaviors on the list were given the opportunity to provide additional details in a free-response box. Some of them described conduct that, while potentially distressing, would not generally be classified as sexual harassment: for instance, one-time inadvertent physical contact or an overheard remark that they considered inappropriate. Nonetheless, in the aggregate, we believe that the offensive behaviors on our list provide a rough approximation of experiences of sexual and gender harassment (broadly construed) in the Mathcamp community.

Participants who reported experiencing any offensive behaviors (whether by campers or staff) were asked two additional follow-up questions:

Please describe how you reacted to the situation(s). Select all that apply.

- *I ignored the person and did nothing*
- *I avoided the person as much as possible*
- *I told the person to stop*
- *I asked a peer for advice or support*
- *I asked friends or family outside of Mathcamp for advice or support*
- *I talked with Mathcamp staff about the incident*

How did the experience(s) you described above affect you?

- *Very negatively*
- *Somewhat negatively*
- *Slightly negatively*
- *Neither negatively nor positively*
- *Positively*

¹Fitzgerald, L. F., Magley, V. J., Drasgow, F., & Waldo, C. R. (1999). [Measuring sexual harassment in the military: The sexual experiences questionnaire \(SEQ-DoD\)](#). *Military Psychology*, 11, 243–263.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). [Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization](#). *Psychology of Women Quarterly*, 31, 357–370.

Finally, all participants, whether or not they had reported experiencing any offensive behaviors, were asked to comment on two statements:

I was sexually harassed at Mathcamp.

I was sexually assaulted at Mathcamp.

The response options for each statement were "Yes", "No", and "Not sure". Participants who answered "Yes" or "Not sure" were shown additional text encouraging them to report the incident to Mathcamp outside of the context of the anonymous survey.

2.2 Harassment, assault, and other offensive conduct by Mathcamp staff

10 out of 402 respondents (2%) reported one or more offensive behaviors by a Mathcamp staff member.

3 of these respondents explicitly labeled their experience as sexual harassment and/or assault:

- The two campers from Section 1.2 ("Campers who did not feel safe at Mathcamp") who described situations involving staff members. Both report that their experience of offensive conduct affected them *very negatively*.
- A female staff member from 2008 - 2015 reported being sexually assaulted and possibly harassed at Mathcamp. She reports offensive behaviors by two campers and one staff member, including unwanted sexual touching by the staff member. These experiences affected her *slightly negatively*. Due to a flaw in the survey design, it is unclear from her responses whether she reported the staff member's behavior to Mathcamp. (She did report the behavior of one of the campers.)

The other 7 respondents who reported offensive conduct by staff did not label it as sexual harassment or assault:

- One female staff member reported persistent unwelcome attempts by a fellow staff member to establish a sexual or romantic relationship. She gave no details beyond saying that the situation had "no particularly negative outcomes". This experience affected her *slightly negatively*. She did not report it to Mathcamp.
- 3 campers (two female, one male) reported that a staff member inadvertently touched them in a way that made them uncomfortable.² In their survey comments, all 3 campers emphasized that the incident was unintentional on the part of the staff member (e.g. it happened during a group game). All 3 campers say that the experience affected them *slightly negatively*. Although none of these incidents constituted sexual harassment on the part of the staff member, the fact that several campers reported such experiences makes it all the more important for Mathcamp to reexamine its policies on camper-staff physical contact and boundaries in general. See Section 3.2 ("Physical contact between staff and campers") and Chapter 5 ("Conclusions and next steps").
- 3 staff members (all male, from different time periods) report offensive verbal behavior by a fellow staff member. One respondent says that the experience affected him *very negatively*, another *slightly negatively*, and the third did not quantify the impact. In all three cases, the respondents describe specific staff interactions that are potentially inappropriate (i.e., insensitive, unpleasant) but do not fall under the broad definition of sexual harassment.

In addition, two respondents – a female camper and a male staff member – described being involved in camper-staff interactions that, while entirely consensual and not sexual, had a romantic component. Whether or not the relationships described by these respondents fall under the category of sexual harassment, they constituted violations by staff of Mathcamp's official policy against romantic involvement with campers.

²Since these campers attended Mathcamp in different time periods, most likely their experiences involved different staff members.

2.3 Harassment, assault, and other offensive conduct by Mathcamp students

Offensive behaviors perpetrated by campers

While only 2% of respondents reported offensive conduct by Mathcamp staff, offensive conduct by campers was more prevalent:

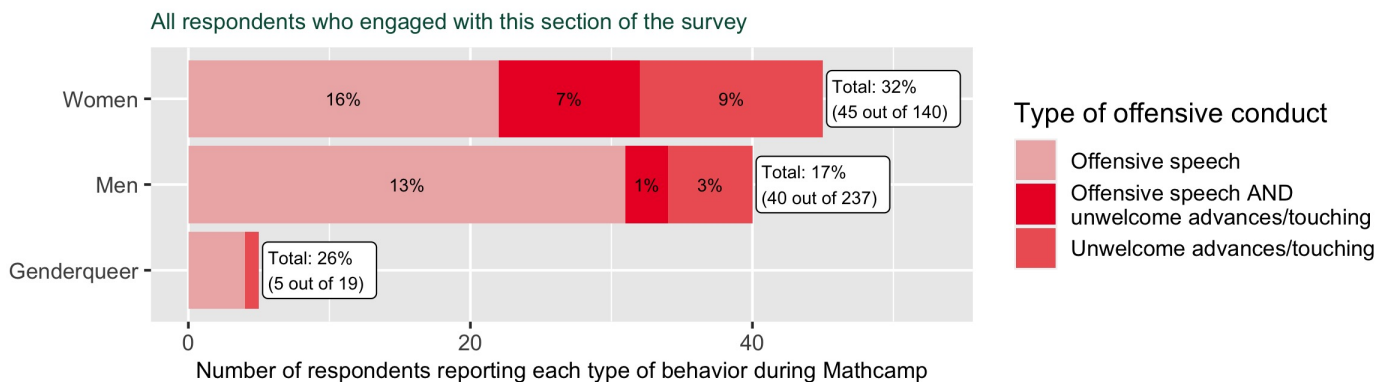
- **90 out of 402 respondents (22%)** reported experiencing at least one offensive behavior by a camper during Mathcamp.³
- Among recent campers, **24 out of 139 respondents (17%)** reported offensive conduct by a fellow camper during Mathcamp.
- Among respondents under 18, **4 out of 49 respondents (8%)** reported offensive conduct by a fellow camper during Mathcamp.

By far the most common offensive behavior reported by survey respondents from all time periods was "sexist, homophobic, heterosexist, or transphobic remarks".⁴ For **40 respondents (10%)**, this was the only offensive behavior from our list that they reported experiencing at Mathcamp. Of those who gave more details in the comments, the vast majority reported that the remarks were not aimed at them personally, but were something they had overheard. Several respondents indicated that such remarks were isolated incidents that other camp participants (campers and/or staff) immediately objected to and condemned. Moreover, among survey respondents as a whole, there were numerous comments emphasizing that Mathcamp was one of the least sexist and most LGBTQ-friendly communities they had ever been a part of.

More generally, we can divide the offensive conduct reported by survey participants into two categories:⁵

- *Offensive speech*: the first three items on the list of offensive behaviors in Section 2.1 (sexist, homophobic, or transphobic remarks; sexual stories or jokes; and spreading or posting unwelcome sexual comments, jokes, pictures, or rumors);
- *Unwelcome sexual or romantic advances and/or unwanted physical contact*: the last five items on the list of offensive behaviors in Section 2.1.

Respondents of different genders experienced these two types of offensive conduct at different rates:

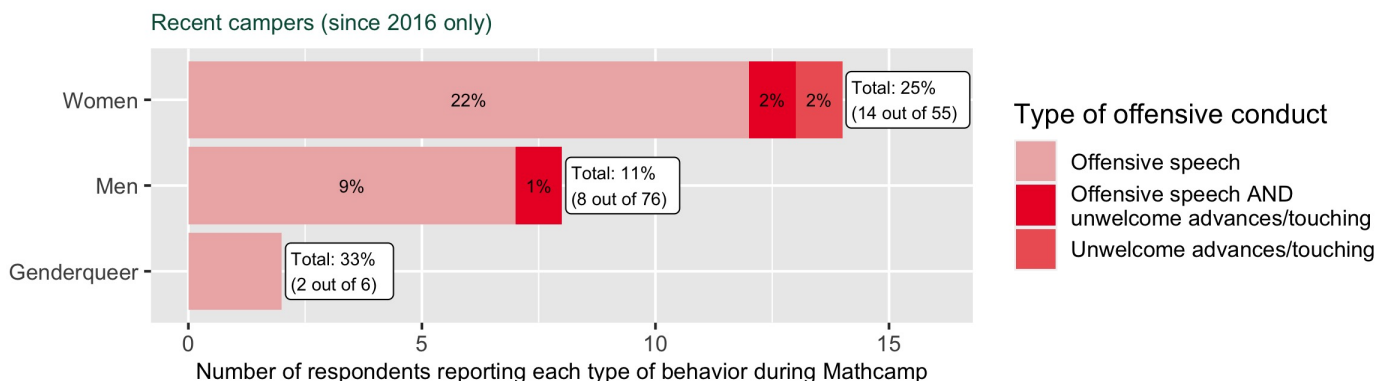


³An additional **9 respondents (2%)**, including 1 recent camper, reported offensive conduct by Mathcamp students only during the year, when Mathcamp was not in session. As explained in Section 2.1, these data are not included in our analysis.

⁴The relative frequency with which surveys respondents reported each of the eight offensive behaviors, and the respondents' reactions to these behaviors, can be found in Appendix A.2.

⁵One camper's experience involving indecent exposure (see Section 1.2) does not fit into either category and was not captured by the survey. It is not included in the graphs below.

Both male and female campers from 2016 - 2021 experienced offensive conduct at a somewhat lower rate than respondents from earlier time periods:



The graphs above show that the rate at which female respondents experienced unwelcome advances or unwanted touching was substantially lower for recent campers than for the entire sample (4% vs 16%). On the other hand, the rate at which female respondents experienced offensive speech was roughly the same for recent campers as for the entire sample (24% vs 23%). Among male respondents, both types of experiences were rarer for recent campers than in the sample as a whole. See Section 2.7 for further discussion of these trends.

6 out of 402 respondents (1.5%) reported unwanted sexual touching by a camper, a reasonable proxy for sexual assault. 4 of these respondents were women, and 2 were men. Only 1 was a recent camper (one of the campers from Section 1.2).

2 out of 402 respondents (0.5%) reported that a camper had "implied [they] would be treated better if [they] were sexually cooperative" (sexual coercion): the second camper from Section 1.2 and a female camper from 1997 - 2000 who left no additional comments.

Experiences labeled by respondents as sexual harassment

As discussed in Section 2.1, asking survey participants about specific offensive behaviors that they experienced is one way of assessing the prevalence of sexual harassment and assault. Another is to ask participants directly whether they have been sexually harassed or assaulted.

In our survey, although 22% of respondents reported offensive behaviors by Mathcamp students, only **6 out of 402 respondents (1.5%)** explicitly stated that they had been sexually harassed or assaulted by a camper. **3 others (1%)** said that they were not sure.

Of the 6 respondents who said they had been sexually harassed by a camper:

- 2 have already been mentioned in Section 1.2 ("Campers who did not feel safe at Mathcamp"). Both were recent campers.
- The other 4 were female campers from different time periods, none of them recent.⁶ All of them reported unwelcome sexual or romantic advances by a camper; 2 of them also reported uncomfortable and/or sexual touching, although they did not explicitly label it as sexual assault; and 1 of them reported sexual coercion. None of these 4 respondents mentioned reporting the situation to Mathcamp staff. (One of them remembers not wanting to make a so-called "big deal out of nothing," referring to the common pejorative description of reporting, because of the way that girls were socialized in the late 2000's.)

One of these 4 respondents indicated that she was affected *very negatively* by her experience of offensive conduct at Mathcamp; she also marked "somewhat disagree" for feeling comfortable and welcome at Mathcamp overall (Section 1.3). Two other respondents indicated that they were affected *slightly negatively* by their experience of offensive conduct at Mathcamp, and one did not specify.

⁶2 of these campers later became staff, but the incidents described in their survey comments occurred when they were campers.

Of the 3 respondents who were not sure if they had been sexually harassed at Mathcamp:

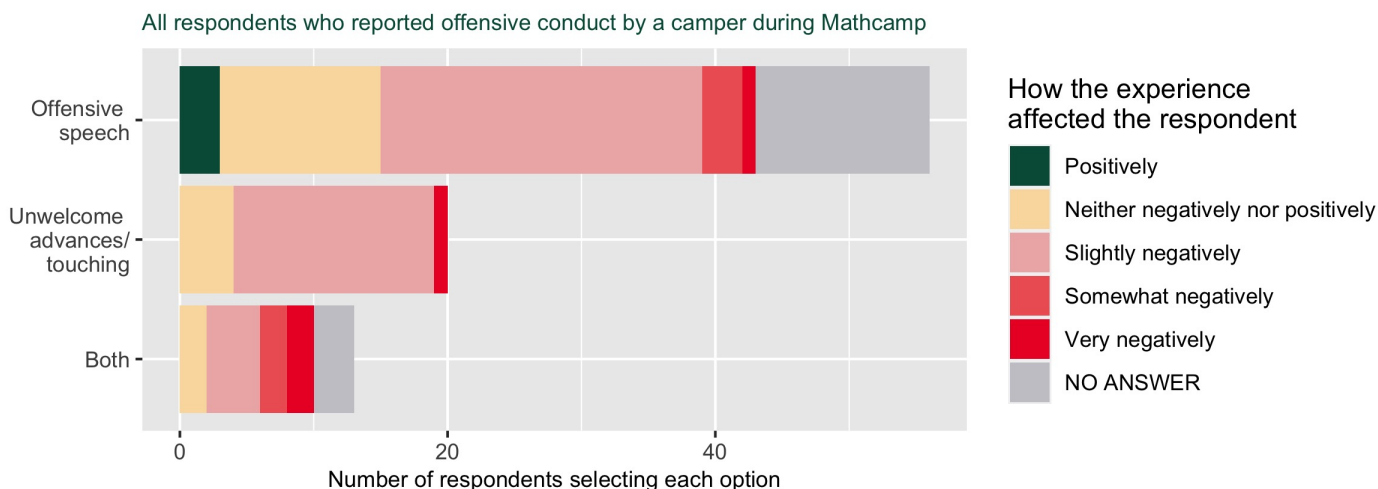
- 2 were female campers from the early 2000's who later became staff. One reports offensive behaviors from male campers both when she was a camper and when she was staff, including unwanted sexual/romantic advances and uncomfortable physical contact; these affected her *slightly negatively*.⁷ She reported the incident that occurred when she was a staff member to Mathcamp leadership. The other respondent experienced unwelcome advances as well as sexual touching by a camper. The situation affected her *somewhat negatively*; she did not report it to Mathcamp staff.
- The third respondent who was unsure whether he had experienced sexual harassment at Mathcamp was a male camper from 2001 - 2007. The only offensive behavior he listed were offensive sexist/homophobic/transphobic remarks; he did not indicate how the experience had affected him and included no further comments.

2.4 Self-reported effects on respondents of sexual harassment, assault, and other offensive conduct

In Section 2.2, we examined the effects on survey respondents of offensive conduct by staff: there were 10 instances of such conduct in total, and we went through them in detail.

The effects on respondents of offensive conduct by campers are summarized below, broken down by type of conduct and by gender of respondent.⁸

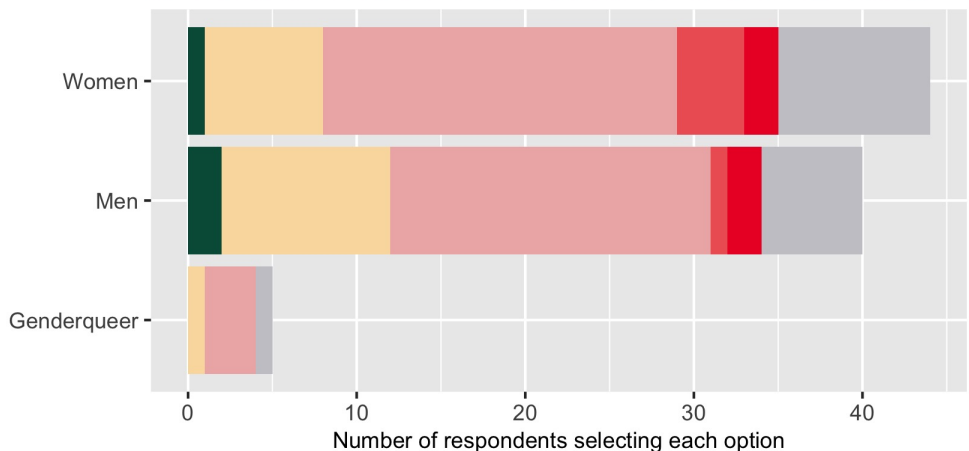
All survey respondents:



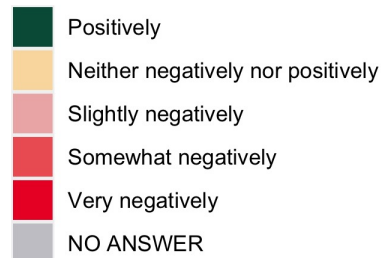
⁷This respondent also reported unwanted sexual touching by a fellow Mathcamp staff member; see Section 2.2. Her assessment of a *slightly negative* effect refers to all of these experiences.

⁸The experience of the camper who described an incident of indecent exposure in her comments (see Section 1.2) is not included in these graphs. Because indecent exposure was not on the list of offensive behaviors queried by our survey, the respondent was not asked about how it affected her. However, her survey comments and the fact that she reports not feeling safe at Mathcamp suggest that the experience impacted her *very negatively*.

All respondents who reported offensive conduct by a camper during Mathcamp

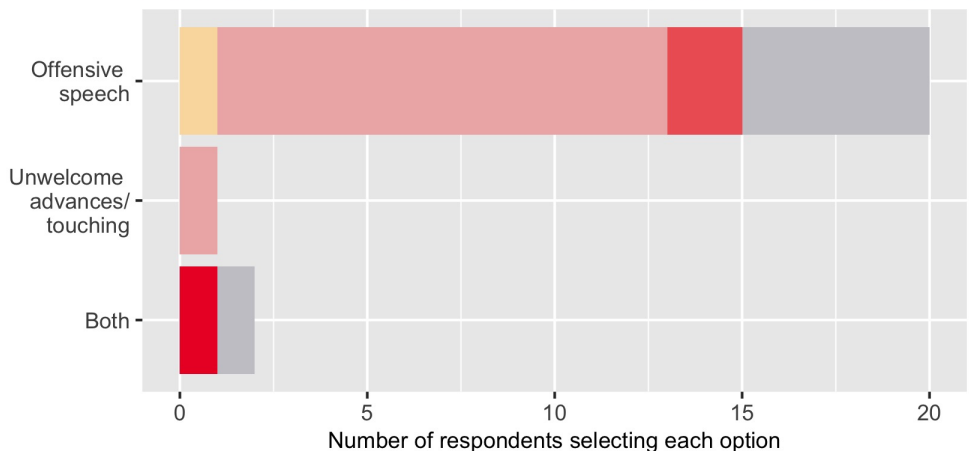


How the experience affected the respondent

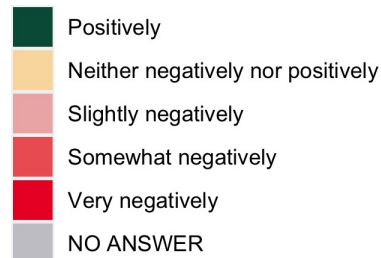


Recent campers:

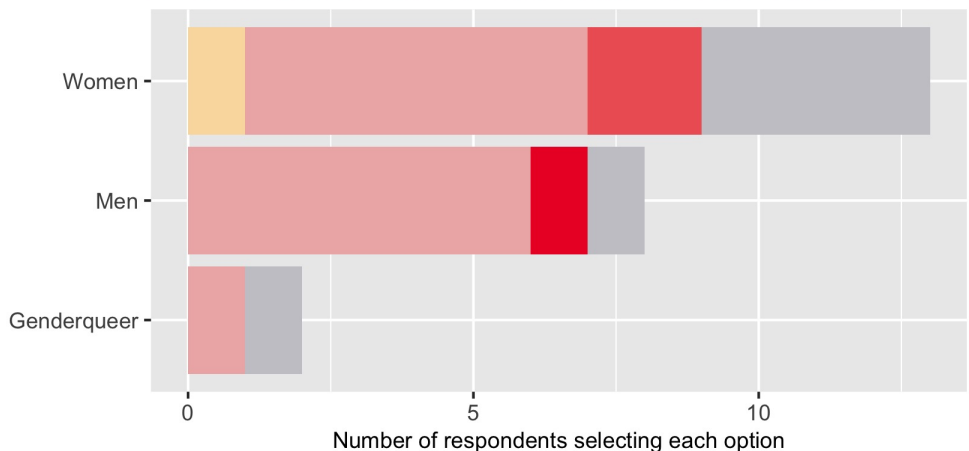
Recent campers who reported offensive conduct by a camper during Mathcamp



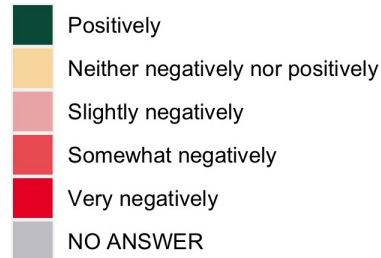
How the experience affected the respondent



Recent campers who reported offensive conduct by a camper during Mathcamp



How the experience affected the respondent



In total, **58 out of 402 respondents (14%)** reported experiencing offensive conduct (by campers or staff) that affected them negatively to some extent:⁹

- *Slightly negatively* – 46 respondents (11%); 15 out of 139 recent campers (11%);
- *Somewhat negatively* – 5 respondents (1%); 2 recent campers (1%);
- *Very negatively* – 7 respondents (2%); 2 recent campers (1%).

The **7 respondents** who were affected *very negatively* include:

- The 3 campers who reported not feeling safe at Mathcamp (Section 1.2);
- 2 female campers who reported unwelcome sexual / romantic advances and unwanted touching by fellow campers. One of them labeled the experience as sexual harassment; the other did not, but the specific conduct that she describes in her comments does appear to fall under the broad definition of sexual harassment.
- 2 male respondents (one camper, one staff member) who described conduct by fellow camp participants that, while interpersonally distressing or unpleasant, does not fall under the broad definition of sexual harassment. Neither of them labeled their experience as sexual harassment.

The **5 respondents** who were affected *somewhat negatively* included 4 women and 1 man. 3 of them reported offensive speech only, while 2 reported both offensive speech and unwanted advances, including, in 1 case, sexual touching. All the offensive conduct was by campers.¹⁰

There were **3 respondents** who reported that the offensive conduct they had experienced at Mathcamp had affected them *positively*:

- A female camper from the early 2000's who reported making offensive (homophobic) remarks herself and learning from the experience;
- A male camper who had felt uncomfortable because of a (non-harassing) conversation on a topic related to sexuality, and credits this experience with making him more comfortable speaking about sex;
- A male staff member who observed campers learning positive lessons from the way their inappropriate comments were handled by Mathcamp staff.

⁹This includes offensive conduct by campers while Mathcamp was in session and offensive conduct by staff at any time. For the purposes of this cumulative summary, we *are* including the camper from Section 1.2 who reported an incident of indecent exposure. Although she was not explicitly asked about how this experience affected her, her other responses and comments suggest that she was affected *very negatively*.

¹⁰2 other female campers (neither of them recent) reported offensive conduct by a fellow camper outside of Mathcamp that affected them *somewhat negatively*.

2.5 Mathcamp's institutional response to sexual harassment and assault

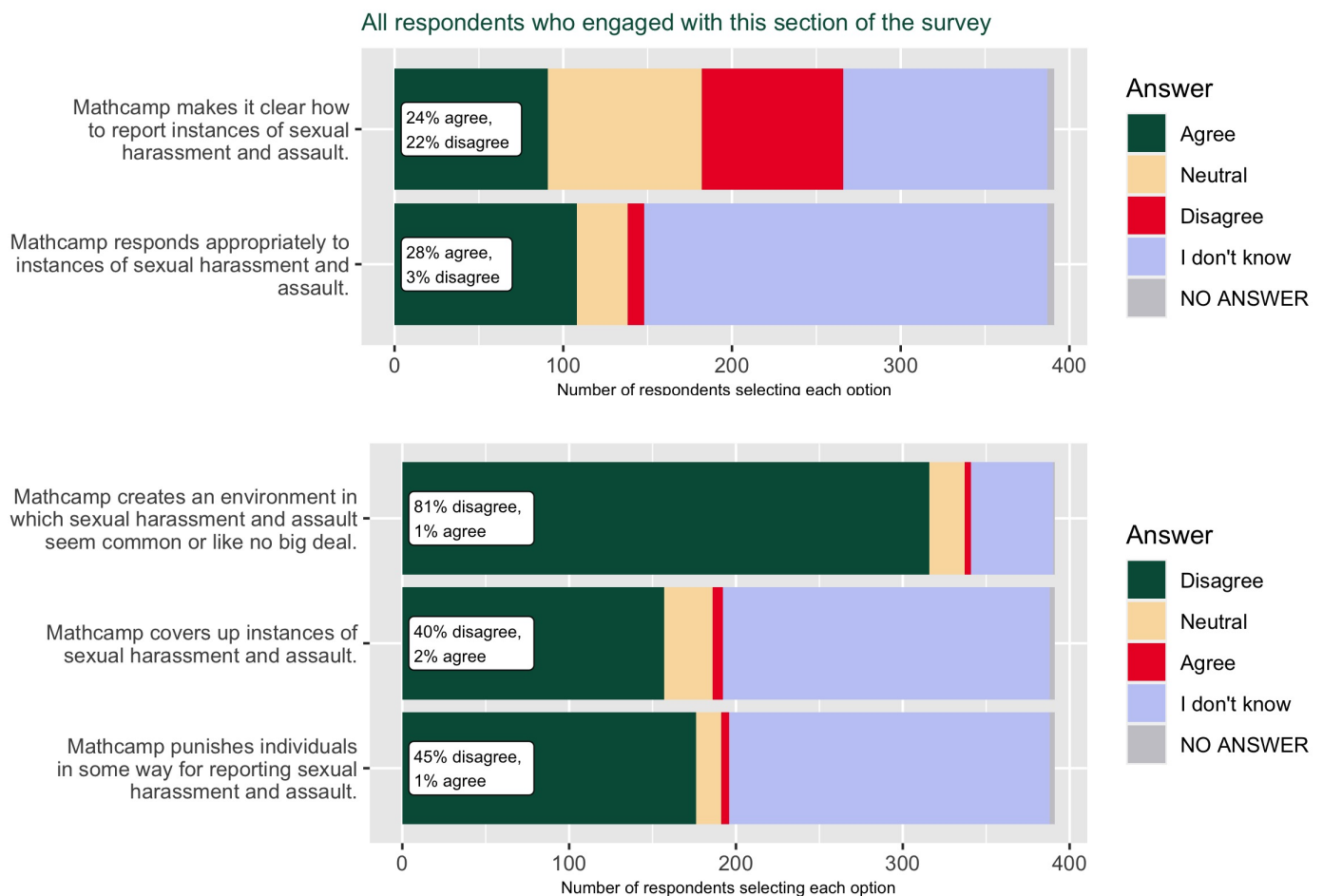
All survey participants were asked:

How well do the following describe Mathcamp's response to issues of sexual harassment and assault?

- *Mathcamp makes it clear how to report instances of sexual harassment and assault.*
- *Mathcamp responds appropriately to instances of sexual harassment and assault.*
- *Mathcamp creates an environment in which sexual harassment and assault seem common or like no big deal.*
- *Mathcamp covers up instances of sexual harassment and assault.*
- *Mathcamp punishes individuals in some way for reporting sexual harassment and assault.*

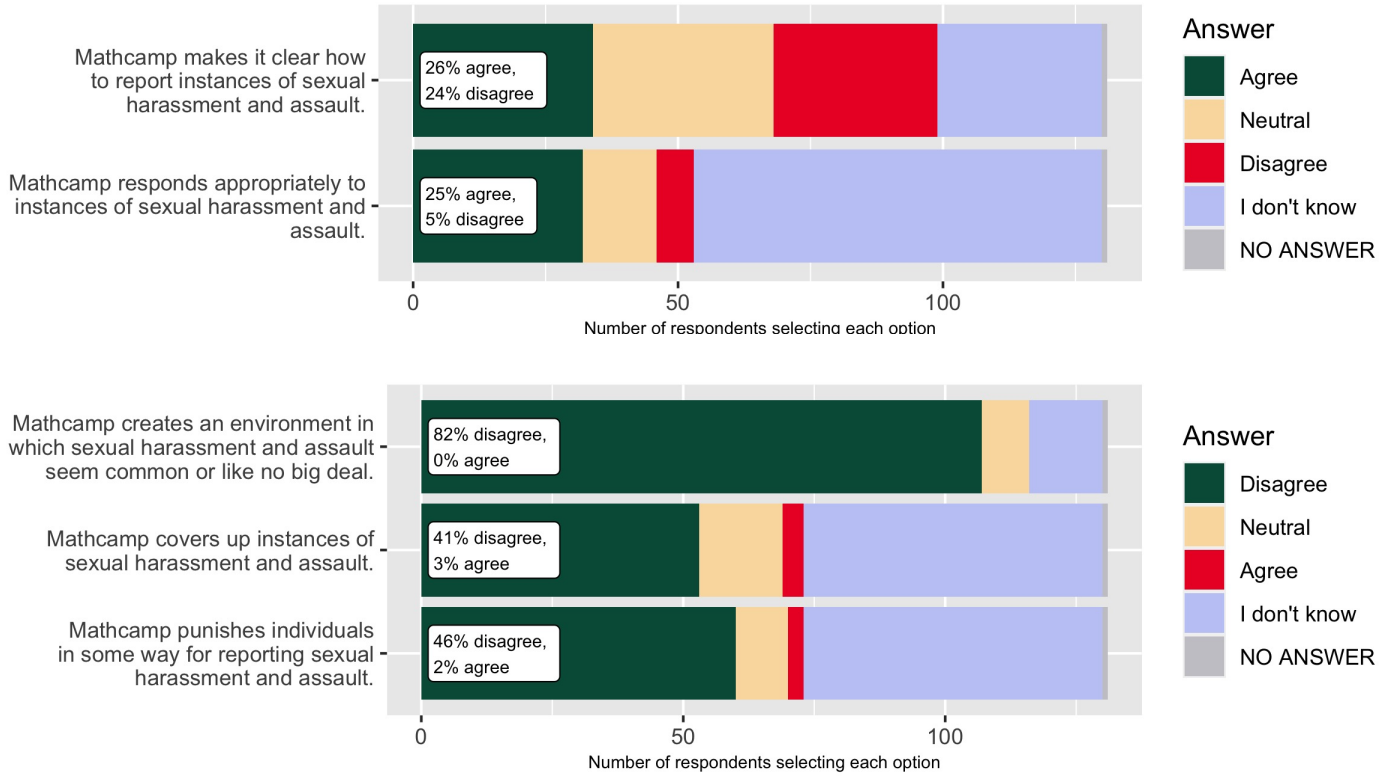
The response options were "Agree", "Disagree", "Neutral" and "I don't know". (We anticipated that many respondents who had never experienced or thought about sexual harassment at Mathcamp would want to select "I don't know" for many of the statements.)

Responses from all survey participants:



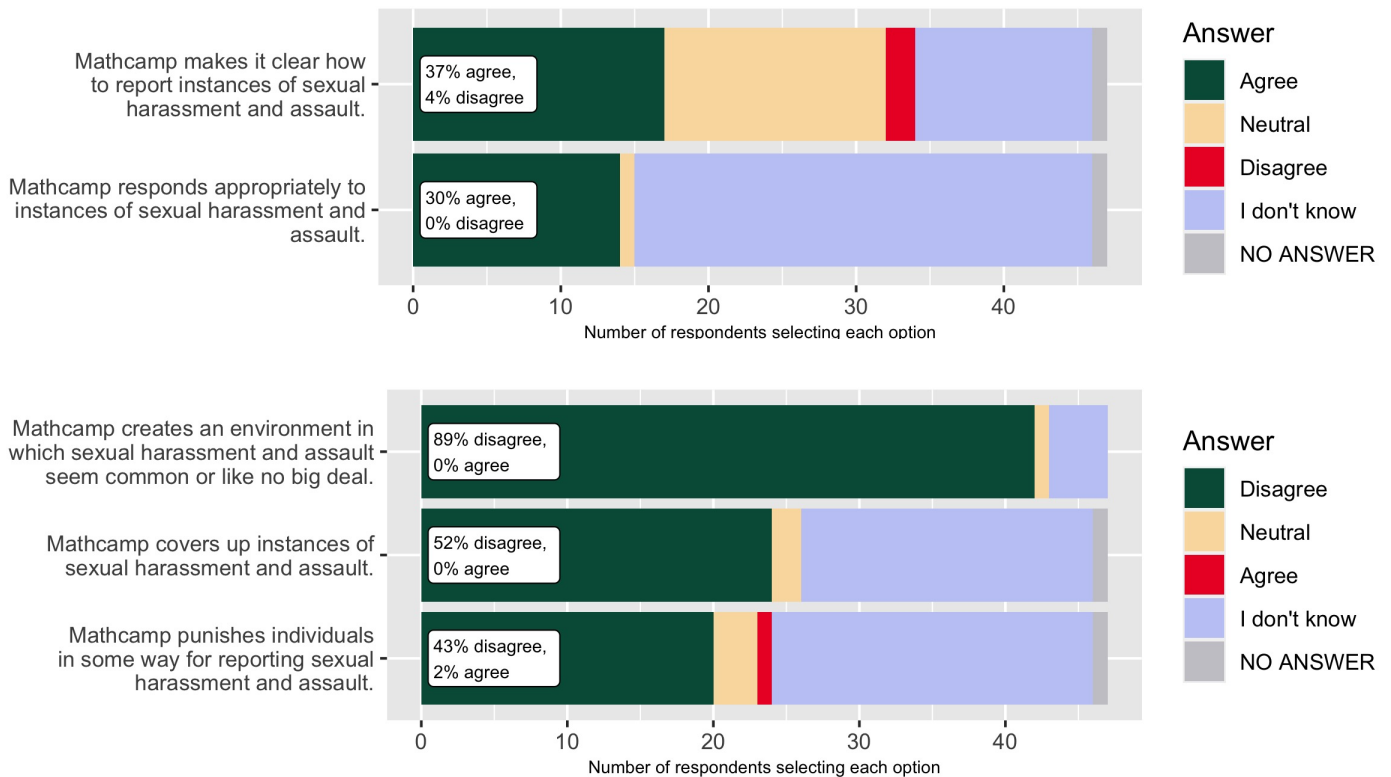
Recent campers:

Recent campers (since 2016 only)



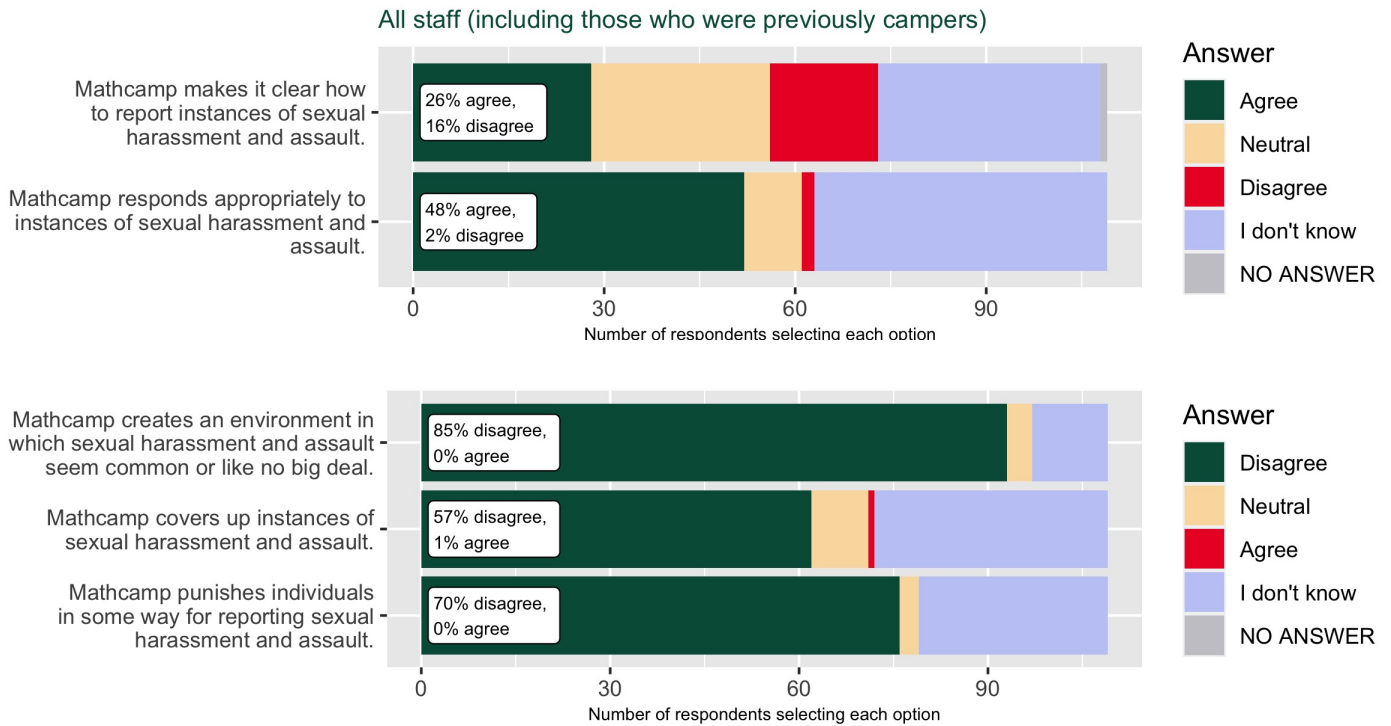
Respondents under 18:

Respondents under 18

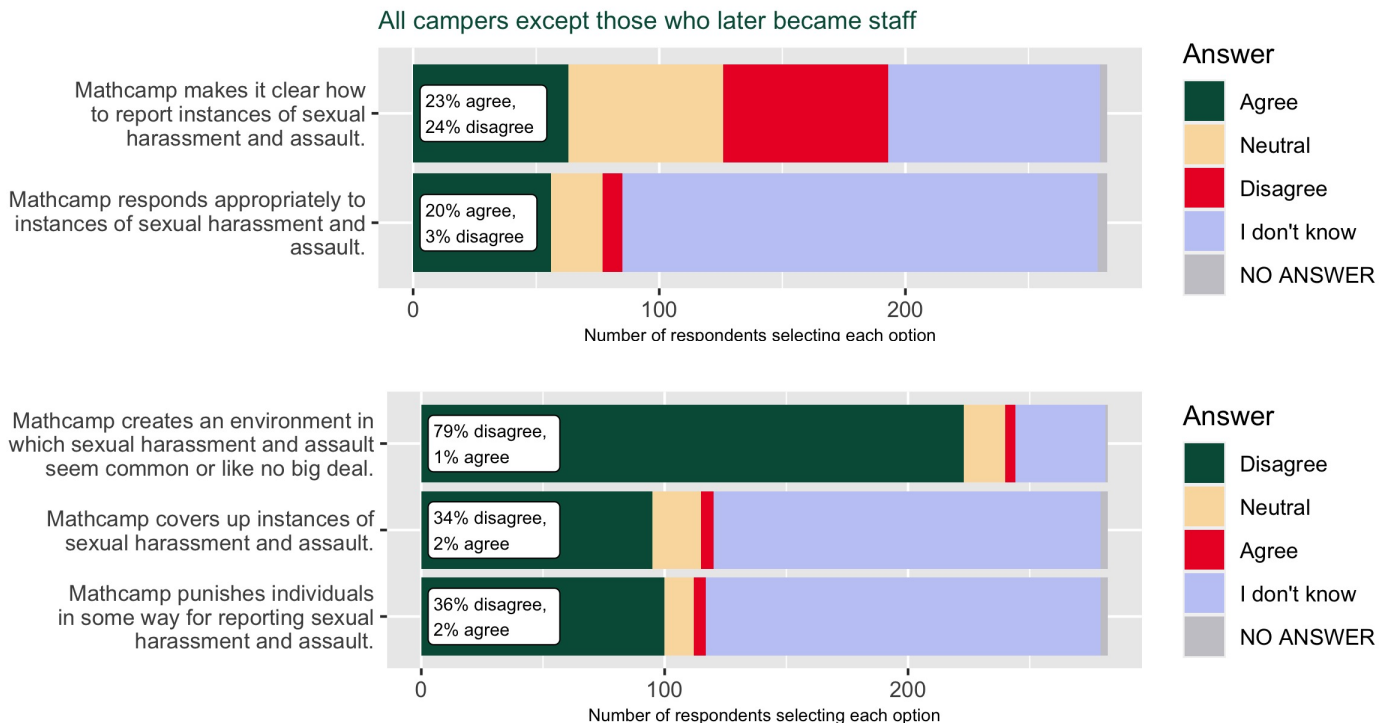


As expected, a common answer in this section was "I don't know". Several respondents included comments saying that they had no reason to think there was anything wrong, but they did not feel they could give a clear-cut answer, since they had no personal knowledge or experience with these issues. However, there was a notable difference in this respect between campers and staff: staff respondents were less likely to answer "I don't know", perhaps because they have a better knowledge of how Mathcamp operates behind the scenes:

Responses from staff:



Responses from campers:



Positive perceptions of Mathcamp’s response

Among those giving positive or neutral responses to these questions, a number of commenters praised Mathcamp’s handling of the 2021 Title IX case and/or other specific incidents to which Mathcamp has responded in the past, while others indicated a general confidence that Mathcamp would handle such cases appropriately.

Who was unhappy and why?

It is clear from all the graphs above that Mathcamp has not done enough to educate participants on how to report sexual harassment and assault. This topic is addressed in more detail in the next section (Section 2.6).

Aside from the issue of reporting, there were **12 respondents (3%)** who expressed explicit disapproval of the way Mathcamp handles issues related to sexual harassment and assault (i.e. who did not agree that Mathcamp responds appropriately to sexual harassment and assault and/or agreed with one of the last three statements above).¹¹ All these respondents reported experiencing at least one offensive behavior at Mathcamp, including all 6 of the campers who said the experience had affected them very negatively (Section 2.4).

Of the 12 respondents who expressed disapproval:

- 2 respondents (one male, one female) indicated that they did not know whether Mathcamp responds appropriately to sexual harassment and assault, but were concerned that the Mathcamp environment makes it seem like harassment and assault are no big deal. Both respondents were campers who attended Mathcamp over a decade ago and had experienced offensive conduct by other campers that had affected them very negatively.
- The remaining 10 respondents disagreed with the statement "Mathcamp responds appropriately to issues of sexual harassment and assault." (5 of them also said that Mathcamp covers up instances of sexual harassment and assault and/or punishes those who report them, and 2 said that Mathcamp creates an environment in which sexual harassment and assault seem like no big deal.) 5 of these these respondents included comments:
 - 2 of the campers from Section 1.2 ("Campers who did not feel safe at Mathcamp") referenced their own experience: the camper from 2001 - 2007 who reported being sexually harassed by a staff member and the camper who was dissatisfied with Mathcamp’s handling of her sexual harassment complaint against a fellow student.
 - 3 respondents (including the remaining camper from Section 1.2) referenced the recent Title IX complaint. One of these respondents also commented that Mathcamp needs to take campers more seriously when they say they don’t want any further contact with another camper. (This respondent was a female camper who had been affected very negatively by another student’s offensive conduct.)

The other 5 respondents who disagreed that Mathcamp responds appropriately to issues of sexual harassment and assault included no comments relevant to this topic. All of them were recent campers, one of whom later became staff.

2.6 Reporting sexual harassment and assault

In addition to the question about whether Mathcamp makes it clear how to report sexual harassment and assault, there were two other questions on the survey that are potentially relevant to this topic:

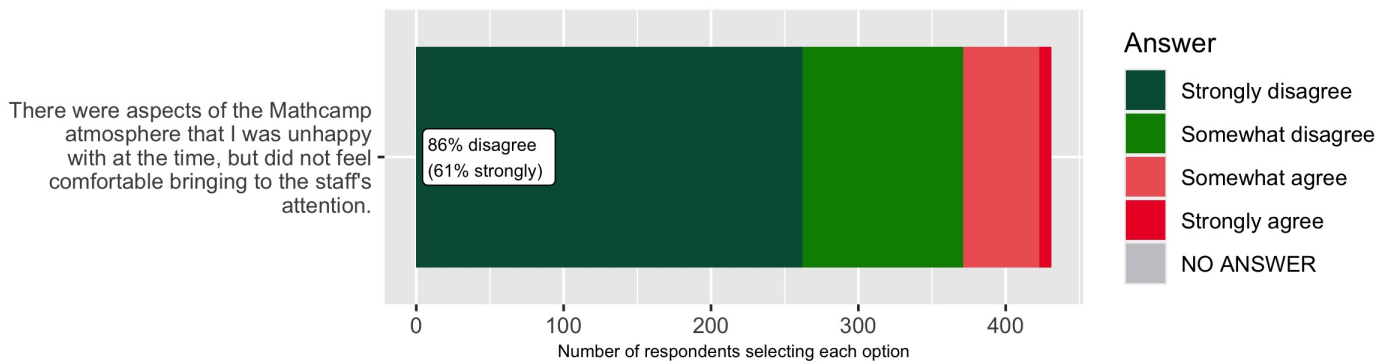
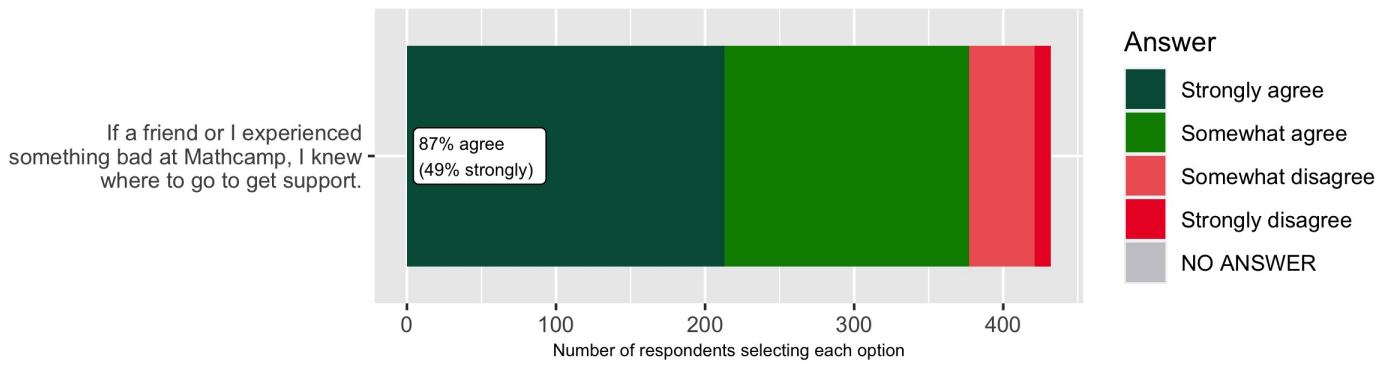
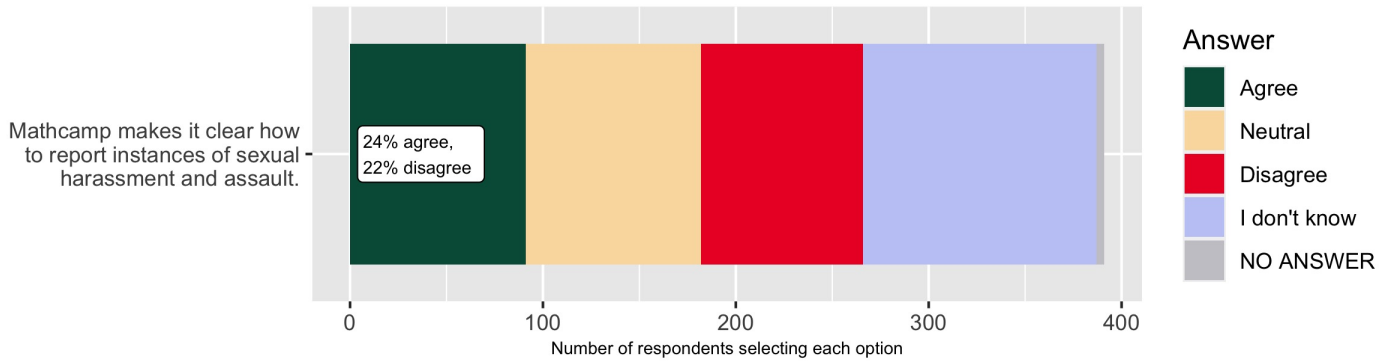
How well do the following describe your experience at Mathcamp?

- *If a friend or I experienced something bad at Mathcamp, I knew where to go to get support.*
- *There were aspects of the Mathcamp atmosphere that I was unhappy with at the time, but did not feel comfortable bringing to the staff’s attention.*

¹¹There were 5 additional respondents whose responses in this section were contradictory: they agreed that Mathcamp responds appropriately to sexual harassment and assault, yet simultaneously agreed that Mathcamp either covers up harassment and assault or punishes those who report it. Based on this contradiction and on these respondents’ uniformly positive answers to the rest of the survey, careless error appears the most likely explanation here. (See Appendix C for details).

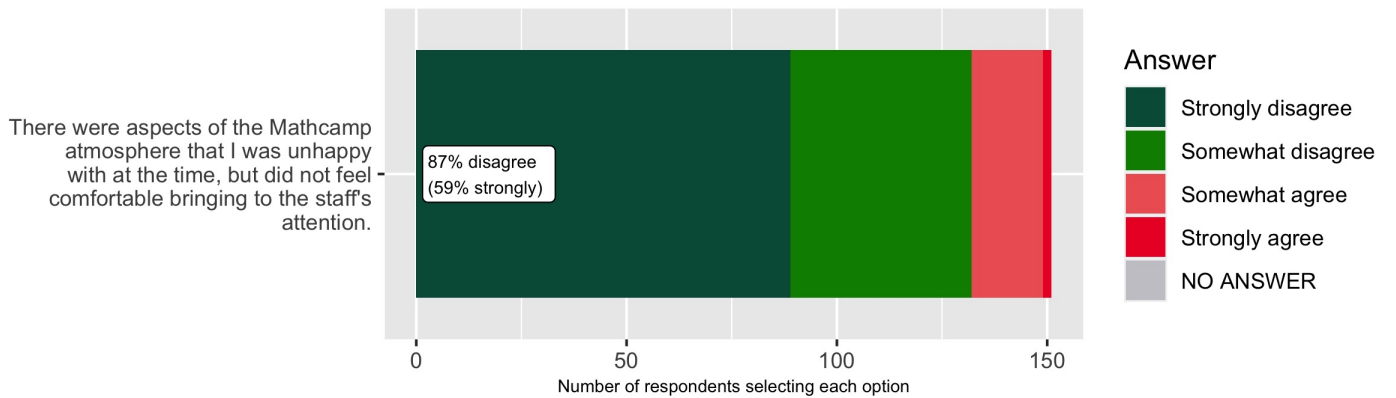
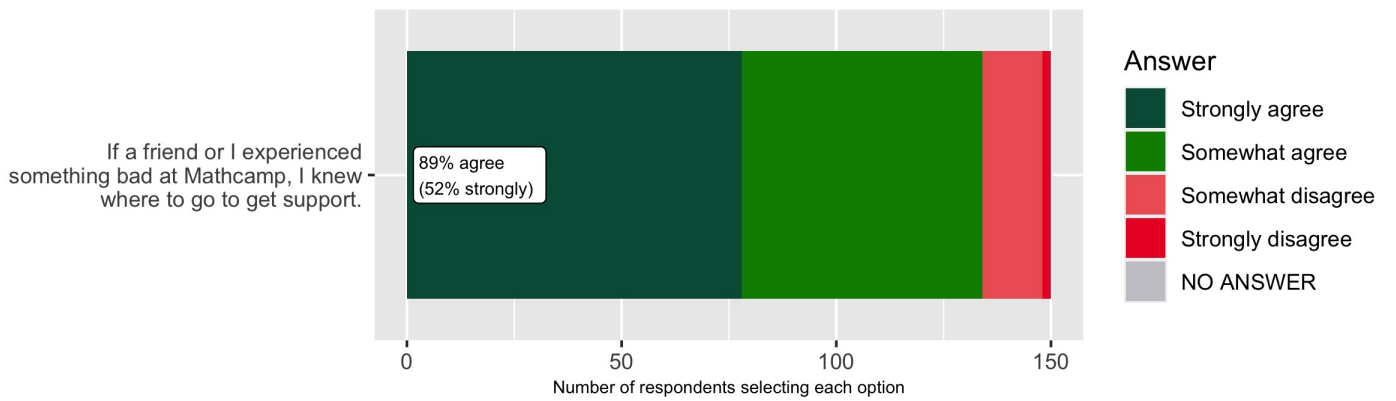
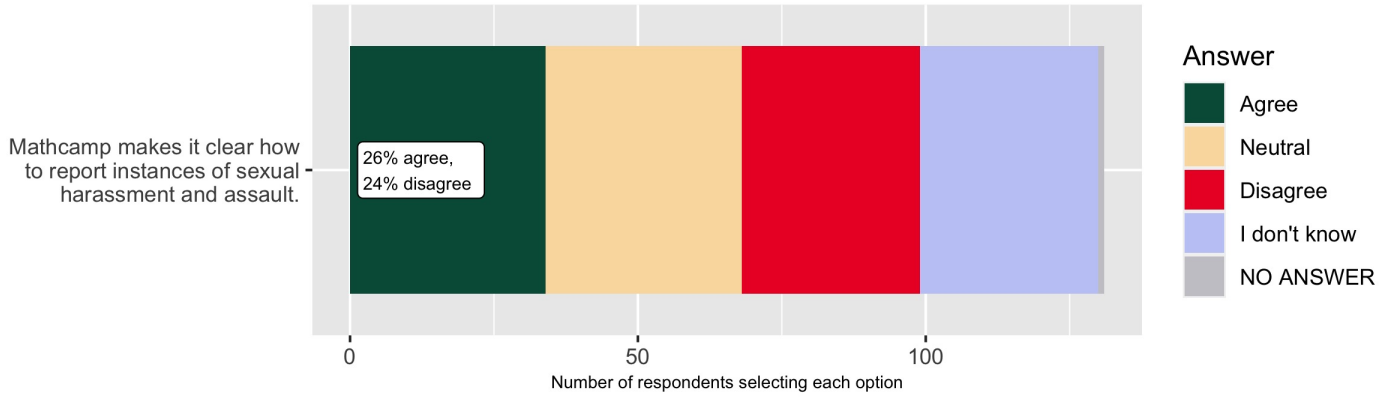
Responses (with reporting question included for comparison):

All respondents who engaged with this section of the survey



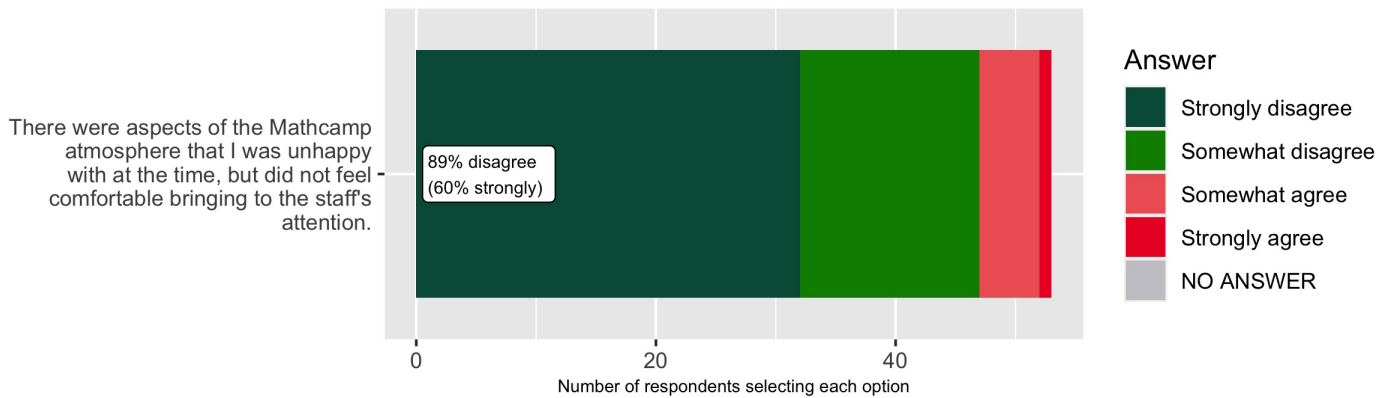
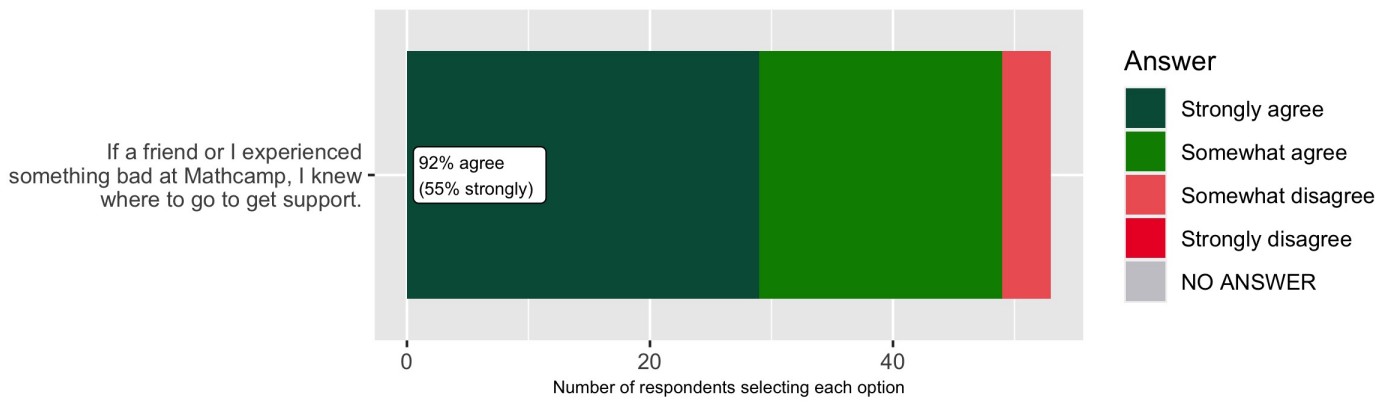
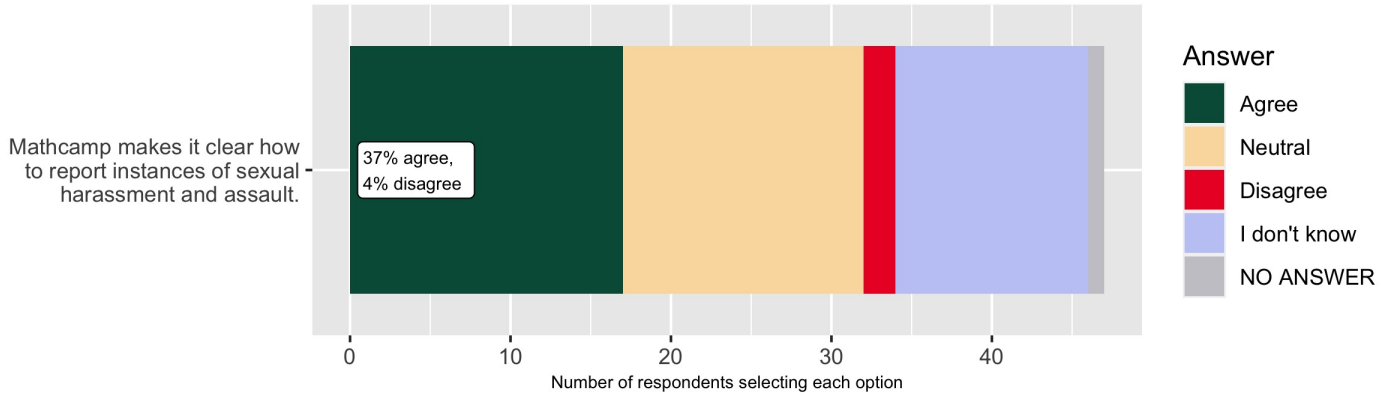
Recent campers:

Recent campers (since 2016 only)



Respondents under 18:

Respondents under 18



Past, Present, and Future Practices for Reporting Issues at Mathcamp

Mathcamp's policy has been to tell campers that they should talk to their residential advisor (or to any other staff member with whom they feel comfortable) about *any* problem or issue they might encounter at camp. The same procedure would apply for reporting sexual harassment and assault, but this has not been stated explicitly in past summers. A large percentage of respondents (22% overall, 24% of recent campers) did not think that Mathcamp made it clear how to report sexual harassment and assault (and a further large percentage was only "neutral" on this matter).

Somewhat reassuringly, more than half of those respondents above who answered "Disagree" to this question (63% out of those respondents, 71% among recent campers) said they *would* have known where to seek support if they experienced any difficulties at Mathcamp. Thus, in practice, they might indeed have understood how to report sexual harassment if they had encountered it. However, as several survey participants pointed out in their comments, there are many subtle instances of sexual harassment where the victim might not be sure if it is the kind of thing that should be brought up with staff or might be embarrassed to talk about it. It is Mathcamp's responsibility to convey to participants that we take all such issues seriously and that students (and staff!) should not hesitate to bring them up. Thus, one of our chief takeaways from this survey is that we need to address the issue of sexual harassment more explicitly in both our student and staff orientation; see Chapter 5 ("Conclusions and Next Steps") for further discussion.

We also note that 13% of all respondents (11% of recent campers) said they would not have known where to seek support if they experienced a difficulty at Mathcamp more generally. Mathcamp has always tried to be proactive and to encourage campers to talk to us about any problems that arise; indeed, numerous respondents mentioned in their comments how friendly, approachable, and helpful the Mathcamp staff always were. Nonetheless, it is clear that we need to try even harder in this domain, not just around the issue of sexual harassment but more generally; see Chapter 5 for further discussion.

2.7 Summary, discussion, and comparison to other institutions

As outlined in the introduction to this chapter, there are two approaches to measuring the prevalence of sexual harassment and assault. One is to ask participants directly whether they have been sexually harassed or assaulted. The other is to ask about a list of offensive behaviors to obtain a more direct measure.

When asked about a list of eight offensive behaviors which may fall under the broad umbrella of sexual harassment (see Section 2.1), 10 respondents (2%) reported experiencing offensive conduct by staff, of which 4 instances may be identified as sexual harassment or assault. 22% of respondents (17% of recent campers) reported offensive conduct by campers. A much smaller percentage of respondents (2%) self-identified their experience as sexual harassment or assault (either by staff or by campers).

The most common type of offensive behavior indicated by respondents were sexist, homophobic, heterosexist, or transphobic remarks. For 10% of respondents (i.e. almost half of those who had experienced some form of offensive conduct at Mathcamp), this was the only one of the eight offensive behaviors queried in the survey that they reported experiencing.

Notably, there was a substantial reduction in non-verbal offensive conduct (such as unwelcome advances and unwanted touching) reported by recent campers. The decline is partially explained by the fact that Mathcamp was virtual in 2020 and 2021. However, this on its own would not be enough to bring the percent of female respondents experiencing such conduct down from 16% to 4%: even if we reduce the denominator in the percentage calculation for recent campers by 2/3 (since roughly two thirds of camper-summerers since 2016 have been in person), the rate of reported non-verbal harassment would still be much lower than in previous years. It is possible that increasing cultural attention to issues of consent, both in society at large and within the Mathcamp community, has resulted in reduced rates of sexual harassment at Mathcamp. However, since our sample of respondents is not random (and, in particular, since the response rate is much lower among participants from earlier years than among recent campers, leading to more potential response bias), we cannot draw this conclusion with any confidence.

Given the unique nature of Mathcamp, it is not possible to directly compare the rates of sexual harassment, assault, or other offensive behaviors reported in our survey with perfectly equivalent alternate institutions. The rate of sexual harassment among high school students in general tends to range quite widely across studies. For example, two studies that asked high school students about their experiences of offensive conduct found 12-month prevalence rates of 30% to 66% for female students and 21% to 39% for male students.¹² (The latter study also found that rates of sexual harassment tend to be higher among sexual and gender minorities. However, the number of genderqueer individuals in our sample is too small to allow for any meaningful comparison.)

The two studies used a list of offensive behaviors adapted from the same standard instrument that we used in designing our survey. Notably, their list was much shorter than ours and did not include anything analogous to the item "sexist, heterosexist, homophobic, or transphobic remarks", which accounted for over 40% of all offensive conduct reported by our survey respondents. Thus for a maximally direct comparison of our survey results with these two studies, we would need to look at the rates at which respondents who were campers at Mathcamp experienced offensive conduct *other than* sexist, homophobic, or transphobic remarks.

These rates were substantially lower in our survey sample than in either of the studies: 24% for female campers and 8% for male campers (13% and 5% for recent female and male campers respectively). However, this comparison is still far from perfect. On the one hand, Mathcamp is only 5 weeks long, so we would expect the prevalence rates of offensive conduct at Mathcamp to be lower than in studies with a 12 month look-back period. On the other hand, Mathcamp is a round-the-clock residential environment, where participants interact with peers much more than they typically do during high school. These differences, together with the different lists of offensive behaviors used in the two studies and in our survey, make it impossible to draw an exact comparison.

As discussed in Sections 2.5 and 2.6, the main concern in terms of institutional response identified through the survey was in terms of reporting: 22% of respondents (24% of recent campers) disagreed that Mathcamp makes it clear how to report sexual assault or harassment, and 13% (11% of recent campers) indicated that they would not have known where to seek support should they have experienced difficulties at Mathcamp more generally. Aside from the issue of reporting, 12 respondents (3%) disapproved of Mathcamp's handling of issues related to sexual harassment and assault.

The implications of these findings and important next steps are discussed in Chapter 5.

¹²Clear, E. R., Coker, A. L., Cook-Craig, P. G., Bush, H. M., Garcia, L. S., Williams, C. M., Lewis, A. M., & Fisher, B. S. (2014). [Sexual harassment victimization and perpetration among high school students](#). *Violence Against Women*, 20(10), 1203-1219.

Mennicke, A. M., Bush, H., Brancato, C., & Coker, A. (2020). [Sexual minority high school boys' and girls' risk of sexual violence, harassment, stalking, or bullying](#). *Violence Against Women*, 27(9), 1361-1378.

Chapter 3

Camper-staff interactions at Mathcamp

3.1 Positive and negative interactions

All survey participants who had attended Mathcamp as campers were asked:

How well do the following describe your experience as a camper?

- *Light-hearted, informal interactions with Mathcamp staff (e.g. playing games, going on field trips, silly pranks, etc.) were a significant positive part of my Mathcamp experience.*
- *Close personal interactions (e.g. deeper conversations) with at least one Mathcamp staff member were a significant positive part of my Mathcamp experience.*
- *Interactions with at least one Mathcamp staff member had a negative impact on my Mathcamp experience at the time.*
- *In hindsight, interactions with at least one Mathcamp staff member had a negative impact on me in a way I was not aware of at the time.*

All survey participants who had worked at Mathcamp were asked:

How well do the following describe your experience as staff at Mathcamp?

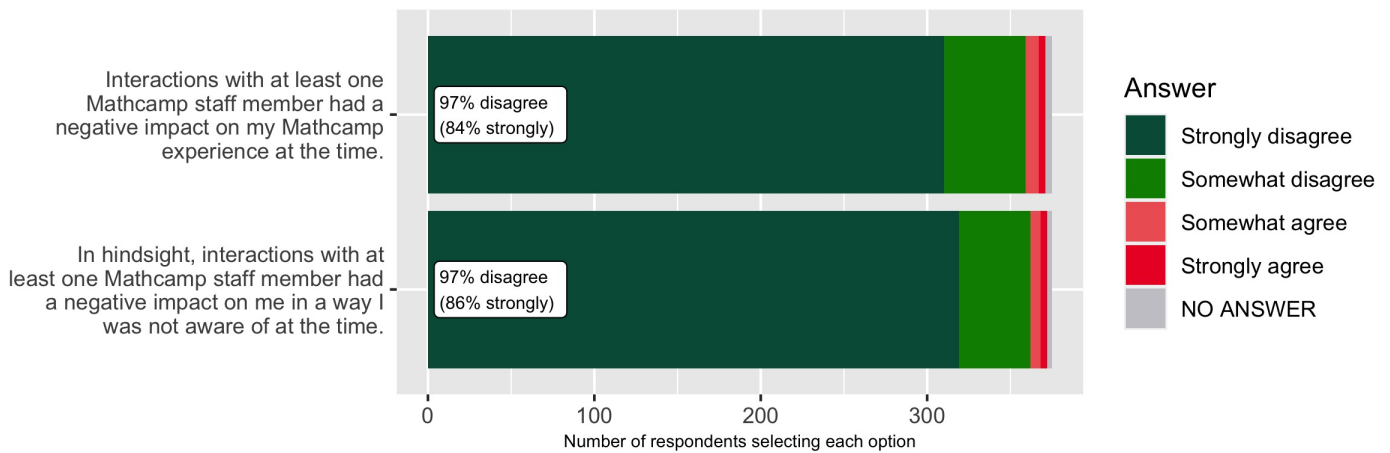
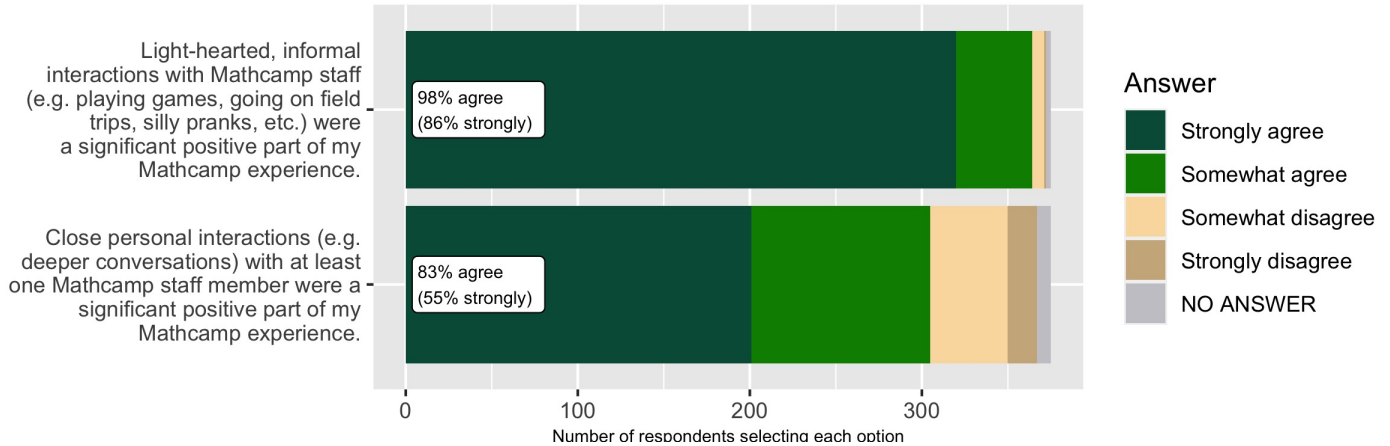
- *Light-hearted, informal interactions (e.g. playing games, going on field trips, silly pranks, etc.) were a significant positive part of the experience we created for Mathcamp students.*
- *Close personal interactions (e.g. deeper conversations) with at least one Mathcamp student were a significant positive part of the work that I have done at Mathcamp.*

Survey participants who had been both campers and staff were asked both sets of questions.¹

¹Participants who were campers at Mathcamp were also asked about the specific kinds of contact they had maintained with Mathcamp staff outside of camp while they were still in high school: e.g. professional interactions, occasional updates, meaningful personal conversations, etc. Staff participants were asked analogous questions about their contact with campers outside of camp. Responses to these questions are reported in Appendix A.1.

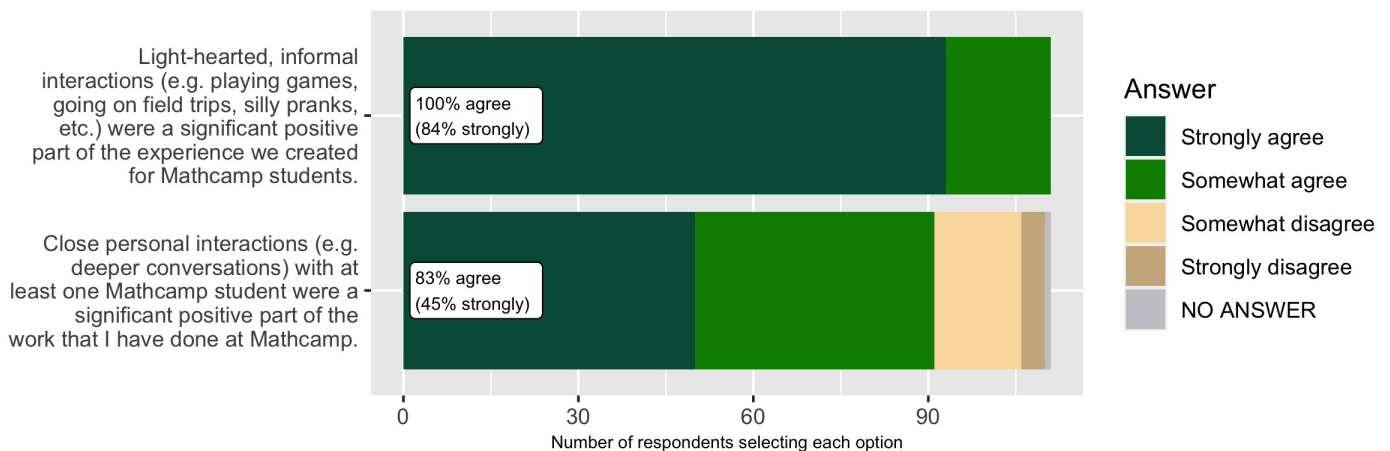
Responses from campers:²

All campers (including those who later became staff)



Responses from staff:

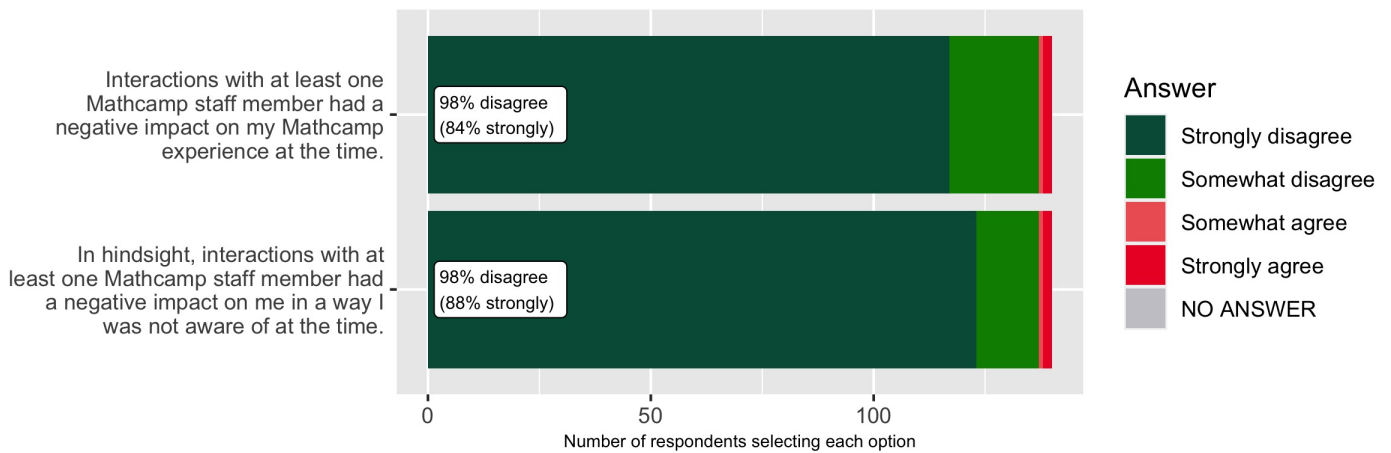
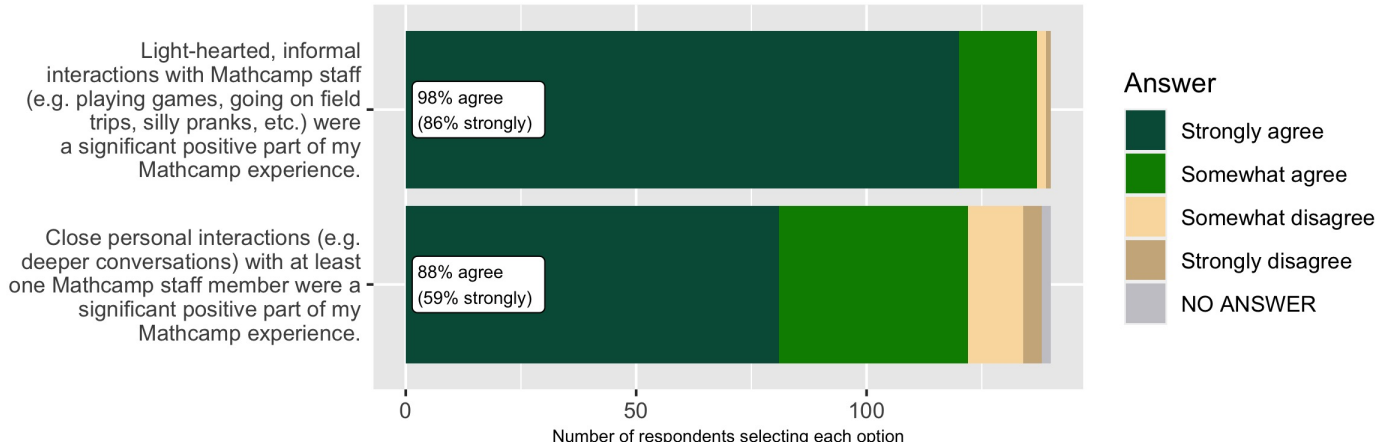
All staff (including those who were previously campers)



²For the questions about positive interactions, we use neutral colors for "Somewhat disagree" and "Strongly disagree", because disagreement in this case does not necessarily indicate a negative experience or judgment. A number of survey respondents included comments saying that they were quite happy at Mathcamp, both mathematically and socially, without having significant non-mathematical interactions with any staff members.

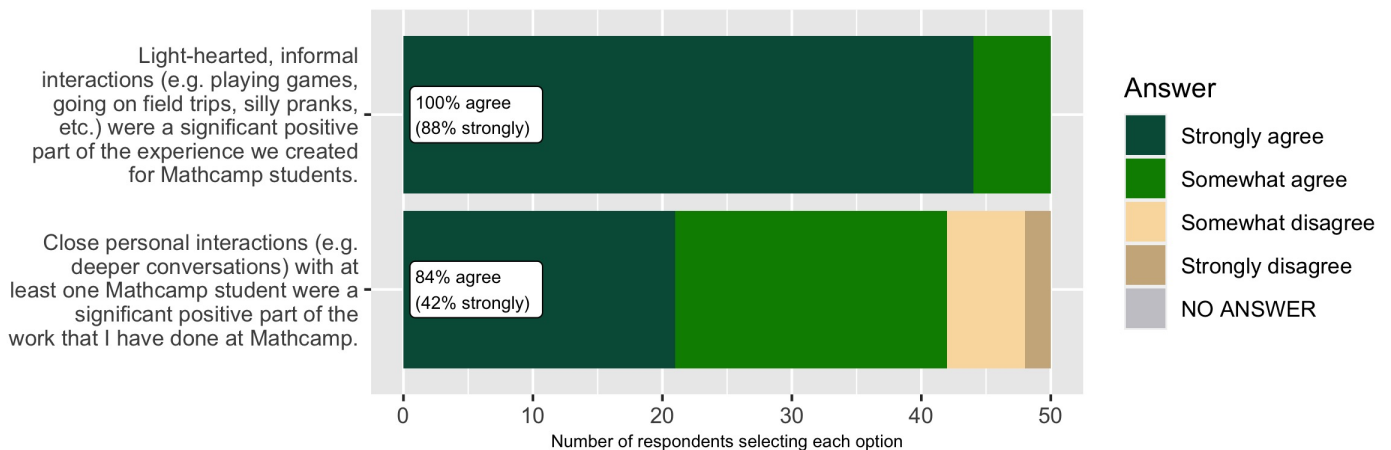
Recent campers:

Recent campers (since 2016 only)



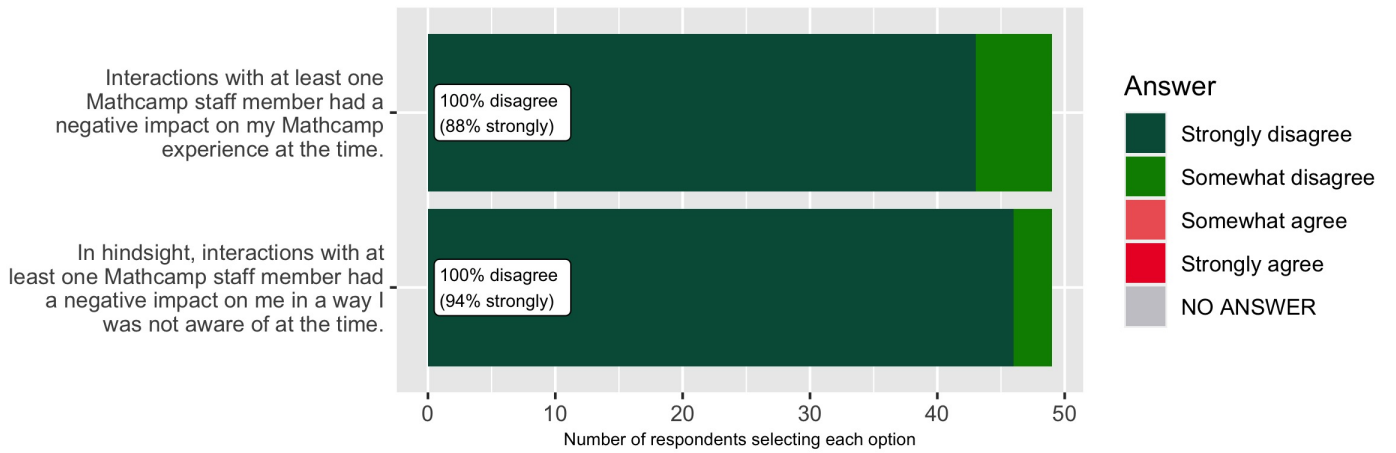
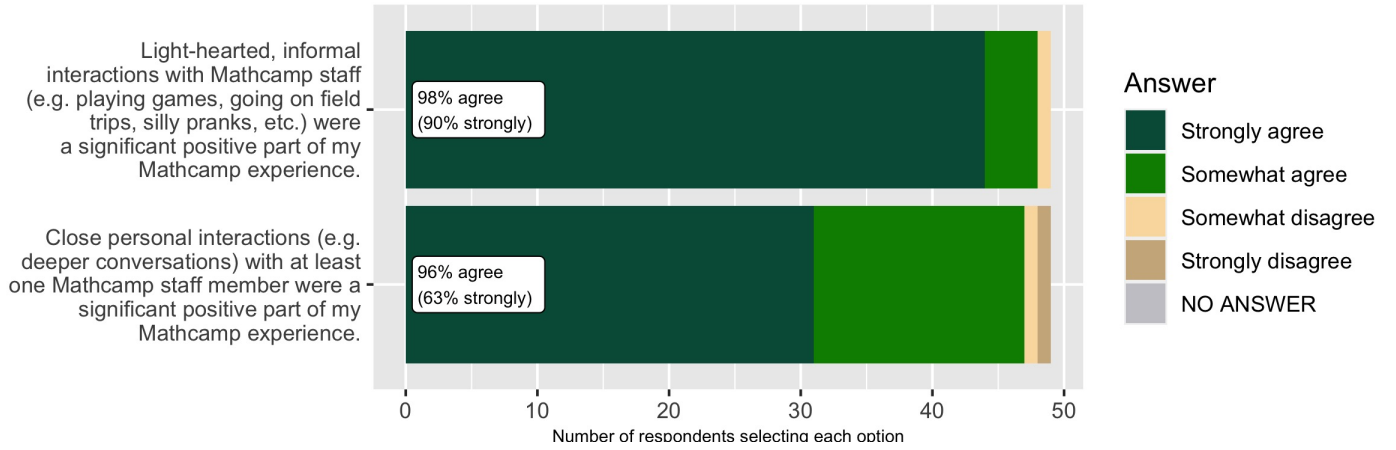
Recent staff:

Staff since 2016 (excluding those who had been at camp since before 2007)



Respondents under 18:

Respondents under 18



Positive responses

Among respondents who answered positively to all of these questions, there were numerous comments praising interactions between campers and staff at Mathcamp. Major themes in these comments included:

- The positive impact of close personal relationships that developed between campers and staff;
- The non-hierarchical nature of many interactions between campers and staff;
- Specific examples of significant interactions with or advice received from staff;
- An appreciation for Mathcamp staff as role models;
- Benefits of campers and staff keeping in touch outside of Mathcamp.

Others indicated that while on the whole they did not interact much with staff, what interactions they did have were generally positive.

Reservations mentioned by more than one person, among those respondents nevertheless answering positively to these questions, included a sense that staff sometimes had favorite campers, and that cults of personality emerged around some staff members. There was also a recognition, among several respondents who described a generally positive view of close relationships between campers and staff, that such relationships are not without risk.

Who was unhappy and why?

16 out of 372 campers (4%) reported an interaction with a staff member that had impacted them negatively, either at the time or in hindsight. Among recent campers, **3 out of 140 respondents (2%)** reported an interaction with staff that had impacted them negatively. **None of the 49 respondents under 18** who engaged with this section of the survey reported such an interaction.

Campers who reported a staff interaction that had impacted them negatively included the three campers from Section 1.2 ("Campers who did not feel safe at Mathcamp"). A few other respondents (none of them recent campers) mentioned specific incidents in the comments:

- One camper reported that a staff member inadvertently touched her during a group activity in a way that made her feel uncomfortable. (She also reported this as an offensive staff behavior – see Section 2.2.) Although it was an accident, the respondent believes the staff member should not have been involved in this activity in the first place.
- One camper had an interaction with a visiting speaker that had made her uncomfortable; she reported it to Mathcamp staff at the time and believes the situation was handled appropriately.
- One camper was disturbed by a visiting speaker's political beliefs.
- One camper's interactions with some staff members made him feel unwelcome at the Mathcamp 2017 reunion (also referenced in Section 1.3).

3.2 Physical contact between staff and campers

All survey participants were asked:

At Mathcamp, platonic physical contact between staff and campers (e.g. lifting someone up as part of a game, contradancing, offering hugs for emotional support) has historically been allowed (in addition to circumstances such as safety or medical need). Staff are permitted to use their judgment to decide in which situations this is appropriate.

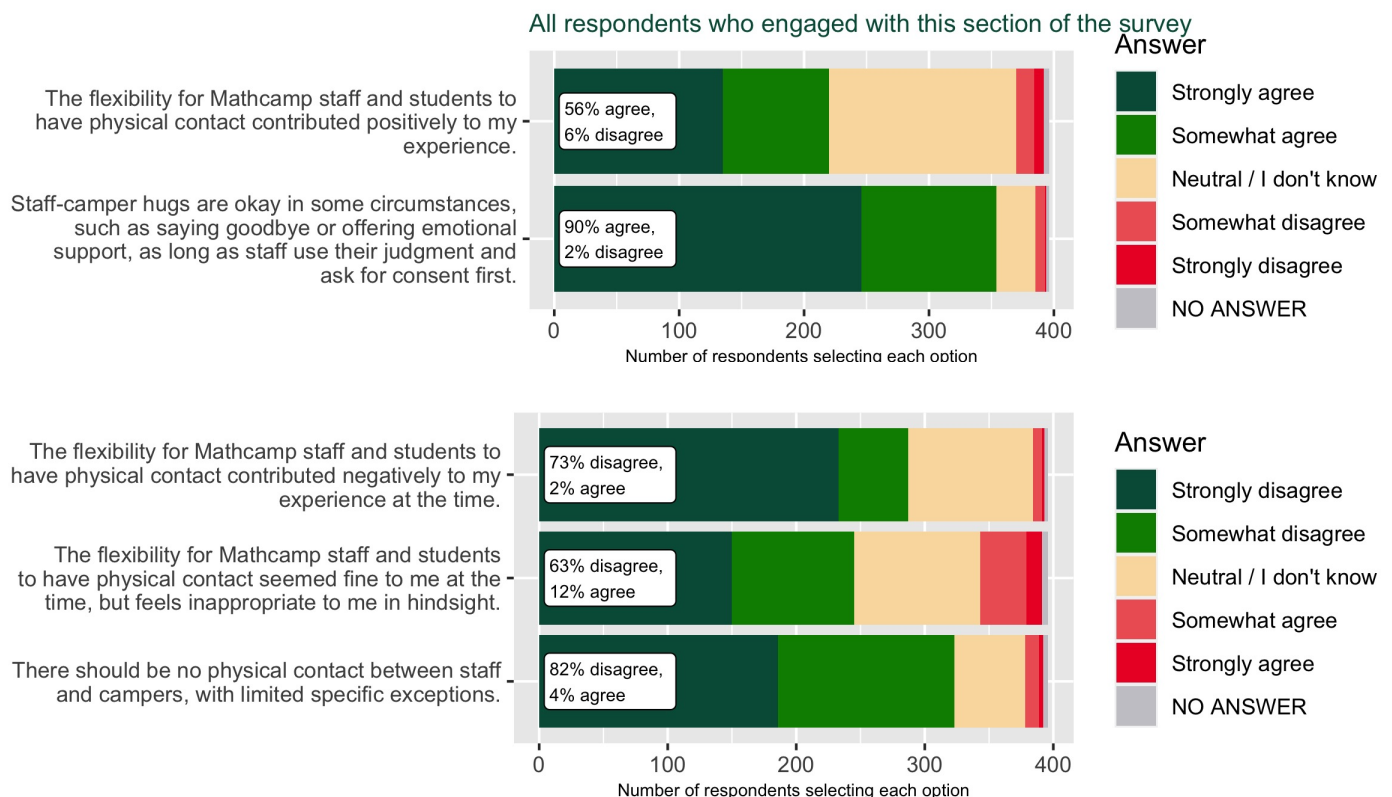
On the one hand, this flexibility allows for a wider range of fun activities and creates a warm environment; on the other hand, it may create situations in which individuals feel uncomfortable. We are interested in how alumni and staff feel about their experiences around this issue.

How well do the following statements describe your views on camper/staff physical contact at Mathcamp?

- *The flexibility for Mathcamp staff and students to have physical contact contributed positively to my experience.*
- *Staff-camper hugs are okay in some circumstances, such as saying goodbye or offering emotional support, as long as staff use their judgment and ask for consent first.*
- *The flexibility for Mathcamp staff and students to have physical contact contributed negatively to my experience at the time.*
- *The flexibility for Mathcamp staff and students to have physical contact seemed fine to me at the time, but feels inappropriate to me in hindsight.*
- *There should be no physical contact between staff and campers, with limited specific exceptions.*

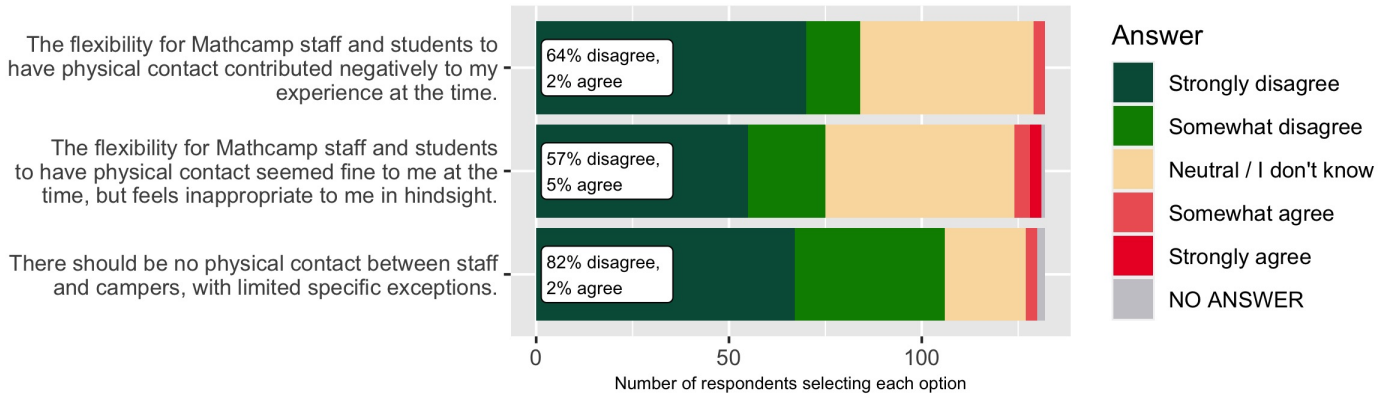
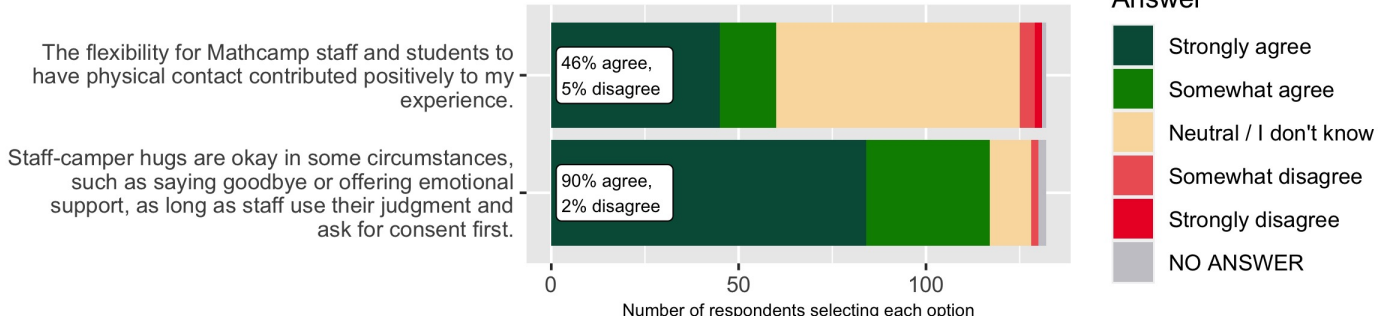
The response options in this section of the survey included "Neutral/I don't know", since we wanted to give participants the option to indicate that they had no opinion on what the policy should be. It appears from the data that many participants from 2020 and 2021 (when Mathcamp was remote) also used this response to indicate that questions about participants' experience with staff-camper physical contact at Mathcamp did not apply to them.

Responses from all survey participants:



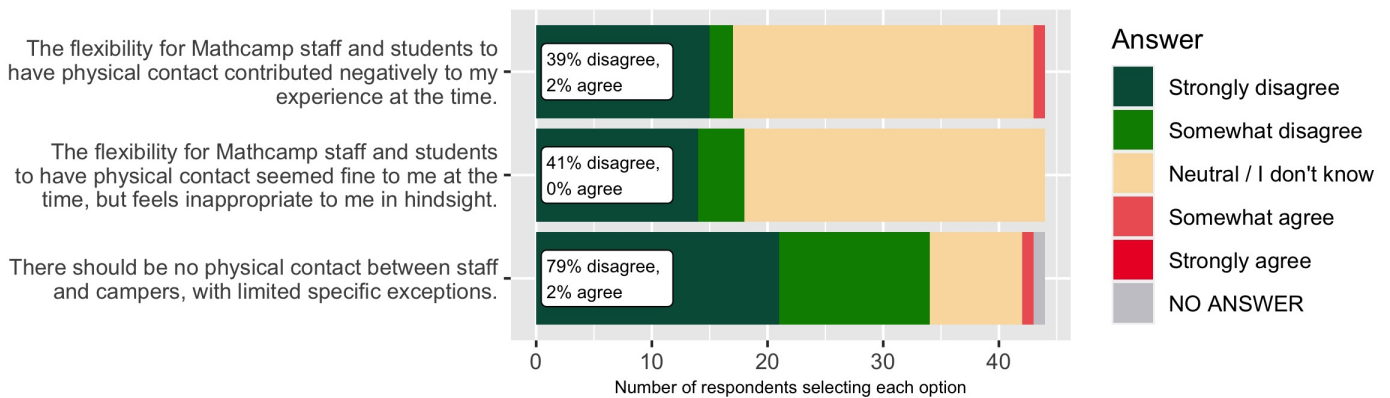
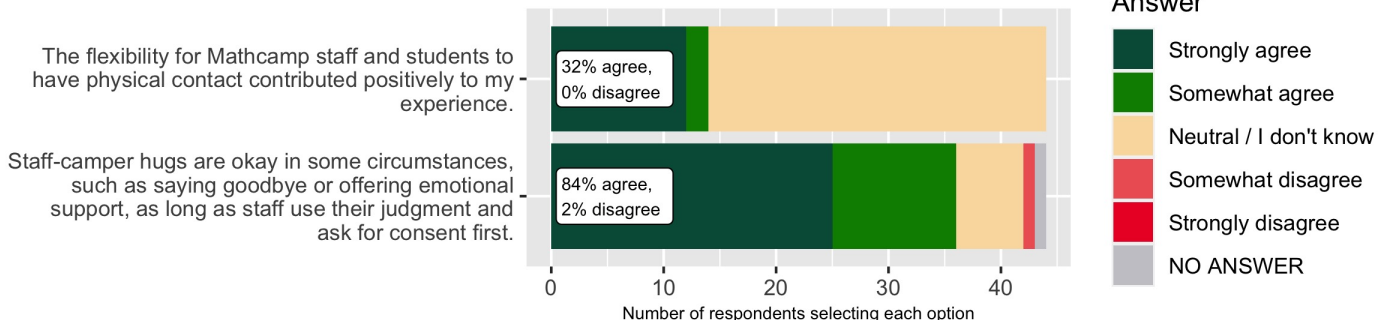
Recent campers:

Recent campers (since 2016 only)



Respondents under 18:

Respondents under 18



Participant comments on camper-staff physical contact

Several themes emerged in comments from survey participants:

- Campers enjoyed camp activities such as sports and dancing, as well as more random activities such as carrying a staff member across a field. Dancing in particular was cited by numerous respondents as a favorite camp activity.
- Many comments from both campers and staff that they are disinclined towards physical contact in general and so did not participate in physical contact at Mathcamp, either at all or specifically with staff, but that this was never a problem.
- Many comments about the positive effects of Mathcamp's culture surrounding physical contact in general, and a handful of negative comments.
- Many comments in favor of allowing hugs, especially when saying goodbye or to comfort someone in distress; but many of them emphasizing the need for both explicit training on boundaries, consent, gender and power dynamics, etc. and the need for staff to be careful and/or intentional and use their judgment in every case.
- A few comments proposing specific restrictions (for instance: hugs can only be initiated by campers or are only appropriate during departures) and a few comments advocating that hugs between campers and staff be disallowed altogether, for reasons of power dynamics and/or potential for liability if misconstrued.

Who was unhappy and why?

"The flexibility for Mathcamp staff and students to have physical contact contributed negatively to my experience at the time."

9 out of 396 respondents (2%) agreed with this statement, including **3 recent campers**.

Among these respondents were two of the campers from Section 1.2 and two recent campers from Section 2.2 who reported a staff member unintentionally touching them in a way that had made them uncomfortable. One other respondent (a male camper from 2008 - 15) included a comment relevant to this question: he described finding several aspects of Mathcamp's culture alienating, including some activities involving staff-camper physical contact, although he himself was never personally involved.

"The flexibility for Mathcamp staff and students to have physical contact seemed fine to me at the time, but feels inappropriate to me in hindsight."

48 out of 396 respondents (12%) agreed with this statement. These included all 3 campers from Section 1.2 and one camper from Section 2.2 who reported a staff member unintentionally touching her in a way that had made her uncomfortable. A disproportionate number of respondents who agreed with this statement (21 out of 48) had themselves been staff at Mathcamp.

Among recent campers, **7 out of 132³ respondents (5%)** agreed with the statement. Two of them included comments relevant to this issue:

- One of the campers from Section 1.2 reported that as part of a game, a male staff member had lain across the laps of several campers; in retrospect, the respondent believes that the staff member was taking advantage of the campers.
- A female camper who attended Mathcamp remotely described her own interactions with Mathcamp staff as uniformly positive; however, she was concerned about issues of power dynamics that might arise around staff-camper physical contact in a non-virtual program.

Respondents from earlier years at Mathcamp included a number of specific comments on staff-camper physical contact that they felt in hindsight had been inappropriate:

³The number of recent campers who engaged with this section of the survey was somewhat lower than for other sections, probably because many of them had only experienced Mathcamp online.

- Several respondents singled out the practice of staff and campers sitting very close together/"cuddling" as particularly problematic.
- A few respondents commented that a staff member touching a camper's nose to activate their "nose function"⁴ may be inappropriate or boundary-crossing in some circumstances.
- Other activities that respondents mentioned as inappropriate for staff and campers to engage in together were "meatloaf" (a game where many people pile on top of each other) and "petting zoo" (where participants pet each other's hair).

Several respondents (especially among staff) did not bring up any specific issues, but emphasized that, in order to avoid potential problems in this area, it was essential for Mathcamp not just to rely on staff judgment, but to provide training and guidelines around issues such as consent, power differentials, and gender dynamics.

3.3 Boundaries

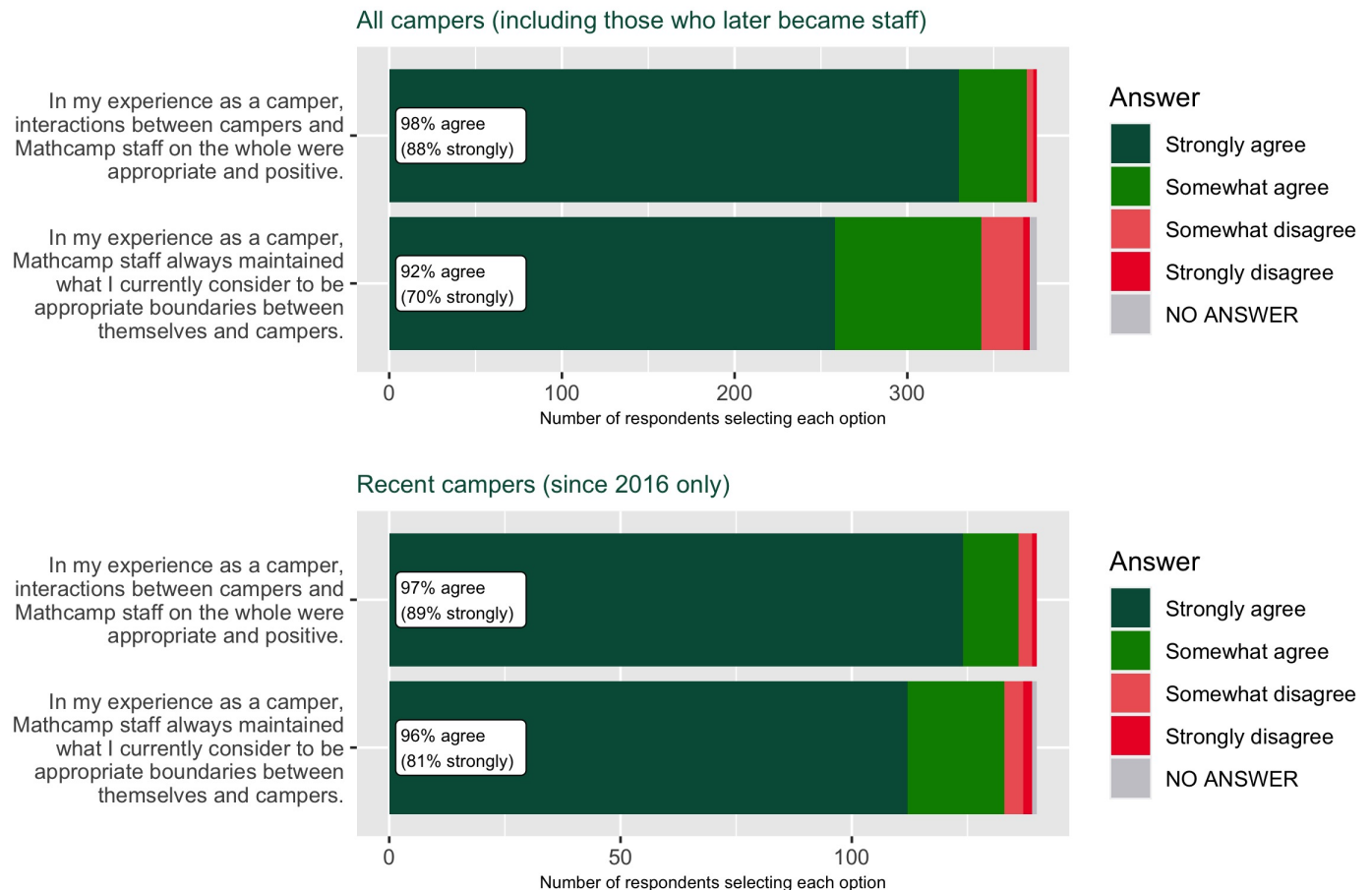
All survey participants who attended Mathcamp as campers were asked:

How well do the following describe your experience as a camper?

- *In my experience as a camper, interactions between campers and Mathcamp staff on the whole were appropriate and positive.*
- *In my experience as a camper, Mathcamp staff always maintained what I currently consider to be appropriate boundaries between themselves and campers.*

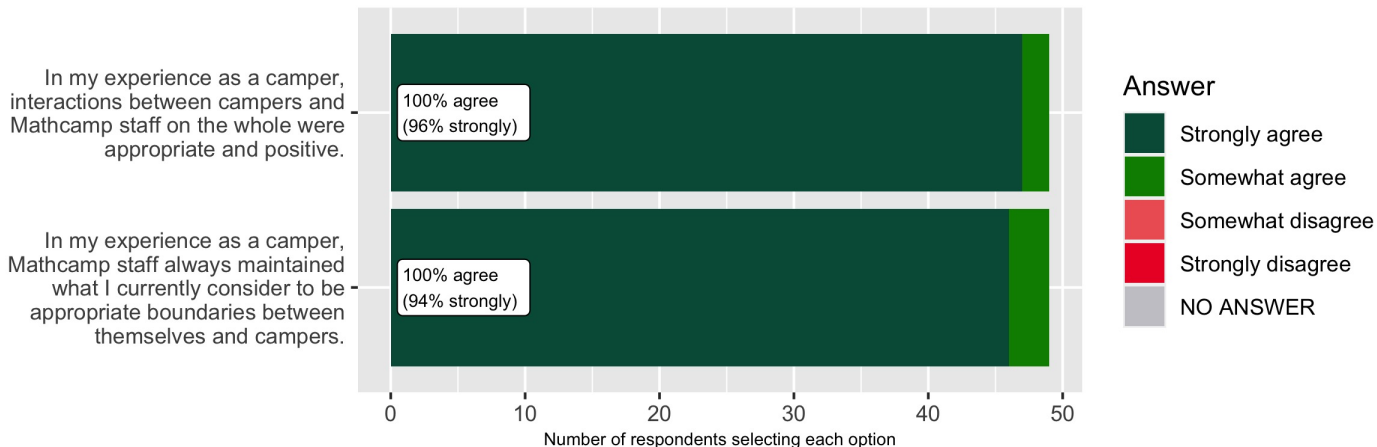
Survey participants who had worked at Mathcamp were asked the same questions about their experience as staff.

Responses from campers:



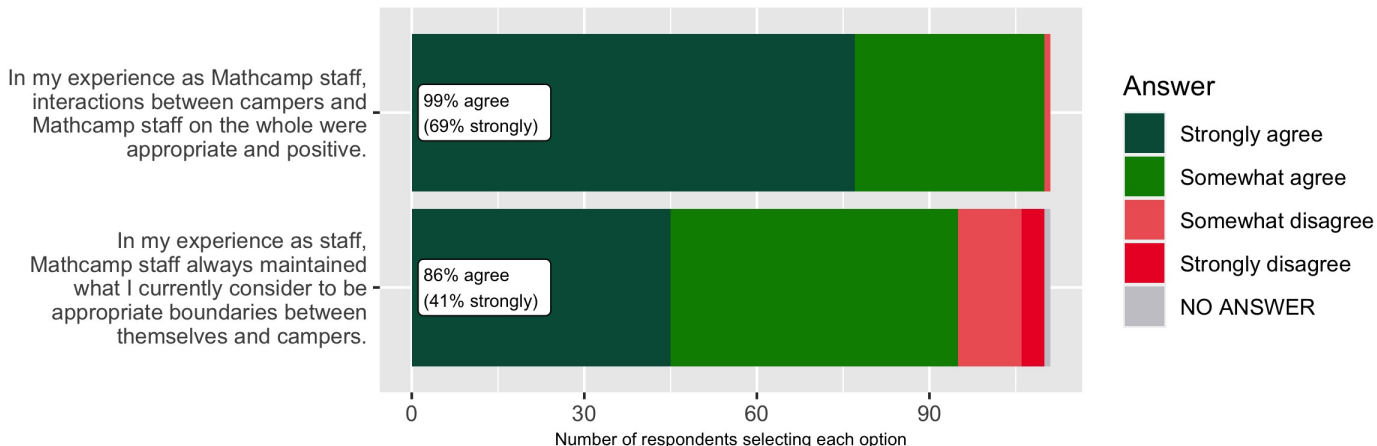
⁴On nose functions more generally, see Section 4.1 ("Mathcamp traditions").

Respondents under 18

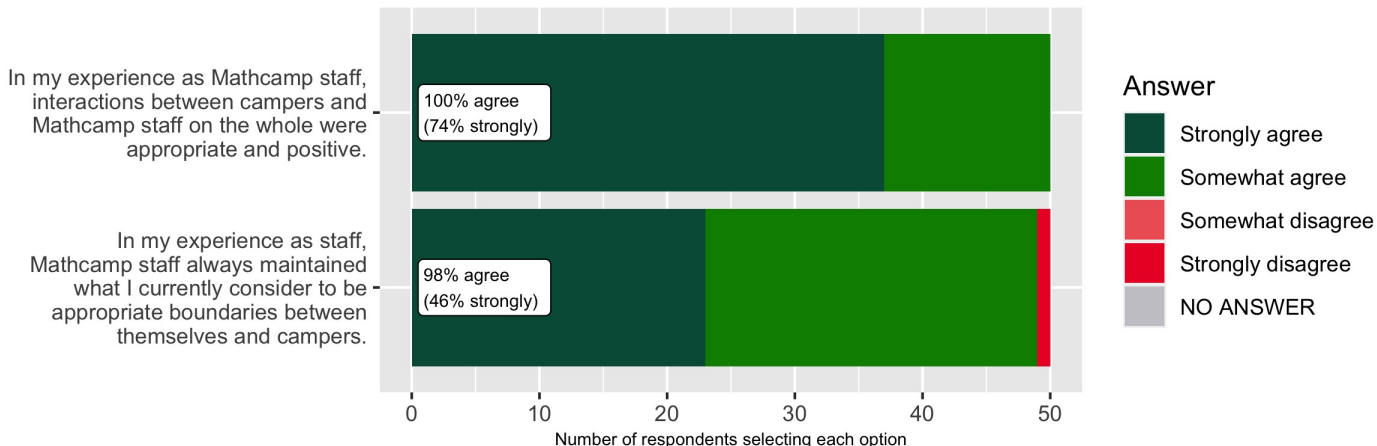


Responses from staff:

All staff (including those who were previously campers)



Staff since 2016 (excluding those who had been at camp since before 2007)



Who was unhappy and why?

"Interactions between campers and Mathcamp staff on the whole were appropriate and positive."

7 out of 411 respondents (2%) disagreed with this statement.⁵ All but one of these respondents also disagreed with the statement "Mathcamp staff always maintained what I currently consider to be appropriate boundaries between themselves and campers" (see below). The sole exception was one recent female camper, who did not leave any comments.

"Mathcamp staff always maintained what I currently consider to be appropriate boundaries between themselves and campers."

39 out of 407 respondents (10%) disagreed with this statement. (A disproportionate number of these respondents – more than half of the total – had themselves been staff at Mathcamp.) Among recent campers, **6 out of 139 respondents (4%)** disagreed with the statement. No respondents under 18 disagreed.

Respondents who disagreed included all 3 campers from Section 1.2 ("Campers who did not feel safe at Mathcamp"). Two of them reported being sexually harassed and assaulted by a Mathcamp staff member. The third one states that during her time at Mathcamp (2016 - 2021), it was common for staff to have sexual relationships with campers; she does not elaborate or give examples, and no other survey respondent expressed this sentiment.

Apart from the two recent campers from Section 1.2, no other recent campers who disagreed with the statement included comments relevant to this issue. Comments from other respondents who disagreed referenced both specific incidents and more general concerns:

- In addition to the 3 campers from Section 1.2, there were 4 other respondents who alluded to incidents of inappropriate sexual or romantic contact between a staff member and a camper:
 - As mentioned in Section 2.2, two respondents who were at Mathcamp in 2008 - 2015 (a female camper and a male staff member) described being involved in consensual non-sexual interactions that had a romantic component. (These two descriptions may or may not be referring to the same incident.)
 - One respondent reported hearing of a male staff member who was sexually interested in a camper and behaved inappropriately. (This respondent was at Mathcamp in 2001 - 2007, so it is possible that she is referring to the incident of sexual harassment and assault reported by one of the campers from Section 1.2.)
 - One respondent reported hearing of a camper-staff romantic relationship when they were a camper; based on the dates when this respondent was at Mathcamp, this was in the 1990's or early 2000's.
- Three staff respondents alluded to an incident in which a staff member failed to maintain appropriate decorum in the presence of campers. (One of these respondents was the staff member in question himself.)
- Several respondents mentioned activities from early years at Mathcamp that involved a lot of physical contact, in which staff sometimes participated. (See Section 3.2 for more discussion of physical contact between campers and staff.)
- Some staff respondents brought up the issue of young staff members having difficulty making the transition from camper to staff and not maintaining good boundaries with campers in their previous friend groups.
- Some staff were concerned about balancing the benefits of close personal connections between campers and staff with the need to draw appropriate emotional boundaries in these interactions.

These questions generated notable self-reflection from staff, including from those who responded positively, acknowledging that maintaining appropriate boundaries with campers is a challenge that staff regularly face and on which Mathcamp can provide increased support. For example, several JCs expressed uncertainty about whether they had optimally handled friendships with campers continued from previous summers when they themselves had been campers. See Chapter 5 ("Conclusions and next steps") for further discussion.

⁵Some respondents were asked to comment on the statement twice – once based on their experience as campers and once as staff. We include them here if they disagreed at least once.

3.4 Summary and discussion

This chapter explored interactions between students and staff at Mathcamp, both in general terms (whether the interactions were beneficial and maintained appropriate boundaries) and with specific attention to platonic physical contact (such as in the context of sports, contradancing, or offering hugs for emotional support).

When asked about the overall culture of interaction between Mathcamp staff and campers, survey respondents overwhelmingly reported that it contributed positively to their experiences at camp, both as campers and as staff. Particularly notable is that 100% of respondents under 18 reported no interactions with staff that negatively affected their experience, either at the time or in hindsight. Similarly 100% of respondents under 18 reported that their interactions with staff were appropriate and positive, and that staff always maintained appropriate boundaries. Among all respondents across the decades, 16 campers (4%) reported negative interactions with staff and 10% of respondents (4% of recent campers) disagreed that Mathcamp staff always maintained appropriate boundaries in their interactions with campers. Many of these respondents' experiences have already been described in the previous chapters (as summarized in Sections 1.4 and 2.7). Over half of the respondents concerned about boundaries had themselves been staff at Mathcamp. Their comments offer thoughtful reflections on the challenges of drawing lines optimally in the role of a peer counselor.

In earlier years of Mathcamp, the culture surrounding physical interaction among participants (both students and staff) was more permissive than is typical in similar contexts (such as in high schools). For example, a popular Mathcamp tradition in the mid-'00s (beginning in 2004) was "nose functions," an informal game, played by both campers and staff, in which pressing the tip of someone's nose was an invitation to activate that individual's 'programmed' response. This tradition invited a natural opportunity for platonic physical contact.⁶ Some survey respondents recall Mathcamp's general openness around physical contact very positively, as a way of creating a warm, welcoming, and informal environment; some experienced it negatively at the time; and some report having a positive or neutral experience at the time but being uncomfortable with it in retrospect. Specifically with respect to physical contact between campers and staff, while only 2% of respondents identified a negative impact during their time at camp, 12% indicated that the flexibility of physical contact between students and staff at Mathcamp seemed inappropriate to them in hindsight. Among the respondents who were concerned about staff boundaries, a large fraction of comments were also on this topic.

As pervading societal norms have changed, Mathcamp's culture around physical contact has also shifted over the last decade. It has long been considered improper to touch someone's nose without asking first, and games like "meatloaf", in which many participants pile on top of each other, have not been played in many years. In recent summers, starting from opening assembly on the first day of camp (and throughout the program), the staff have emphasized the importance of consent and personal boundaries when setting the tone of interactions at Mathcamp. Thus, many of the comments describing experiences from earlier years at Mathcamp are not representative of the current climate at camp, but rather serve to illustrate the story of an evolving program in a changing world.

In response to questions on what does constitute appropriate staff-camper physical contact, survey respondents offered many thoughtful comments and suggestions, which serve as valuable input for future camp policy (see Chapter 5 for discussion). The overwhelming majority of respondents articulated the position that the flexibility of physical contact between Mathcamp staff and campers, including offering hugs for emotional support, is valuable and is not something the community wants to remove completely. Only 4% of respondents (2% of recent campers) agreed with the statement "There should be no physical contact between staff and campers, with limited specific exceptions", and only 2% (of all respondents and of recent campers) disagreed that "Staff-camper hugs are OK in some circumstances". However, many respondents emphasized in their comments that good staff training and guidelines are essential to making this flexible framework successful while maintaining a safe and healthy community.

⁶For more on nose functions, see Section 4.

Chapter 4

Other topics

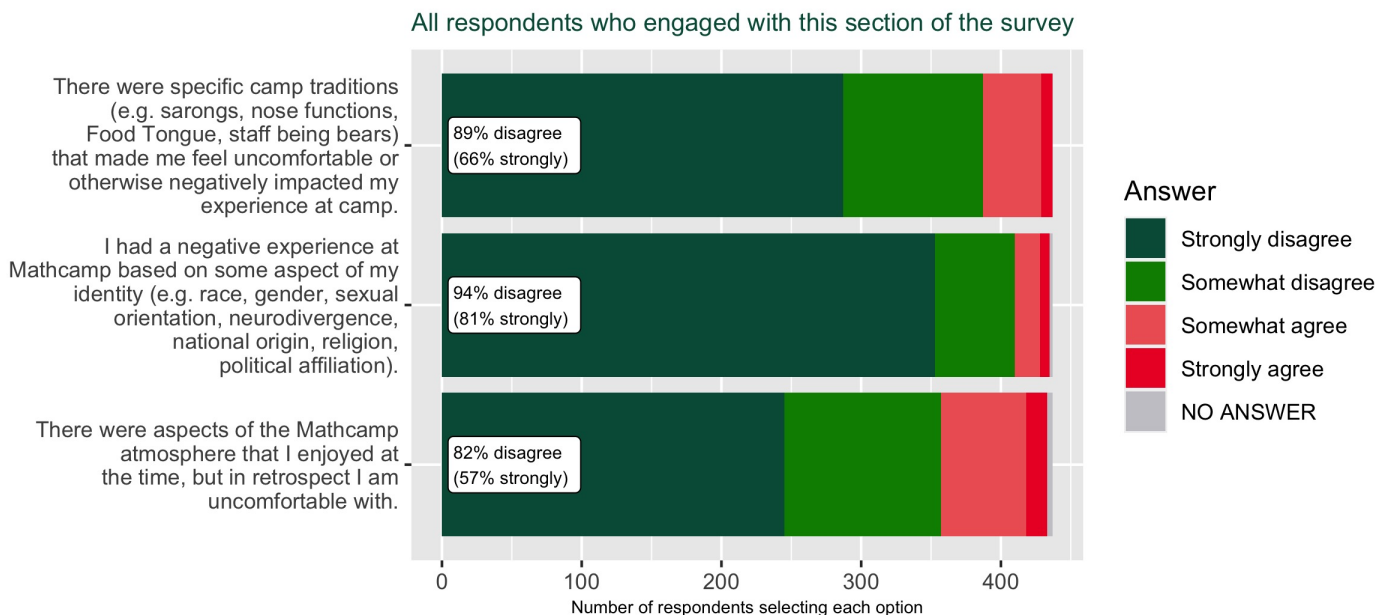
In addition to addressing the issues of sexual harassment and assault and studying staff-camper interactions at Mathcamp, we asked several broader questions on the survey about participants' experiences at camp, to capture aspects of the atmosphere that would not be encapsulated within the specific topics above. These broader reflections on camp experiences allow us to delve more deeply into the questions of feeling safe, comfortable, and welcome at Mathcamp.

All survey participants were asked the following:

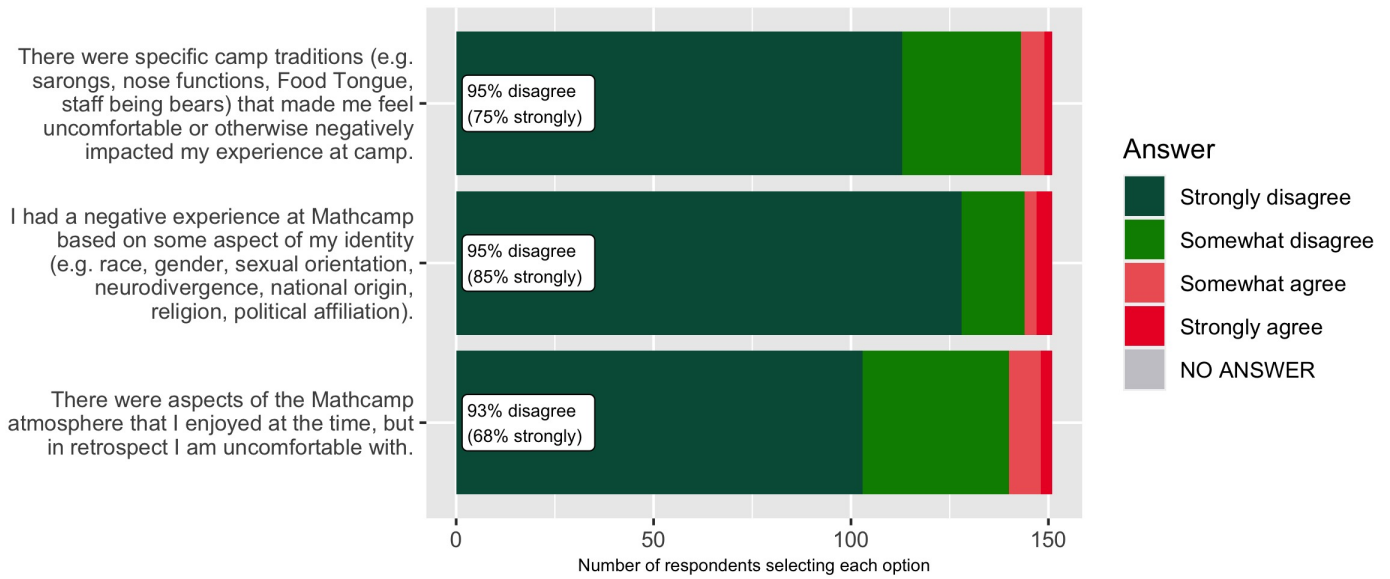
How well do the following describe your experience at Mathcamp?

- *There were specific camp traditions (e.g. sarongs, nose functions, Food Tongue, staff being bears) that made me feel uncomfortable or otherwise negatively impacted my experience at camp.*
- *I had a negative experience at Mathcamp based on some aspect of my identity (e.g. race, gender, sexual orientation, neurodivergence, national origin, religion, political affiliation).*
- *There were aspects of the Mathcamp atmosphere that I enjoyed at the time, but in retrospect I am uncomfortable with.*

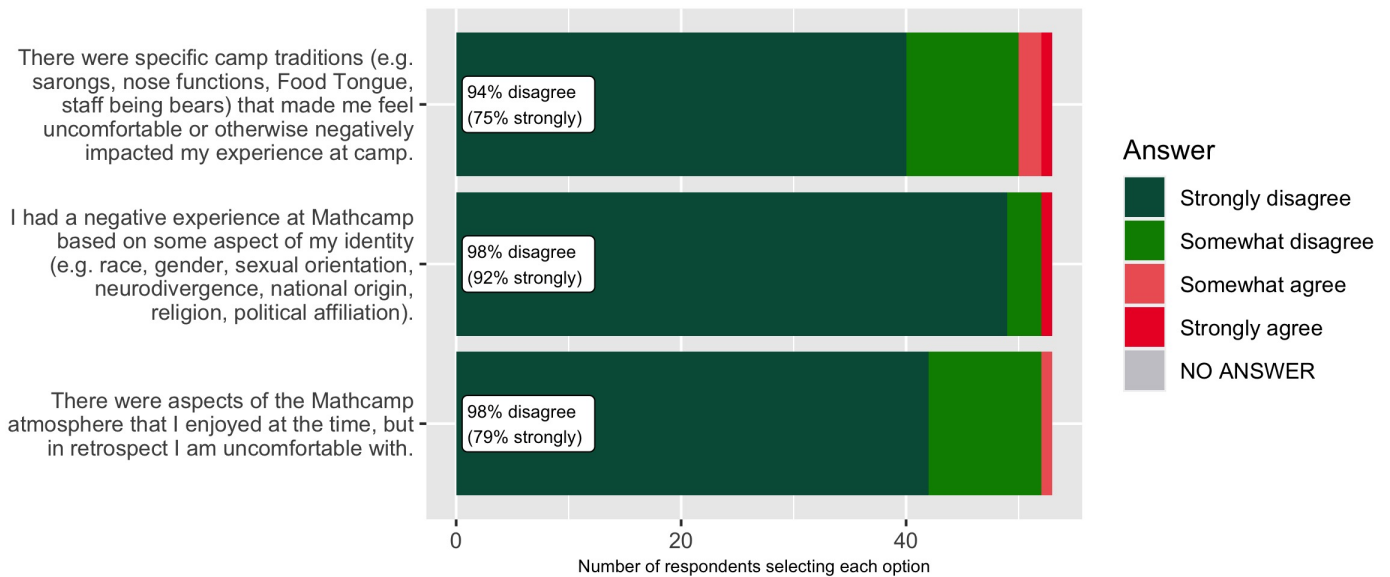
Summary of responses:



Recent campers (since 2016 only)



Respondents under 18



4.1 Mathcamp traditions

50 out of 437 respondents (11%) said that there were specific Mathcamp traditions that had made them feel uncomfortable or otherwise impacted them negatively, though only **8 of these respondents (2%)** marked "strongly agree".

8 out of 151 recent campers (5%) and **3 out of 53 respondents under 18 (6%)** said there were Mathcamp traditions that had made them uncomfortable; **2 recent campers** and **1 respondent under 18** marked "strongly agree".

In total, about 60 respondents included comments relevant to this topic (depending on what counts as a "tradition"). These included a roughly equal number of purely positive and purely negative comments, as well as numerous comments recognizing that the positive and negative aspects of many Mathcamp traditions were deeply intertwined.

Some respondents cited specific traditions as having been enjoyable. Beyond that, the main positive aspect of Mathcamp traditions that was indicated in the comments was that participation in traditions helped some new campers feel that they fit in at camp and/or were part of a community with a longer history.

The two main negative aspects of Mathcamp traditions that came up in the comments were:

- Traditions that involved (non-sexual) physical contact where consent norms could be hard to maintain. The primary example, mentioned by 8 respondents, were "nose functions".¹
- Unusual ("quirky" or "weird") traditions that could make people (especially new campers) feel excluded – either because they were not interested, because they were self-conscious, or because it was difficult for a new person to join. 5 people mentioned Food Tongue² in particular as having such exclusionary potential, and around a dozen people addressed this problematic aspect of Mathcamp traditions more generally, with Food Tongue frequently included among the examples. Only one respondent explicitly mentioned feeling *pressured* to participate in any Mathcamp traditions (whereas many others explicitly stated that they had not felt any pressure). Still, a few people mentioned that strong traditions could lead to the feeling of there being an "in" group at camp.

Many of comments from participants who said that some Mathcamp traditions had made them uncomfortable were hedged in various ways. Several respondents emphasized that the traditions themselves were fine, even positive, as long as their problematic aspects (e.g. consent issues for nose functions, exclusionary potential for Food Tongue) could be addressed. Many respondents noted that if they did experience discomfort with any of the traditions, it was only slight and did not significantly detract from their Mathcamp experience.³

Several respondents also emphasized in their comments that "uncomfortable" is not the same as "negatively impact[ing one's] experience at camp". Some reported being uncomfortable with Mathcamp's more unusual traditions initially but enjoying them later on. Others pointed to the discomfort around traditions such as "cross-dressing day" being good for them in the long term. Still others said that they could simply avoid any traditions that they did not enjoy (e.g. avoid groups of people speaking in Food Tongue) and that it was not a big deal. Several staff members mentioned that although some traditions made them uncomfortable in principle, this did not negatively affect their own experience. (Staff were strongly over-represented among those who reported being uncomfortable with some Mathcamp traditions, relative to survey respondents overall.)

¹A "nose function" is a funny action that a person performs whenever their nose is poked, such as saying a particular phrase, pretending to be a chicken, freezing until their nose is poked again, etc. (The specific action is chosen by each individual – it is "their" nose function.) There were many years at Mathcamp in the 2000's and 2010's when the majority of camp participants had a nose function, though there were always plenty of people who opted out. While many campers and staff enjoyed the game and participated in it enthusiastically, the enthusiasm sometimes led to noses being touched excessively or without permission. When it became clear that this was an issue, the rules of the game were changed to require explicitly asking for permission before touching someone's nose; however, these rules were not always observed.

²Food Tongue is a "language" invented at Mathcamp in the early 2000's, in which every word is an English word for a kind of food. At the beginning of each summer, alumni and staff from previous years would offer Food Tongue classes to any new campers who were interested in learning. The most enthusiastic Food Tongue speakers can carry on extended conversations, but the majority of campers in most years knew only a few words or phrases.

³Indeed, of the 50 respondents who said they were uncomfortable with some aspect of Mathcamp traditions, 21 agreed strongly to feeling safe, comfortable, and welcome at Mathcamp overall, and 43 agreed at least "somewhat" with all three statements. For most of the remaining 7 respondents, it seems clear from their surveys that camp traditions were not the main problem. Only one person (a female camper from 2008 - 2015) explicitly indicated in the comments that Mathcamp's traditions were a major issue for her; she felt that they formed a rigid framework in which she was pressured to participate.

4.2 Identity-based experiences

25 out of 435 respondents (6%) reported that they had had an identity-based negative experience at Mathcamp, including the three campers from Section 1.2 ("Campers who did not feel safe at Mathcamp"). **7 out of 151 recent campers (5%)** and **1 out of 53 respondents under 18 (2%)** reported an identity-based negative experience.

A number of commenters wrote positively of Mathcamp as a community where diversity in gender identity and/or sexual orientation is accepted. This includes LGBTQ+ respondents who wrote that they felt safe and appreciated at camp, as well as respondents who had had limited or no exposure to LGBTQ+ communities before camp and wrote that Mathcamp had helped them become more accepting.

Among recent campers who reported negative identity-based experiences, one brought up a lack of diversity on the Mathcamp staff and another mentioned the challenges of being an international student (although they described this as a minor issue that Mathcamp supported them on). Among respondents from earlier years, two comments mentioned isolated negative interactions related to gender identity or sexual orientation. Other comments that may be relevant to this question mentioned religion, difficulty voicing conservative political views (though the respondent felt that this issue was generally handled well), and neurodivergence. None of these issues was brought up more than once.

4.3 Reflections in hindsight

76 out of 433 respondents (18%) said there were aspects of the Mathcamp atmosphere that they had enjoyed at the time but were uncomfortable with in retrospect. Among recent campers, **11 out of 151 respondents (7%)** felt this way.

Among participants from the early years of Mathcamp, by far the most common concern brought up in the comments was Mathcamp's permissive culture surrounding platonic physical contact, whether between campers and staff or between participants more generally. (See Sections 3.2 and 3.4 for further discussion of related questions.) None of these comments were from recent campers or staff. Another issue brought up by several respondents, including two recent participants, was excessive idolization of Mathcamp culture and/or Mathcamp staff by camp participants.

Several respondents offered positive comments which indicate the opposite experience from that described in the survey question: finding an aspect of Mathcamp challenging at the time, but appreciating it in hindsight. The most common theme was feeling uncomfortable as a camper when encountering cultures very different from one's own, but later appreciating these introductions as formative and beneficial.

4.4 Summary and discussion

This chapter addresses Mathcamp participants' perceptions of specific aspects of the camp's atmosphere which may contribute to the overall sense of feeling safe, comfortable, and welcome at the program.

Most respondents indicated having neutral or positive experiences of camp traditions, citing opportunities for bonding and feeling connected to a lineage of camp participants sharing these traditions. Similarly, most comments about identity-based experiences at camp described the positive effects of forming affinity groups and feeling accepted by the camp community.

11% of respondents (5% of recent campers) reported discomfort with some aspects of camp traditions, and 6% of respondents (5% of recent campers) were negatively impacted by identity-based experiences. These respondents' comments addressed questions of belonging, exclusion, and social pressure to participate in quirky traditions.

When reflecting on their time at camp in hindsight, 18% of respondents (7% of recent campers) reported feeling uncomfortable with some aspects of their experience at camp in retrospect. Most of the comments on this issue were from participants from the early years of Mathcamp, reflecting on Mathcamp's community norms around platonic physical contact during that time period. Related concerns regarding staff-camper interactions are addressed more fully in Sections 3.2 and 3.4.

Overall, the comments regarding the atmosphere at Mathcamp indicate that the community values inclusivity, maintaining healthy boundaries in social interactions, and upholding high standards of mutual respect across differences. The specific anecdotes and perspectives shared by respondents provide valuable input for shaping Mathcamp's policies and practices going forward; see Chapter 5 ("Conclusions and next steps").

Chapter 5

Conclusions and next steps

We have endeavored in this document to provide a full, open, and frank account of the results of the Mathcamp Community Survey. It is our hope that the complete report to the alumni community provides a window into Mathcamp's successes and challenges.

The survey has been a valuable tool for developing our understanding of both camper and staff perspectives on the program over the past 25 years. On the one hand, the responses indicate that participants overwhelmingly had positive experiences at Mathcamp. On the other hand, these experiences were not universal; some members of the community shared painful and very serious incidents, as well as concerns about specific aspects of the program. Our goal is to use this feedback to identify ways in which Mathcamp as an organization can better support our students and staff going forward and to meet the community's aspirations for the future of Mathcamp.

As a result of the feedback from the survey, the MFOA Board and Camp Directors have revised organizational policies in four major areas, including both proactive and responsive measures. These are centered around three key areas: prevention (points 1 & 2), reporting (point 3), and response (point 4).

1. Improving guidelines and training for staff regarding staff-camper physical contact. This includes outlining what is and is not appropriate, and attending to questions of consent, power differentials, and gender dynamics. It is important to us that we provide training while also allowing for the positive interactions that survey participants identified as important. For example, contact sports or dances with structured partner changes will continue to be permitted; hugs will also continue to be permitted, with special attention to the language used for obtaining prior consent.
2. Improving guidelines and training for staff regarding interactions with campers more broadly: understanding the benefits to campers of building personal connections with staff, while at the same time emphasizing the need to draw appropriate emotional boundaries in these interactions. Particular attention will be paid to the question of navigating the transition to a staff role for those who were recently campers.
3. Improving education for campers and staff about policies and practices at Mathcamp. This includes proactively communicating about expectations in our community around consent and boundaries, and making it clear that certain behaviors are unacceptable. It also includes offering direct, clear reporting procedures when something goes wrong (including sexual harassment, other forms of discrimination, or any other issues that may arise); making sure that campers know that staff *want* to hear from them, even about small things; and providing many avenues for campers and staff to voice concerns, including both anonymous reporting and the opportunity to ask, "Is this something I *should* report?"
4. Improving record-keeping and follow-through after an incident has been reported, with particular emphasis on clear communication throughout the process, including after the situation has been resolved.

Looking towards the future, our ongoing work is to maintain Mathcamp's spirit of openness and trust while at the same time making sure that everyone feels safe, comfortable, and welcome, and to respond appropriately when challenging situations arise. Many survey respondents asked us not to overreact and change too much in the direction of fear and rigidity; indeed, we deeply respect the integrity of our campers and staff, and the survey responses indicate that this respect is well-deserved.

Our policies are designed to provide guard rails to ensure the safety of all participants, and to support all of us in our efforts to be excellent to one another.

Mathcamp has always prioritized getting feedback from its participants and acting on that feedback. Every summer, we invite input from all campers through both anonymous and "onymous" surveys, as well as individual check-ins with Residential Advisors and Academic Advisors. We also offer the option to share feedback through "onymous" and anonymous comment boxes, as well as focus groups ("Future of Mathcamp"). There are similar written, one-on-one, and group discussion opportunities for feedback from staff. We consider ourselves an ever-evolving project, and our policies, procedures, and community norms will continue to be shaped by camper and staff input going forward.

In particular, we welcome feedback from any readers of this document. The best way to reach us is through [this link](#), which will allow you to keep your identity private (if you wish), while still enabling us to reply to your feedback and questions.

Appendices

Appendix A

Results for Additional Survey Questions

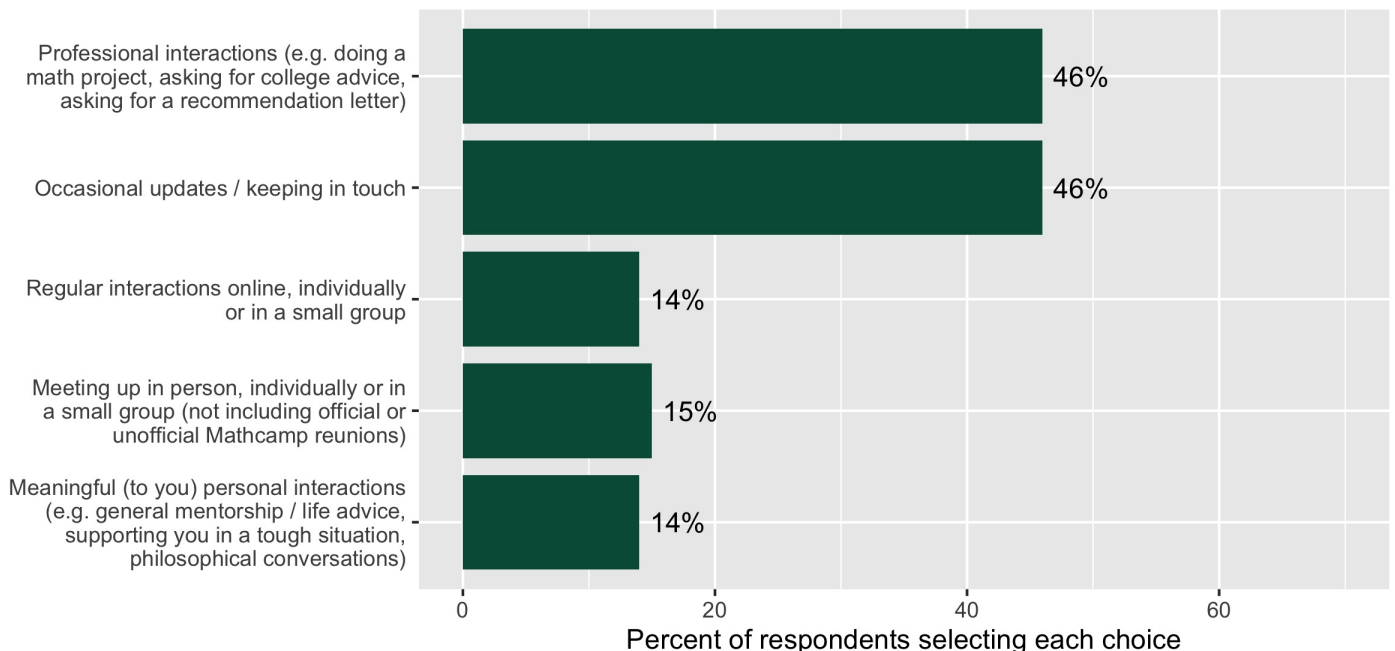
A.1 Camper-staff interactions during the year

All survey participants who attended Mathcamp as campers were asked:

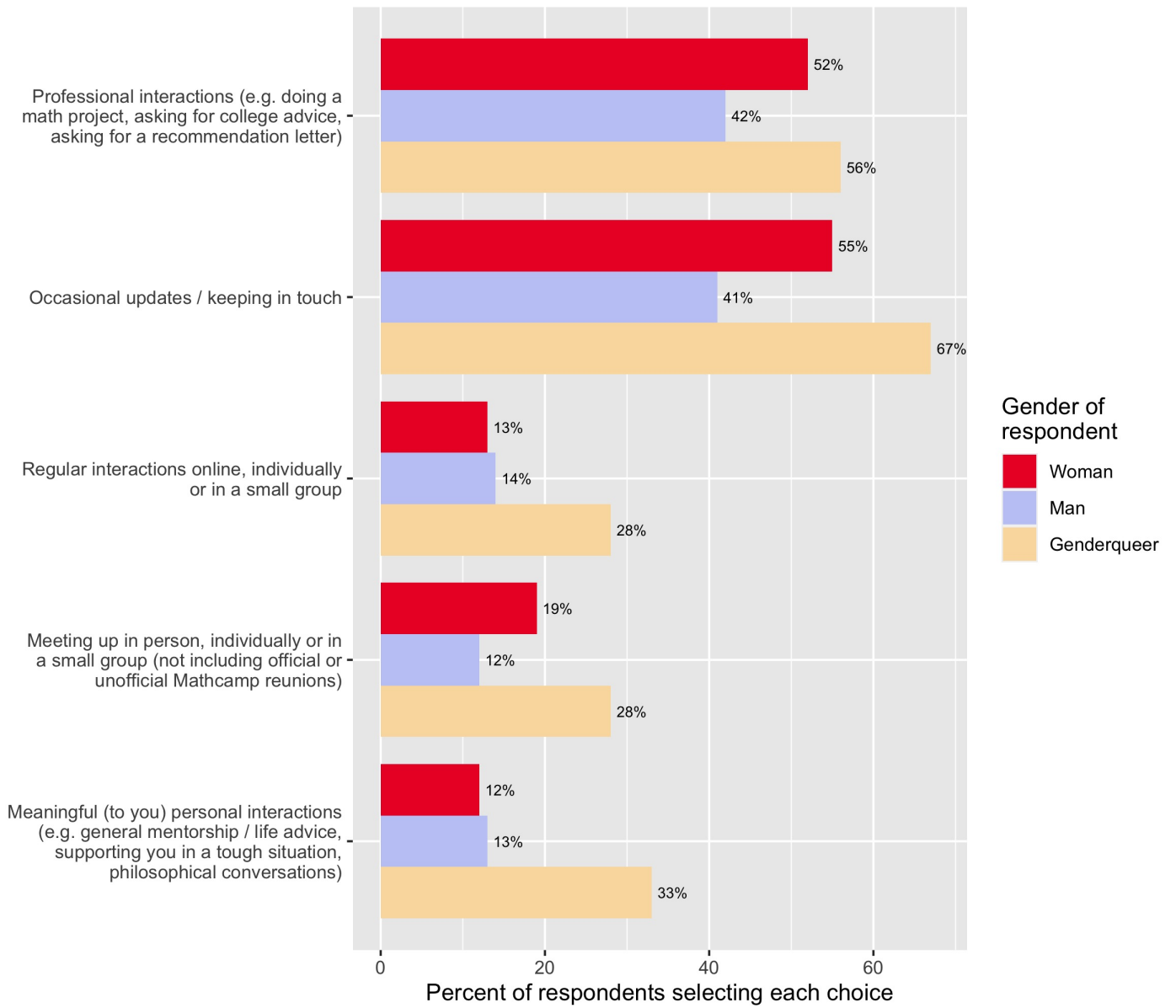
While in high school, what kind of contact did you have with Mathcamp staff outside of Mathcamp? (Select all that apply.)

- *Professional interactions (e.g. doing a math project, asking for college advice, asking for a recommendation letter)*
- *Occasional updates / keeping in touch*
- *Regular interactions online, individually or in a small group*
- *Meeting up in person, individually or in a small group (not including official or unofficial Mathcamp reunions)*
- *Meaningful (to you) personal interactions (e.g. general mentorship / life advice, supporting you in a tough situation, philosophical conversations)*

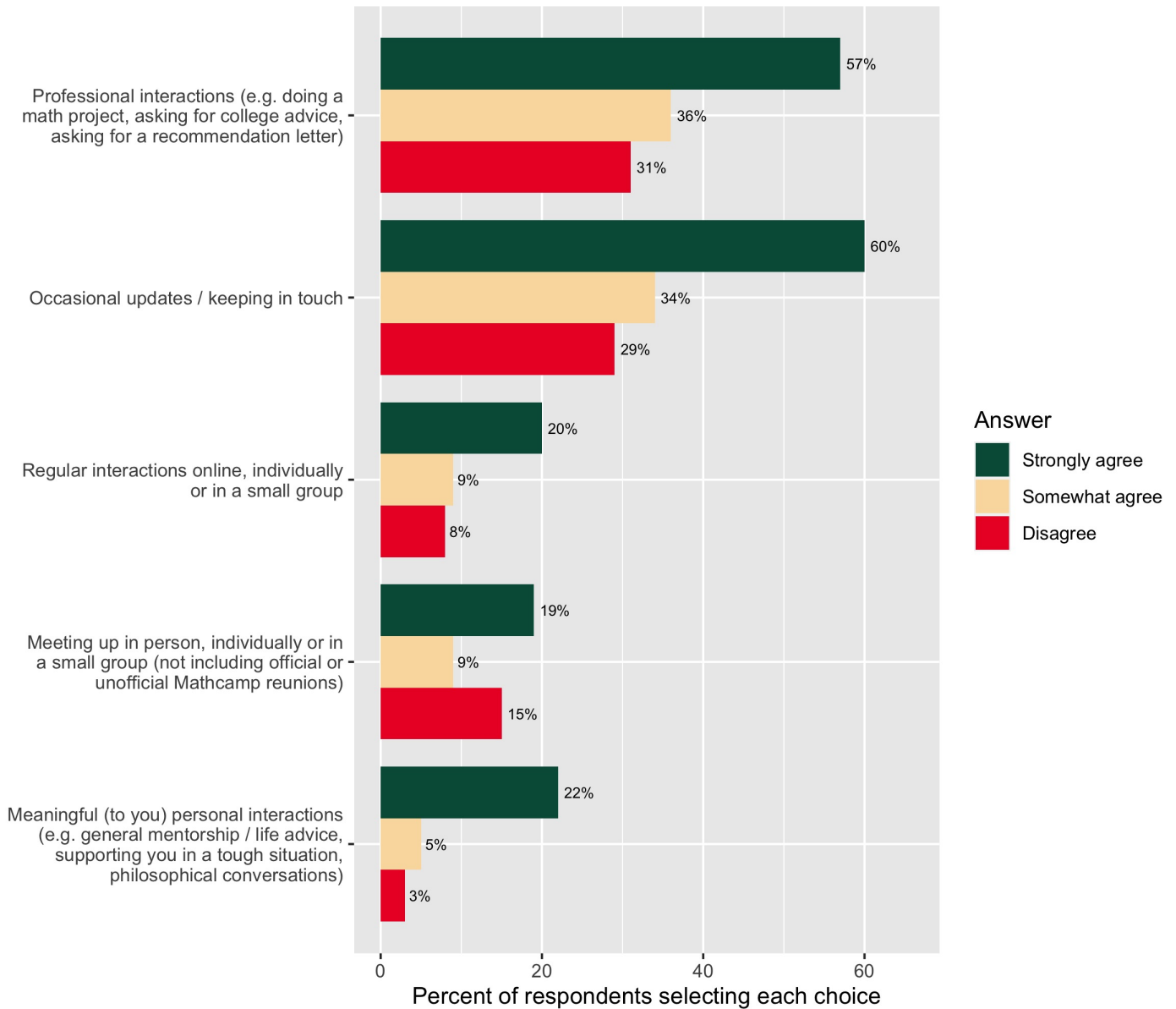
Percent of campers reporting each interaction:



Percent of campers reporting each interaction, by gender:



Percent of campers reporting each interaction, by agreement with the statement:
"Close personal interactions ... with at least one Mathcamp staff member were a significant positive part of my Mathcamp experience."



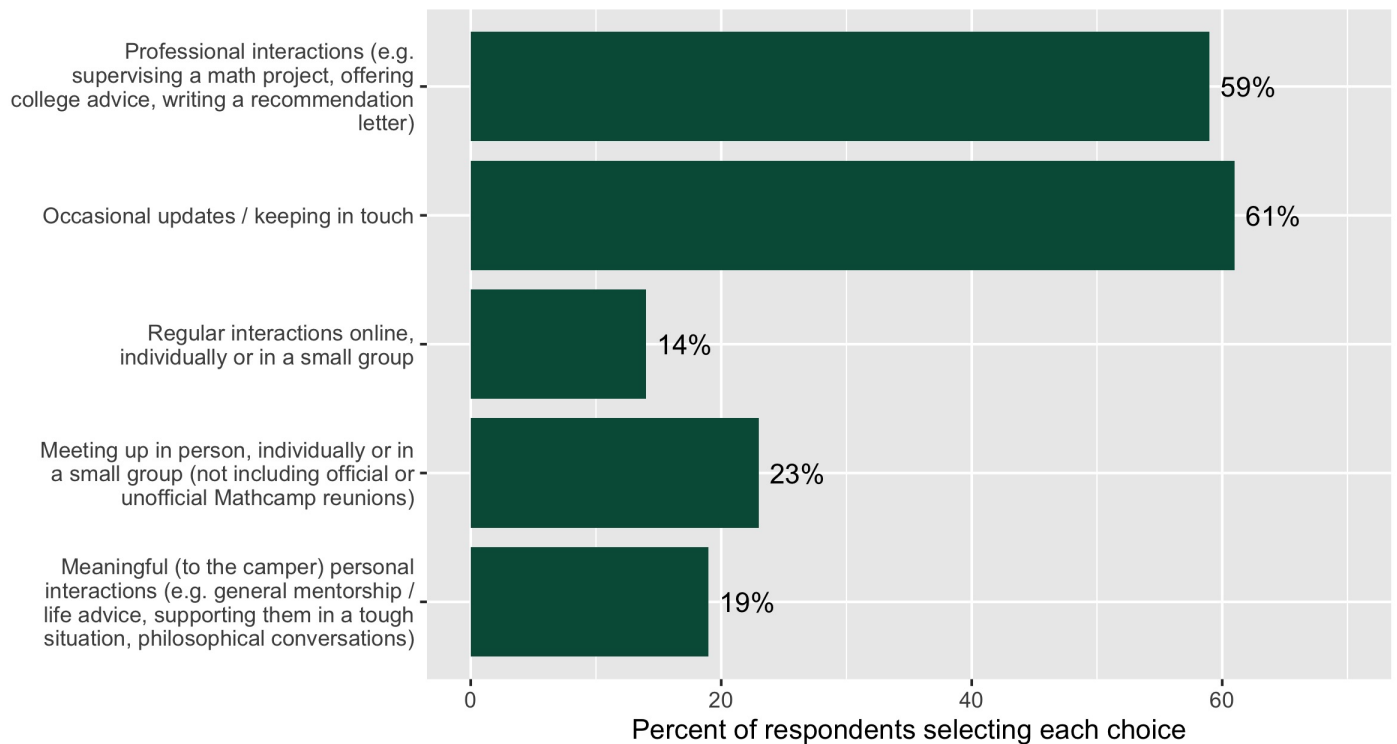
The staff perspective

All respondents who were staff at Mathcamp were asked:

After working as a Mathcamp staff member, what kind of contact did you have with campers who are still in high school, outside of Mathcamp? (Select all that apply.)

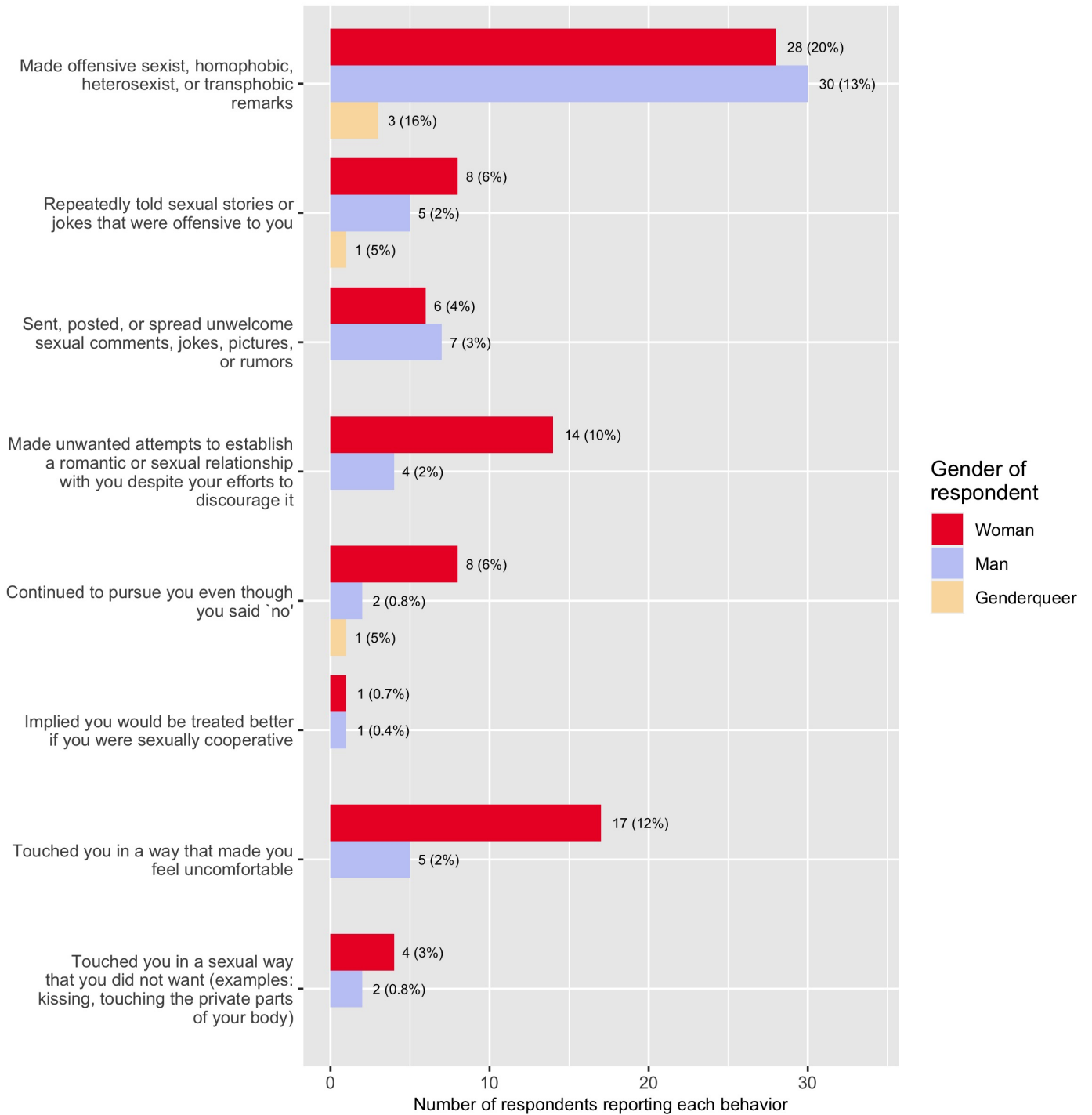
The response options were the same as for the analogous question asked of campers, with the last option altered appropriately ("Meaningful (to the camper) personal interactions" rather than "Meaningful (to you) personal interactions").

Percent of staff members reporting each interaction:



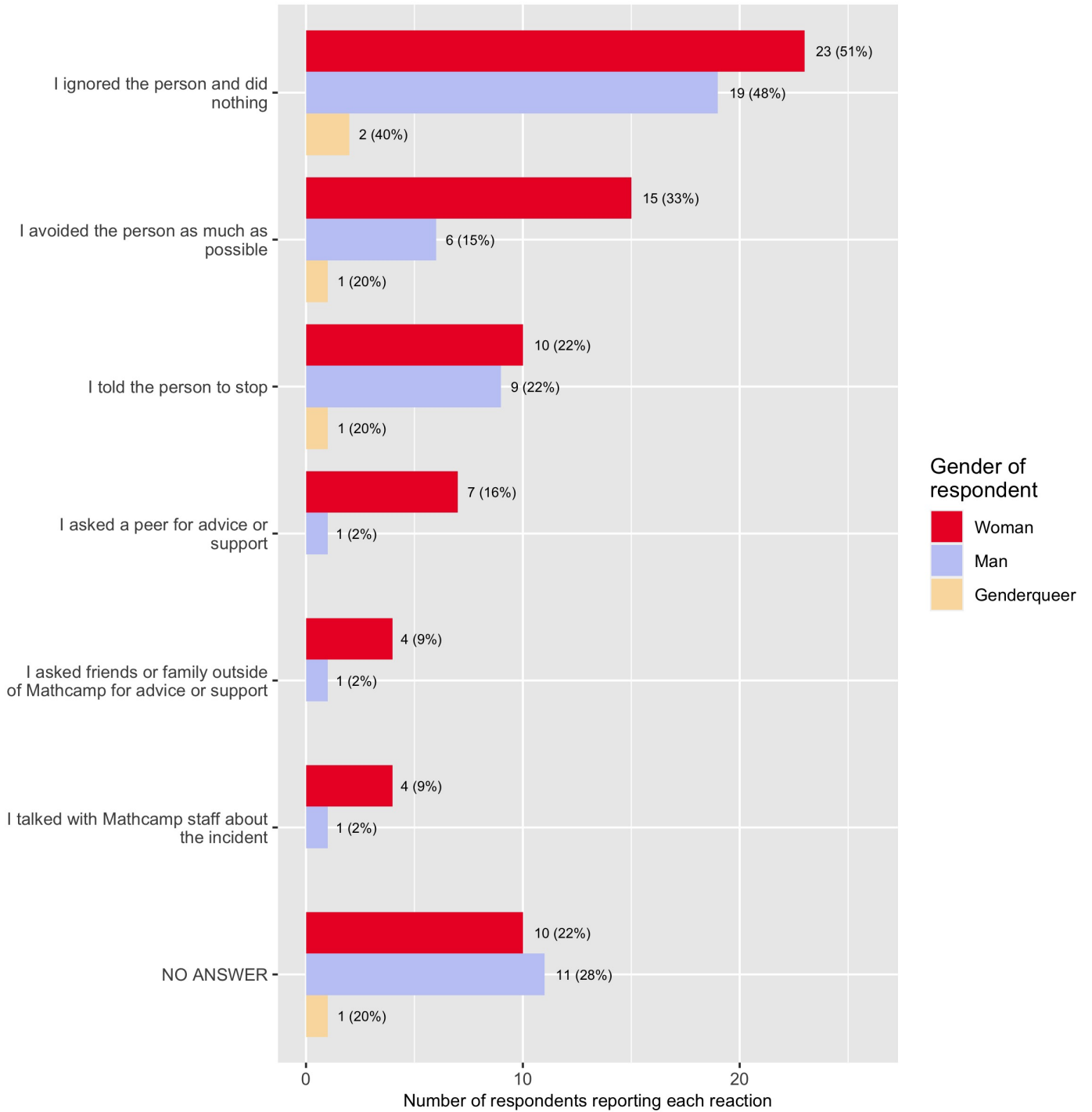
A.2 Offensive conduct

Reports of offensive behaviors perpetrated by campers during Mathcamp
(out of 402 respondents engaging with this section of the survey):

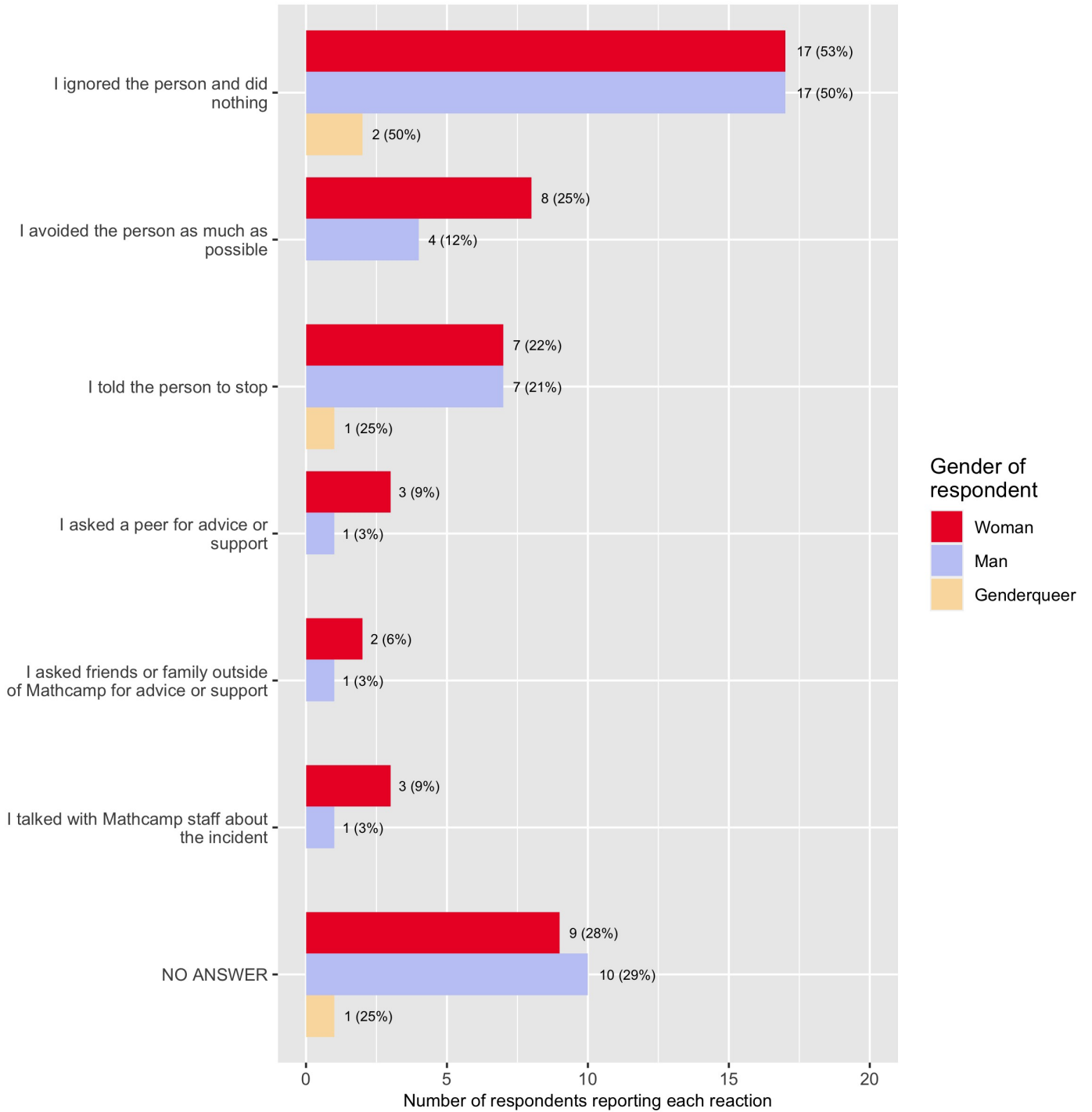


Note: This graph does not include offensive conduct by staff. Only 10 respondents reported such conduct; the details can be found in Section 2.2.

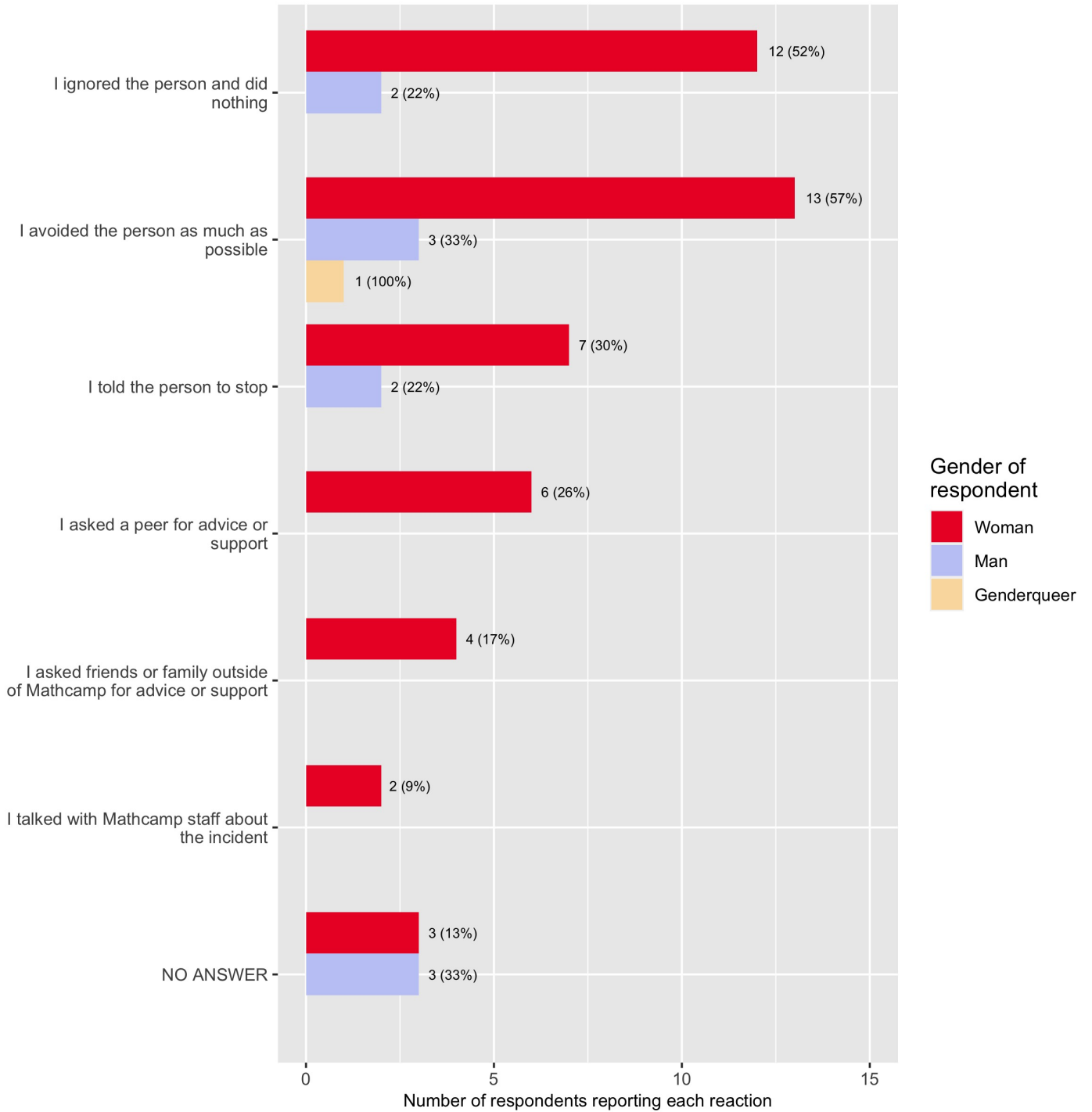
Respondents' reactions to offensive behavior
 (out of 90 respondents reporting offensive behavior by campers during Mathcamp):



**Respondents' reactions to offensive speech
(out of 70 respondents reporting offensive speech by campers during Mathcamp):**



Respondents' reactions to unwelcome advances and/or unwanted physical contact (out of 33 respondents reporting such conduct by campers during Mathcamp):



Note that the last two graphs have some overlap, since some respondents reported both offensive speech and unwelcome advances/physical contact by campers.

Appendix B

Survey response rate

The overall response rate to the Mathcamp community survey was **23%**; it was **34%** among participants after 2007 and **42%** among participants after 2015. The response rate did not vary substantially by gender, but did vary by role at camp (camper vs staff). This chapter gives further details on response rate by years at camp, gender, and role.

B.1 Response rate by role and years at camp

All survey participants were asked:

What was your role at Mathcamp? (Select all that apply.)

- *I was a camper.*
- *I was a staff member.*

When did you attend Mathcamp?¹ (Select all that apply.)

- *1993 – 2000*
- *2001 – 2007*
- *2008 – 2015*
- *2016 – 2021*

Participants who marked that they were campers in 2016 - 2021 were also asked:

Are you over 18?

- *I am age 17 or below.*
- *I am age 18 or above.*

Our population of interest includes everyone who participated in Mathcamp as either a camper or a full-time staff member since 1997 (the beginning of "modern" Mathcamp). However, the survey was also inadvertently emailed to 6 campers who attended Mathcamp only in 1995 or 1996 (the only campers from those years for whom we have email addresses). We do not know if these individuals responded, but for the purposes of computing response rate, we include them in our survey population (i.e. in the denominator).

Although Mathcamp's database contains a full list of camp participants going back to 1995, we do not have email addresses on file for many participants from the earlier years. In Tables 1–3 below, response rate is computed in two different ways: as a fraction of all camp participants and as a fraction of those for whom we have an email address on file (shown in parentheses). In subsequent tables, response rate is always shown as a fraction of all participants, since our primary interest in computing response rate is to determine what fraction of the entire Mathcamp community we have data from.

¹The specific time periods chosen are not significant: no unusual changes took place at Mathcamp between 2000 and 2001, between 2007 and 2008, or between 2015 and 2016.

Table 1: Response rate by years at camp

At Mathcamp in...	# in database	# with email address	# of respondents	Response rate
1997 - 2000	366	166	30	8% (18%)
2001 - 2007	588	348	101	17% (29%)
2008 - 2015	675	625	211	31% (34%)
2016 - 2021	522	517	219	42% (42%)
TOTAL	1903	1432	440	23% (31%)

Note that the rows of Table 1 correspond to groups of participants that are *not disjoint*: for example, a person who was at Mathcamp both in 1997 - 2000 and in 2001 - 2007 is counted in both the first and the second row of the Table.

Table 2: Response rate by role at camp

Role	# in database	# with email address	# of respondents	Response rate
Just campers	1689	1241	323	19% (26%)
Campers who became staff	126	120	79	63% (66%)
Just staff	88	71	38	43% (54%)

Table 3: Response rate for recent campers and minors

Participants	# in database	# with email address	# of respondents	Response rate
Recent campers (since 2016 only)	401	398	152	38% (38%)
Minors (under 18 in Nov 2021)	122	122	53	43% (43%)

Here and elsewhere in this document, "recent campers" refers to participants who were campers at Mathcamp *only* in the period 2016 - 2021 (and not before); this includes campers who later became staff.

Table 4: Response rate by role and years at camp (as a fraction of all camp participants)

At Mathcamp in...	Just campers	Campers who became staff	Just staff	All participants
1997 - 2000	13 / 317 (4%)	12 / 26 (46%)	5 / 23 (22%)	30 / 366 (8%)
2001 - 2007	54 / 494 (11%)	36 / 60 (60%)	11 / 34 (32%)	101 / 588 (17%)
2008 - 2015	133 / 562 (24%)	57 / 83 (69%)	21 / 30 (70%)	211 / 675 (31%)
2016 - 2021	156 / 441 (35%)	42 / 50 (84%)	21 / 31 (68%)	219 / 522 (42%)
TOTAL	323 / 1689 (19%)	79 / 126 (63%)	38 / 88 (43%)	440 / 1903 (23%)

B.2 Response rate by gender

All survey participants were asked:

What is your gender identity? (Select all that apply.)

- *Woman*
- *Man*
- *Non-Binary or Gender Fluid*
- *Prefer not to say*
- *Prefer to self-describe: (text box)*

Respondents reported their gender identities as follows:

Self-reported gender	# of respondents
Woman	150
Man	258
Non-Binary or Gender Fluid	12
Woman, Non-Binary or Gender Fluid	6
Man, Non-Binary or Gender Fluid	4
Woman, Man, Non-Binary or Gender Fluid	1
Prefer not to say / NO ANSWER	5
Prefer to self-describe	4

To simplify our analyses, we assigned each respondent to one of four non-overlapping gender categories: "Woman", "Man", "Genderqueer", or "Unknown". We coded as "Genderqueer" anyone who reported a gender identity other than "Woman" alone or "Man" alone. The resulting frequencies were as follows:²

Gender	# of respondents
Woman	150
Man	260
Genderqueer	24
Unknown	6

The Mathcamp database has gender information for only 33% of camp participants from 1997 - 2007. Thus for these early time periods, it is impossible to compute response rate by gender. After 2008, we do have gender information for most participants, although it is almost certainly out of date in some cases, as can be seen from Table 5 below.

²For the 4 respondents whose answers included "Prefer to self-describe", we coded their gender category based on their comments. In addition, one respondent who identifies as a (trans)woman requested to be coded as a man for the purposes of our analysis, since her experiences of Mathcamp were as a boy/man.

Table 5: Response rate by gender, 2008 - 2021

Gender	# in database	# of respondents	Response rate
Women	364	134	~ 37%
Men	671	215	~ 32%
Genderqueer	17	23	?
Unknown	45	5	?

The fact that the number of genderqueer survey respondents in Table 5 exceeds the number of genderqueer individuals in our database is probably due to outdated gender records; indeed, it is not surprising that some participants' reported gender identities have changed since 2008.

However, assuming such changes are relatively rare, they should not have a significant effect on the response rates among women and men. Table 5 shows that these response rates (which, because of outdated records, we report only approximately) are roughly comparable for the two groups. Since the number of women at Mathcamp has increased over time and response rates are generally higher among more recent participants, the fact that the response rate is slightly higher among women than men is to be expected.

Appendix C

Suspected response error

In preparing this document, we looked particularly closely at the surveys of those participants who gave negative responses, in order to better understand the nature and causes of their dissatisfaction. In the process, we found several instances where a participant's response to a certain question seemed to contradict their responses to other questions and/or to their own explicit statements in the comments. In a few cases, the contradictions were so clear-cut that we believe the most likely source was *response error*: a careless mistake made by a survey participant, causing them to mark a different answer from the one they had intended.

The three instances where we are most confident that response error has occurred are described below. Each of these instances is also flagged in the corresponding section of the report. We did not remove these respondents' data from any of the graphs in the document, but they are not included in our summaries of results for Chapters 1 and 2 or in the [Executive Summary](#).

"I felt safe / comfortable / welcome at Mathcamp."

These three statements were the first non-demographic questions on the survey and were presented in a single table. We believe that **4 respondents** marked "strongly disagree" for all three of them in error. These 4 respondents strongly agreed with the statement "Mathcamp took proactive steps to create a safe and welcoming environment for all participants" and reported uniformly positive experiences across the rest of the survey. None of them reported experiencing any offensive conduct, sexual harassment, or sexual assault at Mathcamp. These respondents wrote only a few comments, all of which were either positive or neutral. None of the comments suggest any reason why the respondents might "strongly disagree" with feeling safe, comfortable, and welcome at Mathcamp.

"Mathcamp took proactive steps to create a safe and welcoming environment for all participants."

We believe that **2 respondents** marked "strongly disagree" to this question in error. These respondents' answers to all other questions on the survey were uniformly positive: they strongly agreed with all favorable statements about Mathcamp and strongly disagreed with all unfavorable statements. One of them also included several enthusiastic comments about the Mathcamp environment, and neither included any negative comments. Such strong positive responses could still be consistent with answering "somewhat disagree" to this question, but seem at odds with an answer of "strongly disagree".

"Mathcamp covers up instances of sexual harassment and assault."

"Mathcamp punishes individuals for reporting sexual harassment and assault."

We believe that **5 respondents** marked "agree" for one of these statements in error: 2 for the first statement and 3 for the second one. All 5 of these respondents agreed with the statement "Mathcamp responds appropriately to instances of sexual harassment and assault", which directly contradicts the two statements above. These respondents reported no other negative experiences or opinions about Mathcamp and included no negative comments. One of them did include positive

comments about their experience at camp, and another included a positive comment on Mathcamp's response to a camper's inappropriate behavior.

The issue of potential bias

The fact that we have only identified response errors that are "false negatives" (i.e. instances where the respondent gave a negative answer where we believe they intended to give a positive one) raises the possibility of bias. We discovered these suspected errors by looking closely at the negative responses. If we had examined the positive responses equally closely, would we have found just as many "false positives"?

While we consider it likely that there are additional instances of response error in our data (in both directions), statistically we expect there to be far fewer false positives than false negatives overall. If we assume that the rate of survey error is the same in both directions (positive-to-negative and negative-to-positive), then we would expect the number of erroneous negative responses to be much higher than the number of erroneous positive responses, since the total number of intentionally positive responses is much larger. For instance, the highest incidence of error that we found was on the first three questions ("I felt safe / comfortable / welcome at Mathcamp."). 316 respondents marked "strongly agree" on all three questions, and we suspect that 4 additional respondents had intended to mark "strongly agree" but marked "strongly disagree" by mistake. If so, then the error rate on this part of the survey was approximately 1%. Since the number of respondents who disagreed with any of the three questions is much smaller than 100 (only 22 people marked "disagree" for any of the three questions, including the suspected response errors), at this rate the expected number of "false positives" on these questions is much less than 1.

Based on the other instances of suspected response error in our data, the error rate on other questions on the survey was generally less than 1%. Since there were a total of 604 negative responses in the survey (from all survey respondents combined), we expect at most a handful of false positives across our entire data set. These are probably impossible to detect based on the evidence that we have, but even if we could detect them, they would be unlikely to have any significant impact on our overall findings. The impact of the false negatives, on the other hand, is quite substantial: for example, we believe that half of all the survey respondents who reported feeling unsafe at Mathcamp are false negatives.