SSEER
SOCIAL SCIENCE EXTREME EVENTS RESEARCH

2023 SSEER CENSUS

The **Social Science Extreme Events Research (SSEER) network** is a global platform for social science hazards and disaster researchers. With the support of the **National Science Foundation**, SSEER was established in 2017. SSEER's mission is to **identify** researchers to develop the social science workforce and **coordinate** social science research teams in large-scale disasters to **advance scholarship** on the root causes and human consequences of extreme events.

To join the SSEER network, social scientists fill out a brief **survey** that asks questions about disciplinary and methodological focus, disaster events studied, demographic characteristics, and more. Since 2018, the SSEER research team has released an **annual census** to report on the size and composition of the social scientific hazards and disaster workforce and to provide data on the geographic distribution and skills of this global research community. The **SSEER map** identifies researchers by their expertise and helps them to build connections—to one another, to interdisciplinary teams, and to communities at risk to hazards and affected by disasters.

The results of the **2023 Social Science Extreme Events Research (SSEER) Census** are based on responses gathered from social scientists who completed the SSEER membership survey between its release date on July 8, 2018 and December 31, 2023.

AS OF DECEMBER 31, 2023,
THERE WERE **1,620 RESEARCHERS** IN THE
SSEER NETWORK

In this report, where possible and relevant, we separate data by year the SSEER member originally joined the network—2018, 2019, 2020, 2021, 2022, or 2023—to provide greater context regarding the continued growth and evolution of the network. The SSEER survey, de-identified SSEER dataset, and data documentation that informed this and prior annual reports are **published on DesignSafe** and are available for download.

HOW MANY SOCIAL SCIENTISTS HAVE JOINED THE SSEER NETWORK?

As of December 31, 2023, 1,620 researchers had joined the SSEER network. The largest number of current members joined in 2018 (N = 621; 38.33%), which was the year that the SSEER membership survey was launched. In 2019, 294 (18.15%) new SSEER members joined the network, while slightly more signed up in 2020 (N = 317; 19.57%). Fewer members joined in 2021 (N = 121; 7.47%) and 2022 (N = 125; 7.72%). In 2023, 142 (8.77%) new members joined (see **Figure 1**).*

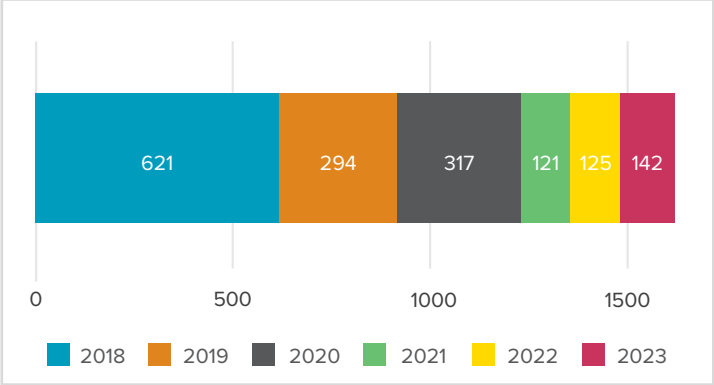

Figure 1. Number of SSEER Members by Year Joined, 2018-23.

*Readers of previously published SSEER Census annual reports may notice small differences in numbers stated throughout this report when compared with earlier versions. These discrepancies are the result of members updating their data or being removed from the network due to career or other professional changes. To account for these slight variations across years, we use what demographers refer to as the vintaging method, which entails updating the dataset each year based on the latest data. This allows each year's data to be independent from previous years. This 2023 SSEER Census reflects the current membership of the SSEER network. As a reminder, interested readers can find the de-identified versions of the **SSEER data** published annually on DesignSafe.

WHERE ARE SSEER MEMBERS LOCATED?

The online **SSEER map** is organized by United Nations (UN) regions and subregions. Users can search for researchers by name, location, disciplinary foci, methodological expertise, and the types of hazards or disasters they study (see **Figure 2**).

Figure 2. SSEER Interactive Web Map.

A SSEER member's expanded profile, indicating title, affiliation, and areas of expertise.

Our team created the SSEER map to highlight the contributions of social scientists who study hazards and disasters. Since its online launch in 2019, thousands of people from across the U.S. and around the world have used the map. It is often accessed in the aftermath of disasters as it allows people to rapidly locate locally-affected researchers as well as those in any location who may hold expertise relevant to an unfolding event.

Figure 3 shows the region of residence of SSEER members who joined the network by December 31, 2023. Most SSEER members reside in the Americas (N = 1,286; 79.38%). Fewer members are in Europe (N = 127; 7.84%), Asia (N = 113; 6.98%), Oceania (N = 55; 3.40%), and Africa (N = 39; 2.41%).

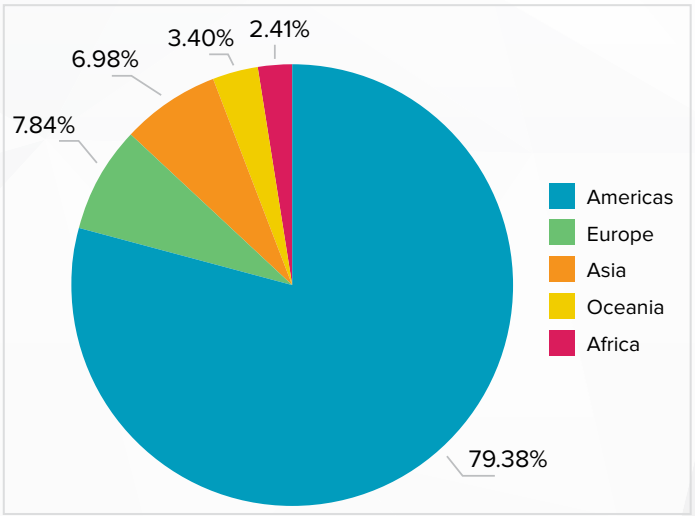

Figure 3. Percent Distribution of SSEER Members by UN Region.

Table 1 provides a more detailed portrait of SSEER members by region, subregion, and country. As shown in the table, most SSEER members are in the United States (N = 1,169; 72.16%). SSEER members from Canada (N = 65; 4.01%) are the next most common in the dataset, followed by those from the United Kingdom (N = 38; 2.35%), Australia (N = 29; 1.79%), and India and New Zealand (N = 25; 1.54%, each).

SSEER MEMBERS RESIDE IN
76 DIFFERENT COUNTRIES
AROUND THE WORLD.

Region	# of SSEER Members in the Region	Subregion	# of SSEER Members in the Subregion	Country	# of SSEER Members in the Country
Africa	39	Eastern Africa	15	Ethiopia	2
				Kenya	4
				Madagascar	1
				South Sudan	1
				Tanzania	1
				Uganda	3
				Zambia	3
				Zimbabwe	1
		Middle Africa	1	Chad	1
		Southern Africa	7	Botswana	1
				South Africa	6
		Western Africa	16	Ghana	1
				Guinea	1
				Nigeria	13
				Senegal	1
Americas	1,211	Caribbean	3	Jamaica	1
				The Bahamas	2
		Central America	8	Guatemala	1
				Mexico	6
				Panama	1
		Northern America	1,234	Canada	65
				United States	1,169
		South America	41	Argentina	8
				Bolivia	1
				Brazil	13
				Chile	10
				Colombia	4
				Ecuador	1
				Peru	3
				Venezuela	1
Asia	106 *(continued on next page)*	Eastern Asia	27	Hong Kong	1
				Japan	16
				Republic of China	8
				Republic of Korea	2

Table 1. SSEER Researchers by UN Region, Subregion, and Country (continued on page 4).

Region	# of SSEER Members in the Region	Subregion	# of SSEER Members in the Subregion	Country	# of SSEER Members in the Country
Asia	106 *(continued from previous page)*	Southeastern Asia	17	Indonesia	3
				Malaysia	1
				Philippines	6
				Singapore	1
				Thailand	4
				Union Republic of Myanmar	1
				Vietnam	1
		Southern Asia	57	Afghanistan	1
				Bangladesh	9
				Bhutan	1
				India	25
				Iran	2
				Nepal	8
				Pakistan	9
				Sri Lanka	2
		Western Asia	12	Israel	4
				Kingdom of Saudi Arabia	1
				Turkey	5
				United Arab Emirates	1
				Yemen	1
Europe	127	Eastern Europe	1	Romania	1
		Northern Europe	56	Denmark	4
				Finland	4
				Iceland	1
				Ireland	1
				Norway	2
				Scotland	1
				Sweden	5
				United Kingdom	38
		Southern Europe	27	Greece	2
				Italy	7
				Portugal	13
				Spain	5
		Western Europe	43	Austria	7
				France	11
				Germany	11
				Netherlands	9
				Switzerland	2
Oceania	55	Australia and New Zealand	54	Australia	29
				New Zealand	25
		Melanesia	1	Solomon Islands	1
				Total	**1,620**

Table 1. SSEER Members by UN Region, Subregion, and Country (continued from page 3).

Researchers from the United States make up the majority of SSEER members. In 2023, however, new members joining the network from outside the United States represented just over one-third (N = 48; 33.80%) of new members (see **Figure 4**).

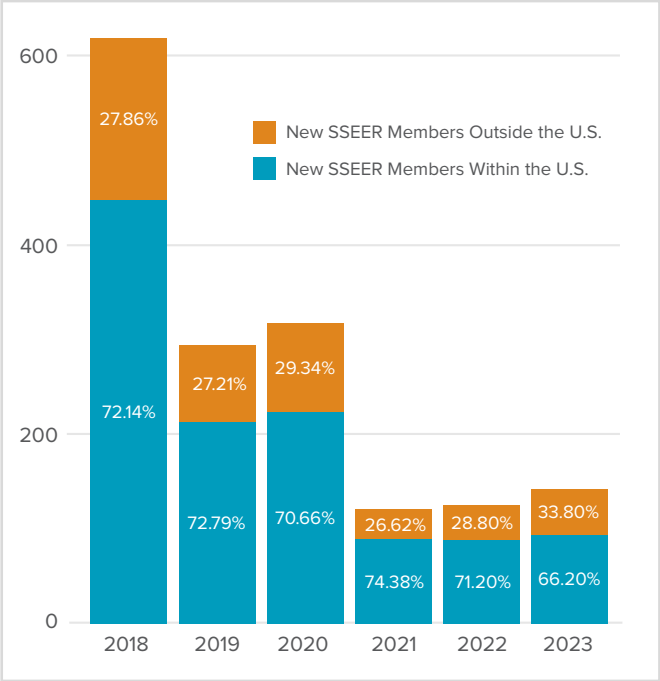

Figure 4. Percent of New SSEER Members Within and Outside the United States by Year Joined, 2018-23.

WHAT ARE THE DISCIPLINARY BACKGROUNDS AND AREAS OF EXPERTISE OF SSEER MEMBERS?

There is no single, universal **definition for which disciplines are included in the social sciences**. There are, however, several distinct disciplines that focus on individuals, groups, institutions, and/or society, which are often included under the broad umbrella of the social sciences.

The SSEER membership survey asks researchers to identify their primary social science discipline—or set of disciplines for those with multidisciplinary training. Of the 20 disciplines offered on the SSEER survey, most members identified with Disaster Science (N = 545). The next most often selected discipline was Decision-Making and Risk Analysis (N = 359), followed by Sociology and Geography (N = 348, each). Public Administration/Emergency Management (N = 336) completes the list of top five disciplines selected by SSEER members (see **Figure 5**). The figure does not sum to the number of SSEER members (N = 1,620) because researchers could, and often did, select more than one discipline.

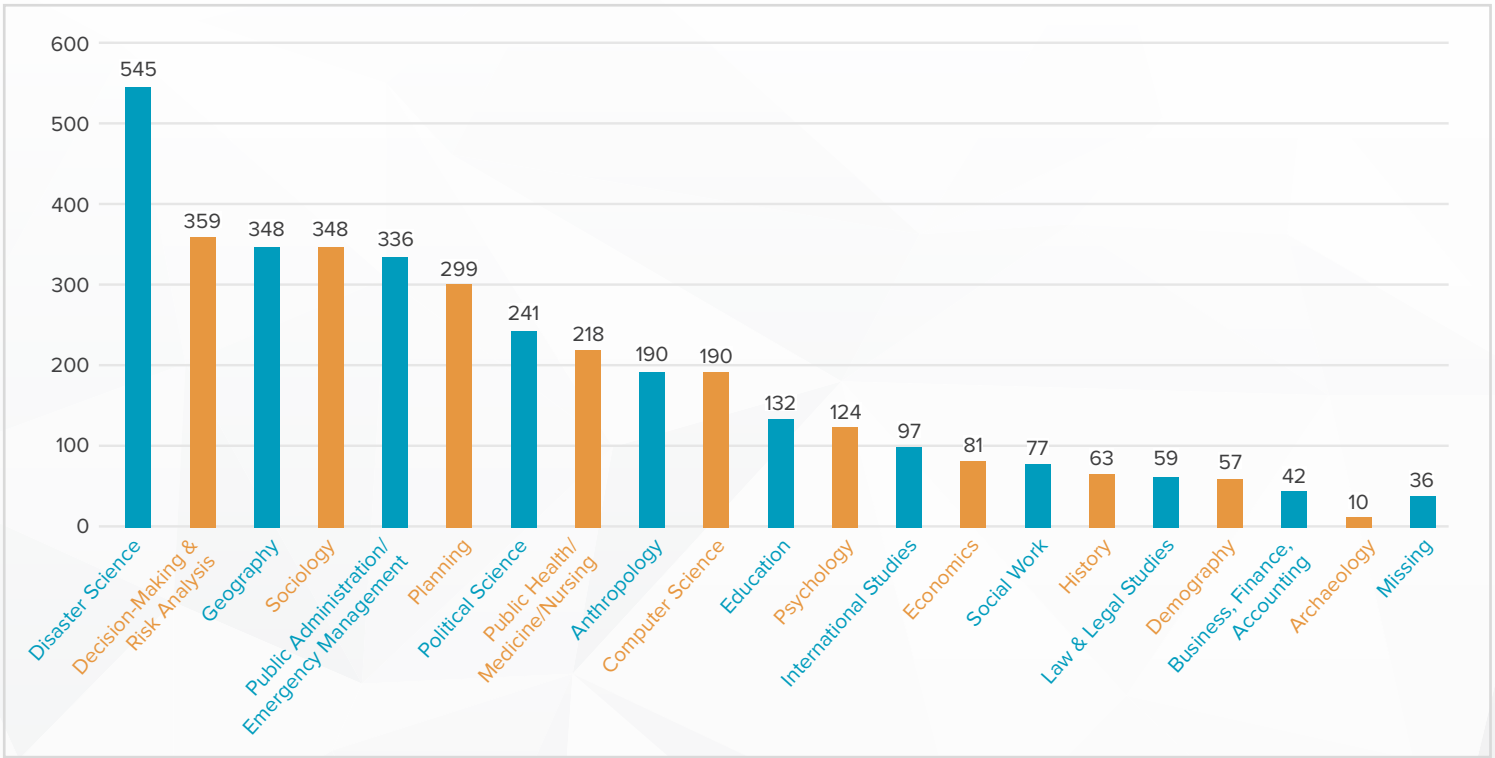

Figure 5. SSEER Members and Their Self-Selected Disciplinary Backgrounds.

WHAT ARE THE EDUCATIONAL AND PROFESSIONAL BACKGROUNDS OF SSEER MEMBERS?

The SSEER membership survey prompts researchers to share information about their educational attainment. Most SSEER members hold a doctoral degree (N = 959; 59.20%). The second most common level of educational attainment is a master's degree (N = 449; 27.72%). Fewer members hold a bachelor's degree (N = 101; 6.23%) or an associate's degree (N = 19; 1.17%). Educational attainment data are missing for slightly more than 5% of SSEER members (N = 92; 5.68%) (see **Figure 6**).

ABOUT
87% OF SSEER MEMBERS
HAVE A GRADUATE DEGREE.

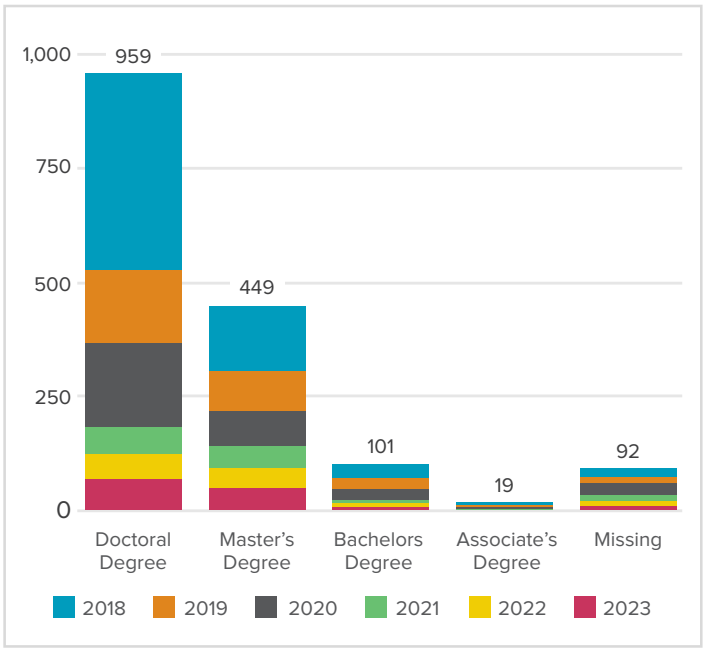

Figure 6. Highest Academic Degree Completed by SSEER Members by Year Joined, 2018-23.

In terms of primary professional status, most SSEER members identify as an academic researcher (N = 928; 57.28%), student (N = 309; 19.07%), or government researcher (N = 137; 8.46%). Fewer members identify as a non-profit researcher (N = 78; 4.81%), independent researcher (N = 65; 4.01%), private-sector researcher (N = 37; 2.28%), or retiree (N = 3; 0.19%). The remaining members identify as another kind of professional or have missing data (N = 63; 3.89%). As also shown in **Table 2**, the most to least common primary professional statuses of new SSEER members joining each year has, for the most part, remained the same from 2018 to 2023. Perhaps most notably, academic researchers continue to constitute the largest proportion of the membership each year.

MOST SSEER MEMBERS
ARE AFFILIATED WITH AN ACADEMIC INSTITUTION.

	2018		2019		2020		2021		2022		2023		**Total**	
	N	%	N	%	N	%	N	%	N	%	N	%	**N**	**%**
Academic Researcher	398	64.09	156	53.06	188	59.31	52	42.98	62	49.6	72	50.7	**928**	**57.28**
Student	90	14.49	59	20.07	52	16.4	36	29.75	33	26.4	39	27.46	**309**	**19.07**
Government Researcher	50	8.05	28	9.52	23	7.26	12	9.92	10	8	14	9.86	**137**	**8.46**
Non-Profit Researcher	23	3.7	15	5.1	18	5.68	7	5.79	8	6.4	7	4.93	**78**	**4.81**
Independent Researcher	29	4.67	14	4.76	11	3.47	6	4.96	4	3.2	1	0.7	**65**	**4.01**
Private-Sector Researcher	13	2.09	10	3.4	6	1.89	1	0.83	3	2.4	4	2.82	**37**	**2.28**
Retired	1	0.16	0	0	1	0.32	0	0	0	0	1	0.7	**3**	**0.19**
Other or Missing	17	2.74	12	4.08	18	5.68	7	5.79	5	4	4	2.82	**63**	**3.89**
Total	**621**	**100**	**294**	**100**	**317**	**100**	**121**	**100**	**125**	**100**	**142**	**100**	1,620	100

Table 2. Primary Professional Status of SSEER Members by Year Joined, 2018-23.

WHAT IS THE LEVEL OF INVOLVEMENT OF SSEER MEMBERS IN HAZARDS AND DISASTER RESEARCH?

Drawing on the influential ***Facing Hazards and Disasters*** report, our SSEER research team developed an expanded typology of levels of involvement in the hazards and disaster field (see **Peek et al. 2020**). We use the typology in the SSEER membership survey and ask each respondent to select which of the following best describes their status as a hazards and disaster researcher:

- **Core Researcher:** Strongly self-identifies as a hazards or disaster researcher, has a deep commitment to the field, and has engaged in hazards or disaster research for a sustained period of time.
- **Periodic Researcher:** Is not primarily engaged in hazards or disaster research but focuses on related topics from time to time throughout one's professional career.
- **Situational Researcher:** Not previously trained or involved in the hazards or disaster field but had the opportunity to study new phenomena or processes based on a situational event; for example, a researcher who undertook a study after their community was affected by a major disaster.
- **Emerging Researcher:** Includes students and others who are new to the hazards or disaster field and who are still learning about its disciplinary, multidisciplinary, or interdisciplinary histories, theories, methods, and approaches. Emerging researchers may have limited experience or may not have yet conducted their own original empirical research.

Figure 7 illustrates patterns of researcher self-identification for new researchers joining the network from 2018 to 2023. Around 39% percent of SSEER members identify as core researchers (N = 631; 38.95%). One-quarter identify as emerging researchers (N = 428; 26.42%), one-fifth identify as periodic researchers (N = 339; 20.93%), and less than 10% identify as situational researchers (N = 118; 7.28%). A small percentage of responses were missing (N = 104; 6.42%).

Over time, core researchers within the SSEER network remain the largest category cumulatively, but in 2021, 2022, and 2023, emerging researchers represented the largest proportion of new SSEER members. In 2020, the first year of the COVID-19 pandemic, the number of periodic researchers joining the SSEER network overtook emerging researchers to become the second largest category of new members that year.

EMERGING RESEARCHERS
ARE THE FASTEST GROWING MEMBER TYPE IN THE SSEER NETWORK.

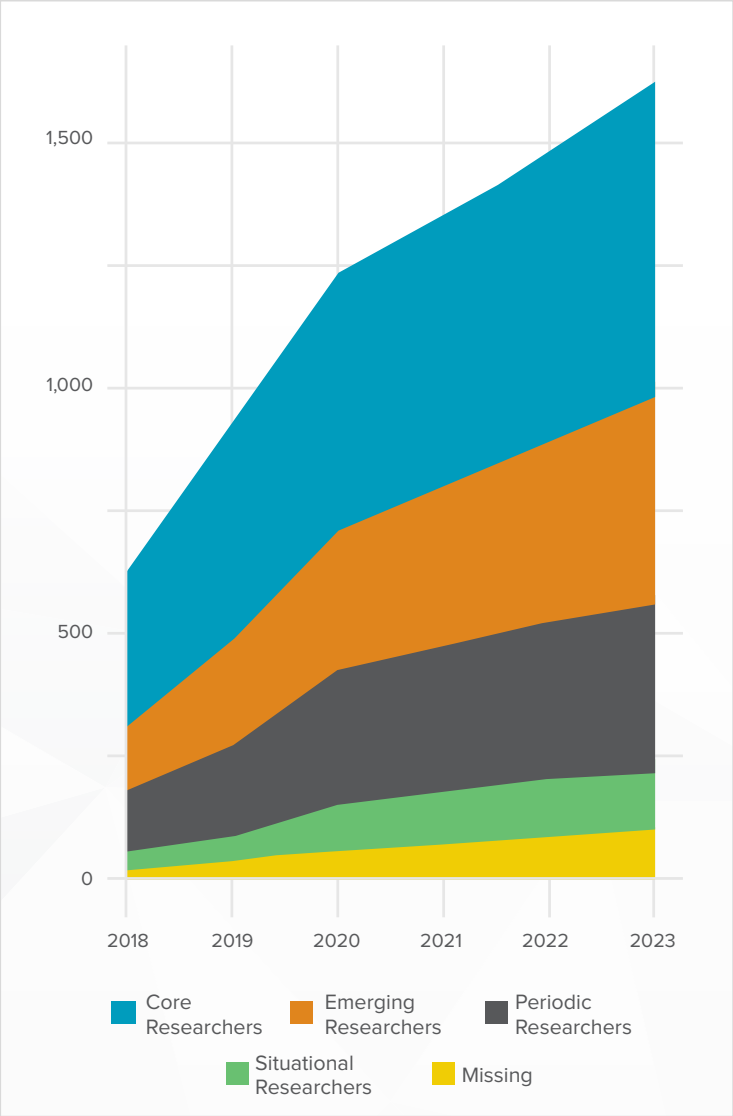

Figure 7. Level of Involvement in the Field of SSEER Members by Year Joined, 2018-23.

WHAT METHODS AND APPROACHES DO SSEER MEMBERS USE IN THEIR WORK?

The SSEER membership survey asks researchers to select their primary approach or approaches to data collection and analysis. As summarized in **Figure 8**, the top three most frequently chosen methodological approaches include in-depth interviews (N = 949), survey research (N = 946), and case studies (N = 932). The numbers in the figure do not sum to the sample size of 1,620 because researchers had the option to choose more than one approach, and most did so.

WHAT PHASES OF THE DISASTER CYCLE DO SSEER MEMBERS STUDY?

Social scientists who research hazards or disasters often study distinct **phases in the disaster cycle** including preparedness, emergency response, short-term reconstruction, long-term recovery, and mitigation (see **Figure 9**).

Figure 9. The Disaster Cycle.

SSEER MEMBERS **CONTRIBUTE NEW KNOWLEDGE** ACROSS EVERY PHASE OF THE DISASTER CYCLE.

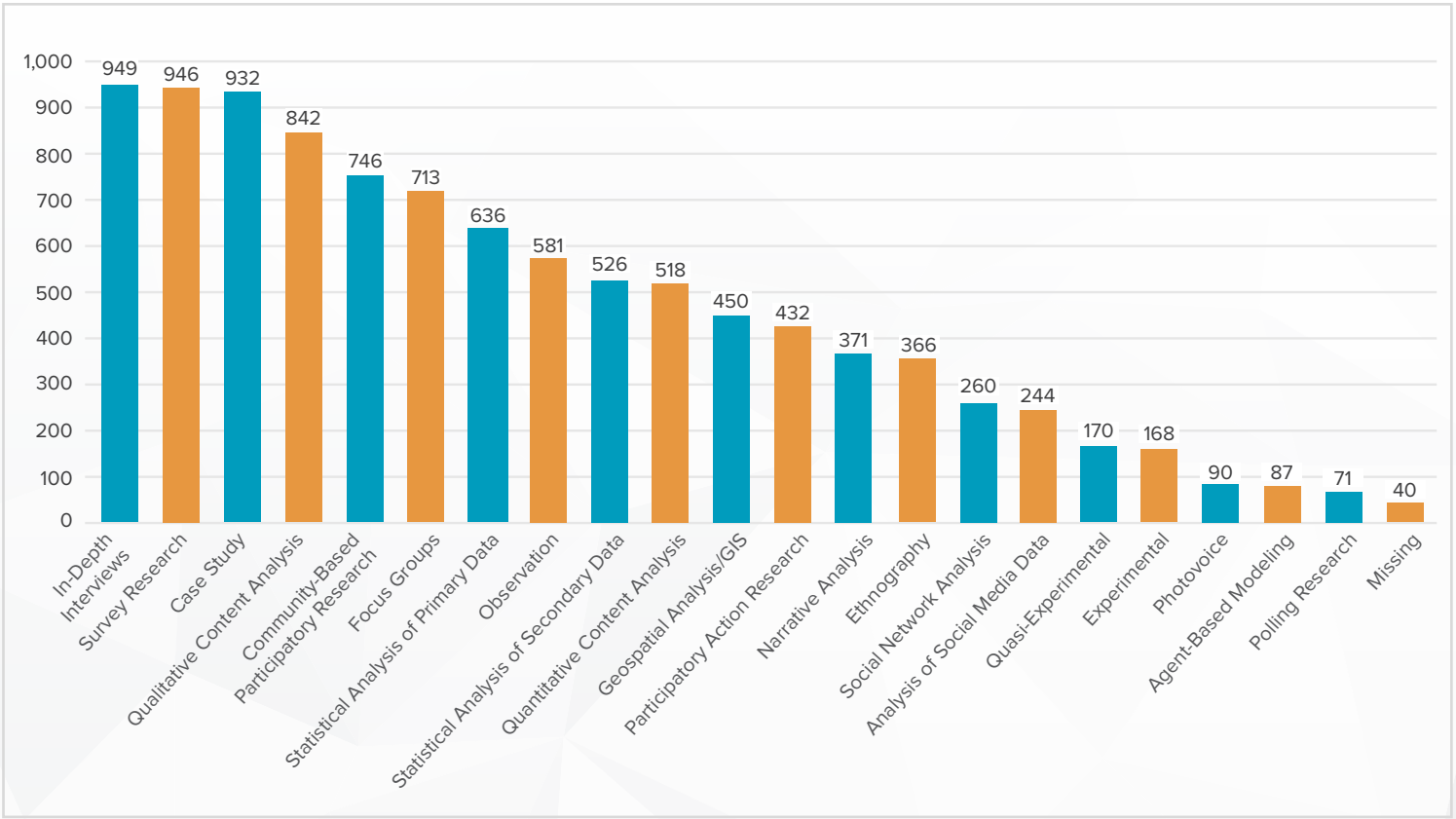

Figure 8. Primary Methodological Approaches of SSEER Members.

Figure 10 shows the different phases across the disaster cycle that SSEER members study. Most social scientists in the network focus on disaster preparedness (N = 1,213), followed by mitigation (N = 990), emergency response (N = 948), long-term recovery (N = 913), and short-term reconstruction (N = 598). The numbers in the text and in the figure do not sum to the sample size of 1,620 because researchers had the option to choose more than one phase, and most did so. In addition, there were 55 members who did not select any disaster phase.

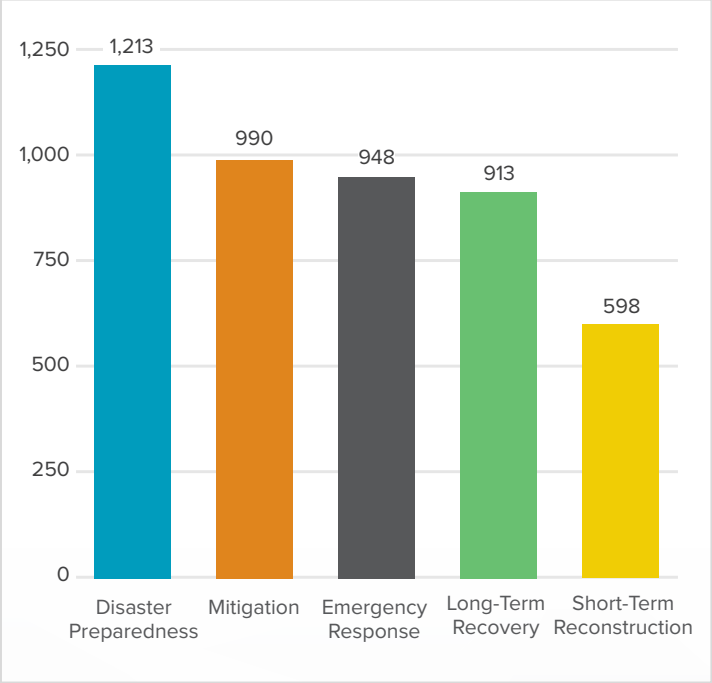

Figure 10. Disaster Phases Studied by SSEER Members.

WHAT HAZARD TYPES DO SSEER MEMBERS STUDY?

Figure 11 includes a summary of the hazard types that SSEER members indicated having studied on the survey. As shown, the majority of SSEER members study natural hazards (N = 1,484), which include geophysical, meteorological, hydrological, climatological, biological, and extraterrestrial events. A smaller number of respondents study technological hazards (N = 408) such as industrial accidents, transport accidents, and toxic exposures. The smallest portion of SSEER members focus on terrorism or other willful acts of violence such as mass shootings (N = 301). The numbers in the figure do not sum to the sample size of 1,620 because researchers had the option to choose more than one hazard type, and many did so.

HOW MANY DISASTER EVENTS HAVE SSEER MEMBERS STUDIED?

The SSEER membership survey asks respondents to identify up to 10 specific named disaster events that they have studied during their career. Between 2018 and 2023, we received 1,157 responses to this question, with 4,095 unique disaster events studied. These disasters span several centuries and multiple geographic and cultural contexts. The disasters that SSEER members have studied, along with keywords characterizing research expertise, are viewable through each **researcher's profile in the SSEER map**.

SSEER MEMBERS HAVE STUDIED
4,095 UNIQUE DISASTER EVENTS.

Based on responses detailing disasters studied by name of event and year, nearly one-third of SSEER members either refrained from responding to the question or had not studied any named disaster events (N = 462; 28.52%). Almost as many respondents had studied one disaster event (N = 218; 13.46%) as had studied two events (N = 227; 14.01%). A moderate number of SSEER members

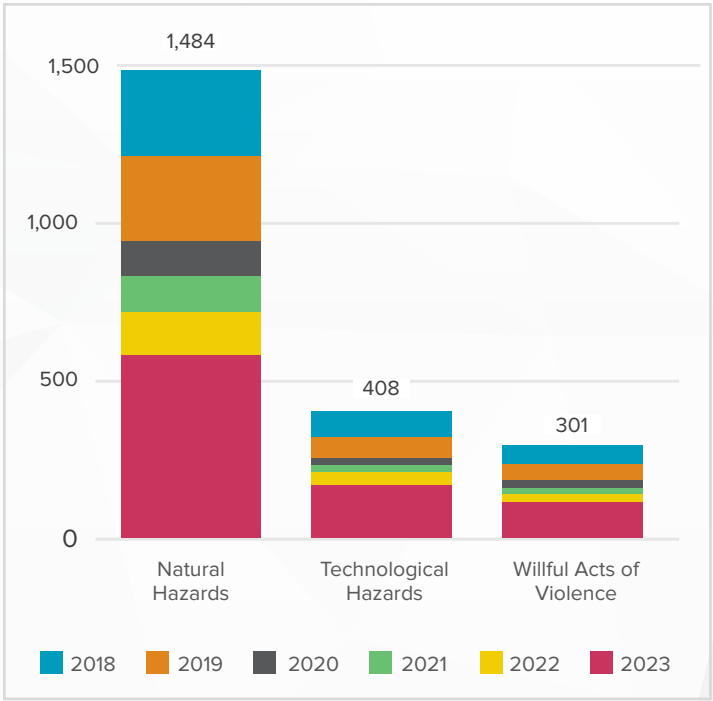

Figure 11. Hazard Types Studied by SSEER Members by Year Joined, 2018-23.

studied three events (N = 191; 11.79%), four events (N = 127; 7.84%), or five events (N = 105; 6.48%). Fewer than 100 members studied ten (N = 76; 4.69%) or six (N = 68; 4.20%) disaster events. An even smaller number of SSEER members had researched seven (N = 47; 2.90%), eight (N = 42; 2.59%), or nine events (N = 32; 1.98%), respectively. Less than 1% of members researched 11 events (N = 15; 0.93%), and a small number of members responded to the survey with 12 (N = 7; 0.43%) or 13 events (N = 3; 0.19%) (see **Figure 12**).

SSEER MEMBERS HAVE STUDIED AN AVERAGE OF **2.89 NAMED DISASTER EVENTS**.

On average, SSEER members studied 2.89 events; however, variation exists between different levels of involvement in the field of social science hazards and disaster research (see **Figure 13**). Core researchers report studying an average of 4.40 events (SD = 3.38). Those who identify as periodic researchers reported the next-highest average at 2.60 events studied (SD = 2.66). Emerging researchers report studying 1.82 disaster events on average (SD = 2.17), and situational researchers report having studied 1.77 events on average (SD = 1.89).

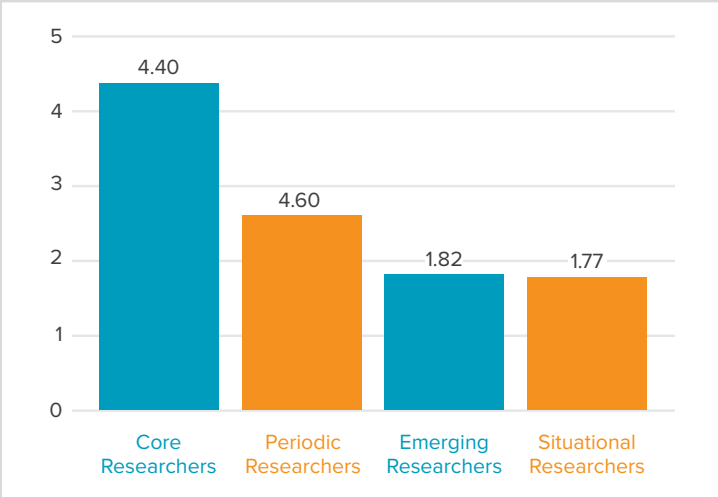

Figure 13. Average Number of Disaster Events Studied by SSEER Members Based on Their Self-Reported Level of Involvement in the Field.

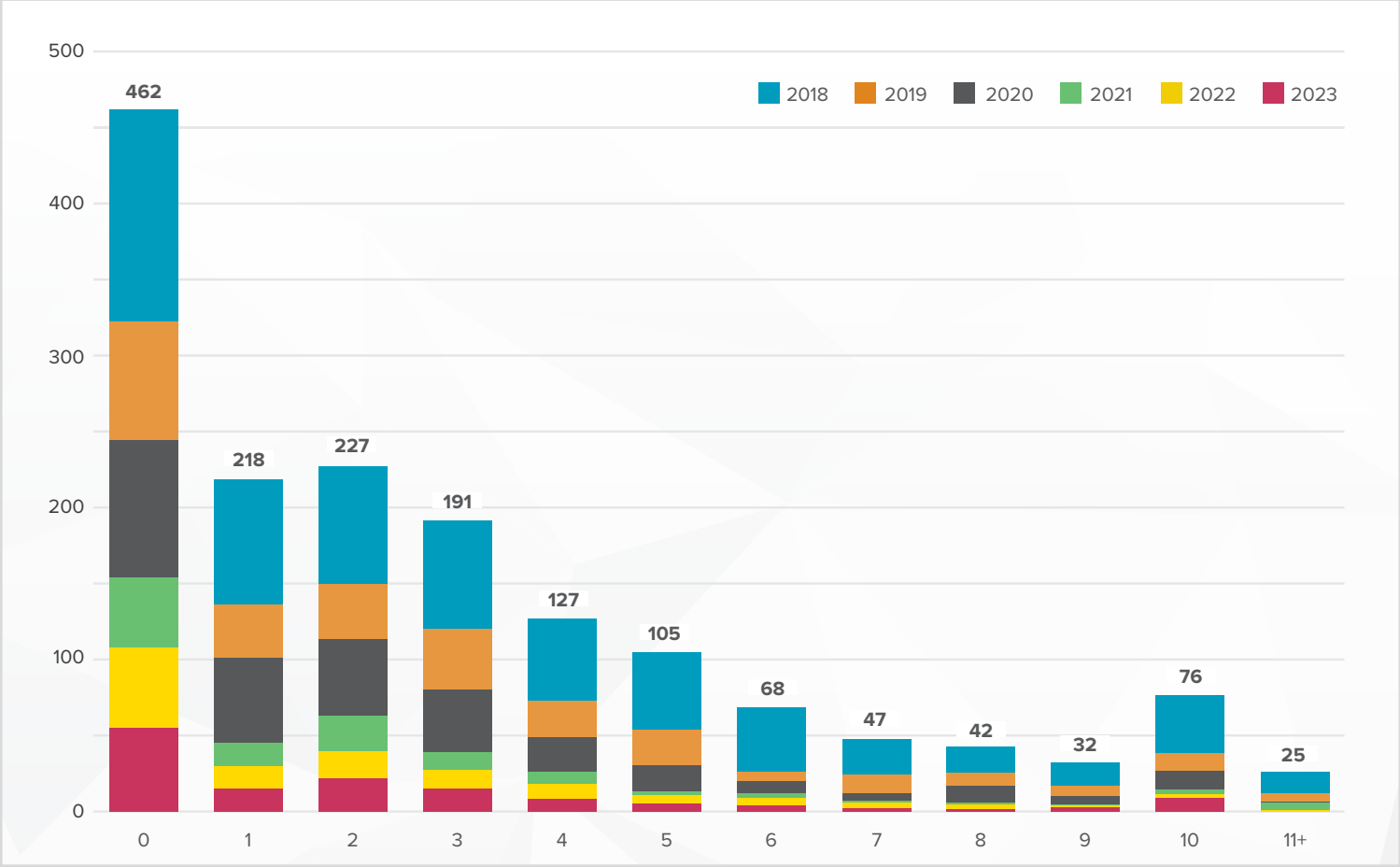

Figure 12. Number of Disaster Events Studied by SSEER Members by Year Joined, 2018-23.

WHAT NAMED DISASTER EVENTS HAVE SSEER MEMBERS STUDIED?

In terms of the most frequently studied disasters in the SSEER database (see **Table 3**), **Hurricane Katrina** remains the most studied disaster event (N = 264), followed by **Hurricane Harvey** (N = 166), **Hurricane Maria** (N = 143), and **Hurricane Sandy** (N = 137). For the second year in a row, **COVID-19** (N = 132) remains the fifth most studied event by SSEER members. **Hurricane Irma** (N = 104) is the sixth most studied event, followed by the **9/11 terrorist attacks** (N = 81), the **2004 Indian Ocean earthquake and tsunami** (N = 75), and the **2011 Fukushima/Great East Japan earthquake and tsunami** (N = 71). The **2010 BP Deepwater Horizon oil spill** (N = 62) rounds out the top 10 most studied disaster events.

Disaster Event	Year Event Was Named	Number of SSEER Members Who Studied the Event**
Hurricane Katrina	2005	264
Hurricane Harvey	2017	166
Hurricane Maria	2017	143
Hurricane Sandy	2012	137
COVID-19	2020*	132
Hurricane Irma	2017	104
9/11 Terrorist Attacks	2001	81
Indian Ocean Earthquake and Tsunami	2004	75
Fukushima/Great East Japan Earthquake and Tsunami	2011	71
BP Deepwater Horizon Oil Spill	2010	62

Table 3. Most Commonly Researched Disaster Events by SSEER Members.
**The World Health Organization declared COVID-19 a pandemic on March 11, 2020.*
***Some of these researchers studied more than one event in this list.*

WHAT IS THE DEMOGRAPHIC COMPOSITION OF THE SSEER RESEARCH WORKFORCE?

To characterize the demographic composition of the social science hazards and disaster workforce, the SSEER survey ends with a series of questions regarding respondent age, years of experience, race and ethnicity, and gender identity.

Age and Experience

Based on their reported birth year, SSEER members are between 22 to 89 years of age. The average SSEER member is 45.74 years old and has 8.9 years of research experience in the hazards and disaster field. More than one-fifth of SSEER members (N = 364; 22.47%) did not provide their age in the survey.

THE AVERAGE SSEER MEMBER HAS ABOUT
9 YEARS OF EXPERIENCE
IN THE HAZARDS AND DISASTER FIELD.

Race and Ethnicity

The SSEER survey prompts respondents to select which racial and ethnic category or categories, which were adapted from the U.S. Census, best describe their identity. Most SSEER respondents identify as White (N = 873; 53.89%). Fewer SSEER members identify as Asian/Asian American (N = 221; 13.64%), Hispanic/Latino (N = 99; 6.11%), or Black/African American (N = 92; 5.68%). A small percentage of respondents selected two or more racial or ethnic categories (N = 76; 4.69%) or some other provided answer option (N = 69; 4.26%) such as Native Hawaiian/Pacific Islander, American Indian or Alaska Native, or Prefer to Self-Describe. About five percent respondents (N = 86; 5.31%) selected Prefer Not to Answer, and just over six percent (N = 104; 6.42%) of SSEER respondents were coded as Missing because they did not respond to the race and ethnicity question. **Table 4** *(page 12)* displays the racial/ethnic identity of SSEER members by year that they joined the network.

Gender

More women (N = 851; 52.53%) than men (N = 641; 39.57%) have joined the SSEER network. Additionally, a small portion of members provided some other answer (N = 128; 7.9%), including identifying as non-binary/non-conforming, transgender, or selecting Some Other Answer or Prefer Not to Answer. Around five percent of respondents were coded as Missing (N = 82; 5.06%) because they did not answer this question. Responses regarding the gender identity of SSEER members for each year joined between 2018 through 2023 appear in **Table 5** *(page 12)*. Cumulative counts of gender identification each year are displayed in **Figure 14** *(page 12)*.

Core Researchers by Race and Ethnicity, Gender, and Age

As described above, core researchers make up the center of the field in that they include those with the deepest commitment to hazards and disaster research and those who have engaged in this type of research for a sustained period of time. Given the importance of core researchers to the cultivation and continuity of the field, we sought to

understand more about the racial/ethnic, gender, and age composition of this specific group of researchers.

Most core researchers identify as White (57.53%; N = 363), followed by Asian/Asian American (16.32%; N = 103). Fewer core researchers identify as Hispanic/Latino (5.39%; N = 34) or Black/African American (4.91%; N = 31).

Of the current SSEER membership, 52 percent of core researchers identify as women (52.14%; N = 329) and about 45 percent (45.32%; N = 286) of core researchers identify as men. A smaller percent of core researchers (2.54%; N = 16) gave some other answer, including Prefer Not to Answer, Some Other Answer, transgender, or non-binary/ non-conforming.

The average age of core researchers is 48.16 (SD = 11.68) compared with the average age of full SSEER network of 45.74 (SD = 11.86). Shown in **Figure 15** *(page 13)*.

		White	Asian/Asian American	Hispanic/ Latino	Black/African American	Two or More Racial/Ethnic Identities	Some Other Answer	Prefer Not to Answer	Missing	**Total**
2018	N	383	85	32	28	14	32	28	19	**621**
	%	61.67	13.69	5.15	4.51	2.25	5.15	4.51	3.06	**100**
2019	N	168	36	15	15	13	15	20	12	**294**
	%	57.14	12.24	5.1	5.1	4.42	5.1	6.8	4.08	**100**
2020	N	146	47	21	22	16	20	19	26	**317**
	%	46.06	14.83	6.62	6.94	5.05	6.31	5.99	8.2	**100**
2021	N	53	10	11	11	7	0	6	23	**121**
	%	43.8	8.26	9.09	9.09	5.79	0	4.96	19.01	**100**
2022	N	57	20	8	5	11	1	9	14	**125**
	%	45.6	16	6.4	4	8.8	0.8	7.2	11.2	**100**
2023	N	66	23	12	11	15	1	4	10	**142**
	%	46.48	16.2	8.45	7.75	10.56	0.7	2.82	7.04	**100**
Total	**N**	**873**	**221**	**99**	**92**	**76**	**69**	**86**	**104**	**1,620**
	%	**53.89**	**13.64**	**6.11**	**5.68**	**4.69**	**4.26**	**5.31**	**6.42**	**100**

Table 4. Racial/Ethnic Identity of SSEER Members by Year Joined, 2018-23.

		Woman	Man	Some Other Answer	Missing	**Total**
2018	N	327	265	9	20	**621**
	%	52.66	42.67	1.45	3.22	**100**
2019	N	150	122	21	1	**294**
	%	51.02	41.5	7.14	0.34	**100**
2020	N	166	119	6	26	**317**
	%	52.37	37.54	1.89	8.2	**100**
2021	N	69	39	2	11	**121**
	%	57.02	32.23	1.65	9.09	**100**
2022	N	71	37	3	14	**125**
	%	56.8	29.6	2.4	11.2	**100**
2023	N	68	59	5	10	**142**
	%	47.89	41.55	3.52	7.04	**100**
Total	**N**	**851**	**641**	**46**	**82**	**1,620**
	%	**52.53**	**39.57**	**2.84**	**5.06**	**100**

Table 5. Gender Identity of SSEER Members by Year Joined, 2018-23.

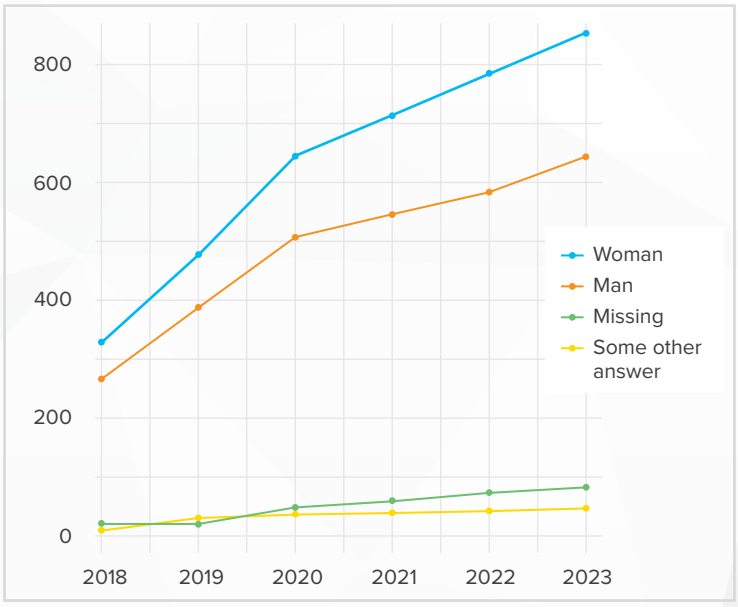

Figure 14. Cumulative Counts of Gender Identity among SSEER Members by Year Joined, 2018-23.

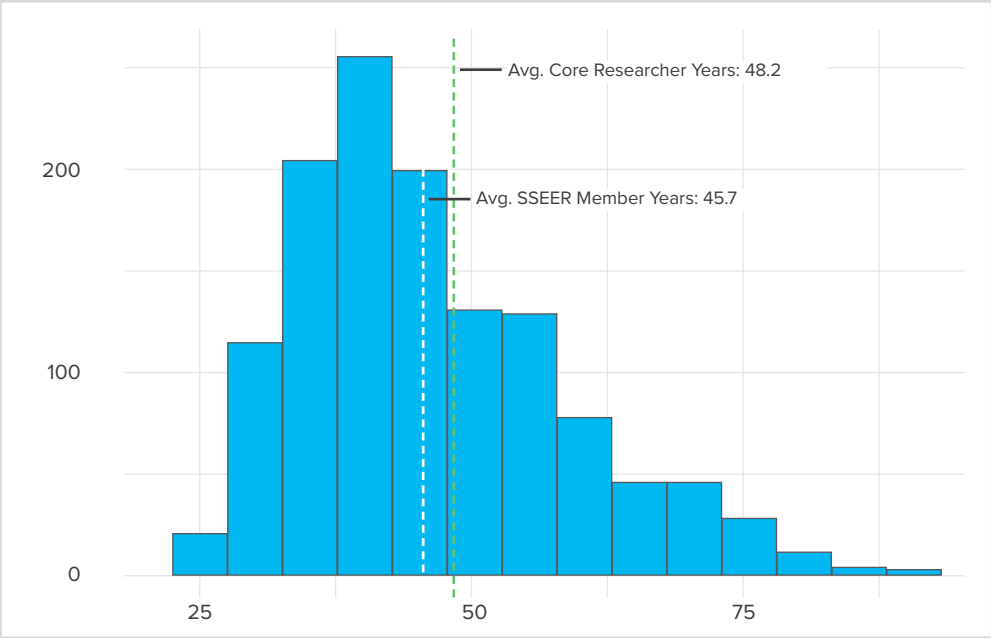

Figure 15. Distribution of Current SSEER Members by Age.

CONCLUSION

The SSEER network is now in its sixth year. Since the membership survey was first launched in 2018, the network has more than doubled in size and now includes a total of 1,620 researchers from 76 countries. The number of SSEER members joining each year increased by the greatest percent in the first three years, and after 2020 has increased by 9 to 10% per year.

SSEER members are predominantly located in the United States, although in 2023, new members joining the network from outside the United States represented just over one-third (N = 48; 33.80%) of new membership. As noted in previous reports, it is not clear if there are, in fact, more social scientists who study disasters in the United States, or if that is where we have been most successful at identifying researchers and encouraging them to join SSEER. Historically, there have been relatively strong investments in **social science and multidisciplinary hazards and disaster research** in the United States, but the predominance of members here may be more a reflection of our reach as a U.S.-led and U.S. National Science Foundation-funded network.

Members of the SSEER network are most likely to study natural hazards, although hundreds of members also study technological hazards or terrorism and other willful forms of violence. Social scientists in the network report studying 4,095 unique disaster events. The most frequently studied disasters include major hurricanes such as Hurricane Katrina, Harvey, and Maria that have affected the mainland United States and its territories, the COVID-19 pandemic, and the 9/11 terrorist attacks among other disasters of national and global significance. It is noteworthy that the 10 most frequently studied disasters all occurred in the 21st century and most of these events happened in the United States. This is likely because SSEER membership is heavily concentrated in the United States, although these particularly devastating named events attracted broad media coverage and international interest as well.

As indicated in this report, social scientists use a range of methods and approaches to collect and analyze data. The most often utilized methods include survey research, case studies, and in-depth interviews. It is worth noting, however, that SSEER members hold a wide range of methodological skills and often use more than one methodological approach in their research.

The **demographic composition** of the hazards and disaster research workforce has long been of interest to leaders within the field. One area of special concern is whether **researchers reflect the demographic diversity** of the populations being studied. Our analyses in this and prior reports offer the first systematic characterization of the years of experience and racial, gender, and age composition of the social science hazards and disaster research community. These results show that the majority of SSEER members are women and those who identify as White. The average SSEER researcher is about 45 years old, although reported ages range from 22 to 89. These demographic characteristics also hold for core researchers, who make up the committed center of the field.

Moving forward, we will continue to release annual **SSEER Census** results via the **CONVERGE website** so that we can monitor and assess the status of the social science hazards and disaster research workforce. We also update the interactive **SSEER map** quarterly; if you are a social scientist who studies extreme events and have not yet joined, you are invited to do so by completing the **SSEER membership survey**.

RECOMMENDED CITATIONS FOR THE 2023 CENSUS AND DATA

Mark, Brigid and Lori Peek. 2024. "2023 Social Science Extreme Events Research (SSEER) Census," in Social Science Extreme Events Research (SSEER) Network Data, Survey Instrument, and Annual Census. DesignSafe-CI. https://doi.org/10.17603/ds2-s891-5r70

For reference to the data used in this year's SSEER Census, please see:

Peek, Lori, Brigid Mark, Jessica Austin, and Heather Champeau. 2024. "2023 Social Science Extreme Events Research (SSEER) Network," in Social Science Extreme Events Research (SSEER) Network Data, Survey Instrument, and Annual Census. DesignSafe-CI. https://doi.org/10.17603/ds2-s891-5r70

SSEER ANNUAL REPORTS AND DATA PUBLICATIONS

Previously published SSEER Census reports are available via the CONVERGE website and through the DesignSafe project page for SSEER.

The de-identified SSEER datasets and data documentation that informed prior annual reports are published and available for download on DesignSafe.

ABOUT SSEER

SSEER is a **global network** of social scientists who study hazards and disasters. SSEER **identifies** researchers to develop the social science workforce and **coordinates** social science research teams in large-scale disasters to **advance scholarship** on the root causes and human consequences of extreme events.

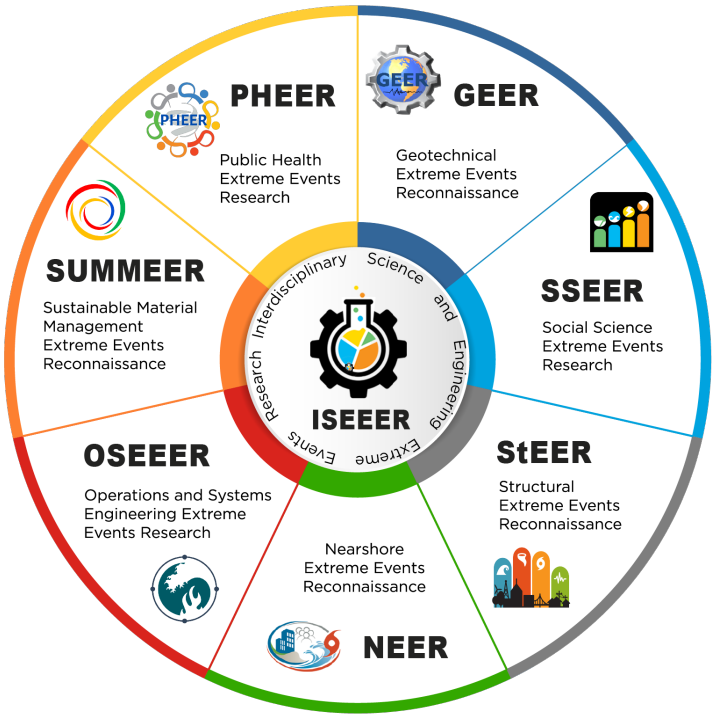

Figure 16. Extreme Events Research and Reconnaissance Networks.

SSEER is part of a larger ecosystem of extreme events research and reconnaissance networks, shown in **Figure 16**, that were established with support from the National Science Foundation (NSF) and Centers for Disease Control and Prevention (CDC). These networks coordinate disciplinary communities in engineering, the social and natural sciences, and public health; they also encourage ethical reconnaissance practices, open data sharing, and interdisciplinary integration. The networks are coordinated through the National Science Foundation-funded CONVERGE facility. More information on SSEER and the other networks is available on the CONVERGE website.

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