# Women and Parapsychology 2022 An Online Survey

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Abstract - In 1991, the Parapsychology Foundation organized an international conference on the topic "Women and Parapsychology," held in Dublin, Ireland. The survey aimed for an assessment of the situation in parapsychology 30 years after this conference. Our team asked women active in the research field of parapsychology and related areas about their scientific careers, authoring articles, contributions to the field and gender-specific experiences. We distributed the link to the extensive online questionnaire on several e-mail lists and websites and also sent the link specifically to individuals. 30 women completed the questionnaire. We got a selective, non-representative sample, with a high average age and level of education. Due to these limitations, the survey did not provide complete clarity as to whether parapsychology differed from other disciplines with regard to the status and situation of women. Several aspects are comparable to the situation of women in other research fields. As is generally the case in academia, women tend to be paid less. They have to make greater efforts to be taken seriously by male colleagues, which can slow down their careers, in addition to career interruptions due to raising children, greater difficulties balancing work and family life, and the like. We found a relatively low proportion (10%) of women who reported sexual intimidation or harassment in the field of parapsychology. General funding problems in parapsychology are even greater for women because of the additional childrearing responsibilities and less institutionalized research. Some findings lead us to the thesis that it is not necessarily the gender aspect that is respon-

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sible for rude and inappropriate behavior on the part of male colleagues, but rather a tendentially greater openness on the part of female researchers for worldviews and heterodox research subjects outside of the scientific mainstream. This thesis must be validated in further studies.

Keywords: feminism in parapsychology – gender equity – women and methodological standards – women in science – authorship – obstacles in research – funding – barriers to contribution

### Frauen und Parapsychologie 2022 - Eine Online-Umfrage

Zusammenfassung<sup>2</sup> – 1991 organisierte die Parapsychology Foundation eine internationale Konferenz zum Thema "Frauen und Parapsychologie" [Women and Parapsychology] in Dublin/Irland. Die Umfrage zielte auf eine Einschätzung der Situation in der Parapsychologie 30 Jahre nach dieser Konferenz ab. Unser Team befragte Frauen, die im Forschungsfeld der Parapsychologie und verwandten Bereichen tätig sind, zu ihrem wissenschaftlichen Werdegang, zum Verfassen von Artikeln, zu Beiträgen auf dem Gebiet und zu geschlechtsspezifischen Erfahrungen. Wir verbreiteten den Link zu dem umfangreichen Online-Fragebogen über mehrere E-Mail-Listen und Websites und schickten den Link auch gezielt an Einzelpersonen. 30 Frauen füllten den Fragebogen aus. Es handelte sich um eine selektive, nicht repräsentative Stichprobe mit einem hohen Durchschnittsalter und Bildungsniveau. Aufgrund dieser Einschränkungen lieferte die Umfrage keine vollständige Klarheit darüber, ob sich die Parapsychologie im Hinblick auf den Status und die Situation von Frauen von anderen Disziplinen unterscheidet. Einige Aspekte sind mit der Situation von Frauen in anderen Forschungsbereichen vergleichbar. Wie allgemein in der Wissenschaft werden Frauen tendenziell schlechter bezahlt, sie müssen sich mehr anstrengen, um von ihren männlichen Kollegen ernst genommen zu werden, was ihre Karriere verlangsamen kann, dazu kommen Unterbrechungen der Karriere durch Kindererziehung, größere Schwierigkeiten, Beruf und Familie unter einen Hut zu bringen und ähnliches. Wir fanden einen relativ geringen Anteil (10 %) von Frauen, die über sexuelle Einschüchterung oder Belästigung im Bereich der Parapsychologie berichteten. Die allgemeinen Finanzierungsprobleme in der Parapsychologie sind für Frauen aufgrund der zusätzlichen Kindererziehungspflichten und der weniger institutionalisierten Forschung vermutlich noch größer. Einige Befunde führen zu der These, dass nicht unbedingt der Gender-Aspekt für unhöfliches und unangemessenes Verhalten männlicher Kollegen verantwortlich ist, sondern vielmehr eine tendenziell größere Offenheit der Forscherinnen für Weltanschauungen und heterodoxe Forschungsgegenstände außerhalb des wissenschaftlichen Mainstreams. Diese These muss in weiteren Studien validiert werden.

Schlüsselbegriffe: Autorenschaft – Feminismus in der Parapsychologie – Frauen und methodologische Standards – Frauen als Wissenschaftlerinnen – Funding – Gender-Gleichheit – Hindernisse in der Forschung – wissenschaftliche Publikationen

<sup>2</sup> Eine erweiterte deutsche Zusammenfassung befindet sich am Ende des Artikels.

I think parapsychology is biased with regards to mediums [...] being taken seriously [...] or being trained as clinical parapsychologists or researchers —almost as though 'they' would decrease the credibility of those in the field (survey participant)

As far as women and parapsychology are concerned, feminist research methodology or scientific ideology may give momentum for a hidden conflict. The whole thing begs the question, is parapsychology friendly to women?

### Preliminary Remark by Gerhard Mayer

The idea of Conducting an online survey among female parapsychologists came to me while realizing the special issue of the Journal of Anomalistics. Guest editor Cedar S. Leverett noted imbalance between male and female scientists presenting at the 2019 Parapsychological Association Annual Meeting in Paris (cf. Leverett, 2022, this issue). In addition to the presentations on the various aspects of the topic that we hoped to get through a call for papers and invited papers, I wanted to get the opinions of a larger number of active female researchers rather than relying solely on guesswork. At first, I had a short questionnaire in mind. It made sense to include in the design of the questionnaire two guest editors, the other being Nancy L. Zingrone since she was part of the 1991 Parapsychology Foundation conference "Women and Parapsychology." During the discussion of the questionnaire, complex and subtle topics and questions arose. This brought with it a challenge, because it was no longer a questionnaire that could be filled out conveniently. The length of the questionnaire increases the intensity and depth of the individual's reflection, which can affect the answering of questions such as whether something has changed for the better or for the worse. Therefore, we would like to take this opportunity to thank the women who have supported our project with their participation.

#### Introduction

In 1991, a conference of the Parapsychology Foundation took place with the title *Women and Parapsychology* in respect to viewpoints of women in science and in the research area of parapsychology. It addressed scientific careers, the publication of articles, cultural and religious contributions to the field and other advancements made by women. Only a few males attended the conference; it was considered a "woman-thing" by some of them (Zingrone, 2022, this issue). It coincides with the onset of third-wave feminism, which has focused more on issues of diversity, and societal and cultural sub-areas based in advances of civil rights for underrepresented groups (Evans, 2015). "Gender and science" was one such sub-area for feminist approaches. Questions about gender-specific research objects and methods, but of course also

gender-specific disadvantages and disabilities in the scientific career, became the subject of scientific investigations (cf., e.g., Schiebinger, 1999). The first contributions from the field of parapsychology on this topic came from Hess (1988) and Zingrone (1988).

# Designing a Survey

Without knowing in detail what changed over the past 30 years for women active in parapsychology and related fields of heterodox research, it was at least clear that references to societal sensitivity surrounding issues of diversity and sexual harassment in the workplace had a starting point for discussion and became significantly larger. For this reason, we anticipated the survey's results to reflect scientists' interests in gender-related issues in the field of parapsychology and to still be as high as it was 30 years ago.

Our survey asked women about their experiences and assessment of the situation today. It is difficult to assess the changes that have occurred if no longitudinal studies are available. Unfortunately, this is the case for parapsychology, we do not have comparable quantitative data from the 1990s. However, we have at least the conference proceedings *Women and Parapsychology* (Coly & White, 1994) which contains excellent qualitative material. We have the memories of researchers who were there at the time.

A second layered problem we encountered in our survey is limited knowledge of the ratio of female to male researchers and the specific population of women active in parapsychology and related research fields; professional associations such as the Parapsychological Association (PA) often do not record the gender of their members in their membership lists. However, reasonably reliable estimates can be made by using existing lists of names, e.g. quantifying the salutations or separating the first names according to gender, which is not always possible. Roughly estimated, three-quarters of the members in associations dedicated to parapsychology in a narrower sense are male. We counted 73% male forenames on the PA member list with no significant difference between professional members and associates. This is mirrored in the numbers of a survey among PA members (Irwin, 2014), with 73% male and 27% female respondents. The German association Wissenschaftliche Gesellschaft zur Förderung der Parapsychologie (WGFP) [Scientific Society for the Advancement of Parapsychology] counts 75% male members and 25% female members. The German Gesellschaft für Anomalistik (GfA) [Society of Anomalistics] currently has 77% male and 21% female members, with the gender of 2% of the members not being derivable from the available data. With the Society for Psychical Research (SPR), the ratio of male and female members could be slightly more balanced. The proportion of male titles (Mr.) in an e-mail to the SPR members was 43%, the proportion of female titles (Mrs/Ms/Miss) was 24%, and the remaining 33% could not be assigned.<sup>3</sup> All data are as of August 2022, if not otherwise indicated. Interestingly, a comparable gender ratio was also found by Zingrone (1988) in her analysis of gender in the authorship of scientific articles in the *Journal of Parapsychology* (JP) and the *Journal of the American Society for Psychical Research* (JASPR), with 73% of the JP authors and 80% of the JASPR authors of the modern period (1977–1986) being male.

If the proportion of female members of the SPR is actually higher than in the other mentioned associations, this could be an indication of a shift in the focus of interest. Is there perhaps a larger percentage of SPR members with spiritualist interests than in the PA, the WGFP or the GfA? The degree of professionalism of the PA and SPR members differs solely due to the different admission requirements (Mayer, 2017). There are other associations that deal with sub-areas of parapsychology and related areas such as the International Remote Viewing Association (IRVA) or the International Association for Near-Death Studies (IANDS), which each represent different substantive and ideological focuses with their membership and embody different degrees of scientific professionalization. Does it influence the number of women members?

A third problem is the definition of parapsychology and related fields (Evrard & Tremmel, 2015; Tremmel, 2014). In a narrow sense, parapsychological research deals with the investigation of psi phenomena (extrasensory perception, psychokinesis, precognition). The survival hypothesis also traditionally belongs to this research area. Near-death experiences, out-of-body experiences, reincarnation experiences, and the like are associated with parapsychological research (Irwin & Watt, 2007), but also are the subject of research in other academic disciplines such as religious, neuropsychological and anthropological studies. Parapsychology can be understood as a branch of anomalistics, which also includes astrology, cryptozoology, ufology, among others. For instance, the Society for Scientific Exploration (SSE) is an association dedicated to this broad spectrum of anomalistic phenomena. This means that researchers in the field of parapsychology and anomalistics form a heterogeneous group in terms of research interests and ideological orientation.

A fourth problem undetected during the inception of the design, but evaded the survey's organization while attempting to manage its length and style, had to do with lacking information about current trends in parapsychology. It was not until after its publication that certain points on the survey were externally noticed. For example, Association for the Women in Science, AWIS, published an article about authorship in Science, Technology, Engineering, and Mathematics, STEM (Langin, 2022), an article that reflected items in the survey, but author-

<sup>3</sup> We thank the secretary of the SPR, Peter Johnson, for this information.

ship was not discussed among us as a trend for parapsychology. Additionally, neither a spontaneous search for new books in parapsychology written by women nor approaching members of associations in parapsychology produced relevant information. So, any attempt to have a book review in the special issue escaped the opportunity to reveal what is up and coming insofar as reading material is concerned.

In contrast to the great interest in psi phenomena among the general population, even in modern Western-style societies, as reflected in cultural products such as films, TV programs and fiction books, the interest in their scientific study is astonishingly small. At least that is what the precarious funding situation in parapsychology suggests (Mayer, 2021). To what extent the lack of interest in researching psi phenomena is primarily due to fellow researchers in mainstream science or whether this is a phenomenon affecting society as a whole cannot be clearly determined. One reason for this is the influence this research can have on worldviews; to give an example, many practicing mediums may have no interest in scientific study of mediumship. On the one hand, they are of the opinion that mediumship works, but cannot investigate it scientifically, as is generally the case with esoteric teachings and forms of knowledge. On the other hand, they are afraid that what they consider negative scientific findings will have a disillusioning unfriendly and business-damaging effect. Depending on the implicit theoretical model for psi phenomena, mediumship practices may be viewed as expressions of the "supernatural," perhaps religious signs, and scientific investigation is viewed as inadequate and, at worst, sacrilegious.

The ideological aspects associated with parapsychology distinguish its research discipline from other scientific disciplines. For this reason, researchers working in these fields form a kind of elite group as specialists who have left the framework of the usual scientific establishment because they deal with heterodox research subjects and are therefore exclusive. This deviation from the mainstream can weld the group together to a distinctiveness. The present study examines whether and in what way this special situation also affects the experiences as female scientists. Due to the restrictive conditions mentioned above, i.e. the lack of comparative figures, we can only rely on the statements of the participants and let them speak for themselves.

# Conducting the Survey

The survey was directed to women active in the research field of parapsychology and closely related areas. By women active in these fields of research we meant those who are contributing to the field, as opposed to only participating as a subject, as full-time, part-time, independent or informal researchers, teachers, students, clinicians, or who are actively involved in the work of associations, societies, research, virtual or traditional educational institutions (e.g. PA, SPR,

SSE). We characterized, in the introductory explanation, that we are using the term parapsychology in a broad sense including the study of psi phenomena of different kinds (extrasensory perceptions, telepathy, precognition etc.) in different settings (laboratory, field studies) as well as research into other paranormal claims such as near-death experiences, reincarnation, mediumship, survival research etc. Asking for "women active in parapsychology and closely related areas" does not very accurately describe the persons to whom the survey was directed. We did not want to restrict the sample too much from the outset.

The data for this study was collected anonymously, using the survey software LimeSurvey, which stores data in encrypted form on a German server. Only the IPs were recorded in order to be able to weed out duplicate data records if necessary. After checking the raw data sets, the IPs were deleted. For acknowledgment of anonymity, we wrote a disclaimer and had an ethics review committee ensure confidentiality of identity.

We distributed the link to the online survey via e-mail lists of the Parapsychological Association, the Society for Scientific Exploration, the Gesellschaft für Anomalistik [Society of Anomalistics], the Wissenschaftliche Gesellschaft zur Förderung der Parapsychologie [Scientific Society for the Promotion of Parapsychology], the "Parapsychology Discussion List," and the "Survival Net List." In addition, a link to the online survey was provided in the news section of the Society for Psychical Research website. We also sent the link specifically to individuals. We did not post it on open social networks like Facebook or Twitter to avoid troll involvement. The survey was conducted in English only. The data were obtained between January 18, 2022 and April 26, 2022.

The survey study was approved by the local Ethics Committee of the Institute for Frontier Areas of Psychology and Mental Health (IGPP\_2021\_06).

# The Questionnaire

The questionnaire consisted of 51 items. Estimated time was 30 to 40 minutes. It started with an introductory text describing the purpose of the study, a brief explanation of how we use the term "parapsychology" as well as a brief description of the questionnaire, followed by an informed consent agreement part and a check item to ensure that the participants belong to the target group. The items were grouped as follows: (1) sociodemographic data (seven items), (2) involvement in parapsychology as science (26 items), (3) specifics of female researchers in parapsychology (11 items), and (4) various (seven items). Some items were conditional follow-up items to a "yes" or "not sure" answer. These often related to

<sup>4</sup> https://www.limesurvey.org/

descriptions or specifications of the preceding item, which should be entered in free-text boxes without predefined categories.

### Response

With such a specific topic, it was difficult to estimate the possible return because we did not know the number of women working in this research area. In addition, it was difficult to estimate how many of the possible participants would be willing to invest a considerable amount of time in completing the extensive questionnaire; however, since we restricted ourselves to a descriptive evaluation, it did not play such a large role. We received 30 completed questionnaires, which is a satisfactory result considering the comparatively small total number of active researchers (see introduction).

#### **Evaluation**

We limited ourselves largely to a descriptive analysis because the survey was purely exploratory and we were unable to formulate any well-founded hypotheses in advance due to a lack of current research on the investigated topic. In addition, due to the small N, the use of inferential statistical methods only makes sense in a few points and for purely exploratory purposes. We used SPSS (version 28; IBM Corporation, USA) for the statistical calculations. Where possible, we grouped the information from the free-text boxes into categories to provide a clearer picture.

#### Results

The following are the grouped items of the survey sections.

# Sociodemographic Data

The mean age of our participants is 58.5 years, with a standard deviation of 15.5 and a range from 25 to 89 years. The majority of participants live in the United States (n=19, 63.3%); five participants (16.7%) live in Germany; the country of residence of another two participants (6.7%) is Canada, and, by one person each (3.3%), Greece, India, Scotland and Spain. All participants have one or more university degrees. The highest university degree of four participants (13.3%) is "bachelor", and of another four "master". Twenty-two participants (73.3%) have a PhD. The high average age and the high percentage of people with a doctorate clearly

<sup>5</sup> n=29; one value missing.

show that the sample is selected; it is not possible to generalize all female researchers in parapsychology. The most frequently chosen academic discipline is psychology, which includes various specializations such as applied, community, clinical, transpersonal, experimental, and social psychology, as well as consciousness, and parapsychology. See Table I in the appendix for more details. The occupation at the time of the survey or before retirement includes a variety of professions or activities and is provided in the appendix.

# Involvement in Parapsychology

The largest block of items concerned involvement in parapsychology and related scientific research fields. Only four participants (13.3%) have no active membership in one or more societies or associations related to the field. There were nine women (30%) who are active member in one association, and 17 participants (56.7%) have active memberships in more than one parapsychology affiliation. So, there is a high level of organized participation and involvement in this area.

Since parapsychology is hardly offered as a subject of study at universities, education and training is mainly done in self-study and in non-university courses, more formalized possibility for social interest, personal avocation development as well as continuing educational benefits increased significantly with the wide range of online offers in recent years. We asked about attended courses, training or workshops in the field of parapsychology. There were 19 participants (63.3%), who answered in the affirmative. The descriptions include courses in parapsychology: remote viewing, consciousness studies, near-death experiences, reincarnation, survival, alternative medicine and healing methods, and anthropological courses in witchcraft (see Table II in the appendix).

Only five participants have been involved in parapsychological, psychical, or psi research for less than five years. There were six participants, who each fall into the categories 5–10 Years, 10–20 years, and 20–30 years. There are seven women who indicated more than 30 years in this research area (see Table 1). These astonishing numbers show once again that we have a very select sample of experienced researchers. With regard to teaching, we found a significantly lower level of involvement. A percentage of 63.3% had never taught in the field of parapsychology, and two-thirds never in related fields. Only five participants taught parapsychology for at least 10 years, and only four in related fields for at least 10 years (see Table 3). Teaching in these areas appears to be inconsistent, which is understandable given the lack of representation in higher education of these research fields by mainstream academic institutions.

Involvement in Research and Teaching							
	Involvement in parapsy- chological, psychical, or psi research logical, psychical, or psi		Involved in teaching in related fields such as Reiki healing, psychic develop-				
		research	ment or mediumship				
	n (%)	n (%)	n (%)				
No involvement	0 (0.0)	19 (63.3)	20 (66.7)				
< 2 years	1 (3.3)	4 (13.3)	3 (10.0)				
> 2 and < 5 years	4 (13.3)	1 (3.3)	2 (6.7)				
5-10 years	6 (20.0)	1 (3.3)	1 (3.3)				
10-20 years	6 (20.0)	2 (6.7)	0 (0.0)				
20-30 years	6 (20.0)	1 (3.3)	3 (10.0)				
> 30 years	7 (23.3)	2 (6.7)	1 (3.3)				
Total	30 (100)	30 (100)	30 (100)				

**Table 1.** Involved in psi research and teaching in parapsychology and related fields such as Reiki healing, psychic development or mediumship.

We asked about the position in which the research or teaching is or was carried out, multiple answers being possible. Almost two-thirds said they have worked or work *independently*. There were 10 participants, who stated that they held or had held the position of *project head*. Just as many have held or are holding the position of *assistant*. When asked whether they held or are holding the position of *teacher* or *professor*, seven participants answered in the affirmative. The same number stated that they were *employed*. Three participants have or had the position of a *significant other* (see Table 2).

Position of research or teaching							
independently	employed	assistant	project head	teacher/professor	As significant other		
19 (63.3)	7 (23.3)	10 (33.3)	10 (33.3)	7 (23.3)	3 (10)		

Table 2. Position of research or teaching; percentages in brackets.

A percentage of 73.3% participants indicated that their research was related to their role in an academic institution or non-profit research organization.

The information given by the participants on their *areas of special interest* varied widely, as we did not specify any categories. If the information is summarized under the categories commonly used in the field, the following picture emerges. The most frequently mentioned category

is, not very surprisingly, parapsychological phenomena in a broad sense (23 mentions), with an emphasis on extrasensory perceptions and remote viewing (nine mentions). The second most frequently mentioned category relates to the topic of survival with 17 mentions, including also near-death experiences (five mentions) and reincarnation (CORT cases – three mentions). Exceptional experiences in a broad sense, not falling under the categories already mentioned, were mentioned 13 times. These include out-of-body experiences, dreams, altered states of consciousness, and synchronicity, among others. Another category with seven mentions relates to forms of unorthodox, alternative or spiritual healing. Five persons emphasized an interest in mediumship. Several other areas of special interest are mentioned only three times or less, such as meditation, mind-matter-interaction, astrology, psychology of paranormal beliefs, and many others. These categories are obviously not distinct and have many overlaps. Therefore, only a rough picture can be obtained with these mentions. However, even this rough picture shows a wide variety of specific interests, indicating a corresponding variety of personalities among participants.

### *Inspirations and Mentors*

We asked about different influential circumstances that inspired introduction to parapsychology or fostered a career as a parapsychologist. Prominent parapsychological researchers and teachers played an important role as role models for many (18 mentions) and gave important impetus to start a career in this field. Innate interest or a corresponding interest in the family are also mentioned relatively frequently (nine mentions). Books or paranormal TV shows were the inspiration for eight participants to enter the field. Personal experiences of psi phenomena are mentioned 14 times as a significant factor as well as psi phenomena reported by others (eight mentions). Philosophical or religious thoughts can also play a crucial role (six mentions). Table 3 provides an overview of the most often mentioned inspirations. Others are spiritual experiences, healing experiences, past-life memories, mediumship séance, etc.

	Influential circumstances and people
n	
18	Prominent researchers and teachers in parapsychology
14	Personal experience of psi phenomena
9	Early childhood and life-long curiosity or family interest
8	Psi phenomena reported by others (e.g. in books)
8	Books or TV shows
6	Philosophical or religious thoughts

**Table 3.** Influential circumstances and people. Multiple entries were possible.

We asked the participants how they did get where they are such as mentors, career changes, personal resources, or something else. One woman wrote: "In summary, my progress was only possible through perseverance, multiple employment, hard work and sacrifices of time and money." However, the most frequently mentioned factors were mentors/mentorship (14 mentions), followed by scholarships/grants (five mentions). Four people mentioned hard work/perseverance and fortunate circumstances/synchronicity. Others were: family support and encouragement, self-funded research, encouragement by professionals, and lectures/conferences/courses (three mentions each), and several more. In any case, role models and mentors in the field of parapsychological research are very important both at the beginning and during the career.

### Parapsychology and Professional Life

Paid research positions in parapsychology at universities and private institutes are scarce; subsequently, many conduct this research in their spare time. We asked what percent of the professional life involves parapsychology. We used a sliding scale. The mean is 45.8% (median = 50%) involvement. Table 4 shows the results in detail. For reasons of clarity, we have clustered the data provided in 5-percent increments into six categories.

	0%	5-25%	30-50%	55-70%	75-95%	100%
n	5	7	5	3	6	4

**Table 4.** Percent of professional life involving parapsychology.

These figures indicate again that we have a very selective sample. One-third of the participants show involvement of parapsychology of at least 75% of parapsychology in professional life. This also applies to paid work in parapsychology, as we can see from Table 5. The mean is 42.7% (median = 35%). For many, it is true that only a small part of the work in the field of parapsychology is or has been paid for.

	0%	5-25%	30-50%	55-70%	75-95%	100%
n	3	10	4	3	3	7

**Table 5.** Percent of paid work in parapsychology.

Table 6 shows which roles the participants had throughout their careers in parapsychology, broken down into paid and unpaid jobs. The role of a teacher is more often paid. The roles of researchers and research assistants are more or less balanced in terms of the ratio of paid and unpaid work. It is the typical service jobs that often go unpaid.

n=29	Support	Adminis-	Research	Researcher	Teacher	Editorial	IT	other
(one missing)	staff	trator	assistant					
Paid	2 (6.9)	2 (6.9)	5 (17.2)	12 (41.4)	6 (20.7)	4 (13.8)	1 (3.4)	2 (6.9)
Unpaid	5 (17.2)	4 (13.8)	6 (20.7)	12 (41.4)	3 (10.3)	8 (27.6)	4 (13.8)	5 (17.2)

**Table 6.** Roles in the course of the career in parapsychology; percentages in brackets.

#### Publications and Media

Importantly, scientific publications represent socially recognized criterion for success as a scientist. This is especially true for peer-reviewed articles. Publications in more informal, non-peer-reviewed venues such as newsletters and magazines have a lower priority in this respect. Nevertheless, there are good reasons for some scientists to publish in such media as well. We asked about the number of publications of both types. Only five participants have no academic publications whereas two-thirds of participants have not published in more informal venues. The median of peer-reviewed publications is 3–5 articles (see Table 7).

	Articles in peer-reviewed academic journals or	Articles in more informal, non-peer-reviewed venues
	scholarly books	
	n (%)	n (%)
no publications	5 (16.7)	20 (66.7)
1-2 articles	7 (23.3)	0 (0.0)
3-5 articles	6 (20.0)	4 (13.3)
6-10 articles	5 (16.7)	2 (6.7)
11-20 articles	2 (6.7)	0 (0.0)
>20 articles	5 (16.7)	4 (13.3)
Total	30 (100)	30 (100)

**Table 7.** The number of publications in academic journals or scholarly books and non-peer-reviewed publications; percentages in brackets.

The most mentioned reason for publishing papers in more informal or popular venues among the 10 authors of such texts is to reach a broader audience. For half of them, this is always or almost always the case. Other reasons are to add additional publications to the formal ones, and due to obstacles being published in formal journals because of content reasons.

Newsletters, blogs, radio, and television programs are other ways of making research known to a wider audience outside of the scientific community. Eight participants (26.7%) write their own blog or newsletter. A far larger proportion, 73.3 percent, take the opportunity to discuss their research in audio or visual media broadcasts, ranging from appearances in movies and documentaries to TV shows, radio interviews, podcasts, YouTube talks and more. But only two (6.7%) had established an own broadcast for this purpose.

If an article is written by more than one contributor, the authors' classification represents an important quality criterion. The author who did most of the work on a study is usually credited as first author. However, this rule is not always observed by the authors involved (Ross et al., 2022). We asked for an estimation of the percent of time when the participants were the first author of a published article; academic and more popular texts were not distinguished. For reasons of clarity, we have clustered the data provided in 5-percent increments of the slider scale into six categories. These figures can give a rough picture, as percentages based on small numbers produce a bias. Hypothetically, an author, who published a single paper and is the first author, falls into the 100% class. Anyway, we can see that about two-thirds of the participants are in 75% to 100% of their publications first authors (see Table 8). A further question on the issue of authorship in texts was: Have you contributed an amount of work to a paper that was more than your authorship level? For example, you were listed as the second or third author instead of the first. Please estimate the percent of time. Half of the 22 participants who answered this question indicated that their amount of work is not adequately reflected in the authorship level in 5 to 50% of the publications (see Table 9).

How often first author (percent of time)	0% (never)	5-25%	30-50%	55-70%	75-95%	100% (always)
<b>n</b> (total = 26; 4 missing)	4 (15.4)	2 (7.7)	3 (11.5)	0 (0)	12 (46.2)	5 (19.2)

How often not the correct authorship level	0% (never)	5-25%	30-50%	55-70%	75-95%	100% (always)
<b>n</b> (total = 22; 8 missing)	9 (40.9)	6 (27.3)	5 (22.7)	0 (0)	1 (4.5)	1 (4.5)

**Table 8** and **Table 9**. Percent of time as first author in publications and incongruous authorship levels related to the amount of work done for a paper; percentages in brackets.

# Female Researchers in Parapsychology

# Disadvantages and Advantages in Professional Life

It is well known that female scientists often experience *disadvantages* in careers because of their gender (Schiebinger, 1999; The Lancet, 2019). The survey asked whether the participants experienced situational disadvantage in their professional life associated with being a woman. Yes answers reflected 43.3% and 46.7% answered no. 10% said they were not sure if they experienced such situational disadvantage. In the following list we have summarized the descriptions by topic. Occasionally, some participants were not sure whether the disadvantage they experienced was actually related to being a woman.

	Disadvantages in professional life
n	
6	Structural disadvantages (being ignored, being told what is right, being
	pushed away, withheld information)
4	Differences in pay in academia
4	Differences in offered opportunities in academia
3	Situational disadvantages
3	Being treated as inferior
3	Editorial rejections
2	Less or no mentoring
2	Less or no recognition for the work
1	Necessity to stroke the ego of male fellow researchers/colleagues
1	Critique and animosity by males for the style of running a department
1	Less encouragement by parents
1	Maternity leave / domestic chores / work-life balance
	<u> </u>

**Table 10.** Experience of situational disadvantage in professional life connected with being a woman. Multiple entries were possible.

In a similar vein was the question of whether they encountered *obstacles* that they believe male researchers do not have. More than half of the participants (53.3%) answered no, while 23.3% answered yes and 23.3% were not sure. The statement most frequently mentioned

<sup>6</sup> See the theme issue of *The Lancet* (2019, Vol. 393, No. 10171) with several contributions on this topic. https://www.thelancet.com/journals/lancet/issue/vol393no10171/PIIS0140-6736(19)X0006-9

(four mentions) was that the male colleagues initially lacked trust and that female researchers were taken less seriously. Three times the feeling of being shunned or ignored or experiencing rude behavior when working with male colleagues was mentioned as an obstacle. They also mentioned that interruptions due to child rearing and the problem of balancing family and work are also obstacles that apply to women's scientific careers in general, not just in parapsychology.<sup>7</sup>

Seventy percent of the participants said no to the question whether they encountered *advantages* that they thought male researchers may not have. Possible advantages mentioned included that the social networking might be easier because there is less need to initiate conversations, or that there might be better support from men who are attracted to a female researcher. It was also mentioned that there might be better access to female research participants and generally better relating to women. Being underestimated is also mentioned as a possible advantage; this example in particular represents a double-edged sword. Accordingly, such advantages are rarely mentioned. One gets the impression that an attempt is made in a flexible way to gain positive aspects from the negative situation (Zingrone, 2002).

The majority (56.7%) of the participants is of the opinion that there are *no areas* or *subjects* in parapsychology for which women are better suited than men. Six (20%) agree and seven (23.3%) are not sure about this issue. They mentioned working with research participants due to better communication skills, also in terms of conducting interviews, and caring (four mentions),<sup>8</sup> and particularly with female practitioners or participants, or male subjects who are shy, frightened or reserved with other men (three mentions). Furthermore, it is mentioned that women are usually more suitable in areas which have to do with feelings, intuition, and groups; that they are more intuitive, which helps to achieve more first-person experience of the phenomena; and that they have more often abilities in fields such as ESP, PK or mediumship – "women are demonstrably more psychic than men," as a participant stated (two mentions each). Finally, one person wrote that women have easier access to children as study participants or subjects.

The question of whether there were specific *research methods* in parapsychology for which women are better suited than men went in a similar direction, which is why the answers partially

<sup>7</sup> Londa Schiebinger wrote on this issue, "(p)erhaps the worst thing a professional woman can do is to marry a professional man. For many men, marriage is a distinct advantage: married men with families on average earn more money, live longer, and progress faster in their careers than do single men. For a working woman, a family is a liability, extra baggage threatening to drag down her career" (Schiebinger, 1999: 92).

<sup>8</sup> The well-known experiment in remote staring research conducted by Marilyn Schlitz and Richard Wiseman would be a telling example for this (Watt et al., 2002).

overlap with those of the previous question. However, only two participants (6.7%) answered yes and another six (20%) were not sure. Again, directly working with participants in experiments, e.g. by setting up a friendly environment, is mentioned twice as well as interviewing and animal studies (one mention each, both with the qualification "possibly").

There are two statements that we would like to highlight as they may address a core issue of parapsychological research;

- The first is, "I think when dealing with the 'other side' women are probably more willing to listen to experiencers."
- The second is, "I think parapsychology is biased with regards to mediums (among
  others like people who have UFO experiences for example) being taken seriously, and
  or being trained as clinical parapsychologists or researchers almost as though 'they'
  would decrease the credibility of those in the field."

These two statements suggest that female researchers may tend to be more open to alternative world models and epistemologies than their male counterparts. What can be seen as an advantage in an ontologically difficult field of research raises problems with conventional parapsychological methodology and epistemology oriented to orthodox mainstream science. The awareness of this conflict is also expressed in the following statement, with which the participant directly supplemented the first quote: "But as for actual research methods, they must be scientifically based and reproducible or they lose scientific validity."

#### Sexual Intimidation

Fortunately, the majority of our participants, 90%, did not report that they had to experience anything of this nature. However, one must take into account that the question of what exactly is understood by sexual intimidation may be answered quite differently among women. Sexual intimidation inevitably comes up when addressing gender issues related to work and careers. Age and cultural, and even political, background can play a decisive role, among others; with 58.5 years, the average age in our sample is high. Lifetime prevalence varies considerably between 11% and 72%, depending on the study design, population, work sector etc. (Jonsdottir et al., 2022). An Australian study reported a prevalence of 46% of sexual harassment among women working in the science, technology, engineering, and mathematics (STEM) sector (Science and Technology Australia, 2019). Considering our unique survey sample, during the time when the older participants started their careers, some things were perhaps tolerated that would nowadays be clearly understood as sexual intimidation or harassment. The following two statements show the ambiguity of what exactly falls under sexual intimidation.

I am not sure if it was sexual – but I was told by my dept. head when I wanted to teach a course in [...] to our premed majors that no one would sign up – and I should make it for nonmajors. When I insisted, it was a packed course.

This participant did not answer yes to the question about experienced sexual intimidation. The woman, who made the following description, answered yes: "I don't know if this counts, but a few male colleagues hug me longer than I am comfortable with and generally invade my personal space at conferences." However, there was also this statement, "Sexually harassed by a fairly big presenter at SSE/IRVA in 2016. No other incidents," which needs no comment. One of the three women who reported being sexually intimidated talked about several incidents of ugly and rude male behavior, the contents of which included an angry e-mail post from a man complaining that "there are too many people on the board who are now women and someone needed to get these 'witches' off." This was not the worst incident. One can only hope that these are now major exceptions caused by unreceptive men.

### Differences and Changes

We asked for an assessment if the situation in parapsychology is different from the position women have in science in general. The difficulties, obstacles and intimidations mentioned above are reported from basically all kinds of workplace situations. Seven participants (23.3%) agreed and eight (26.7%) were not sure. Half the women of the sample do not think that there is a difference. Working in a field that many do not take seriously multiplies already existing problems that women in science face, was the most mentioned statement about differences (five mentions). Funding problems of parapsychology, for instance, are even worse for women due to the additional childbearing and childrearing responsibilities. One woman wrote, "I believe there is such an aversion to being seen as a stereotypical psychic, that men are very concerned [about] women who do psychic work in addition to parapsychology are going to make them look foolish or hurt the field." There were two mentions that the proportion of males and females is worse in parapsychology than in science in general. A statement: "There are only few women in parapsychological research, although 80% women study psychology." However, another person of parapsychology and related fields wrote,

I think science is a more male-oriented field and parapsychology isn't, as far as I can tell. There are plenty of female astrologers who are leading in their field as well as female NDE researchers and spiritual teachers. I find women are already prominent in the fields I study.

This quote may identify a problem with defining parapsychology. For this participant, astrologers and spiritual teachers seem to correspond to parapsychology, which of course results in a differ-

ent picture than if only investigators of the core topics of parapsychology, i.e. of psi phenomena like precognition, clairvoyance and psychokinesis, are included.

During the 1991 conference, Rhea White spoke of a "feminist approach to parapsychology" (White, 1994). We asked in our survey if the term "feminist parapsychology" from the 1990s means anything for the participants. Only two women (6.7%) answered yes, three (10%) were not sure. But two stated that they were curious or intrigued what it could mean. One woman commented, "I haven't heard that term but my objectivity has been called into question by critics of my work because they label me as a feminist."

Half the survey participants saw no changes for women in the field of parapsychology in recent years. Nine (30%) were not sure. Six (20%) noticed changes; the most often mentioned was that there are more women in this field; additionally, the number of publications by qualified women authors has increased. The assumption of leadership and responsibility in important international parapsychological associations was also seen as a positive development. One participant stated, "I feel more supported with more women around." Another relayed,

I see the field is still predominately male, but I see many successful women psi researchers as well who are also inspiring. I would like to see more women in the field, but ultimately we need more talented, smart, skilled, dedicated people from all/any genders and sociodemographic characteristics.

Most of the noticed changes were classified as positive or neutral. Only one woman mentioned a negative change. She also classified the same change as positive. She wrote as a comment to noticed positive changes, "more awareness to our field as it's gotten some mainstream attention (which is also negative)." There seems to be an interesting thought behind this, namely that greater visibility, such as that which comes automatically with significant growth, has disadvantages alongside the obvious advantages.

# Some Exploratory Inferential Statistical Data

Due to the lack of hypotheses and a small sample, we largely dispensed with inferential statistics and limited ourselves to descriptive statistics. For exploratory purposes, we calculated a few correlations and sub-group comparisons as well, which, however, only can provide hints for further research. We calculated Spearman rank order correlations between the variables "age," "years of involvement in parapsychology" (ordinal scale), "percent of professional life involving parapsychology," and "number of articles in peer-reviewed academic journals or scholarly books" (ordinal scale). Table 11 shows the results.

Spearman's rho	Age (n = 29)	Years of Involvement $(n = 30)$	Percent of Professional Life (n = 30)
Years of Involvement	r = 0.47; p = 0.01**	, ,	. ,
Percent of Professional life	r = -0.29; p = 0.12	r = -0.02; p = 0.91	
Publications Academic/Scholarly	r = 0.09; p = 0.65	r = 0.29; p = 0.12	r = 0.30; p = 0.10

**Table 11.** Correlations between age, years of involvement in parapsychological research, percent of professional life involving parapsychology, and number of academic or scholarly publications.

The highly significant correlation between age and years of "involvement in parapsychology" was to be expected. There is no significant correlation between age and "number of academic publications," and none between "years of involvement" and "percent of professional life." Thus, older women in the sample who are long involved have little published. However, "involvement" and "professional life" correlate moderately with the "number of academic publications," although not significantly due to the small n. This is not surprising either. The more interesting result is the lack of an association between years of involvement in parapsychology and the percentage of professional life involving parapsychology. One can be involved in parapsychological research for many years without it being reflected as a significant part of professional life. We think this is not unique to women in parapsychology, but is a general feature of this field of research that hinges on the lack of jobs and funding in the field. Many once-active researchers will lower their percentage of time or stop working in the field during their "career" years but come back in retirement as full-time workers.

Subgroups with "yes" and "no" answers for each of four variables were formed. The four items were, (1) "Have you experienced situational *disadvantage* in your professional life that you connect with being a woman?" (2) "Have you encountered *obstacles* that you think male researchers may not have? (3) "Have you encountered *advantages* that you think male researchers may not have?" and (4) "[Do] you believe there are [positive] changes [for women in the field of parapsychology in recent years]?"

It was calculated if the subgroups differ significantly in terms of mean age (interval scale), length of involvement in parapsychological research (ordinal scale), percent of professional life involving parapsychology (interval scale), and number of published articles in peer-reviewed academic journals or scholarly books on this research (ordinal scale). T-tests were used for the two interval-scaled variables, and Mann–Whitney U tests for the ordinate-scaled variables. Tables 12–15 show the results.

Disadvantages	n (yes/no)	mean <sup>a</sup> / mean of scale <sup>b</sup> (yes/no)	<i>T</i> (df) <sup>a</sup> / <i>Z</i> <sup>b</sup>	р
Age	12/14	a 54.75/59.00	a -0.710 (24)	0.485
Involvement	13/14	b 4.31/3.86	b -0.644	0.520
Percent Professional Life	13/14	a 50.38/39.29	a 0.745 (25)	0.463
Publications	13/14	ь 4.08/2.57	ь -2.175	0.030*
Obstacles				
Age	6/16	a 61.00/57.25	a 0.500 (20)	0.622
Involvement	7/16	ь 4.71/3.69	ь -1.431	0.152
Percent Professional Life	7/16	a 48.57/35.00	a 0.791 (21)	0.438
Publications	7/16	ь 5.14/2.50	ь -3.063	0.002**
Advantages				
Age	5/20	a 52.40/62.00	a-1.308 (23)	0.204
Involvement	5/21	b 3.40/4.38	ь -1.561	0.119
Percent Professional Life	5/21	a 61.00/36.67	a 1.429 (24)	0.166
Publications	5/21	ь 3.40/3.19	ь -0.264	0.791
Changes for women in parapsychology (positive)				
Age	12/17	a 53.25/62.12	a-1.560 (27)	0.130
Involvement	13/17	b 3.77/4.35	ь -1.152	0.249
Percent Professional Life	13/17	a 37.31/52.35	a-1.077 (28)	0.291
Publications	13/17	ь 3.31/3.18	ь -0.426	0.670

**Tables 12–15.** Disadvantages, obstacles, advantages, and positive changes related to age, length of involvement into parapsychological research, percent of professional life involving parapsychology and number of published articles in peer-reviewed academic journals or scholarly books.

Due to the low n, only two values reach the level of significance, despite the occasional considerable differences in mean values or mean of scale values. And even these two should be viewed with caution, since no Bonferroni correction was applied. In this respect, a look at Tables 12–15 can only serve to form hypotheses. With all due caution, however, it appears that above all the number of scientific publications is a predictor for the experience of disadvantages and obstacles due to being a woman. Experiencing benefits as a woman or observing positive developments for women in parapsychology, on the other hand, does not seem to be related to this variable at all. Considering the demand of authoring publications for a scientific career, the

connection of experiencing disadvantages and obstacles due to being a woman makes sense. Career breaks to raise children, domestic chores, and more difficult work-life balance are only the most obvious disadvantages and obstacles that have a particularly strong impact on the necessity to write publications (Zingrone, 1988).

#### Additional Comments

Participants had the option to write thoughts or comments on the subject of "women and parapsychology" that were not addressed in the survey in a comment box at the very end of the questionnaire. A number of participants used this opportunity. It is not easy to cluster them thematically.

A theme mentioned several times is the question of funding and the more difficult economic situation for women. A woman wrote, "as a childless researcher, it is currently still possible for me to have several jobs to finance my research. Once I have children, this will no longer be possible. Then I can only try to predict the lottery numbers." Another one stated, "finally, most of my obstacles have stemmed more from my economic situation than my gender. It may be worthwhile to think about where women's issues and economic issues converge." And a last quote, "it might also be worth examining general funding patterns."

Three participants addressed transgender issues. One person considered, "I think it is important to ask men in the field to put some time into this level of reflection, and also to consider the viewpoints of trans and non-binary identifying people," while another woman wrote,

I have had a lot of struggles in the field, many of which were entirely unexpected. They include intellectual property theft, gaslighting, and abuse of power. However, it is difficult to specifically attribute these situations to being a woman vs. general toxicity in academic culture.

The last point of the quote shows that it is sometimes not clear if obstacles and difficulties women researchers experienced are actually (only) based on gender. A further statement supports the idea that there could be structural problems or a "general toxicity" in academia:

I would say a disadvantage I've experienced has to do with an attempt at exploitation from someone in a senior position (who happens to be a woman) – not because I'm a woman but because of my position. That has caused me a lot more stress compared to being a woman researcher in parapsychology (which I would say has been neutral so far).

Another researcher stated that "cultural differences – the east-west factors – rather than gender issues sometimes play a greater role." A further comment highlighted, "if you know what you are talking about, it gets recognized, although you occasionally see the same issues of jealousy

(whether with colleagues or ghost hunter groups) that are part of human nature and unrelated to gender." These quotes show a differentiated understanding of the problem instead of a simplifying explanatory model focused on blame. They display a reflexive and humanistic approach to gender issues.

The still unresolved problem of a clear and unambiguous definition of parapsychology has also been the subject of comment. One participant would have liked more examples of what parapsychology includes, and another mentioned that she knows women who were not academics but running informal remote viewing experiments. She was "not at all sure if they would even feel qualified to take this survey as the term 'parapsychologist' is rather narrowly defined and exclusive." This quote shows that we have to deal not only with a problem of definition in terms of different areas or aspects of the research field, but also with a problem of status in terms of professionalism, credentialing, and academic localization.

Another interesting comment by a participant: "I saw less bias in parapsychology than in the medical world, where I started my career." This statement suggests that the situation for women in parapsychology appears to be better than in other areas of science, at least than in medicine. For example, when it comes to sexual intimidation, data recently published in medical journals support this statement (Grant-Kels, 2021). A survey among 2458 physicians in Great Britain "found that 91% of women doctors had experienced sexism at work" (Bagenal & Baxter, 2022: 1030) – an alarming number. Ten percent of the participants of our survey reported the experience of sexual intimidation at work in the field of parapsychology. Of course, that is still 10% too much.

In a final comment to be cited here, one participant wrote, "If the male/female proportion of parapsychologists matched the male/female proportion of the general public interested in things paranormal, women would dominate the field." This remark raises the question of the implications of gender disproportionality between publicly expressed interest and involvement in the paranormal and research in the field. Considering that there are significantly more women than men studying psychology in the U.S. (Fowler et al., 2018), this finding cannot be reduced to a generally lower willingness of women to engage with subjects of their interest in an academic setting. A closer look at the psychology data reveals that the largest imbalances in favor of female students are in the health service subfields (school, clinical, counseling) and in the research subfield of developmental psychology. This suggests that an important purpose for studying psychology could be its non-scientific application. With a strong interest in the paranormal, it is not easy to combine academic study, research and practice, e.g. working as a medium. The psi phenomena themselves are critically examined

<sup>9</sup> See, for example, Pastwa-Wojciechowska and Chybicka (2022) on factors influencing careers of female psychologists.

from a scientific perspective and so is the practice itself. In this respect, one can even assume that some individuals see scientific parapsychological research as a threat to their interest in the paranormal, including its integration into practice or everyday life – a conflict that, however, does not only affect women.

#### Discussion

A quote from a survey participant highlights complications that seem to occur if parapsychology researchers also work as mediums, "almost as though 'they' would decrease the credibility of those in the field." This quote hints at a point that partially shifts the focus on the gender issue. We can see that the androcentric approach to parapsychology (White, 1994), as made strong by J. B. Rhine in his attempt to normalize parapsychology (Mayer & Schetsche, 2016), led to a devaluation of personal experience for research. Moreover, the inclusion of particularly gifted experimental participants - so-called psychic virtuosi - was perceived as a methodological risk due to the problem of fraud (Braude, 1986: 9f.). Many theories in parapsychology use concepts or at least terminology (since the middle of the last century) that developed compatibility with models of physics including quantum mechanics (Stokes, 1987). Even if terms such as "information," "meaning," and "spirit" are used, the trains of thought and metaphors remain largely oriented towards physical processes and dimensions such as the "space-time structure." Douglas Stokes, who reviewed such models of psi phenomena, devoted less than nine pages of his extensive 112-page book chapter to theories of survival (ibid.: 181-189). This clearly shows that the survival hypothesis in parapsychological research was minor during this time and previously. If we look at the techniques used by gifted individuals to obtain information through paranormal means, we find a more or less accepted variant: Remote Viewing, developed in a male military context, worked with a fixed protocol and using coordinates. Here, too, we have a strong formal approximation to exact methods of natural sciences, even if the mechanisms underlying Remote Viewing do not become clearer because of that and are still not understood.<sup>11</sup> In contrast, psychics or mediums who seek to obtain information in paranormal ways or to contact the deceased tend to be shunned or disregarded by the parapsychological mainstream. This different assessment is fundamentally based on ideological arguments or preferences, rather than on scientific facts. The statement "... almost as though 'they'

<sup>10</sup> This problem was pointed out by the French astronomer and computer scientist Jacques Vallée in his J. B. Rhine address "The Software of Consciousness" at the 2018 Convention of the Parapsychological Association in Petaluma. He considers it a mistake, "a trap," for parapsychology to turn exclusively to physicists to explain how psi works. "Psi research should lead, not follow physics," he said.

<sup>11</sup> Michael Nahm is a German biologist, parapsychologist and colleague at the IGPP, who brought this point to our attention. We thank him.

would decrease the credibility of those in the field" addresses precisely this point of implied and unjustified ideological rejection, on the one hand. On the other hand, there are many mediums and clairvoyants who have no interest in a critical scientific investigation of mediumship or other psi-related phenomena and their underlying mechanisms. They see their faith as the foundation and necessary condition for the functioning of their practice (Leverett, 2020), which can lead to a great deal of gullibility from a scientific point of view.

A prior mentioned quote points to this problem for women researchers in parapsychology: "I think when dealing with the 'other side' women are probably more willing to listen to experiencers. But as for actual research methods, they must be scientifically based and reproducible or they lose scientific validity." This statement suggests that women researchers more than male counterparts tend to be more open to models of the world that deviate from physicalist-materialistic models of mainstream science. In addition, they seem less apprehensive when writing openly about their own extraordinary experiences in the field of science, as the example of Fanny Moser shows (Schmied-Knittel, 2022, this issue). 12 All this leads us to the thesis that it is not the gender piece directly responsible for disapproving attitudes and inappropriate behavior of male colleagues, but rather a greater openness to worldviews and heterodox research topics outside the scientific mainstream, openly advocated by some female researchers.<sup>13</sup> The fear of not being recognized as equal by the scientific mainstream leads to strong demarcation efforts against deviating positions, to boundary work (Gieryn, 1999) that excludes the more open and alternative positions, seemingly more often held by women. We are aware that in doing so we run the risk of reintroducing gender stereotypes, which can also be found in the comments of the participants.<sup>14</sup> However, research shows that there is a gender difference in paranormal beliefs (Irwin, 2009) and esoteric practice (Höllinger & Smith, 2002; Sinabell & Wohlfahrt, 2005).

It is important to consider the limitations of this study. We have a highly selective group of scientists, non-representative of all women in parapsychology. We do not have comparison data from men in parapsychology. For this reason, our data do not allow us to draw conclusions about gender differences. In addition, the qualitative data are assessments based on personal, perhaps not very recent, experiences and are thus also easily susceptible to bias. For example,

<sup>12</sup> This goes in line with Louisa Rhine's conclusion "that at least women report their psychic experiences more frequently than men" (Hess, 1988: 344; cf. Rhine, 1961: 121).

<sup>13</sup> Even a statement such as "there are too many people on the board who are now women and someone needed to get these 'witches' off" can be seen in this light, in addition to the misogynist connotation. Targeted as a witch means one is said to have a connection to "the other side" or to forces outside of science (e.g., Favred-Saada, 1980). See also Zingrone (1994) for a historical perspective on males' view on the role of women in society and "images of woman as medium."

<sup>14</sup> cf. Johnston, 2015, on gender stereotypes linked to "occult" or esoteric practices.

a statement that the proportion of women in parapsychology is larger today, may be based on a misjudgment, since there is no reliable data on the actual gender distribution. Moreover, according to a male scientist's feedback who learned about the results, if we had asked men about career disadvantages they associate with being a man, we might have gotten very similar answers on some points. In this respect, such data primarily provide a picture of the state of mind of the participants, which, however, has its value in itself and can be used to form hypotheses.

The average age and level of education is very high in our sample, as is the degree of professionalization. This is not surprising given our survey recruitment through the appropriate professional association e-mail lists and websites. Although associations such as the PA with high entry requirements now offer supporting memberships for non-academics, the questionnaire was aimed at active researchers and teachers, which is reflected in the data. The annual membership fees that have to be paid to the associations assume a specific interest in this research. It makes membership for those who are not wholeheartedly interested in scientific research on these topics and phenomena less likely.

The problem of defining parapsychology and thus the related fields challenged us with questioning who felt addressed, to which group distribution lists the survey invitation was sent, and where the response was particularly high, e.g. on the field of survival or of remote viewing. Due to these limitations, among other things, the survey did not provide complete clarity as to whether parapsychology differed from other disciplines with regard to the status and situation of women. Comparable to the situation of women in other research fields is that women in parapsychology have to make greater efforts to be taken seriously by male colleagues, this can slow down their careers in addition to career interruptions due to raising children. Often greater difficulties balancing work and family life are embedded in these situations for women. And let's not forget the differences in pay in academia. According to some participants, working in a field that many do not take seriously multiplies the problems that women in science already face. Funding complications and perhaps, stereotyping and stigmatizing through general ideological suspicion of women being naïve and unsophisticated as scientists are damaging roadblocks that women encounter.<sup>15</sup>

A positive for the field of parapsychology is the relatively low proportion (10%) of women who reported sexual intimidation or harassment. This proportion is far below the numbers found in studies of other professional situations. However, this result has to be qualified with a caveat: we mentioned the problem of the contingency of age, cultural and political background already in the respective section. Although we asked about lifetime prevalence, one cannot easily com-

<sup>15</sup> See Zingrone (1994) for a historical perspective on males' view on the role of women in society and the relationship to mediumship.

pare the experiences of today's older women in their younger years and how they remember and report them with those of today's young women because of the different cultural situations. Another important point to consider is that we have a large proportion of independently working participants (63.3%). This shows that the figures are not comparable with those from studies that collected data from workplace situations. Therefore a lower number is to be expected.

Another positive aspect could be that the percentage of women who are not properly credited as authors is probably lower in parapsychology than in science in general. This means that the amount of work to a paper was more than the indicated authorship level on the article. Nine (40.9%) of the respondents (n=22) to this question experienced this never, another three (13.6%) only in 5% of the publications. In only two cases (9%) this happened basically with all publications. Unfortunately, no suitable comparative values were available to us and we can only derive this assumption from approximate indications from other studies. Ross et al. (2022), for example, report that 43% of female respondents in their survey have experienced disqualification from authorship of work they directly collaborated on.  $^{16}$ 

The question about the inspirations that led to entering the field is interesting because we have a selective sample with many long-time female researchers. Prominent researchers and teachers in parapsychology were mentioned most frequently, followed by personal experiences with psi phenomena. Experiencing good models and one's own experience of extraordinary phenomena seems to be of central importance in this research field, which is strongly driven by an idealistic motivation. This strong idealism is reflected in the amount of unpaid work done by our participants. It can be assumed that the proportion of unpaid work among male colleagues is also high, since parapsychological research as a whole is chronically underfunded, but it may be higher among women. However, there are no comparative figures.

Whether the experiential aspect is more important to female parapsychologists than to male parapsychologists also cannot be determined based on the survey data. But it would be an interesting future research question, as one would like to see a similar survey for men and an expanded sample in general. It would also be interesting to investigate what influence the changed media situation with the almost unmanageable range of online presentations and courses will have on the inspiration for entering the field and provoking enduring interest in this kind of research. This would be a research question for the future too.

<sup>16</sup> This was also the case with 38% male researchers – significantly less than with female researchers (Ross et al., 2022) but nevertheless an indication for the "general toxicity in academia" as one of our respondents took it.

#### Conclusion

This exploratory survey primarily provides data that can be used to generate hypotheses. Despite the selective sample and limited generalizability, the items asked in the survey may be stimulating for the reader. The results of the survey revealed not a very dynamic direction for women in parapsychology. Many things seem to be the same or similar, some perhaps worse, hardly anything better. In parapsychology and related fields of research, women also suffer from the usual structural disadvantages that are well known from other areas. So far so bad. Some things can hardly be solved in parapsychology as a discipline, since general social problems are involved. However, where parapsychologists, male or female, do not escape their responsibility is the demand for more ideological openness and flexibility, the lack of which too often leads to disadvantageous treatment of female scientists in this field of research. This should by no means be seen as merely a necessary concession. It could well turn out to be a helpful or even imperative broadening of the ideological horizon for parapsychology, offering a way out of methodological and theoretical dead ends.

### Acknowledgements

We would like to thank all participants who took the time to reflect on their experiences in the field of professional parapsychology and to complete the long questionnaire. We would also like to thank the people who forwarded our invitation to participate in the survey. These are Annalisa Ventola for the PA and SSE, Peter Johnson, Tom Ruffles and Nemo Mörck for the SPR, Eberhard Bauer and Walter von Lucadou for the WGFP. We are grateful for the reviews by Helané Wahbeh and her valuable suggestions.

#### References

- Bagenal, J., & Baxter, N. (2022). Sexual misconduct in medicine must end. *The Lancet*, 399(10329), 1030–1032. https://doi.org/10.1016/S0140-6736(22)00316-6
- Braude, S. E. (1986). The limits of influence psychokinesis and the philosophy of science. Routledge & Kegan Paul.
- Coly, L., & White, R. (Eds.) (1994). Women and parapsychology: Proceedings of an international conference held in Dublin, Ireland, September 21—22, 1991. Parapsychology Foundation.
- Evans, E. (2015). The politics of third wave feminisms: Neoliberalism, intersectionality and the state in Britain and the US. Palgrave Macmillan.
- Evrard, R., & Tremmel, M. (2015). Clarifying Definition Issues around the Psychology of Exceptional Experiences. *Journal of Exceptional Experiences and Psychology*, 3(2), 36–48.

- Favret-Saada, J. (1980). Deadly words: Witchcraft in the Bocage. Cambridge University Press.
- Fowler, G., Cope, C., Michalski, D., Christidis, P., Lin, L., & Conroy, J. (2018). Women outnumber men in psychology graduate programs. *Monitor on Psychology*, 49(11), 21.
- Gieryn, T.F. (1999). Cultural boundaries of science: Credibility on the line. University of Chicago Press.
- Grant-Kels, J.M. (2021). Commentary on: Sexual misconduct in academic medicine. *International Journal of Women's Dermatology*, 7(3), 369–370. https://doi.org/10.1016/j.ijwd.2020.10.004
- Hess, D. J. (1988). Gender, hierarchy, and the psychic: An interpretation of the culture of parapsychology. The Parapsychological Association 31st Annual Convention: Proceedings of presented papers. Parapsychological Association.
- Höllinger, F., & Smith, T. (2002). Religion and esotericism among students: A cross-cultural comparative study. *Journal of Contemporary Religion*, 17(2), 229–250.
- Irwin, H.J. (2009). *The psychology of paranormal belief: A researcher's handbook*. University of Hertfordshire Press.
- Irwin, H.J. (2014). The View of Parapsychologists: A Survey of Members of the Parapsychological Association. *Journal of the Society for Psychical Research*, 78.2(915), 85–101.
- Irwin, H.J., & Watt, C.A. (2007). An Introduction to Parapsychology. (5th ed.). McFarland & Company.
- Johnston, J. (2015). Gender and the occult. In C.H. Partridge (Ed.), *The occult world* (pp. 681–691). Routledge.
- Jonsdottir, S.D., Hauksdottir, A., Aspelund, T., Jakobsdottir, J., Runarsdottir, H., Gudmundsdottir, B., Tomasson, G., Valdimarsdottir, U. A., Halldorsdottir, T., & Thordardottir, E.B. (2022). Risk factors for workplace sexual harassment and violence among a national cohort of women in Iceland: A cross-sectional study. The Lancet Public Health, 7(9), e763–e774. https://doi.org/10.1016/S2468-2667(22)00201-8
- Langin, K. (2022, June 22). Women scientists don't get authorship they should, new study suggests. Science Careers. https://doi: 10.1126/sciene.caredit.add6146
- Leverett, C.S. (2020). Healing conflict with grigri. In R. Nicholson (Ed.), *Natural healing as conflict resolution* (pp. 21–41). IGI Global.
- Leverett, C.S. (2022). Editorial: Between two worlds: Unmasking commonly shared female experiences of women in parapsychology. *Journal of Anomalistics / Zeitschrift für Anomalistik*, 22(2), 254–273. http://dx.doi.org/10.23793/zfa.2022.254
- Mayer, G. (2017). What about parapsychology and anomalistics?: Results of a WGFP and GfA member survey. *Journal of the Society for Psychical Research*, 81(4), 209–227.
- Mayer, G. (2021). Editorial: Bigelow, BIAL, and the Funding of Parapsychological Research. *Journal of Anomalistics / Zeitschrift Für Anomalistik*, 21(2), 354–366. https://doi.org/10.23793/zfa.2021.354
- Mayer, G., & Schetsche, M. (2016). On anomalistics research: The paradigm of reflexive anomalistics. *Journal of Scientific Exploration*, 30(3), 374–397.

- Pastwa-Wojciechowska, B., & Chybicka, A. (2022). Outstanding women psychologists mainly from Europe – What helped and what limited them in their scientific careers? Guidelines for gender equity programs in academia. Frontiers in Psychology, 13, Article 877572. https://doi.org/10.3389/ fpsyg.2022.877572
- Rhine, L.E. (1961). Hidden channels of the mind. Sloane.
- Ross, M.B., Glennon, B.M., Murciano-Goroff, R., Berkes, E.G., Weinberg, B.A., & Lane, J.I. (2022). Women are credited less in science than men. *Nature*, 608(7921), 135–145. https://doi.org/10.1038/s41586-022-04966-w
- Schiebinger, L. (1999). Has feminism changed science? Harvard University Press.
- Schmied-Knittel, I. (2022). Occultism as a resource: The parapsychologist Fanny Moser (1872–1953). *Journal of Anomalistics /Zeitschrift für Anomalistik*, 22(2), 286–307. http://dx.doi.org/10.23793/zfa.2022.286
- Science and Technology Australia (2019). Sexual harassment in the workplace. https://scienceandtechnologyaustralia.org.au/wp-content/uploads/2019/02/STA-Submission-Sexual-harassment-in-the-workplace-.pdf
- Sinabell, J., & Wohlfahrt, M. (2005). Fundamentalismus, Esoterik und der Markt der Religionen. SWS-Rundschau, 45(4), 472–494.
- The Lancet. (2019). Feminism is for everybody. *The Lancet*, 393(10171), 493. https://doi.org/10.1016/S0140-6736(19)30239-9
- Tremmel, M. (2014). Clarification of terms and concepts defining parapsychology and related disciplines: Comments on Mathijsen (2009, 2013), Abrassart (2013), and Evrard (2013). *Journal of Exceptional Experiences and Psychology*, 2(1), 24–46.
- Watt, C.A., Wiseman, R., & Schlitz, M. (2002). Tacit information in remote staring research: The Wiseman-Schlitz interviews. *Paranormal Review*, 24, 18–25.
- White, R.A. (1994). The relevance to parapsychology of a feminist approach to science. In L. Coly & R. A. White (Eds.), *Women and parapsychology: Proceedings of an international conference held in Dublin, Ireland, September 21–22, 1991* (pp. 1–27). Parapsychology Foundation.
- Zingrone, N.L. (1988). Authorship and gender in American parapsychology journals. *Journal of Parapsychology*, 52(4), 321–343.
- Zingrone, N.L. (1994). Images of woman as medium: Power, pathology and passicity in the writings of Frederic Marvin and Cesare Lombroso. In L. Coly & R. A. White (Eds.), Women and parapsychology: Proceedings of an international conference held in Dublin, Ireland, September 21–22, 1991 (pp. 90–123). Parapsychology Foundation.
- Zingrone, N.L. (2002). Controversy and the problems of parapsychology. *Journal of Parapsychology*, 66, 3–30.
- Zingrone, N.L. (2022). Editorial: An editorial reflection on women in parapsychology from the perspectives of St. Louis, Montreal, and Dublin, and the pages of this journal. *Journal of Anomalistics / Zeitschrift für Anomalistik*, 22(2), 226–253. http://dx.doi.org/10.23793/zfa.2022.226

# Appendix

Bachelor	Master	Doctoral
Psychology (6)	Psychology (6)	Psychology (9)
Anthropology (4)	Education (2)	Philosophy (2)
Music (3)	Sociology (2)	Anthropology (1)
Journalism (2)	Anthropology (1)	Atmospheric Science (1)
Accounting (1)	Asian studies (1)	Cell and Molecular Biology (1)
Atmospheric & Oceanic Science (1)	Biology (1)	Laser Raman Spectroscopy and Polymers (1)
Biology (1)	Clinical research (1)	Human Science (1)
Cartography/Geography (1)	Consciousness Studies (1)	Literature (1)
Child Development (1)	Literature (1)	Naturopathic Physician (ND) (1)
Elementary education (1)	Mathematics (1)	Neuroanatomy (1)
English (1)	Physics (1)	Pharmacology and Toxicology (1)
Environmental Sciences (1)	Social Work (1)	
Literature (1)		
Philosophy (1)		
Physics and Mathematics (1)		
Religious studies (1)		
Statistics (1)		

**Table I (appendix).** Discipline or fields of study where the university degrees were achieved. Multiple entries were possible, major and minor not distinguished. The numbers in parentheses indicate the number of participants in each research field.

The occupation at the time of the survey or before retirement includes a variety of *professions* or *activities* and is displayed in the following list. The numbers in parentheses indicate the number of participants in the positions. Multiple entries were possible.

- Researcher/Research Associate/scholar (11)
- Professor (7)
- Author / Writer (6)
- Editor (3)
- Educator / Teacher (3)
- Entrepreneur (3)

- Administrator (3)
- Counseling/Consultant (2)
- Public affairs/communication manager/ social media management (2)
- Attorney (1)
- · Board director
- Government work (1)
- Librarian (1)
- Pastor (1)
- Project assistant (1)
- Psychologist (1)
- Webmaster (1)

The following *job titles* or *specializations* as academic scholars or researchers were mentioned:

- Research associate (4)
- College professor (3)
- Department chair (2)
- Director of research (2)
- Co-director of research (1)
- Senior research specialist (1)
- Intermediate research specialist (1)
- Chief data scientist (1)
- Associate professor (1)
- Highschool professor (1)
- Head of library (1)
- Field researcher (1)
- Guest lecturer (1)

Courses, trainings or workshops in the field of parapsychology		
n	Field/area	Institutions / Associations
14	parapsychology	Rhine, IONS, IGPP, and others
4	remote viewing	
3	consciousness studies	Monroe Institute, JF Kennedy Univ.
3	NDE/reincarnation/survival	IANDS
5	alternative healing methods	
1	witchcraft/magic (anthropological course)	

**Table II (appendix).** Courses, trainings or workshops in the field of parapsychology and related areas. Multiple entries were possible.

### Frauen und Parapsychologie 2022 - Eine Online-Umfrage

### Erweiterte Zusammenfassung

1991 organisierte die Parapsychology Foundation eine internationale Konferenz zum Thema "Frauen und Parapsychologie" [Women and Parapsychology] in Dublin/Irland. 30 Jahre nach dieser Konferenz wollten wir Forscherinnen nach ihren gegenwärtigen Erfahrungen als Frauen im Forschungsfeld der Parapsychologie und der Anomalistik befragen und eine Einschätzung der Situation erlangen. Dazu gestalteten wir eine Online-Umfrage, die Daten zum wissenschaftlichen Werdegang, zur Veröffentlichung von Artikeln, zu Beiträgen auf dem Gebiet der Parapsychologie bzw. Anomalistik und zu spezifischen geschlechtsspezifischen Erfahrungen erhob. Wir haben den Link zu dem umfangreichen Online-Fragebogen über mehrere E-Mail-Listen und Websites verbreitet und auch gezielt an Einzelpersonen verschickt. 30 Frauen füllten den Fragebogen aus. Die Aussagekraft der Daten ist insofern begrenzt, als keine Vergleichswerte aus zurückliegenden Jahren sowie von männlichen Forschern vorliegen und auch die Anzahl der im Feld aktiven Forscherinnen unbekannt ist. Da wir neben quantitativen auch qualitative Daten erhoben haben, konnte dennoch ein informatives Bild gewonnen werden.

Unsere selektive, nicht repräsentative Stichprobe hatte ein hohes Durchschnittsalter (58,5 Jahre) und Bildungsniveau (alle Teilnehmerinnen mit akademischem Abschluss, 73,3% mit Doktortitel). 63,3% beschäftigten sich mindestens seit 10 Jahren mit parapsychologischer Forschung. 33,3% bekamen Dreiviertel oder mehr ihrer Arbeit in diesem Feld bezahlt, während 43,3% für nur Einviertel oder weniger eine Bezahlung erhielten. Ungefähr gleich viele Teilnehmerinnen bejahten (43,3%) bzw. verneinten (46,7%) die Frage, ob sie *Nachteile* in ihrer Tätigkeit erfahren hätten, die sie mit ihrem Geschlecht in Verbindung bringen. Größer hingegen ist der Prozentsatz der Frauen, die *Hindernisse* auf Grund ihres Geschlechts bejahen (53,3%),

während nur 23,3% dies verneinen. Nur 16,7% geben an, Vorteile als Frau erfahren zu haben. Wir führten exploratorische statistische Berechnungen durch, um zu sehen, inwiefern die Variablen Alter, Jahre der Involviertheit, der Anteil dieser Forschung am Berufsleben und die Anzahl der Publikationen mit dem Erleben von Nachteilen, Hindernissen und Vorteilen zusammenhängen. Zwar ließen sich deutliche Mittelwertsunterschiede feststellen, die jedoch aufgrund der geringen Größe des Samples nicht signifikant waren. Der einzige signifikante Prädiktor für das Erfahren von Hindernissen und Nachteilen, die mit dem Geschlecht in Zusammenhang gebracht wurden, war die Anzahl wissenschaftlicher Publikationen: Je mehr Publikationen eine Forscherin hatte, desto größer war die Wahrscheinlichkeit, dass sie Nachteile und Hindernisse berichtete.

Die Hälfte der Teilnehmerinnen verneinte die Frage, ob sich die Position der Frauen in der Parapsychologie von derjeningen in der Wissenschaft allgemein unterscheide, während 23,3% dies bejahten. Die restlichen 26,7% waren sich darüber unsicher. Ein Punkt, der genannt wurde, war, dass sich die Probleme, denen die Parapsychologie an sich schon ausgesetzt ist, für Frauen noch multiplizieren.

Aufgrund der oben genannten Einschränkungen lieferte die Umfrage keine vollständige Klarheit darüber, ob sich die Parapsychologie im Hinblick auf den Status und die Situation von Frauen von anderen Disziplinen unterscheidet. Einige Aspekte sind mit der Situation von Frauen in anderen Forschungsbereichen vergleichbar. Wie im Allgemeinen in der Wissenschaft üblich, werden Frauen tendenziell schlechter bezahlt, sie müssen sich mehr anstrengen, um von männlichen Kollegen ernst genommen zu werden, was ihre Karriere verlangsamen kann, dazu kommen Karriereunterbrechungen aufgrund von Kindererziehung, größere Schwierigkeiten, Beruf und Familie unter einen Hut zu bringen, usw. Wir fanden einen relativ geringen Anteil (10 %) von Frauen, die über sexuelle Einschüchterung oder Belästigung im Bereich der Parapsychologie berichteten. Ebenfalls scheint der Anteil der Frauen, deren Autorschaft bei Publikationen nicht rechtmäßig gewürdigt wird, in der Parapsychologie geringer als in anderen Forschungsbereichen zu sein. Hingegen sind die allgemeinen Finanzierungsprobleme in der Parapsychologie für Frauen aufgrund der zusätzlichen Kindererziehungspflichten und der weniger institutionalisierten Forschung noch größer.

Einige Befunde führen zu der These, dass nicht unbedingt der Geschlechteraspekt an sich für unangemessenes Verhalten männlicher Kollegen verantwortlich sein könnte. Vielmehr könnte eine größere Offenheit für Weltanschauungen und heterodoxe Forschungsgegenstände außerhalb des wissenschaftlichen Mainstreams eine entscheidende Rolle spielen. Eine solche Offenheit, die tendenziell eher bei Frauen zu finden sein könnte, löst Ängste und Abgrenzungsbemühungen bei denjenigen Wissenschaftlern und Wissenschaftlerinnen aus, die die parapsychologische Forschung möglichst am Ideal einer objektiven und am Mainstream experimenteller Laborforschung orientierten Wissenschaft ausrichten wollen. Diese These muss in weiteren Studien validiert werden.