

# **Incorporating feminist practices into (psychological) science - the why, the what and the how**

Helena Hartmann<sup>1,2\*</sup>, Kohinoor M. Darda<sup>2,3</sup>, Vasiliki Meletaki<sup>2,4</sup>, Zlatomira G. Ilchovska<sup>2,5,6</sup>, Nadia S. Corral-Frias<sup>2,7</sup>, Gabriela Hofer<sup>2,8</sup>, Flavio Azevedo<sup>2,9</sup>, & Sarah A. Sauve<sup>2,10</sup>

<sup>1</sup> *Clinical Neurosciences, Department for Neurology and Center for Translational and Behavioral Neuroscience, University Hospital Essen, Germany*

<sup>2</sup> *Feminist WonderLab Collective*

<sup>3</sup> *Advancement and Research in the Sciences and Arts (ARISA) Foundation, Pune, India*

<sup>4</sup> *Penn Center for Neuroaesthetics, University of Pennsylvania, Philadelphia, PA, USA*

<sup>5</sup> *School of Psychology, University of Birmingham, Birmingham, UK*

<sup>6</sup> *School of Psychology, University of Nottingham, Nottingham, UK*

<sup>7</sup> *Psychology Department, University of Sonora, Mexico*

<sup>8</sup> *Faculty of Psychology, University of Graz, Austria*

<sup>9</sup> *Department of Social Psychology, Faculty of Behavioural and Social Sciences, University of Groningen, Netherlands*

<sup>10</sup> *School of Psychology, College of Health and Science, University of Lincoln, Lincoln, UK*

\* Corresponding author: Helena Hartmann, [helena.hartmann@uk-essen.de](mailto:helena.hartmann@uk-essen.de)

**This is a preprint which has not been peer-reviewed yet.**

## **Abstract**

Feminism is about challenging power in all its forms. Applying a feminist lens to scientific research brings many advantages, such as broadening theoretical perspectives, encouraging collaboration with—and inclusion of—marginalized groups, and widening the scope of research methods. However, findings from an informal survey as part of a SIPS hackathon revealed that both academics and non-academics grapple with a lack of clear conceptual understanding regarding feminist approaches and feminism as a whole. We aim for this perspective piece to provide an access point for *why* researchers should incorporate feminist approaches in psychological science, *what* feminist approaches look like and *how* researchers can start incorporating them into their own work. In answering the why, what and how of feminist practices, we aim to make working in a feminist way more legible and accessible, with the ultimate aim of cultivating a more comprehensive understanding of human psychology while fostering diverse perspectives. Based on the survey and our unique viewpoints as feminist ECRs working in different domains of psychological science, we propose constructive approaches for integrating feminist values and practices into the domain of psychological science. We highlight what possible barriers exist to incorporating feminist practices into one's own work and how future research can embrace feminist practices. We also provide a short glossary explaining terminology that can support the communication of feminist research as well as a curated checklist of feminist practices to start out with. This perspective warmly invites—and promotes—researchers from all backgrounds to engage in and contribute to the exploration of feminist values and practices within the realm of psychological science.

## **Keywords**

Feminism, methods, critical theory, reform, change, higher education

## **Introduction**

**Feminism** is about challenging **power** in all its forms. Applying such a feminist lens to scientific research is advantageous in many ways, as exemplified in geography (Liboiron, 2021), neuroscience (Choudhury et al., 2009; Hyde et al., 2019; van Anders et al., 2015), and science and technology studies (Faculty of Native Studies, University of Alberta, n.d.; Murphy, 2012). However, there is little knowledge among scientists not actively practicing feminist psychology or applying feminist practices in psychology regarding the general definition, implementation or impact of feminist approaches in the psychological sciences (see Wiggington & Lafrance, 2019 on how to conduct or teach critical feminist research; and Gruber et al., 2020; Matsick et al., 2021; McCormick-Huhn et al., 2019; Olos & Hoff, 2006; Pastwa-Wojciechowska & Chybicka, 2022 for more specific topics). This can lead early career researchers interested in feminist topics or approaches to be overwhelmed by the classic feminist literature. It is also difficult to know how to be feminist in science if you do not research 'typical' feminist topics. In this piece, we focus on feminist practices (the method), which are related to but different from feminist psychology (the topic). In order to reach the diverse audience of psychological sciences and showcase how feminist practices are already and can be further implemented on the individual and institutional levels for any topic in psychological research, we first need to delve deeper into the *why*, the *what*, and the *how* of feminist practices and research.

First, *why* can the incorporation of feminist approaches be beneficial for psychological science? We argue that it broadens theoretical perspectives, encourages **collaboration** with and **inclusion of marginalized groups** and widens the scope of research methods. Past feminist psychology literature already laid important groundwork, but here we aim to present a more accessible and facilitated 'easing' into feminist approaches to doing science.

Second, *what* are feminist approaches, and/or what can they be? We propose a diverse list of feminist approaches at the individual and institutional levels, including some that people might not be aware are considered feminist practices. These are drawn from a review of previous literature and results of an informal survey we conducted on feminist approaches in the context of open practices in the psychological sciences. For readers unfamiliar with the feminist literature and feminist conversations, we further highlight key terms and buzzwords to improve joint understanding of terminology. These are defined and explained in a short glossary in Table S1 of the Supplementary material, and also highlighted in bold where they appear first in the main text. These keyword explanations are intended to support the communication of feminist research and practices.

Finally, *how* can psychological science researchers move towards readily incorporating feminist approaches into their work and what are potential barriers to doing so? Here, we offer a summary of the potential barriers, as perceived by our survey participants, as well as a 'Top 11' author-curated list of actions that researchers can take to begin incorporating feminist practices into their work.

By offering answers to these three questions, this paper aims to provide a brief and easy to digest overview of the status quo of feminist approaches to psychological science. Our aim is also to start the conversation towards more feminist practices within all domains of psychological science and to contribute towards a strong foundation that will stimulate further research into the effects of implementing feminist values and their practices across the field.

## **Positionality**

We are a group of early career researchers, psychological science researchers and practitioners of open scholarship who identify as feminists. We are all members of the Feminist WonderLab Collective, a group of like-minded individuals that regularly discuss feminist practices in science. While we agree on a broad definition of feminism, it applies differently in each of our lives as a function of our intersecting identities. Using the Academic Wheel of **Privilege** (Elsherif et al., 2022) as a guideline, we find it relevant to share that we come from and work in different so-called nation-states (Global North/South, High/Low-Middle Income Countries, WEIRD/non-WEIRD (Western Educated Industrialized Rich Democratic), colonizer/colonized, dominant/marginalized), as citizens or immigrants; we hold different **gender** identities, including outside of the gender binary, some of us identify as queer, some identify as neurospicy (i.e., neurodivergent), and some of us identify as **racialized**. English is not everyone's first language. Some of us have care duties and we do not all have access to the same levels of institutional resources, which impacts how this project fits into each of our workloads and the amount and types of labor we can each contribute. Especially in this later axis of power, our **intersectionality** has guided how we work together and has affected the final manuscript, including authorship.

Writing this paper familiarized us with prior feminist psychology work, helped many of us identify the feminist practices that we already use in our everyday professional and personal lives and discover new practices that we can incorporate. It has affected how we interact with our students and colleagues. It has made a lot of the invisible labor that we do visible to us and, we hope, to our institutions. This is empowering for us and we hope that it will empower readers and feminists-to-be as well.

### **1) The Why**

First, let us begin by addressing *why* feminist practices might be needed in science in the first place. Currently and historically the world has been governed by systems of power and **oppression** along gender, racial, geographical, economic and religious lines, to name a few. In the words of Katherine McKittrick, “overarching systems are powerfully anchored to uneven practices of accumulation and dispossession that thrive on replicating themselves through *rewarding* human activities that *validate inequities*” (2021, p. 152, emphasis added). These systems of power and oppression are driven by ideologies, brilliantly defined by Hannah McGregor on the podcast *Witch, Please* as the “imagined relationship to the real conditions of our existence” (Kosman & McGregor, 2020). **Ideology** can also be referred to as a worldview. Given everyone lives in the world and has relationships to it, one cannot be outside of ideology. In other words, everyone has a worldview, and everyone holds ideologies. Ideologies can be hidden when they align with the status quo, which, in turn, can promote systems of oppression. Oppressions are invisible to those who do not experience those oppressions, but it does not mean that they do not exist. Some examples include gender, racial and sexual oppression, **colonialism** driven by **racial capitalism** (Robinson, 2000) and **ableist eugenics** (Kosman & McGregor, 2022a). From a westernized perspective of history, science as it was developed in the Enlightenment period (late 17<sup>th</sup> century to 1815) was (and still is) intimately tied to these systems of power and oppression. Psychology was specifically harnessed to justify the oppression of those considered less than human. Black and Indigenous people, for example, were viewed as sources of labor. Feminism is about challenging systems of power and oppression in all their forms; any practice that challenges

power can be considered a feminist practice. Feminism—more specifically intersectional feminism—can be considered an ideology of anti-oppression and is an ideology that we authors hold.

Enlightenment science led to the development of positivism, a research framework where only one truth is possible. It was adopted in psychological research, which has taken a dominating and exclusionary intellectual and academic perspective dictated by mostly white male researchers in high-income countries, particularly Northern America and Western Europe (Lewis Jr, 2022). Therefore, we refer to this type of science as dominant science (Liboiron, 2021, p. 20). This hegemony has far-reaching consequences. For an example on gender inequity, in STEM (Science, Technology, Engineering and Math) fields there exists a so-called **leaky pipeline** (Ong et al., 2011), meaning that the proportion of women decreases the higher the career position in question. In other words, increased recruitment efforts have brought us much closer to gender **diversity** in undergraduate students, which is a significant success; now science needs to work to keep gender diversity for all positions in the academy. There is also plenty of evidence of gender inequity in psychology, for example where despite findings that in some countries the profession of the psychologist is primarily dominated by women in numbers, women are not in a balanced and fair position compared to men (Olos & Hoff, 2006). According to Olos and Hoff's data, women are more likely to work part-time and less likely to hold permanent or leadership positions than men. The leaky pipeline, lack of gender diversity and lack of diversity in all areas of **identity** hinders marginalized researchers by keeping them out of science broadly, and psychological science specifically. It also hinders psychological research as a whole by restricting it to one dominant worldview (McCormick-Huhn et al., 2019). Importantly, gender is but one of many examples of these systems of oppression. Taking a look at Elsherif et al.'s (2022) academic wheel of privilege makes us aware of many more intersectional dimensions that need to be considered, for example race, sexuality, ability, health, socioeconomic background, etc.

Unlike hegemony, diverse perspectives bring about innovation and innovation drives scientific progress (Valantine et al., 2015; Nielsen et al., 2017). Scholars from underrepresented groups tend to have more novel contributions, which may be due to differences in experiences, values, and priorities leading to diversified scholarly perspectives (Hofstra et al., 2020). For example, Elsherif et al. (2022) have recently highlighted how neurodiversity, i.e. divergences from the social norm of physically and/or mentally able individuals, can and should be included in research and academia. Lived experience of neurodivergence contributes unique perspectives to science. Aside from innovation, inclusive perspectives also foster **inclusivity** and diversity. As Ijzerman and colleagues formulate in their three-part series on WEIRD (specifically US) dominance in research, “psychological science needs the entire globe”, not only a selected part of it (Ijzerman et al., 2021; Forscher et al., 2021; Silan et al., 2021).

One such movement for improved inclusivity and accessibility, which is gaining increased momentum in the psychological sciences, is the movement towards open science. Open science aims to make the scientific process more transparent, inclusive, and democratic. In some circles the term open scholarship or open research is used in order to include researchers that may not identify as scientists but where transparency, inclusivity and democracy are still valued (e.g., at Advancing Big-team Reproducible science with Increased Representation (ABRIR) or the Framework for Open and Reproducible Research Training (FORRT); Azevedo et al., 2022; also see Parsons et al., 2022 for a glossary of open scholarship terminology). We will therefore use the term open scholarship in this manuscript, except where open science is more accurate. Feminist approaches in science strive for a

more critical, inclusive, and open psychology, leading feminist scholars to practice important tenets of open scholarship (Matsick et al., 2021). Pownall et al. (2021) rightfully pointed out parallels between open and feminist science. Open scholarship has had some positive outcomes in line with feminism: women scholars are more likely to occupy high-status author positions within open scholarship networks, which, in turn, encourages more women to join the movement (Murphy et al., 2020). Open scholarship democratizes knowledge and levels the playing field by providing access to scientific resources, data, and output. These values of open scholarship align, in principle, with the post-positivist movement focusing on the recognition of bias and error in research practice (Eagly & Riger, 2014). However, open science has followed some of the same patterns of exclusion as previous scientific movements, initially focusing on positivist, quantitative research and failing to address systemic barriers of exclusion such as limited access to institutional funding (Brabeck, 2021; Bennett, 2021). It further requires additional labor and resources than 'closed' science (Hostler, 2023), leading it to 'return' (or never leave in the first place) to core positivist principles. These are important reasons why open science is a crucial site of feminist intervention. Although there have been recent efforts discussing the future of women in psychology (Gruber, et al., 2020), experiences of navigating open science as an ECR (Pownall et al., 2021) and bridging psychology and open science (Matsick et al., 2021), we need wider general knowledge of and practical implementation of feminist practices in the psychological sciences or in open psychological sciences, specifically for researchers new to feminist approaches.

An important step to advance and mainstream feminist practices is to review the general knowledge and current use of such practices among psychological scientists. Previous literature suggests feminist practices help improve psychological science by making it more accessible, inclusive, honest, transparent, collaborative and just (Matsick et al., 2021). We found few papers documenting the proposed benefits of these practices, however we believe this may be due to lack of documentation, not lack of benefit. One interesting paper that evaluated the use of feminist practices, such as challenging power structures, highlighting lived experiences, and emphasizing empowerment, in college-aged students found that it enhances educational and career development (Schlehofer et al., 2021). Although informative, the paper has a small sample, highlighting the importance of future studies on the matter. While proposing many feminist practices, Matsick et al. (2021) provide anecdotal evidence of their positive effects on the authors' lab culture. Such practices include **member checking**, journal keeping, "shared projects, team-based writing assignments, and compassionately critical brainstorming sessions among graduate students" (p. 30).

Murphy et al. (2020) further highlight that "lack of social diversity (e.g., gender and racial diversity) within scientific teams can be detrimental to science." Throughout history and various scientific arenas, homogenous teams, usually white men, have led to failures of knowledge resulting in grave problems in applied areas. For example, the National US automotive crash data from 1998 to 2008 suggested that female drivers were 47% more likely to sustain severe injuries when driving compared to male drivers, when controlling for weight and body mass, primarily because of a lack of adjustability of seatbelts that were designed for the average male body (Bose et al., 2011). Similarly, non-white faces are more likely to be misclassified by artificial intelligence algorithms given that the datasets they are trained on overwhelmingly consist of lighter skin subjects (Buolamwini et al., 2018). For an example from the psychological sciences, the prevalence and incidence of schizophrenia varies remarkably across cultures, social groups, and geographical areas (McGrath et al., 2004; Saha et al., 2005), which might partly be due to incorrect diagnoses. This might lead to

adverse outcomes for suffering individuals. Other evidence suggests a lack of replication across diverse samples which implies insights, theories, or interventions might only be applicable to and useful for more privileged groups (Bustamante et al., 2011 for global genomics; Burkhard et al., 2021 for psychosis research).

In sum, because it is implicated in systems of oppression, psychological science can largely benefit from adopting feminist approaches: challenging power and oppression in all its forms leads to improved outcomes for all<sup>1</sup>.

## 2) *The What*

Now we turn to what exactly is meant by feminist practice, drawing knowledge from the existing literature. Additionally, an informal survey that we carried out further helped us, alongside our own experiences, to generate examples of feminist practices and their definition.

Feminist psychology traditionally referred to psychological research on women and gender (Eagly et al., 2012) and critiquing **androcentric** research (Wiggington & Lafrance, 2019). It can also more generally be defined as research that aims to tackle issues of bias in methodology and **epistemology** and challenge established findings, systems, and methods (Eagly & Riger, 2014; Siegel et al., 2021). Here, we extend this scope and include all (research) practices that align with feminist values. We argue that you can include feminist practices into your work even though you are not doing research on traditional feminist psychological topics. In the words of Lafrance and Wiggington (2019), “there is no one approach to data collection or analysis that is required for engaging in critical feminist research.”

While the literature does a good job identifying existing or potential issues around gender **equality**, the aforementioned informal survey that we conducted focuses more specifically on existing practices - or lack thereof - at an individual and institutional level in the context of open scholarship. In the survey, we also aimed to incorporate increased intersectionality in our descriptions of feminist practice, including questioning the goal of gender equality itself in favor of **equity** along multiple axes of power.

It is worth noting a few caveats before we continue. The following sections deal primarily with gender, and even more specifically, gender in a binary way and with an apparent assumption that the goal is equality between men and women. First, the focus on gender is a reflection of our survey responses, which appear to have interpreted feminist practices as gender-based. While gender is only one aspect of feminism and we could discuss all of the issues raised in the context of race, geographical location, neurodivergence or disability, we will leave an in-depth exploration of these for future work. Second, the issue of the gender binary is challenging because there are clearly gender inequities in academia and these are important to document and name. However, gender can be deconstructed into several facets (physical aspects, gender identity, legal gender, and gender expression) that do not always follow a dichotomy or align (Lindqvist, Sendén, & Renström, 2021). Thus, gender identity or legal gender are not legible by name or appearance. To the extent that literature on gender issues in academia relies on guesses based on names or simple self-reports on a gender binary, it likely misgenders some individuals and/or leaves out people that do not identify as a man or woman. To give a concrete example, we indicate in our positionality statement that

---

<sup>1</sup> For more information on how improved outcomes for all can be enacted as co-liberation, see d'Ignazio & Klein (2020).

we do not all identify as cis-gendered, but it is impossible for anyone to identify who does not, based on our names alone. Ideally, all researchers would disclose their gender, for example using pronouns, in online profiles and author notes. At the same time, this is literally life threatening in places where gender identities other than man or woman are criminalized so it cannot be demanded. Thus, we must acknowledge that the current best approaches are far from ideal but they do reveal some issues. When we compare men and women, we do so because these are the categories used by the literature we are discussing. Finally, we question the apparent goal of reaching equality with men. We interpret feminism as interested in equity, not equality. There is a difference between trying to achieve the same amount of power as those currently in positions of power - which does not change the system - and trying to redistribute and revalue power - which requires changing the system. We advocate for the latter. For example, perhaps women do spend more time mentoring (see section below on the topic) - what if instead of aiming to do less mentoring to leave more time for research, like men, the goal was to recognize and value the labor done in all situations in an equitable way? Not all gender differences are inherently bad; instead, institutions must change the way labor, including gendered labor, is valued.

### *The Survey*

At the meeting of the Society for the Improvement of Psychological Science (SIPS) 2022, authors HH, KMD and SAS hosted a hackathon on “feminist ways of doing science”. As a SIPS event, the focus of the hackathon was feminist practices in open science specifically, though we also discussed practices beyond open science. The goal of the hackathon was to crowdsource feminist practices from daily life and work, seeking ways to apply them to psychological research specifically. In relation to this hackathon, we conducted an informal survey circulated on Twitter (now X) running from May to December 2022 with  $n = 105$  participants from different parts of the world (60% Europe, 17.1% North America, 13.3% Asia, 7.6% South America, 1.9% unknown) and career stages (13.3% undergraduate, 37.1% PhD, 10.5% researcher, 19% postdoc, 17.1% professor, 2.9% non-research job). Though fairly diverse, it is relevant to acknowledge that this is a self-selected sample of platform users from our wider network whose algorithms showed them our Tweets about the survey. In the survey, participants were first asked to provide three associations they had when thinking about feminist approaches to doing science in general (see Figure 1). Then, they answered questions more specifically related to feminist practices in open science, including their own and institutional practices, as well as identifying barriers to incorporating such practices.

Figure 1 suggests that feminist approaches include many perspectives, are highly variable, and are associated with justice, equality, equity, **positionality**, and **accessibility**, among other concepts. The data also suggest that respondents seem to have a general grasp of what feminist approaches are to them and agree on many key terms. However, ~17% of respondents in the survey replied they did not know or were not sure what was meant by such approaches. Furthermore, only 21.9% of respondents indicated that they were currently using feminist approaches to open science in their own work, while the rest did not. However, 61.9% of all respondents indicated that they would like to implement such approaches in the future, while only 16.2% did not have such plans. This demonstrates that even in that small sample of people, the majority reported that they were interested and willing to incorporate feminist approaches to (specifically open) science (also see left panel in Table 1). The replies further showed an existing breadth of approaches currently being implemented by our respondents or their institutions (see right panel in Table 1), even if



those are not explicitly labeled as ‘feminist’. In other words, people are implementing feminist approaches without knowing that they are doing so or knowing that they are feminist practices.

Individual researchers can do a lot themselves, but larger ideological shifts need large-scale, institutional support. Only a small proportion of the respondents (10.5%) indicated that their department or equivalent unit in their place of work implemented feminist practices in open science and almost half (42.9%) believed the institution does not intend to do so. These data showcase that feminist practices are just beginning to be known and implemented across institutions and work places, with much room for improvement, and some resistance.

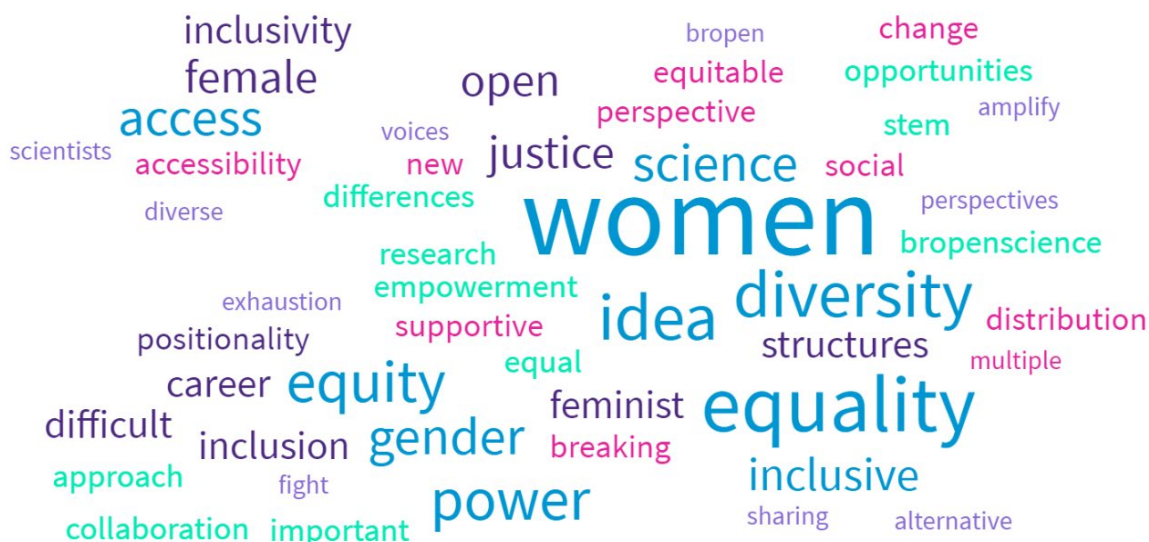


Figure 1. Word cloud created from asking 105 anonymous survey participants what first associations they had with “feminist approaches to doing science”. The bigger the word, the more often this word was mentioned. Figure created using the FreeWordCloudGenerator (<https://www.freewordcloudgenerator.com/>).

Table 1. Alphabetized survey responses on currently implemented individual and institutional feminist practices.

| Individual practices   | Institutional practices   |
|--|---|
| Active resistance against the “bro culture of open science”                                    | Considering diversity in study design                                   |
| Adoption of a “heliocentric” model of open science   | Data sharing  |
| Critical reflection to identify gaps   | Dedicated committees to discuss these topics                            |
| Diversifying citation practices, usage of the Citation Diversity Statement (Zurn et al., 2020) | Discussion panels of feminist approaches                                |
| Diverse study samples and critically assessing existing samples                                | Documenting and updating inclusivity and diversity practices in the lab |

|  |   |
|--|---|
| Education about the topic, e.g. via literature   | Employee selection considering gender           |
| Equal pay enforcement as much as feasible  | Home office                                     |
| Equal encouragement of all trainees regarding project-related work (e.g. technical aspects or managing)          | Listing the supervisor last in the author list  |
| Fostering equality and equity in committees  | Maternity leave                                 |
| Inclusivity (e.g. during hiring)   | Inclusivity in participant recruitment          |
| Increasing visibility/support of and research about people from underrepresented countries                       | Open-access publishing                          |
| Intersectionality  | Promoting publications in gender equality       |
| Inviting diverse speakers for talks, projects, and teams   | Promoting open science practices                |
| Leading while also being attentive to emotions   | Research program on gendered data               |
| Mentoring network, mentoring women for male-dominated fields   | Sharing articles written by women in department |
| New approaches to problem solving  | Women of color initiatives                      |
| Not taking "sex differences" research at face value  | Workshops on diversity and inclusion            |
| Not collecting binary gender data from research participants, particularly when irrelevant to research question  |   |
| Participation in feminist discussions  |   |
| Putting content over structure   |   |
| Promoting and coaching women to become tomorrow's leaders  |   |
| Promoting open science practices   |   |
| Support, sharing, collegiality, collaboration and community (e.g. via social media, in projects, and authorship) |   |

## Transparency

---

*Note: Entries in the same row are unrelated to each other, we merely list the practices mentioned in the survey, sorted alphabetically.*

### *The Literature*

When reviewing literature on feminist approaches to science, many practices that could be considered under this umbrella term are already in existence and use, both on the individual and the institutional level. It is important to consider at least these two levels of action because combatting large systems of oppression necessitates many different solutions at many different levels, altogether putting pressure on the system (Wright, 2016). That being said, it is critical to consider the scale of the problem in order to offer a commensurate solution (Liboiron, 2021). For example, choosing to rest when you are tired or choosing not to buy a branded piece of clothing will not dismantle capitalism but it models resistance to others around you, who may feel empowered to do the same. On the other hand, a focus on relationships between humans and relationships between humans and non-humans instead of extraction for profit that in turn causes climate breakdown will engender larger shifts in our relationships to the material conditions of our lives: shifts in ideologies, shifts in worldviews - away from capitalism and climate breakdown. Both are necessary and impactful practices, but they act at different scales. While an in depth discussion of theories of change is outside the scope of this paper, we generally take the approach of many solutions (Kaba & Murakawa, 2021; Wright, 2016). One size does not fit all and the metaphor of *death by many cuts* describes the approach best. Here we synthesize previous literature with our survey responses and own experience to generate lists of existing or potential practices at both the individual and institutional level.

### *Individual-level practices*

All researchers have the individual opportunity and the duty to make our scholarship more open, inclusive and accessible. Feminism offers various practices all researchers can implement as individuals to make changes in relation to experimental design, research practices, mentorship, and collaborations, among others.

**Intersectionality.** McCormick-Huhn et al. (2019) refer to the four key points of intersectionality, namely how: a) people are multidimensional with multiple identities and group memberships, which are b) dynamic and contextual, c) related to power and, d) related to systemic advantages and disadvantages. However, intersectionality is usually overlooked in the way research is done. For example, most psychology research involves WEIRD population samples, but at the same time assumes generalisability and reports very limited information on sample background of participants (McCormick-Huhn et al., 2019; Matsick et al., 2021). In an effort for more open research and to better situate knowledge (a feminist practice), researchers can include more information about the sample, justify the sample choice (or simply acknowledge that it is an availability sample, and only generalize accordingly) and be more critical about representation (e.g. including a number of non-binary individuals equal to the number of men and women). Furthermore, are the employed tools appropriate for the participants, and the participants suited to the tools? Who/what is included and who/what is left out (Campbell & Wasco, 2000, McCormick-Huhn et al., 2019; Matsick et al., 2021)? This diversification will likely lead to increasingly conflicting, or “messier”

knowledge, but it is a truer, more valid reflection of the world as it is. Messier data reflects D'Ignazio and Klein's (2020) fourth principle of data feminism, which states: 'embrace **pluralism**'. Privileging research approaches that reveal the complexity and nuance of underrepresented groups is also one of Brabeck's (2021) seven policy recommendations for more feminist open scholarship.

Intersectionality applies to the researchers' identities too. It is important to reflect on our own identities and be mindful of any potential privileges or power dynamics that they are associated with. There is very limited information on the multiple and potentially conflicting identities of researchers, but there is enough evidence to show the lack of diversity in academia, with very few people identifying as BIPOC (Black, Indigenous, and other people of color) or LGBTQIA (lesbian, gay, bisexual, transgender/transsexual, queer/questioning, intersex, and allied/asexual/aromantic/agender), for example (Gruber et al. 2021). Collaborations and collegiality are central practices both in feminist psychology and in open scholarship (Pownall et al., 2021). Advocating for more diversity in academia and actively seeking collaborations with people from different backgrounds and identities, including community members, can enrich perspectives and offer space to people from discriminated and marginalized groups to be heard in a non-competitive academic environment (Matsick et al., 2021). Another way individuals specifically in positions of power can help, such as those on hiring committees or funding boards, is familiarizing themselves with more inclusive hiring practices, being active bystanders and speaking up in case of witnessing discriminatory behavior and advocating for more diverse groups if they notice member imbalances (Llorens et al., 2021).

Finally, positionality and reflexivity have been two core practices in feminist epistemology and qualitative psychology where the researcher is not seen as objective but is aware of their identities and motivations, and thus accountable for their actions in the research process (Cancian, 1992, Curtin et al. 2016, Jamieson et al., 2023; Matsick et al., 2021, Olmos-Vega, 2023; Wilkinson et al., 1988). Being aware of one's own **explicit and implicit biases** and ideologies, and thus practicing "disciplined self-reflection" (Wilkinson, 1988, p. 493), can help individuals better understand themselves. Incorporating positionality and reflexivity is another of Brabeck's (2021) seven policy recommendations for feminist open scholarship. Reflexivity also helps a researcher realize how their own intersectional identity and predispositions can influence all stages of the research process, from formulating a research question to data interpretation (D'Ignazio & Klein, 2020; Matsick et al., 2021).

**Teaching and mentoring.** Mentorship has shown to be invaluable for students and early-career researchers, but women and people from marginalized groups are often left out or poorly served (Dobbs & Montecillo Leider, 2021, Moss-Racusin et al., 2012, Llorens et al, 2021). With few mentors who look like them, many students of color, for example, are left with white mentors, who have been described as falling into three categories: collectors, nightlights and allies (Martinez-Cola, 2020; discussed in Kosman & McGregor, 2022b in the context of Slytherin pedagogy). Collectors are described as "[the] mentors who will want to add you to the cadre of students of Color that they have decided to help. These are the ones that will "trot" you out to events, ask you to represent the University at some panel during the admissions process [...] They also often limit their interactions with students of Color to 'diversity' events" (Martinez-Cola, 2020, p. 30). Martinez-Cola goes on to say that while collectors are the most common type of mentor she encountered, they are not bad people. They are instead misguided, and they can be useful because of their knowledge of available resources within and outside of the institution. Nightlights are "White mentors who

understand the challenges inherent at [Historically White Institutions] and can help students of Color navigate the unknown and unforeseeable curves and twists of the academy. [...] They use their privilege, social capital, and cultural capital to [...] reveal the **hidden curriculum** that so often eludes students of Color.” (Martinez-Cola, 2020, p. 32-33). She gives four examples of how a Nightlight can intervene: 1) intervening during a meeting when a person of Color becomes “the representative” for all people of Color; 2) nominating a person of Color for a committee or task that is not related to race/difference; 3) taking a moment to read a colleague’s or student’s work and talk about it with them, drop a note of appreciation, or mention it in a professional setting; and 4) taking a moment to learn about a situation before making conclusions. Finally, “[a]llies have “done the work” it takes to develop an appreciation and admiration for the experiences of students of Color, and this work informs their mentoring relationships.” (Martinez-Cola, 2020, p. 36). More specifically, they “(a) [have] the ability to have and recover from disagreements and (b) understanding when and how to use their privilege in spaces where another’s voice was not or would not be heard.” (Martinez-Cola, 2020, p. 38). Most people would probably like to be an **ally**, and being an ally is a feminist practice. Anyone wishing to be an ally should therefore do the work needed to become one, especially if they have a mentee who identifies with any marginalized group. Martinez-Cola’s model is grounded in the experience of a racialized student, but can be applied to any type of marginalization (see e.g., Academic Wheel of Privilege by Elsherif et al., 2022).

Recent initiatives promoting mentorship opportunities to marginalized groups have been welcomed with great interest and have increased the sense of belonging in research for mentees (Gruber, 2021; for older initiatives, see Gardiner et al., 2007). More senior researchers in academic educational institutes have a duty to train the younger generations of researchers, but mentoring is not yet supported enough by institutions and there is not enough data on mentoring schemes. Individual researchers should explore and take advantage of mentorship opportunities with more senior academics or peer-mentoring and expand their knowledge as mentees. By the same token, providing mentorship to younger aspiring researchers is also important, especially to underrepresented groups and use it as a tool to promote more equality and inclusion in academia either through institutional settings or collaborative initiatives (Duplan, 2019; Curtin et al., 2016; Gannon et al. 2016; Gruber et al., 2021). In other words, use mentorship as an opportunity to be an ally (Martinez-Cola, 2020).

**Critical thinking and justification.** By applying feminist approaches in academia, researchers are working towards a more open, transparent and reproducible science (Cancian, 1992, Curtin et al., 2016, Pownall et al., 2021). Reflective and critical thought can and needs to be applied to all stages of the research process. As such, any researcher driven by the goals above needs to provide more information and justification on why, how and where research will be conducted, for whom (target population), and with whom (as participants and collaborators). When possible, data should be freely available in repositories such as the Open Science Framework for everyone to access them. Authors and reviewers need to ensure that authorship is appropriately credited and acknowledged (for example, see the CLEAR’s author order process by Liboiron et al., 2017). Another step is to start routinely checking the reference list in authored and reviewed manuscripts: if an unbalanced citation list is noticed, authors should diversify their references and, when reviewing, ask authors and journals to do the same (Llorens et al., 2021, for implementation examples).

*Institutional-level practices*

While individual-level practices can be seen as directly actionable points that we as researchers can try to follow in our daily work, institutional-level practices might seem more elusive. How are you, as a sole researcher, supposed to effect institutional change? However, we want to point out that researchers employed at universities are important parts of these institutions. Depending on your career level, you may sit in on a hiring or grant committee or organize a conference. In this section we encourage our readers to reflect on the power they have within their communities and institutions and how they can use it to apply any of the changes suggested throughout.

**Intersectionality.** Just as it is relevant to consider individual intersectional identities, it is necessary to ground feminist practices in the various systemic contexts in which they may appear. It is important to highlight that feminist practices are different in various cultures not only due to cultural differences and knowledge of these practices but also due to the safety of researchers. In low to middle-income countries (LMIC) one needs to navigate it a lot more carefully given that feminism is not universally seen as a “good” thing. It is crucial to note that there are more difficulties for racialized, or otherwise marginalized women, including within high-income countries. For example, more work is given with less credit (e.g. Gruber et al., 2021) and there is less money for research grants (Domingo et al., 2022). Despite NIH funding for women increasing from 23% in 1998 to 34% in 2019, this is not translated to women of color (Kaiser, 2023; Nguyen et al., 2023). Reporting and (over)work on improving diversity and inclusion is mostly given to women of color (Ahmed, 2017). The reporting and fixing of diversity, equity and inclusion (DEI) issues causes trauma and solidifies the stereotype of “angry woman of color”. The issues of work distribution and research grants are discussed in more detail below but are worth introducing here as systemic issues of intersectionality.

Systemic intersectionality, or lack thereof, is also visible in this manuscript. Though we have tried to incorporate diverse perspectives, our framing is still grounded in dominant scientific thought. We have all worked and been trained in the dominant framework and we are writing for a wide, general audience at the intersection of psychology and open scholarship - both grounded in dominant scientific thought. The evidence we draw on to support our arguments and our citations in general are still predominantly American, European and white. This is partially a result of the reality that it is safer and culturally acceptable to write about oppression and injustice in these areas of the world, and this is where the evidence is collected and published. At the same time, oppressed peoples do not need white researchers to collect evidence to know that they are oppressed; what do we cite instead? Even the choice of spelling is standardized to American English. Even though we all write from different places and use different spellings, that sense of place is erased by something as simple as spelling standardization (Liboiron, 2021). It is difficult, if not impossible, to fully divest from the system in which we live and work; however, acknowledging the existence of systemic, intersectional injustices, even in our work, is the first step in correcting it. As the first manuscript we write as a collective, this paper gives us a starting point to show us where we can improve in our future work.

**Policies.** There have been institutional and governmental policies addressing the ways to make academia and research better for women, such as the National Science Foundation’s ADVANCE programme (National Science Foundation, 2020) for institutional transformation in

science and engineering, the German Research Foundation aiming to increase women in leadership positions by 2013 (Schiebinger & Schraudner, 2011), the BRAIN Initiative's Plan for Enhancing Diverse Perspectives (NIH, 2021), or the TARGET, ACT, ANECA and INSPIRE projects (Notus-asr, 2018a, 2018b, 2018c, 2018d)<sup>2</sup>. However, these are only a handful of examples focused on gender alone without considering other axes of oppression, and the outcomes of such changes are still an under-researched area. There is a clear call for organizational transformation, outlined in previous studies and reviews (e.g., Bilimoria & Liang, 2014), so that for example the entry and retention of women in science is improved. Brabeck's (2021) five remaining policy recommendations for a more feminist open science (focusing on open access) are also worth mentioning here as they are institutional recommendations and go beyond gender issues to address power inequities more widely. These are: curate and provide internet that is safe for all to access; reveal who is writing the open access policies and practices that govern open access outlets and mandates; foster the skills needed to engage in an open access knowledge base and apply it in useful ways; include attention to the ethics of open access publishing in the APA Ethics Code; and change university policies and the fear associated with breaking tradition (Brabeck, 2021, p. 470). Gruber et al. (2021) furthermore outline the need for a systematic summary of the contributing factors for the issue of gender (binary) gaps and recommendations of how to address these in the psychological sciences. Some specific areas of concern around gender inequity include family-work balance, service imbalance, grants and awards, public visibility, the gender pay gap, and sexual harassment. These kinds of changes, called for in the literature, from our survey respondents and from us, will require reorganization of institutions' core values, structure, decision-making processes, policies and procedures of **accountability** and authority (Battiste et al., 2018). If you are in a position to influence policy, consider how it can be more inclusive and just.

**Family-work balance.** One concern to be addressed is the family-work balance conflict (Bilimoria & Liang, 2014; Ceci et al., 2015; Schiebinger & Schraudner, 2014; Gruber et al., 2021). Academia is characterized by high workloads and a high prevalence of overtime. While these factors can be disadvantageous to all employees (e.g., with regard to mental health; Gewin, 2021), they are particularly detrimental to women, who still do the majority of care work at home (Rosa, 2022). Referring to women in STEM, Ceci et al. (2015) suggest that the lack of consideration for the family-work balance is one of the main factors making women leave academic careers, particularly at the higher career stages. Due to the similarity of academic expectations and structures across schools or departments within an institution, we consider that these issues would need to be addressed for women and gender diverse scientists in the field of psychology as well. The problem is compounded in the Global South. Caregiving duties are higher in many LMICs (e.g. Mexico). Although there are no international comparisons in Gruber et al. (2021), it is likely that the uneven distribution of care work has an impact on how women advance through academia, additionally penalizing academics living and working in the Global South and/or in LMIC nation-states.

The solutions can be centered around organizing the career path in such a way that it avoids clashes with personal life, which benefits everyone. For example, this could be in the

---

<sup>2</sup>TARGET aims to initiate institutional change in seven institutions in the Mediterranean basin. ACT promotes knowledge, collaborative learning and institutional change on gender equality in research and innovation. ANECA designs and implements the first training course on gender equality and evaluation of notus. INSPIRE builds Europe's Center of Excellence on inclusive gender equality in research and innovation.

form of creating part-time tenure positions, normalizing in greater extent the pausing/extending of the “tenure clock” and providing paid maternity leave while women have or adopt children, normalizing career breaks, or even as simple as scheduling important meetings and events around family duties (Ceci et al., 2015; Schiebinger & Schraudner, 2014). Advocating for changes such as these are one way individuals can have an impact on institutional practices. While such conversations are often centered on women in monogamous heterosexual relationships, the same rules should apply to parents or carers of all genders and relationship styles (e.g. queer, non-monogamous). The definition of family also needs to be taken into account. Family typically equals partners and/or with children, leaving single academics to be considered “unattached” by the institution (McGregor, 2022). This is both untrue and harmful. “Single” academics also have important relationships and are part of communities. Imagining them to be unattached allows the institution to demand more of them because there are no visible care duties associated with partners or children. In this way, feminism intersects with anti-capitalism in pushing back against labor exploitation more broadly.

**Service imbalance and career.** Another problematic area is that of the service imbalance between those with more or less social capital, including gender. According to Huopalaainen and Satama (2018), women’s identities have been constrained in academia, where motherhood is punished in a traditionally masculine, funding-competitive environment, leading to women feeling conflicted and divided. In addition, women, and even more for women of color, are often found to be given more menial tasks and more mentoring-related, teaching-related and generally non-research work, compared to men and white academics (brownamsavenger, 2017, as cited in Robinson, 2020; Gruber et al., 2021; Crapo et al., 2020; Dobbs & Montecillo Leider, 2021; Irby, 2014). In this regard, Gruber and colleagues suggest that service should be formalized as part of the job, and should be included in promotion and raise decisions. In addition, they believe that a rotational principle of assigning such tasks could better address the gender gap. Where an availability principle may be biased, a rotational principle has higher accountability for not complying with the service duties built in. We believe it can also help address the race gap in service. Along the same lines, Matsick et al. (2021) highlights the need to deprioritise quantity of publications as an index of academic success, and instead include collaboration metrics of productivity, such as mentorship and activism. They state that traditional scientific indices of success (e.g., *H*-index, number of citations) should be reimaged, such that they reflect the quality of the research output<sup>3</sup>, as well as the commitment to open scholarship (e.g., teaching open and transparent science, sharing open resources and data, etc.). These would include rather slow changes intended to ultimately displace the “publish or perish” culture. One example that Matsick et al. offers is to implement more research society prizes (e.g., SIPS, Association for Women in Psychology, and Society for the Psychological Study of Social Issues) for recognising contributions beyond the traditional publications, such as qualitative research, mentoring and community building. For such changes to be implemented, there is a need for further clarifying where exactly the problems lie. As such, there is a need to collect data on workloads, responsibilities, and the actual compensation, support and time off for research that staff doing disproportional service loads receive (Bilimoria & Liang, 2014).

---

<sup>3</sup> But who decides what is meant by quality and who decides what knowledge matters, i.e., quality vs. quantity? (Hart & Metcalfe, 2010; Matsik et al., 2021; McDermott, 1994)?



**Grants and awards.** A crucial element in the assessment of promotions is grant and award success rate. Gruber and colleagues (2021) find that women are less likely to apply for grants, less likely to obtain them if the evaluation focuses on the researcher vs. the project, less likely to apply for and secure project renewals, and less likely to obtain senior-level awards. At the intersection of gender and nation of employment, in Mexico an equal amount of scholarships are given to male and female graduate students but less funding for research is given to women full-time professors (CONACYT, 2021). Although UNESCO has pointed out that some LMIC do a decent job with gender diversity in academia (UNESCO, 2021), reality paints a different picture. For instance, in the past few years in Latin America, ) women scientists have been awarded research-productivity fellowships at lower rates than men scientists (Corral-Frias et al, 2023; INMUJERES, 2018; Valentova et al., 2017) and budget cuts in 2021 have further widened this gap, perpetuating other gender imbalances (Hipólito et al., 2022). Where politically possible and safe, we propose that this issue is addressed through the implementation of ongoing procedures of data collection on diversity in the grant and award support offices of institutions. For instance, the EU Commission strategies for gender equality in research and innovation (European Commission, 2023) suggest implementing gender equity plans of research projects and organizations, training for gender equality, implementing gender equality as part of the content of the research proposal, providing specific funding opportunities for women, and fostering the gender equality principles through the awards for gender equality champions. As expressed in the European Commission’s “Approaches to inclusive gender equality in research and innovation” document (European Commission, Directorate-General for Research and Innovation, 2022), if the reasons behind this gender gap are unclear, then that would warrant data collection on the profile, success rates and barriers of the applicants regularly and timely, in cross-institutional collaborative manner. Furthermore, past literature (Billimoria & Liang, 2014; Casad et al., 2019; Gruber et al., 2021) also proposes that committees establish more concrete criteria for promotions and awards, implement interventions that deal with implicit bias, provide reasons for their selections and rankings of the candidates, as well as diversify and reimagine the idea of awards, so that they are not solely based on the traditional academic promotion criteria, but also on interdisciplinarity in scholarship, such as open collaborative science, and diverse ways of working.

**Visibility.** Another important issue to be addressed is the gender gap in visibility of women compared to men at conferences, colloquia and symposia. Equally important to diversity of identity is diversity of thought; however, based on literature and our survey, here we focus on visible diversity (i.e. representation). Data that men were significantly more likely to be invited as colloquia speakers could not be explained by women’s likelihood to decline invitations or perceived value of the invitation (Gruber et al., 2021). This data does not consider genders outside of the binary, which leads to a reasonable assumption that researchers with non-binary gender identities are grossly under-represented, given they were not counted in the first place (D’Ignazio & Klein, 2020, ch. 4). As public representation is important for publicizing one’s research output and for building professional collaborative relationships, this issue of public visibility of women and gender diverse researchers needs to be urgently addressed. Gruber and colleagues (2021) propose the involvement of more women in decision panels and employment of an equity advocate on the panel, along with documenting the selection process. We additionally propose monitoring the gender of speakers by the organizations behind a symposium or colloquia, as well as other marginalized identities. Indeed, documentation is a feminist practice (Ahmed, 2017).

Furthermore, this process should be performed separately at different career stages, to make sure that women and gender diverse researchers are represented both at early and later career stages. Useful, though restricted to the gender binary, online tools in this regard (as cited in Llorens et al., 2021) are the Conference diversity distribution calculator (Prasad, 2019), the Gender bias in recommendation letters tools (Forth, 2013; Lowe, 2023), or the BiasWatchNeuro group (2023) and their resources.

**The gender pay gap.** The issue of unequal financial compensation is still prevalent (Gruber et al., 2021), even in the field of psychological science, where women make up the majority of the university students and early-career researchers. This is also true of populations which are under-represented in research. For example, across different sectors (e.g., information technology, social work, research etc.), women are underpaid compared to men, and for women, this is especially influenced by characteristics such as age (Sengupta & Puri, 2021). This is a specifically institutional issue, and in order to address it, there should be higher transparency in terms of salary-position correspondence, such that: salaries should be announced when a job offer is publicized and the institutions (or independent organizations) should publish more detailed yearly reports on the salary gaps per career stage, and what proportion of these have been addressed and rectified since the year before. Such a suggestion is supported by the literature in that gender pay gaps are smaller when the information is publicly available, at least in an American context (American Association of University Women, 2017, as cited in Gruber et al., 2021).

**Sexual harassment.** Last but not least, reports of sexual harassment across institutions are still prevalent (see National Academies of Sciences, Engineering, and Medicine et al., 2018; Young & Wiley, 2021), despite the commonly adopted zero tolerance policies in many institutions (Atkinson & Standing, 2019). In LMICs, reporting practices have only begun in the last few years. Thus, there is an urgent need of addressing these if institutions want to benefit from the diverse gender scientific excellence in psychological science and create a safe environment for their employees. One of the proposals by Gruber et al. (2021) suggests the diffusion of power to reduce isolation and to instigate the development of supportive structures for those who have experienced sexual harassment. For this to happen, an effective sexual harassment training would be needed, as well as transparent accountability to the consequences and effective leadership committed to eradicating sexual harassment. According to Gruber and colleagues, training should involve bystander interventions and there should be more data collected on gender-based scientific bullying at work. Atkinson and Standing (2019) in a similar manner highlight the need for introducing evidence-based bystander interventions that would foster institutional cultural changes such as supporting positive behaviors and intervening in gender-violence behaviors. However, they also stress on the need of defining what unacceptable behaviors are beyond just behaviors of criminal misconduct. Llorens and colleagues (2021) suggest a list of resources for addressing gender bias in academia, and a few of them are: Bringing in the Bystander workshop (Soteria Solutions, 2023), Code-of-Conduct templates for conferences and laboratories (Saderi, 2019; Sharp, 2022), the Respect Is Part of Research initiative (a sexual harassment prevention workshop; STAR, 2023), and provide useful educational resources for organisations and individuals on some ways to recognise sexual harassment, report it, and support victims. Finally, the existing project UniSAFE in Europe (European Science Foundation, 2021) collects robust qualitative and quantitative data on sexual and gender-based violence in universities and research institutions. Institutions could use this data in their attempts to

eradicate sexual and gender-based violence. However, more data is needed of the prevalence across institutions outside of Europe, and particularly in the Global South.

### 3) *The How*

Now that we have covered why feminist practice is necessary in the psychological sciences and what feminist practices already exist or are proposed to address power imbalances in the academy, we turn to how psychological scientists can directly start implementing feminist practices into their own work. However, this is easier said than done and even if an individual or their institution is ready to shift their practices, it is worth addressing the many barriers to change. Naming and discussing these barriers not only further highlights why we need feminist practice, but also raises awareness so that researchers can better face and overcome them.

#### *Barriers to feminist practice in open science*

As part of our survey, we asked participants to identify perceived barriers to implementing feminist practices in open science. A thematic analysis of the responses was carried out by two authors (GH, SAS). More specifically, GH produced a first set of themes from her reading of the responses. SAS read these themes then produced her own while reading the responses, writing a new idea as it came up then re-reading responses to confirm. There was significant overlap in the themes and the process produced six overarching themes: 1) no barriers; 2) lack of knowledge (for how to practice feminism in science); 3) lack of clarity (on what is meant by feminism in general or with regard to science); 4) structures of entrenched power imbalances; 5) invisible labor and 6) perceived lack of objectivity/rigor. We now briefly discuss each of these themes.

**No barriers.** Some participants responded with “none”, or equivalent. It is unclear, in some cases, whether this means that they perceive no barriers to feminist practices in open science or could not name any. In other cases, participants state that they believe in equity and therefore there are no barriers, which could be interpreted as a report of no barriers to *their* desire to implement feminist practices.

**Lack of knowledge/clarity.** Lack of knowledge for how to practice feminism and lack of clarity on what is meant by feminism with regard to (open) science are different types of unknowns that may prevent individuals from applying feminist practices. In the first case, our participants support our assessment of a lack of general knowledge of feminist practices in the psychological sciences, and specifically open science. For example, one participant wrote, “misunderstanding of what these approaches are and why they are needed”. In the second case, our participants identify a misunderstanding of feminism as a concept, specifically that it is only for women. For example, “People don’t know what it is and think it’s just for women”. These themes suggest that there is a need for education around feminism more broadly and feminist practices specifically for our fields of research. This paper, with its recommendations and glossary, are only a drop in the bucket, but it is one effort to begin to address this need. First and foremost, we want to strongly reiterate that feminism and its practices are for everyone.

**Structures of entrenched power imbalances.** Structures of oppression were perceived as another significant barrier to feminist practice in open science. Though this specific phrase was not used by any participant, many mentioned structures, power and resistance to change. The theme encompasses examples given of local systems of power, such as at institutions or between senior and junior colleagues, and global systems of power, such as cultural values. For example, respondents identified “system rewards male approaches”, “people in higher positions who are opposed to feminism” and “feminist approaches might not be widely understood/accepted in non-Western countries like Asia” as barriers. We choose the term *entrenched* to communicate the inertia of such systems. They are slow to change, which makes things challenging for anyone trying to do things differently. That being said, systems of oppression such as colonialism, **patriarchy**, capitalism and **white supremacy** are not “solid monolith[s] that we must dash our soft bodies against” (Liboiron, 2021, p. 130); they are imperfect and have many cracks which can slowly be pried open and widened over and over again. This is why it is worth doing things, even though they may be difficult.

**Invisible labor.** “Invisible labor” was specifically identified by our participants as a barrier to feminist practice in open science. This can include teaching students and colleagues about open science practices or about oppression, equity, feminism and their importance because they are not taught in the curriculum or supported by the institution, providing emotional labor for marginalized students, and needing to perform additional emotional labor related to dealing with microaggressions, overt discrimination, repeatedly justifying your practices, and fulfilling the service roles around diversity, equity and inclusion often assigned to marginalized individuals (Ahmed, 2017; Crapo et al., 2020). Increased awareness of invisible labor is a first step in recognizing its effects. Distributing this labor more equitably and updating psychology curricula are some of the ultimate goals that would address the issue more permanently. Until these goals are achieved, we recommend creating your own **feminist killjoy** survival kit (Ahmed, 2017), which includes surrounding yourself with other feminists for emotional support. If you feel able, you can also flag when invisible labor is happening to you so that colleagues, students and managers can see the issue more clearly and help distribute the labor more equitably.

**Perceived lack of objectivity/rigor.** Finally, a perceived lack of objectivity and/or rigor was identified as a barrier to feminist practices in open science. For example, “the standards of what counts as significant and valid research findings”. This highlights the dominance of positivist, quantitative research in open psychological science. For example, various crises are often described as problems in psychology as a whole (e.g. Munafò manifesto; Maxwell et al, 2015; Nosek et al., 2015), when in fact they are specific to a particular way of doing science (Bennett, 2021). While feminist practices can be applied to quantitative methods, we argue that they are fundamentally at odds with positivism. Specifically, positivism is a research framework where there is a discoverable truth which makes it prone to reinforcing systems of oppression where one way of doing things is correct and others are wrong. On the other hand, feminist approaches tend towards constructivist frameworks where knowledge is co-produced and personal experience is valued and interpreted in its context (Guba & Lincoln, 2005; Mason et al, 2023). A lack of understanding of the difference between these frameworks produces this barrier, stemming from different implementations and interpretations of rigor. Furthermore, based on the authors’ experience, there is a widespread lack of awareness of ways of producing knowledge other than in the positivist framework in many institutions, where it is the main or even only taught scientific method framework in

psychology programmes at all levels of study. Though there is increasing awareness of this disproportionate focus on positivist, quantitative methods (for example, Thibault et al., 2023) and apparent increasing interest in including qualitative methods (personal author observations), accelerating this process and including research frameworks in psychology methods courses would be helpful in reducing this particular barrier.

These survey responses support the perceived barriers to implementing feminist practices in (open) science found in the existing literature, which is encouraging - in other words, the issues are known and are lying on the metaphorical table.

*Now what?*

What is more challenging is finding and implementing the solutions: how does psychological science fix these issues? How does the field jointly move towards a culture of feminist psychological science, as individuals and as a discipline? Before writing this paper, we collected our own ideas on which feminist approaches we identified as the most practically implementable and as having the most impact. We then sorted these ideas according to both difficulty and importance (as rated by seven of the authors), and present the Top 11 easiest and most impactful practices in Table 2. They are meant as a starting point for people wanting to begin implementing such approaches after reading this paper. A full list and visualization of all collected and rated practices can be found in the Supplement in Table S2. These practices are nicely accompanied and in line with the five methodological considerations at the heart of critical feminist scholarship by Lafrance and Wiggington (2019, p. 534): “1) the politics of asking questions; 2) attention to language/discourse; 3) reflexivity; 4) representation and intersectionality; and 5) mobilizing research for social change.”

*Table 2. Checklist of Top 11 easiest and most impactful feminist practices to start implementing now.*

| <b>Practice</b>  | <b>Mean Difficulty</b> | <b>Mean Importance</b> |
|--|------------------------|------------------------|
| Bringing The Bystander sexual harassment prevention workshop: <a href="https://www.soteriasolutions.org/college/">https://www.soteriasolutions.org/college/</a> .  | 2.4                    | 7.8                    |
| Self-care: move your body, stay hydrated, eat nutritious food, talk to other feminists!  | 2.0                    | 8.8                    |
| Reflect on hierarchies (in power, priorities, and thought) and privilege in work contexts, as well as on personal gender biases.   | 2.8                    | 8.6                    |
| Speak up more often, pointing out sexist behavior and gender inequality. Be an active bystander.   | 3.4                    | 9.4                    |
| Publish open-access and share your work (data, code, materials) if possible and allowed, in a FAIR way & allow others to take part, especially those from regions/institutions who have less resources than you. | 2.6                    | 8.0                    |

|   |     |     |
|---|-----|-----|
| Exchange viewpoints and stay open to views that are different from your own.  | 2.2 | 7.6 |
| Support each other in the lab/work place, provide helpful feedback, mentor/teach the younger generation or people reaching out for support. | 1.6 | 8.0 |
| Be kind when talking to or about other people, think about how you would like to be spoken to/addressed.                                    | 1.4 | 7.2 |
| Respect people's boundaries and restrictions.   | 1.4 | 8.0 |
| Pass the mic: allow those from marginalized communities to take the stage.  | 2.2 | 8.2 |
| Prioritize those who have been marginalized, not the most vocal (usually white males).  | 2.0 | 8.2 |

---

*Note.* The scales ranged from 1 to 10 and higher values indicate higher difficulty or importance.

While we understand the allure and the usefulness of a Top 11 list like the one in Table 2, it is worth noting that change is not straightforward and we do not have all the answers. Doing anything against the status quo is hard, messy and exhausting. We can learn a lot from outside the academy, from social movements and grassroots resistance all over the world and adapt to our local contexts. Furthermore, implementing many of these practices will affect different identities differently. For example, it may be expected of multiple marginalized individuals, or may be seen as overstepping or 'not the place' of a cisgendered white man. It is difficult to give blanket advice, as every situation and individual is different. That being said, we offer this to anyone wishing to be an ally that has either previously experienced repercussions or is nervous about doing the wrong thing: talk to those you wish to ally yourself with and ask them how they would like you to show up and support you. They may not know explicitly, but at least they know you are willing to help. You may make mistakes, but showing you can listen and learn from them is more important than doing the perfect thing, because the perfect thing doesn't exist.

It may be a bit disappointing to read a 'how' section that mainly discusses barriers and provides a few actions with little more structured guidance. We suggest that the most important thing to remember is that feminism is about challenging power. There are infinite ways of challenging power, so there are infinite ways of being a feminist. This makes it difficult to make specific recommendations, though recommendations do exist and we have seen many feminist practices already in use by individuals and institutions. The best way to implement (more) feminist practices in our work is to just do it. Many researchers doing feminism imperfectly is better than a few doing feminism perfectly - which, by the way, is impossible.

### ***Discussion and outlook***

We had multiple goals in writing this paper aiming to summarize feminist approaches to psychological science:

First, we gave an overview of why it is beneficial to implement feminist practices in the psychological sciences as a field. Despite all of these very good reasons, we need to educate and teach our peers, our academic seniors and the next generations of scientists, so we can collectively shift towards widespread use of such diverse approaches.

Then, we provided a non exhaustive summary on what can be considered feminist practices, both on the individual and institutional levels. Feminist practices primarily aim to challenge power; they are anti-oppressive, diverse and interpreted in the context of the environment they are embedded in. We hope to have transmitted that feminist practices are widespread and varied, and most probably, readers are already implementing some of them as they read this. We also summarized buzzwords and existing terminology in a glossary that readers can refer back to whenever necessary. Using this knowledge, readers can come to their own, personal definition of what feminist approaches mean to them and incorporate them into their own work.

Lastly, we identified existing barriers that hinder adoption of such practices, using the literature, our experiences and the qualitatively summarized survey responses, while at the same time providing a starting point for anybody wanting to ease into feminist psychological science. We hope that our glossary, 'Top 11' and extended checklists can be the tools interested researchers need to begin their journey into feminist science.

What remains for future work is to document the effects of the implementation of many of these practices. Do we observe the leveling of the playing field that we aimed for? What can we do as a community to push these practices to become widespread in the psychological sciences? Our effort in this constitutes the Feminist WonderLab Collective, a group of like-minded individuals that regularly discusses feminist practices in science. In the future, we aim to expand on our ideas outlined here, conducting for example a larger, systematic survey on feminist approaches, or a systematic literature search on existing solutions and their effects. In doing so, we could for example investigate whether participants respond differently depending on age, gender or level of education (e.g., PhD student vs. Professor). It might also be interesting to see if identified themes differ based on any of these factors, although we would need a larger, more representative sample for that.

As Mariame Kaba says, “nothing that we do that’s worthwhile is done alone” (Kaba & Murakawa, 2021, chapter “Community Matters, Collectivity Matters”). We ourselves could not write this paper, form a feminist collective, or do the work that we do without the countless feminists who came before us to make our path easier. We can do the same for those who come next.

## **References**

- Ahmed, S. (2017). *Living a feminist life*. Combined Academic Publishing.
- American Association of University Women (2017). *The simple truth about the gender pay gap*. Retrieved from <https://www.aauw.org/app/uploads/2020/02/AAUW-2018-SimpleTruth-nsa.pdf>
- Atkinson, K., & Standing, K. E. (2019). Changing the culture? A feminist academic activist critique. *Violence Against Women, 25*(11), 1331-1351. <https://doi.org/10.1177/1077801219844609>

- Azevedo, F., Liu, M., Pennington, C. R., Pownall, M., Evans, T. R., Parsons, S., ... & Framework for Open Reproducible Research Training (2022). Towards a culture of open scholarship: the role of pedagogical communities. *BMC Research Notes*, 15(1), 75. <https://doi.org/10.1186/s13104-022-05944-1>
- Battiste, M., Chomsky, N., Denzin, N. K., Fine, M., Gill, R., Grande, S., Hall, B. L., Lather, P., Leonardo, Z., Lincoln, Y. S., McLaren, P., McNinch, J., Meyers, C., Smith, L. T., Spooner, M., Tuck, E., & Weistheimer, J. (2018). *Dissident Knowledge in Higher Education*. University of Regina Press.
- Bennett, S., Hine, L., and Mazerolle, L. (2018). Procedural justice. *Oxford Bibliographies*. New York, NY, United States: Oxford University Press. <https://doi.org/10.1093/OBO/9780195396607-0241>
- BiasWatchNeuro (2023). *About BWN*. Retrieved from: <https://biaswatchneuro.com/>
- Billimoria, D. & Liang, X. (2013). State of knowledge about the workforce participation, equity, and inclusion of women in academic science and engineering. In M. Wyer, M. Barbercheck, D. Cookmeyer, H. Ozturk, & M. Wayne (Eds.), *Women, science, and technology: A reader in feminist science studies* (3rd ed., pp. 21-50). Routledge.
- Brabeck, M. M. (2021). Open science and feminist ethics: Promises and challenges of open access. *Psychology of Women Quarterly*, 45(4), 457–474. <https://doi.org/10.1177/03616843211030926>
- brownameavenger. (2017). #AMSSOWHITE. *LiveJournal*. Retrieved from: <https://brownnameavenger.livejournal.com/612.html?page=2>.
- Buolamwini, J., & Gebru, T. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. In: *Conference on fairness, accountability and transparency* (pp. 77-91). PMLR.
- Burkhard, C., Cicek, S., Barzilay, R., Radhakrishnan, R., & Guloksuz, S. (2021). Need for ethnic and population diversity in psychosis research. *Schizophrenia Bulletin*, 47(4), 889-895. <https://doi.org/10.1093/schbul/sbab048>
- Bustamante, C. D., De La Vega, F. M., & Burchard, E. G. (2011). Genomics for the world. *Nature*, 475(7355), 163-165. <https://doi.org/10.1038/475163a>
- Campbell, R., & Wasco, S. M. (2000). Feminist approaches to social science: Epistemological and methodological tenets. *American Journal of Community Psychology*, 28, 773-791. <https://doi.org/10.1023/A:1005159716099>
- Cancian, F. M. (1992). Feminist science: Methodologies that challenge inequality. *Gender & Society*, 6(4), 623-642. <https://doi.org/10.1177/089124392006004006>
- Casad, B. J., Franks, J. E., Garasky, C. E., Kittleman, M. M., Roesler, A. C., Hall, D. Y., & Petzel, Z. W. (2021). Gender inequality in academia: Problems and solutions for women faculty in STEM. *Journal of Neuroscience Research*, 99(1), 13-23. <https://doi.org/10.1002/jnr.24631>
- Ceci, S. J., Ginther, D. K., Kahn, S., & Williams, W. M. (2015). Women in science. *Scientific American Mind*, 26(1), 62-69. <https://www.jstor.org/stable/24946406>
- Choudhury, S., Nagel, S. K., & Slaby, J. (2009). Critical neuroscience: Linking neuroscience and society through critical practice. *BioSocieties*, 4(1), 61–77. <https://doi.org/10.1017/S1745855209006437>
- Crapo, R., Cahill, A. J., & Jacquart, M. (2020). Bearing the Brunt of Structural Inequality: Ontological Labor in the Academy. *Feminist Philosophy Quarterly*, 6(1). <https://doi.org/10.5206/fpq/2020.1.7316>
- Curtin, N., Ramsey, L.R., Tran, J. (2016). The Benefits and Risks of Feminist Practice as Early Career Scholars in Social Psychology. In: Roberts, TA., Curtin, N., Duncan, L.,



- Cortina, L. (Eds) *Feminist Perspectives on Building a Better Psychological Science of Gender*. Springer, Cham. [https://doi.org/10.1007/978-3-319-32141-7\\_20](https://doi.org/10.1007/978-3-319-32141-7_20)
- CONACyT. (2021). *Informe de actividades del CONACyT Enero–Marzo 2021*. Retrieved from: <https://www.siicyt.gob.mx/index.php/transparencia/informes-conacyt/informe-de-actividades/4947-informe-de-actividades-1-trimestre-2021-vf>
- Corral-Frías, N. S., Castillo, E. L., Lucas, M. Y., Armenta, M. F., Rodríguez, Y. V., Dutra, N., ... & Azevedo, F. (2023). Latin American Psychological Science: Will the Global North Make Room?. *APS Observer*, 36. <https://www.psychologicalscience.org/observer/gslatin-american-psychological-science>
- D'Ignazio, C., & Klein, L. F. (2020). *Data feminism*. MIT press.
- Dobbs, C. L. & Montecillo Leider, C. (2021): “Does this happen to everyone?": Women professors of color reflect on experiences in the academy. *International Journal of Qualitative Studies in Education*. <https://doi.org/10.1080/09518398.2021.1930255>
- Domingo, C. R., Gerber, N. C., Harris, D., Mamo, L., Pasion, S. G., Rebanal, R. D., & Rosser, S. V. (2022). More service or more advancement: Institutional barriers to academic success for women and women of color faculty at a large public comprehensive minority-serving state university. *Journal of Diversity in Higher Education*, 15(3), 365–379. <https://doi.org/10.1037/dhe0000292>
- Duplan, K. (2019). A feminist geographer in a strange land: building bridges through informal mentoring in Switzerland. *Gender, Place & Culture*, 26(7-9), 1271-1279. <https://doi.org/10.1080/0966369X.2018.1552249>
- Eagly, A. H., Eaton, A., Rose, S. M., Riger, S., & McHugh, M. C. (2012). Feminism and psychology: analysis of a half-century of research on women and gender. *American Psychologist*, 67(3), 211. <https://psycnet.apa.org/doi/10.1037/a0027260>
- Eagly, A. H., & Riger, S. (2014). Feminism and psychology: Critiques of methods and epistemology. *American Psychologist*, 69(7), 685. <https://psycnet.apa.org/doi/10.1037/a0037372>
- Elsherif, M. M., Middleton, S. L., Phan, J. M., Azevedo, F., Iley, B. J., Grose-Hodge, M., ... Dokovova, M. (2022). Bridging Neurodiversity and Open Scholarship: How Shared Values Can Guide Best Practices for Research Integrity, Social Justice, and Principled Education. *OSF Preprints*. <https://doi.org/10.31222/osf.io/k7a9p>
- European Commission, Directorate-General for Research and Innovation (2022). *Approaches to inclusive gender equality in research and innovation (R&I)*. Publications Office of the European Union. Retrieved from: <https://data.europa.eu/doi/10.2777/004694>
- European Commission (2023). *Gender equality in research and innovation*. Retrieved from: [https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation\\_en](https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/democracy-and-rights/gender-equality-research-and-innovation_en)
- European Science Foundation. (2021). *UniSAFE*. Retrieved from: <https://unisafe-gbv.eu/>
- Faculty of Native Studies, University of Alberta. (n.d.). Lab Blogs. Indigenous STS. Retrieved from: <https://indigenousts.com/lab-blogs/>
- Forth, T. (2013). *Gender bias calculator*. Retrieved from: <https://www.tomforth.co.uk/genderbias/>
- Forscher, P. S., Basnight-Brown, D. M., Dutra, N., Adetula, A., Silan, M., & IJzerman, H. (2021). Psychological science needs the entire globe, Part 3. *APS Observer*, 35. <https://www.psychologicalscience.org/observer/entire-globe-part-3>
- Gardiner, Tiggemann, Kearns & Marshall (2007). Show me the money! An empirical analysis of mentoring outcomes for women in academia. *Higher Education Research & Development*, 26(4), 425-442. <https://doi.org/10.1080/07294360701658633>

- Gannon, S., Kligyte, G., McLean, J., Perrier, M., Swan, E., Vanni, I., & van Rijswijk, H. (2015). Uneven relationalities, collective biography, and sisterly affect in neoliberal universities. *Feminist Formations*, 27(3), 189-216. <https://www.jstor.org/stable/43860820>
- Gewin, V. (2021). Pandemic burnout is rampant in academia. *Nature*, 591(7850), 489–491. <https://doi.org/10.1038/d41586-021-00663-2>
- Gruber, J., Mendle, J., Lindquist, K. A., Schmader, T., Clark, L. A., Bliss-Moreau, E., ... & Williams, L. A. (2021). The future of women in psychological science. *Perspectives on Psychological Science*, 16(3), 483-516. <https://doi.org/10.1177/1745691620952789>
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (pp. 191–215). Sage Publications Ltd.
- Hart, J., & Metcalfe, A. S. (2010). Whose web of knowledge™ is it anyway?: Citing feminist research in the field of higher education. *The Journal of Higher Education*, 81(2), 140-163. <https://doi.org/10.1080/00221546.2010.11779046>
- Hofstra, B., Kulkarni, V. V., Munoz-Najar Galvez, S., He, B., Jurafsky, D., & McFarland, D. A. (2020). The diversity–innovation paradox in science. *Proceedings of the National Academy of Sciences*, 117(17), 9284-9291. <https://doi.org/10.1073/pnas.1915378117>
- Hostler, T. J. (2023). The Invisible Workload of Open Research. *Journal of Trial & Error*. <https://doi.org/10.36850/mr5>
- Huopalaainen, A. S., & Satama, S. T. (2019). Mothers and researchers in the making: Negotiating ‘new’ motherhood within the ‘new’ academia. *Human Relations*, 72(1), 98-121. <https://doi.org/10.1177/0018726718764571>
- Hyde, J. S., Bigler, R. S., Joel, D., Tate, C. C., & van Anders, S. M. (2019). The future of sex and gender in psychology: Five challenges to the gender binary. *American Psychologist*, 74(2), 171–193. <https://doi.org/10.1037/amp0000307>
- Irby, B. J. (2014). Advancing women of color in the academy: Research perspectives on mentoring and strategies for success. *Mentoring & Tutoring: Partnership in Learning*, 22(4), 265-268. <https://doi.org/10.1080/13611267.2014.946280>
- IJzerman, H., Dutra, N., Silan, M., Adetula, A., Brown, D. M. B., & Forscher, P. (2021). Psychological science needs the entire globe, Part 1. *APS Observer*, 34. <https://www.psychologicalscience.org/observer/global-psych-science>
- Jamieson, M. K., Govaart, G. H., & Pownall, M. (2023). Reflexivity in quantitative research: A rationale and beginner's guide. *Social and Personality Psychology Compass*, e12735. <https://doi.org/10.1111/spc3.12735>
- Kaba, M., & Murakawa, N. (2021). *We Do this' til We Free Us: Abolitionist Organizing and Transforming Justice*. Haymarket Books.
- Kaiser, J. (2023). Women, Black researchers are less likely to hold multiple NIH grants. *Science*. Retrieved from: <https://www.science.org/content/article/women-black-researchers-less-likely-hold-multiple-nih-grants>
- Kosman, M., & McGregor, H. (2020). *Animals* (Book 1, Ep. 3). Retrieved from: <https://play.acast.com/s/oh-witch-please/animals>
- Kosman, M. & McGregor, H. (2022a). *Eugenics* (Book 7, Ep. 6). Retrieved from: <https://shows.acast.com/oh-witch-please/episodes/book-7-ep-6-eugenics>
- Kosman, M., & McGregor, H. (2022b). *Slytherin Pedagogy* (Book 6, Ep. 1). Retrieved from: <https://shows.acast.com/oh-witch-please/episodes/book-6-episode-1-slytherin-pedagogy>

- LaFrance, M. N., & Wigginton, B. (2019). Doing critical feminist research: A Feminism & Psychology reader. *Feminism & Psychology, 29*(4), 534–552.  
<https://doi.org/10.1177/0959353519863075>
- Lewis Jr., N. A. (2021). What counts as good science? How the battle for methodological legitimacy affects public psychology. *American Psychologist, 76*(8), 1323–1333.  
<https://doi.org/10.1037/amp0000870>
- Liboiron, M., Ammendolia, J., Winsor, K., Zahara, A., Bradshaw, H., Melvin, J., Mather, C., Dawe, N., Wells, E., Liboiron, F., Fürst, B., Coyle, C., Saturno, J., Novacefski, M., Westscott, S., & Liboiron, G. (2017). Equity in Author Order: A Feminist Laboratory's Approach. *Catalyst: Feminism, Theory, Technoscience, 3*(2).  
<https://doi.org/10.28968/cftt.v3i2.28850>
- Llorens, A., Tzovara, A., Bellier, L., Bhaya-Grossman, I., Bidet-Caulet, A., Chang, W. K., ... & Dronkers, N. F. (2021). Gender bias in academia: A lifetime problem that needs solutions. *Neuron, 109*(13), 2047-2074. <https://doi.org/10.1016/j.neuron.2021.06.002>
- Lowe, S. (2023). *Gender-bias calculator*. Retrieved from: <https://slowe.github.io/genderbias/>
- Martinez-Cola, M. (2020). Collectors, nightlights, and allies, oh my. *Understanding and Dismantling Privilege, 10*(1), 61–82. <https://www.wpcjournal.com/article/view/20275>
- Mason, J., Pownall, M., Palmer, A., & Azevedo, F. (2023). Investigating Lay Perceptions of Psychological Measures: A Registered Report. *Registered Report*. Retrieved from: <https://doi.org/10.31234/osf.io/jf58q>
- Matsick, J. L., Kruk, M., Oswald, F., & Palmer, L. (2021). Bridging feminist psychology and open science: Feminist tools and shared values inform best practices for science reform. *Psychology of Women Quarterly, 45*(4), 412-429.  
<https://doi.org/10.1177/03616843211026564>
- Maxwell, S. E., Lau, M. Y., & Howard, G. S. (2015). Is psychology suffering from a replication crisis? What does “failure to replicate” really mean?. *American Psychologist, 70*(6), 487.  
<https://psycnet.apa.org/doi/10.1037/a0039400>
- McCormick-Huhn, K., Warner, L. R., Settles, I. H., & Shields, S. A. (2019). What if psychology took intersectionality seriously? Changing how psychologists think about participants. *Psychology of Women Quarterly, 43*(4), 445-456.  
<https://doi.org/10.1177/0361684319866430>
- McDermott, P. (1994). *Politics and scholarship: Feminist academic journals and the production of knowledge*. University of Illinois Press.
- McGrath, J., Saha, S., Welham, J., El Saadi, O., MacCauley, C., & Chant, D. (2004). A systematic review of the incidence of schizophrenia: the distribution of rates and the influence of sex, urbanicity, migrant status and methodology. *BMC medicine, 2*(1), 1-22.  
<https://doi.org/10.1186/1741-7015-2-13>
- McGregor, H. (2022). *A Sentimental Education*. Wilfrid Laurier University Press.
- McKittrick, K. (2020). *Dear science and other stories*. Duke University Press.
- Moss-Racusin, Dovidio, Brescoll, Graham & Handelsman (2012). Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences, 109*(41), 16474–16479, <https://doi.org/10.1073/pnas.1211286109>
- Murphy, M. (2012). *Seizing the means of reproduction: Entanglements of feminism, health, and technoscience*. Duke University Press.
- Murphy, M. C., Mejia, A. F., Mejia, J., Yan, X., Cheryan, S., Dasgupta, N., ... & Pestilli, F. (2020). Open science, communal culture, and women's participation in the movement to improve science. *Proceedings of the National Academy of Sciences, 117*(39), 24154-24164. <https://doi.org/10.1073/pnas.1921320117>

- National Academies of Sciences, Engineering, and Medicine, Policy and Global Affairs, Committee on Women in Science, Engineering, and Medicine, & Committee on the Impacts of Sexual Harassment in Academia (2018). *Sexual harassment in academic sciences, engineering, and medicine*. In P. A. Johnson, S. E. Widnall, & F. F. Benya (Eds.), *Sexual harassment of women: Climate, culture, and consequences in academic sciences, engineering, and medicine*. National Academies Press.
- National Science Foundation. (2020). *ADVANCE at a glance*.  
<https://www.nsf.gov/crssprgm/advance/>
- Nguyen, M., Chaudhry, S. I., Desai, M. M., Dzirasa, K., Cavazos, J. E., & Boatright, D. (2023). Gender, Racial, and Ethnic Inequities in Receipt of Multiple National Institutes of Health Research Project Grants. *JAMA Network Open*, 6(2), e230855.  
<https://doi.org/10.1001/jamanetworkopen.2023.0855>
- Nielsen, M. W., Alegria, S., Börjeson, L., Etkowitz, H., Falk-Krzesinski, H. J., Joshi, A., ... & Schiebinger, L. (2017). Gender diversity leads to better science. *Proceedings of the National Academy of Sciences*, 114(8), 1740-1742.  
<https://doi.org/10.1073/pnas.1700616114>
- Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., ... & Yarkoni, T. (2015). Promoting an open research culture. *Science*, 348(6242), 1422-1425.  
<https://doi.org/10.1126/science.aab2374>
- Notus: Applied Social Research. (2018a). *ACT*. Retrieved from: <https://notus-asr.org/en/proyecto/acth2020-project-to-promote-knowledge-collaborative-learning-and-institutional-change-on-gender-equality-in-research-and-innovation/>
- Notus: Applied Social Research. (2018b). *ANECA*. Retrieved from: <https://notus-asr.org/en/proyecto/design-and-implementation-of-the-first-anecas-training-course-on-gender-equality-and-evaluationnotus-has-collaborated-with-the-national-agency-for-quality-assessment-and-accreditation-aneca/>
- Notus: Applied Social Research. (2018c). *INSPIRE*. Retrieved from: <https://notus-asr.org/en/proyecto/inspire-3/>
- Notus: Applied Social Research. (2018c). *TARGET*. Retrieved from: <https://notus-asr.org/en/proyecto/target-h2020-project-on-gender-equality-in-research-and-innovation-aiming-to-initiate-institutional-change-in-seven-institutions-in-the-mediterranean-basin/>
- Olmos-Vega, F. M., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2023). A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher*, 45(3), 241-251.  
<https://doi.org/10.1080/0142159X.2022.2057287>
- Olos, L., & Hoff, E. H. (2006). Gender ratios in European psychology. *European Psychologist*, 11(1), 1-11. <https://doi.org/10.1027/1016-9040.11.1.1>
- Ong, M., Wright, C., Espinosa, L., & Orfield, G. (2011). Inside the Double Bind: A Synthesis of Empirical Research on Undergraduate and Graduate Women of Color in Science, Technology, Engineering, and Mathematics. *Harvard Educational Review*, 81(2), 172-209.  
<https://doi.org/10.17763/haer.81.2.t022245n7x4752v2>
- Parsons, S., Azevedo, F., Elsherif, M. M., Guay, S., Shahim, O. N., Govaart, G. H., ... & Aczel, B. (2022). A community-sourced glossary of open scholarship terms. *Nature Human Behaviour*, 6(3), 312-318. <https://doi.org/10.1038/s41562-021-01269-4>
- 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.  
<http://dx.doi.org/10.3389/fpsyg.2022.877572>

- Pownall, M., Talbot, C. V., Henschel, A., Lautarescu, A., Lloyd, K. E., Hartmann, H., Darda, K. M., Tang, K. T. Y., Carmichael-Murphy, P., & Siegel, J. A. (2021). Navigating Open Science as Early Career Feminist Researchers. *Psychology of Women Quarterly*, 45(4), 526–539. <https://doi.org/10.1177/03616843211029255>
- Prasad, A. (2019). *Conference diversity distribution calculator*. Retrieved from: <http://aanandprasad.com/diversity-calculator/?groupName=women&numSpeakers=20&populationPercentage=10>
- Robinson, C. J. (2000). *Black Marxism: The making of the Black radical tradition*. University of North Carolina Press.
- Robinson, D. (2020). *Hungry Listening: Resonant Theory for Indigenous Sound Studies*. University of Minnesota Press.
- Rosa, R. (2022). The trouble with ‘work–life balance’ in neoliberal academia: A systematic and critical review. *Journal of Gender Studies*, 31(1), 55–73. <https://doi.org/10.1080/09589236.2021.1933926>
- Saderi, D. (2019). *Code of conduct templates for research laboratories*. Retrieved from: [https://github.com/dasaderi/Lab\\_CoC\\_templates](https://github.com/dasaderi/Lab_CoC_templates)
- Saha, S., Chant, D., Welham, J., & McGrath, J. (2005). A systematic review of the prevalence of schizophrenia. *PLoS medicine*, 2(5), e141. <https://doi.org/10.1371/journal.pmed.0020141>
- Sengupta, P., & Puri, R. (2022). Gender pay gap in India: A reality and the way forward—An empirical approach using quantile regression technique. *Studies in Microeconomics*, 10(1), 50-81. <https://doi.org/10.1177/2321022221995674>
- Sharp, R. (2022). *Conference code of conduct*. Retrieved from: <https://confcodeofconduct.com/>
- Siegel, J. A., Calogero, R. M., Eaton, A. A., & Roberts, T. A. (2021). Identifying gaps and building bridges between feminist psychology and open science. *Psychology of Women Quarterly*, 45(4), 407-411. <https://doi.org/10.1177/03616843211044494>
- Silan, M., Adetula, A., Basnight-Brown, D. M., Forscher, P. S., Dutra, N., & IJzerman, H. (2021). Psychological science needs the entire globe, Part 2. *Aps Observer*, 34. Retrieved from: <https://www.psychologicalscience.org/observer/psychological-science-needs-the-entire-globe-part-2>
- Soteria Solutions. (2023). *Bringing in the Bystander*. Retrieved from: <https://www.soteriasolutions.org/bringing-in-the-bystander>
- Schlehofer, M. M., Okubo, Y., & Williams, D. D. (2021). Assessing Feminist Community Psychology Pedagogy. *Global Journal of Community Psychology Practice*, 12(4). <https://www.gjcpp.org/pdfs/SchlehoferEtAL-%20Final.pdf>
- Schiebinger, L. & Schraudner, M. (2013). Interdisciplinary approaches to achieving gendered innovations in science, medicine and engineering. In M. Wyer, M. Barbercheck, D. Cookmeyer, H. Ozturk, & M. Wayne (Eds.), *Women, science, and technology: A reader in feminist science studies* (3rd ed., pp. 100-110). Routledge.
- STAR (2023). *Respect Is Part of Research*. Retrieved from: <https://star.berkeley.edu/resources/respect-is-part-of-research>
- Thibault, R. T., Bailey-Rodriguez, D., Bartlett, J. E., Blazey, P., Green, R. J., Pownall, M., Lyons, P., & Munafo, M. (2023). A Delphi study to strengthen research methods training in British Psychological Society accredited undergraduate courses. *PsyArXiv Preprint*. <https://doi.org/10.17605/OSF.IO/5H7BU>
- UNESCO. (2021). *UNESCO science report: The race against time for smarter development*. Retrieved from: <https://www.unesco.org/reports/science/2021/en>

- Valantine, H. A., & Collins, F. S. (2015). National Institutes of Health addresses the science of diversity. *Proceedings of the National Academy of Sciences*, 112(40), 12240-12242. <https://doi.org/10.1073/pnas.1515612112>
- Van Anders, S. M., Steiger, J., & Goldey, K. L. (2015). Effects of gendered behavior on testosterone in women and men. *Proceedings of the National Academy of Sciences*, 112(45), 13805–13810. <https://doi.org/10.1073/pnas.1509591112>
- Wigginton, B., & LaFrance, M. N. (2019). Learning critical feminist research: A brief introduction to feminist epistemologies and methodologies. *Feminism & Psychology*, 0(0). <https://doi.org/10.1177/0959353519866058>
- Wilkinson, S. (1988). The role of reflexivity in feminist psychology. In *Women's Studies International Forum* (Vol. 11, No. 5, pp. 493-502). Pergamon.
- Wright, E. O. (2016). How to be an anti-capitalist for the 21st century. *The Journal of Australian Political Economy*, 77(5). <https://search.informit.org/doi/10.3316/informit.119678018617015>
- Young, S. L. & Wiley, K. K. (2021). Erased: Why faculty sexual misconduct is prevalent and how we could prevent it. *Journal of Public Affairs Education*, 27(3), 276-300. <https://doi.org/10.1080/15236803.2021.1877983>

### **Author contributions**

Contributed to conception and design: All authors.

Contributed to acquisition of data: HH, KMD, and SAS

Contributed to analysis and interpretation of data: GH, HH, KMD, and SAS.

Drafted and/or revised the article: All authors.

Approved the submitted version for publication: All authors.

### **Acknowledgements**

We thank all participants of the 2022 SIPS hackathon “Feminist Ways of Doing - A Hackathon Collecting Resources for Feminist Approaches to Science”, the event that inspired the formation of our working group, the Feminist WonderLab Collective, and the creation of this paper. We also thank Madeleine Pownall, Krishna Kulkarni, and Tanvi Kale for providing feedback and input on this manuscript during the writing process.

### **Competing interests**

The authors have no competing interests to declare.

### **Funding**

No author received funding for the creation of this manuscript. We acknowledge support by the Open Access Publication Fund of the University of Duisburg-Essen.

### **Data accessibility statement**

All data associated with this manuscript can be found in the corresponding [OSF project](#).