Outcome of the GENERA interview series

previous

7. Physicists experiencing different treatment

Introductory remarks

There is much evidence that women are systematically treated differently in academia and science disciplines, including physics (for an overview of findings see: Sekuła, Pustułka 2016). While blatant sexism - including sexual harassment - is argued to be on decline, covert discrimination - based on subtle, often unconscious gender bias - has been proved to be prevalent. The accumulation of covert discrimination makes the climate for women 'chilly' and sends them the message that science is a man's world (Whitelegg et.al 2002; Ivie, Ray 2005; Ceci, Williams 2010; Shen 2013; Hughes 2014; Britton 2017). It manifests itself in a number of various 'microagressions', understood as “brief and commonplace daily verbal, behavioral or environmental indignities, whether intentional or unintentional, which communicate hostile, derogatory, or negative slights, invalidations, and insults to an individual or group because of their marginalized status in society” (Sue 2010: 5).

The problem of different treatment in the place of work was raised in the semi-structured interviews conducted among male and female physicists. The categorization of their experiences is based on their answers to a specific question (“Do you think you were discriminated against or treated worse than men/women in some situations because you are a woman/man? Please, give me some examples”.), as well as on other parts of the interviews, which included or referred to gender and discrimination. Additionally, experience of gender discrimination was discussed in the expert interviews with physicists in leading positions conducted in the Polish institutes. The analysis is therefore based on the results of overall 72 interviews.

Sometimes female scientists described their experiences in a very general way of undergoing sexism, discrimination, worse treatment, or having a misogynist boss. While use of these vague characterizations may suggest difficulties with sharing unwanted experience with an interviewer, they do not allow for any further interpretations. However, most of the narratives were elaborated and allowed for classification of own experiences of different treatment:

- lack of experience of gender discrimination
- females' experience of overt sexism
- females' experience of microagressions
- males' experience of discrimination

Additionally, regardless of individual experiences some of the interviewees simultaneously:

- either declare knowledge of gender discrimination in their scientific institutions
- or deny the existence of gender inequality or diminished its' importance.

Lack of own experience of discrimination

When directly asked about being discriminated, about one-third of the interviewees (26), both men and women employed in most of the institutions represented in the research, deny they had ever been treated differently because of their gender. A few of them further elaborate on the circumstances of not being discriminated. For some physicists, mostly in senior positions, the absence of episodes of being unequally treated in their professional life is linked with the nature of physics, which operates with objective, external criteria of merit. At the same time rationality and comparability of achievements are seen to be the features, which are not necessary present outside science:

- *I have never felt to be discriminated neither because I was a man nor because of any other feature. I have impression, that most of choices were based on merit, it is because substantially it is possible to relatively well rate the value of a candidate through his achievements. In physics there is comparison to the whole world, this is not a closed group, which does something in one place, locally and doesn't move beyond this, because in such a situation it is difficult to compare. Therefore, there is external way of evaluation and there are certain indices which are independent of what we do here.* 54_M_L
- *I emphasize that - at least in the faculty that I represent at the moment, I never felt that I was treated worse, differently, that was not the case. (…. In addition, it seems to me that in science it is easier than anywhere else, that the effects of work are extremely rational. It is much more difficult to compare successful people or to compare their results in other areas.* 58_F_L

For some female physicists the concluding proof of not being discriminated in the workplace seems to be the way how they were treated by their supervisors and colleagues at the time when they became mothers. The fact that they had caring duties did not caused undermining their credibility as scientists:

- *(…) nobody thought of me, that I have two children and already don't fit for anything and won't do anything* 53_F_L

However, lack of own experience of different treatment is sometimes perceived by the female interviewees to be unusual as they declare - directly or indirectly - awareness of the presence of gender discrimination in their environments. While one of the physicists explicitly defines her situation being exceptional, the other links her advantage of not being discriminated to the qualifications of her (male) colleagues:

- *The question is asked to me very often, so it really forced me to think about it and remember. I happily never had this feeling. I want to say it's probably an exception; I have many friends who experienced this kind of discriminations in personal or professional areas*. 36_F
- *My enlightened colleagues never had problems with the fact that I am a woman and I have never felt any problem connected with this. (…) but I know there are women (…) who feel that [way]* 56_F

The suggestion of existence of gender discrimination is also implicitly present in the narratives of other physicists, who - when asked whether they had ever experienced different treatment in physics - declare either “being lucky” not to have such an experience or not to have it “personally”. Moreover, a few of the female interviewees who negatively answer the question about being discriminated, in other parts of the interviews recall being in situations that can easily be interpreted as various forms of microaggressions, which will be discussed below.

Female experiences of overt discrimination

While there are different classifications of discrimination we use the category of 'overt discrimination' for explicit, direct, intentional and often unlawful forms of negative demeanor and/or treatment toward the members of social minority on the basis of their minority status membership (Jones et al. 2016: 1591). The analysis of the interviews with physicists reveals rare, isolated incidents of overt discrimination and all of them are reported by female physicists. They include instances of mobbing, sexual harassment, discrimination in access to resources as well as unequal pay.

A few interviewees' declarations of being bullied, intimidated, being the subject of verbal aggression as well as being in long term conflict with a supervisor, which prevented them from personal advancement can be qualified as the examples of workplace **mobbing** (comp. Duffy, Sperry 2007):

- *It is a man with who I had personal conflicts, so sometimes I have a feeling that* [these conflicts occurred] *only because I am a woman and it was sad and this mister for some time was head of the department. (...) and then it was very unpleasant and this held my development down, because mentally I was blocked, even to propose something, because when I am treated as ... It is hard to say in what way [I was treated], if I was shouted at by somebody [who] says that I am bad person without having basis for this* 57_F

Two of the interviewees talk about being **sexually harassed** in the past, experiencing unwanted touching and fondling, being blackmailed to “be good to” their boss, otherwise they won't get promotion. At least one of them revealed the problem to the management of the institute. She asked to be moved to another research group which limited her direct contact with the oppressor. However, it seems that the wrongdoer was treated leniently, which might suggest both lack of anti-harassment procedures at that time and unspoken support to male dominance:

- *I went to the director with a written request to be relocated with description of some of the situations that I had been going through. The director read it, blenched, his hands started to shake (...), he summoned my boss and told him to sign it. And he said: 'Here you sign the approval of Ms X's transfer to this and this department with own office, computer, and everything*[1)]

One of the respondents complains about being **discriminated in the access to laboratory and other resources,** which she reports to be directly related to her gender, rather than her junior-level position at the institute. Another female physicist declares being a subject of **pay discrimination,** which she unsuccessfully tried to solve:

(...) *I don't have the key to the laboratory. When I applied for it, because my two male colleagues have it, I was told: 'we won't give you the key, otherwise other women would like to have it too' (...). I was forbidden to go for other departments' seminars, when my male colleagues were allowed to go. I was also forbidden to take part in various grant workshops, and I know my male colleagues were not*. 65_F

- *I feel discriminated because I get a less salary compared with others male colleagues. When I've asked I get no explanation for it*. 83_F

Female experiences of microaggresssion

Most of the narratives of being treated worse delivered by female physicists dealt with the instances

of more of less covered forms of discrimination based on gender bias, which here will be analyzed through the lenses of the concept of microaggressions. As it was signaled in the introduction of this chapter, microaggressions are brief and commonplace daily verbal, behavioral or environmental indignities, whether intentional or unintentional, which communicate hostile, derogatory, or negative slights, invalidations, and insults to an individual or group because of their marginalized status in society (Sue 2010:5). They have also been described as subtle insults delivered through dismissive looks, gestures and tones (verbal, nonverbal, and/or visual) toward people of color, ethnic and religious minorities, women or LGBT persons often automatically or unconsciously.

The scholars analyzing gender microaggressions identify a few of their dominating themes or forms, including: 'sexual objectification', 'second-class citizenship', 'use of sexist language', 'assumption of inferiority', 'restrictive gender roles', 'invisibility' and 'sexist jokes' as well as 'denial of the reality of sexism' (Sue 2010; see also Barthelemy et.al. 2016). It is argued that they "act upon women in several ways, by reiterating the social view that men are more valued than women, by reinforcing traditional stereotypes about proper gender roles, and by contributing to violence toward women by objectifying and sexualizing them" (Barthelemy et.al. 2016: 4). Therefore, the consequences of microagressions may be as severe as these of overt sexism. As they often result in lower evaluation of female applicants for posts, grants or awards than their male counterparts', less often citing women's research than men's, and less often inviting female researchers as speakers for important conferences, they can hinder women's recruitment to academic positions, their advancement and promotion as well as have impact on their decisions to leave science (Roos, Gatta 2009).

Most of the themes of microagression can be identified in the narratives of female physicists. They are discussed in the order of frequency of occurrence.

Assumption of inferiority/ second-class citizenship

In the original categorization of themes of gender microaggressions assumption of inferiority and second-class citizenship are treated separately (see Sue 2010, Barthelemy et. al. 2016). Whereas assumption of inferiority implies expression of conviction that women inherently are unable to do certain tasks, due to their physical or intellectual inferiority, particularly in comparison to men; second-class citizenship refers to treating women as lesser persons or group or/and believing that women should not have same access to resources and opportunities as men (cit. after Barthelemy et.al. 2016). While there might be analytical distinction between these two categories, empirically they are difficult to differentiate, as they interrelate and both explicitly refer to cases when women are told through words and/or actions that they are inferior to men. Therefore, these two themes are analyzed here together.

The theme of assumption of inferiority/second-class citizenship appears in the narratives of 11 female physicists. They recall situations taking place during their studies or at work when they were 'informed' with words or gestures by their male supervisors, directors or colleagues of their inabilities, including "*not having spatial imagination*", "*not being able to worthily represent the department*", "*being second-class researchers*", "*being of a second, third or C category*", "*having again stuffed something up*" or "*being stupid*". According to one of the respondents this kind of discrediting one's abilities does not happen among female scientists:

- *And for example with women, something like this does not happen. So, it never happened to me, that I tried to talk to a woman and she immediately said, immediately looked at me strangely or immediately said 'Ugh, what are you doing here?' or 'Why are you coming to me? You are not able to do anything' or something.* 07_F.

Some of the women described situations when their profession or a research field evoked the

reactions of astonishment and disbelief. They interpret comments like '*oh, really math and physics?*' or receiving emails addressed to them as if they were men as the effect of the domination of an opinion that a physics is a manly thing ("*A genius has to be a man*") and that from women should not be expected too much.

- *I felt that he* [IT Programming course coordinator] *didn't know how to address the fact that I was a woman doing such an abstract thing* [theoretical physics]*.* 51_F

Female physicists recall also other particular actions directed towards them throughout their career which either informed them that expectation towards them are lower or were aimed at showing them their proper place in the hierarchy. These actions include undermining their abilities and competence to make accurate measurements, fix laboratory equipment, or write good articles:

- *we had this experiment and there were very vulnerable electronic modules, they were very capricious and had to be monitored all the time. It was my experiment, so I asked my male colleagues "If something happens to it, let me know, please?" and then they asked me a question "And what will you do? To which expert we should call? What will you do?" and I said what I would come and repair it because I knew how. But for them it was impossible to imagine that a girl could do such things. Although they are educated men and probably have seen many women doing different things, yet still the environment is strongly dominated by men, and they couldn't imagine me doing such things. All in all, they are not against women, but they have in their minds these clichés that we [women] don't do such things*. 61_F

The assumption of inferiority also emerges in some women's experiences of not being accepted in leadership positions, be it a chairperson of a students' association or a head of a department. As one of the interviewees notes it was because "*guys didn't want to be ruled by a babe*":

- *I was the best among them, as far as scientific output, the level of engagement and the number of promoted doctors are concerned. Still, men thought that it was one of them who should be the head of the department, which is why they moved to another department when I took over this position.* 70_F

Female having different experience then men in physics manifested further in mocking their (unconventional) career path and research themes as well as discouraging them from applying for promotion, which "*wouldn't surely happen to a man, who would rather be told 'why haven't you yet applied for a professorship?*'".

Restrictive gender roles

The theme of restrictive gender roles refers to the belief that women must uphold traditional gender roles. The message which is communicated with this microaggression is that women either do not belong in the field of physics, as their presence there is in direct conflict with their gender roles as females (Barthelemy et.al. 2016), mainly as mothers or that, since they are physicists, they should take tasks which are 'appropriate' for them as women e.g. teaching, note-taking. At least 11 female respondents discuss cases of being the object of this kind of microaggression.

Women are informed through words and action that as mothers they should give up or at least limit their engagement in science.

- *When my child was born, I received an email saying that my invited talk had been replaced by a poster. And I said "no, you cannot do this" and finally I was allowed to give the talk by Skype.* 26_F

Being a physicist having children becomes a heavily gendered experience since men are not expected to sacrifice their career when they become parents:

- *the organizer heard I gave good seminars so he invited me but he told me 'I know that you have a kid so I was very hesitant to invite you. I didn't want to put you in a difficult situation'. You would never say that to a guy that has a kid, right?* (05_F)

The clash between social expectations about proper gender roles on one hand and the image of physics as requiring full-time engagement on the other becomes a dead-end trap for some women. They are both expected to limit their professional activity when having babies and, at the same time, they are told that they "*do not have good qualifications for being a physicist, because they are too much distracted by home, by children* (..)" (65_F)

By stressing their roles as mothers and wives women are reminded that they belong to the private sphere rather than the public one. Other ways of informing females about this "natural" order is posing questions like "*why women should be at the institute*, [as they] *are just meant to play with dolls*" (07_F) and whether they do not "*have any beds to make*" (05_F) or not recognizing them as physicists:

- *I have been confused for a secretary before. When I told people: "Well, that a person is not here, you can get a coffee in the kitchen', they thought I was gonna go and make them a coffee, because I was a woman. They thought I was a secretary and not a scientist.* 10_F

Apart from being subtly discouraged to or displaced from physics, once they enter the world of physics women are expected to play their "natural", socially acceptable roles. One of them is assisting males. Female physicists share their experience of being automatically assigned to service duties like taking notes at committee' meetings, making copies of documents, making coffee before and washing dishes after the scientific group's meetings. Similarly, administrative tasks are sometimes ascribed by default to women:

- *If there were any administrative duties my director at my previous institute wanted us, as women, to do these things. I have always refused doing this kind of things. I don't know why women must always do administrative tasks.* 40_F

Some female respondents also recon that their role as physicists is reduced to didactics:

- *I heard it already twice that they like me as a teaching assistant. That is nice, but I heard my supervisor never say that. She knows that there is always more work than that to be done.* 51_F

Sexist jokes and comments

Sexist jokes include derogatory, crude jokes about women, rape, domestic violence (Sue 2010, Barthelemy et. al. 2016). Nine female respondents (and one male) refer in different parts of their interviews and rather generally to sexist jokes or comments that were told in their presence by their male superiors and colleagues. Mostly without citing them, the interviewees call these jokes "inappropriate", "stupid", "insinuating", "boorish", "chauvinist", "distasteful" or "obscene". Some of the women suggest that sexist jokes become an outdated problem, as they used to be told mainly by elderly professors, and it happened rather in the past than nowadays:

- *Mainly elderly people, (…)older than 50 years, used such sexual overtones or jokes, but it slowly, it somehow slowly changes, however there used to be such distasteful comments 64_F*

Additionally, the remarks like: "(…) *but to say that we were shocked shows it was not typical*." (05_F)

and "*he said it as a great joke, but nobody laughed actually*" (61_F) may imply that telling sexist jokes or making sexist remarks ceases to be an accepted social norm in science and academia. However, narratives of other respondents suggest that, at least in some surroundings, it remains a problem that physicists are still faced with on a regular basis:

A few times my boss did some insinuating jokes about the fact that I share the office with a male colleague. 83_F

Invisibility

Invisibility refers to the cases of not including or recognizing women within and outside their institution, not being heard or listened to by their peers due to their gender (Sue 2010, Barthelemy et.al. 2016). This theme fits well into the category of non-events that have been recognized in science and academia. "Non-events are about not being seen, heard, supported, encouraged, taken into account, validated, invited, included, welcomed, greeted or simply asked along" (Scientists of the World 2013: 38). In our interviews 9 female physicists reported instances of being invisible.

Invisibility of women in the workplace manifests itself in being ignored, overlooked and not being asked at conferences or meetings, which in the opinions of our respondents happens to them just because of their gender and because "*male colleagues (...) have low estimation of female colleagues*" (42_M) and makes them feel that they "*don't belong to the community*" (06_F):

- *So how often did we go to fair or to, to, what is the word?, the supplier. And then we were with two people. And then a man comes over and we say 'Yes, hello, we are blah and blah' and this guy, this guy, he only greats the man and I don't matter at all. Just straight up ignored, from beginning to end. Completely. Despite the fact that my colleagues sometimes said 'Yes, she is well versed, maybe she can say something about it' or something, they always went back to the other man (...).* 07_F

Not only women experience not being included in conversations but also their ideas are sometimes underestimated, they "*are not taken seriously at all*" (07_F) or are not given "*the value they deserved*" (26_F):

- *There were things which happened to me where I thought, 'that's because I'm a woman', but I was never sure. Like when I was a post doc, I had an idea and nobody was interested. It was another post-doc but this time a male and people were interested. It made me think if I had been a man they might have listened.* 01_F

Another way of making women invisible is ignoring their performance by attributing merit and success to their male colleagues. This kind of behavior can be seen as an aspect of a wider, well identified phenomenon of systemic under-recognition of women's scientific efforts and achievements, labeled as the Matilda effect (Rossiter 1993; Wennerås and Wold's 1997; Benschop, Brouns 2003; Hill et.al. 2010):

- *I was then, how to say it, an organic adaptor, who could insert a screw in such a way that it was possible to take measurements. So I sat there whole time and was doing it. No one else was able to regulate gas flow in such a way that the temperature stayed static. And then it was my male colleague who got all the praise, he wrote a paper, because he analyzed the measurements. So, what that he tried five times to take measurements by his own, but he couldn't? 65_F*

Women also report cases of their superiors staying silent when it comes to career support, including financing participation in an expensive scientific summit or assigning a project:

- *yesterday I talked to the other women and then it came out that we are both sort of isolated. So we are not allowed to now, we both do not have a project anymore, so no defined project and they [the men] are getting all the new projects, even though one of them is leaving in two months.* 07_F

Sexual objectification

Sexual objectification means treating women as sexual objects, reducing them to their physical appearance or assuming their bodies should be controlled and commodified by men (Barthelemy et.al. 2016). Experiences described by 6 female researchers can be classified as sexual objectification. These women report being treated by their superiors and male colleagues as physical, sexual objects:

- *It happened once, as I am very sensitive to this kind of things, so maybe it was because of my sensitiveness. Once, it was at the first year of studies, we came to one professor and I carelessly, I never wear short skirts, had a dress long to the knee, and he was watching me carefully, evidently, like three times (...).* 56_F

Female physicists also evoke cases of being flirted with at work or during conferences and - as one of the interviewee put it - approached *"with weird sexual (...) ulterior motives*" (07_F), which are difficult to resist, especially when they remain in power relation with the offenders:

- *So there have been situations where I wish I had stood up for myself more, but it is difficult when it is a person in a higher position, when you know there is some kind of ... 'I am organizing a meeting dinner, they'll go, if you'll be going, I'll join'. It's not really harassment, but it is uncomfortable. [..] And I wish I could say something against it, but you know it's that moment were you wish you'd have said something back, but you have to be careful. These are the people giving you jobs.* 10_F

Perceiving women as sexual objects means at the same time not treating them seriously as scientists, which our respondents are aware of. Therefore they consciously manage their presentation of themselves as well as their behaviour in order to be perceived as professionals. This management amounts to mimicking men:

- *I wear trousers with determination, as men. It might seem stupid and pointless, but I do not want them to treat me differently because I have for instance a short skirt (...), I do not want even any subliminal or subconscious signals.* 56_F
- *I had a feeling that if I wanted to be treated equally with my male colleagues I had to be perceived as a man and that I have to become a man.* 55_F.

Other themes of microaggression

In the original conceptualization of the gender microaggression two other themes were identified. These were sexist language and denial of the reality of sexism (Sue 2010). Sexist language refers to using terms that infer superiority of men, e.g. as in the phrase: “lady physics” (Barthelemy at. al. 2016). However, in our material this problem did not come out as an independent factor, rather women occasionally cited sexist terms when they discussed other cases of microaggression, including assumption of inferiority or sexual subjectification (*"sweet blonde*“, *"bimbo*“, *"neither fish nor fowl*“). Denial of the reality of sexism means not believing that sexism exists and refers to situations when individuals are persuaded on different occasions that gender inequality is not an important problem, its scale is minimal or is being sometimes instrumentalized to conceal professional failures of women (Barthelemy et.al. 2016). None of our respondents raised the problem of being faced with this kind of

microaggression. However, some of them, both males and females, themselves formulated opinions challenging the existence of gender inequality in physics, which will be discussed beneath.

Effects of microaggressions

There is some overlap between discussed categories or themes of microaggression, which has been already discussed in an earlier study on gender discrimination in science (Barthelemy et. al. 2016). For example, sexist jokes most often denote sexual objectification of women and sometimes also imply the assumption of their inferiority. Similarly, restrictive gender norms and assumption of inferiority often merge with each other as the belief that women should limit their activity to their traditional gender roles might be supported by the conviction that they are inherently unable to perform “manly” tasks.

While overlapping of themes is a certain limitation of the use of the framework of microaggressions, it does not demand giving up the whole concept, “since it has great power in terms of explaining how small, often unconscious, behaviors can work to convey sexist messages to women. Instead, we may posit that sexist messages are often very complex and may contain multiple messages for women” (Barthelemy et. al. 2016: 10). Together with overt sexism they create a hostile and invalidating climate for female physicists and may have detrimental consequences for their comfort and work productivity (comp. Sue 2011) and, therefore, their professional development and advancement. Our respondents who reported cases of different microaggressions find them ”*frustrating*“ (37_F) and ”*exhausting*“ (07_F), Potentially, accumulation of microaggression may also contribute to leaving science and academia. This potentiality seems evident in case of one of the female interviewees who may have been subjected to certain microaggressions during her career in physics quite frequently and appeared doubtful about continuing her career in science:

- *(...) for 10 years I am working so much, so that I can do what I like, but at a certain point you are done with that. So, it is sort of* ***on the verge*** *right now. Because eventually you realize that the entire world is against you somehow. And that is exhausting. 07_F*

At the same time it is argued that “due to the subtlety and often ambiguous nature of microaggressions, the perceived targets often question themselves about whether or not the incident was motivated by gender bias” (Barthelemy et.al. 2016: 4). This kind of doubts was also formulated by our respondents who for example asked themselves, whether they are ”*too sensitive*“ to pay attention to men looking at them as sexual objects (56_F). It is also difficult to discuss or to respond to microaggression as it is often perceived as part of the masculine culture of physics (as might be in the case of sexist jokes), incidental and not being harmful:

- *And you, you can, so you can convince yourself that it's all just* ***small things*** *and that this is not necessarily because you are women (...)* 07_F

Last but not least, the perpetrators remain often in the relation of formal power or informal domination with women experiencing discrimination, which makes responding to the perceived microaggression difficult as it may have an unintended impact in the form of retaliation:

- *And I wish I could say something against it, but you know it's that moment were you wish you'd have said something back, but you have to be careful. These are the people giving you jobs.* 10_F

These characteristics of microaggressions make them, as compared to overt discrimination, “particularly difficult to isolate, confront, and resolve” (Barthelemy 2016: 4).

Men's experiences of discrimination

The problem of being discriminated in professional life is raised in the interviews with both female and male physicists. However, most of the males who are directly asked the question deny they have ever experienced discrimination. However, four men recall situations, when they felt being unequally treated because of their gender. Two of these were concerned with preferential treatment of female physicists when it comes to recruitment and grants:

- *I felt uncomfortable with reading documents stating that with equal qualifications - in was in Xxx* [another European country] - *they will choose a woman* 67_M

Another example describes situation when a man felt discriminated by national quotas practiced in one of the European physics research institute:

- *When I was in a competition at Xxxx [*research institute outside France*] for a permanent position, I was ranked second after a woman because she was from a minority needed in the program. (...) It was clearly told to me that I was the most brilliant but that she was selected because of quotas. Of course at this moment I was very angry against all Portuguese women (...)* 35_M

The last instance of men being unequally treated concerns interviewee's past experience of informal rules of marking of undergraduate students:

- *Well, not, not really in [country of interviewee's current residence], but in [interviewee's home country] I think, during my undergraduate years, somehow it seemed - maybe that was also just perspective - but somehow it seemed that, for example, sometimes for girls it was a bit easier to get the same grades in some exams*. 11_M

Knowledge of gender discrimination in physics

Irrespective of own experience, 19 physicists, both women and men, admit that gender discrimination remains a living problem both in their institutions and in wider environment of physics. Some of them only signal a problem by talking about "*existing discrimination*" (46_F), or "*misogynous men*" (40_F), women being "*little excluded*" (06_F) or "*institutional sexism in subtle or less subtle ways depending on the institution*" (04_F_L). Others, more precisely, talk about the climate of physics, which includes believing "*that physics is more technical than other research fields and can be difficult for a woman to handle with*" (83_F), looking down on young females, sexualizing them and overburdening them with teaching duties. Additionally, a few admit being aware of past or recent cases of mobbing, bullying and sexual harassment, which resulted in women's "being *victims of men's waging wars*" (66_F) and leaving science.

Denial of the existence of gender inequality

Apart from a question whether the interviewees experienced any instances of different treatment, a more general issues were raised of whether gender equality was an issue both in physics and respondents' institutions. These problems were addressed both in the semi-structures interviews with female and male physicists and in the expert interviews with the leaders within institutions. While the awareness of gender inequalities in physics seems to prevail, some interviewees express belief of the lack of discriminatory practices in their institutions and generally in physics.

The respondents who are confident about inexistence of gender inequality base their belief mainly on own perception, arguing that they have never met with conscious or unconscious discrimination, formal or unconscious barriers, never had experienced it as an important problem in their institution or in physics in general:

- *I haven't heard of a case that the career of a great female physicist was buried only because she was a woman.* 58_F_L

These interviewees also assert that generally gender discrimination is no longer a systemic problem. Even if it happens, it is not omnipresent but rather rare and diminishing. However, few of the interviewees represent the attitude of 'discrimination happening elsewhere', either outside physics in other areas of social and professional life (”*here is better than in corporations*“, 55_F), or in other countries:

- *There is not much discrimination in Spain. Except for specific cases, in Spain we think that a man can be so good as scientist as a woman. I have not perceived problems with women working in my research groups. However, I have heard comments that discriminate against women scientists in other countries.* 30_M

To validate lack of discrimination in physics they claim that there is no prejudice and everyone is treated similarly, ”*fair and equal*“ (22_F), there is ”*no difference in salaries or preference for someone*“ (71_M) as well as ”*women are occupying more leading positions,* [which] *means there is no difference in achieving good positions*“ (80_F_L). Moreover, it is asserted that the exceptionally lower number of women in physics may be advantageous for them, because as a tiny minority they do not threaten the dominant status of men and may even be treated preferentially.

A few of the interviewees, mostly from Polish institutes, link lack of gender discrimination in physics with the nature of the science itself, which includes openness (”*if you feel called to be a physicist, there is no problem to be a physicist, I think*“, 69_M), using ”*objective, external criteria of achievement evaluation* (54_M_L), and immunity to sex differences:

- *physics as science does not distinguish between a man and a woman, a scientist is a scientist and we don't have to add **him** a masculine or a feminine ending, if someone works in science and is suitable, **his** sex doesn't matter* 59_M_L.

next

[1)]
This citations has been intentionally fully anonimized.