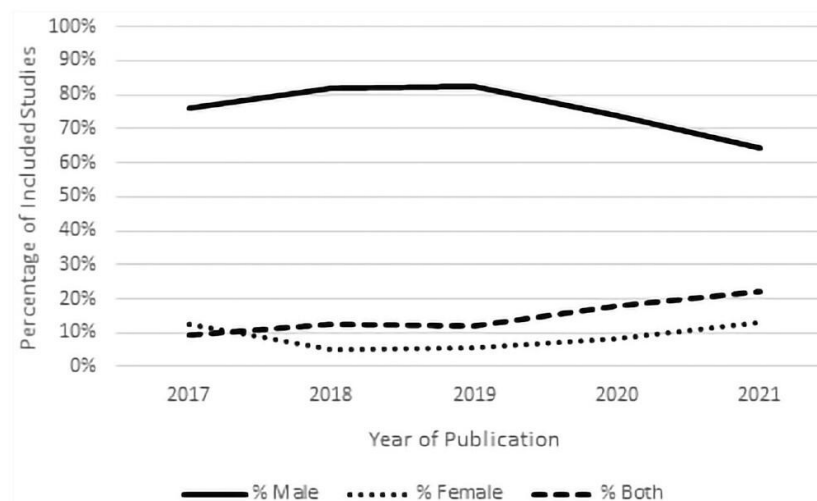


## The Straps Gap: Results from the Inaugural all Women & Non-binary Straps Symposium 2024.

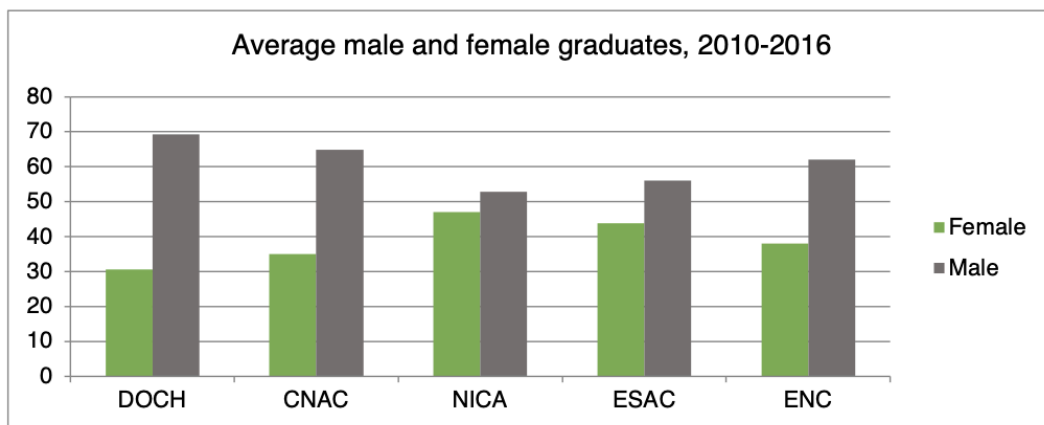
The Inaugural Women & Non-Binary (NB) straps symposium was held at the National Centre for Circus Arts in London on April 6-7th, 2024 and brought together a number of aerialists with other circus related professionals from rigging, physiotherapy and performance neuroscience. The symposium was held to kickstart progression towards improving gender equality within the field of circus, with a particular focus on the discipline of aerial straps. Group discussions were held to address two key questions: Firstly, what are the current gender-related issues in circus and secondly, what actions could be taken to tackle these issues. Gender-related struggles were identified at almost every level of circus, spanning recreational to professional and individual actions to systemic problematic beliefs. Solutions and actions proposed were equally diverse and ranged from addressing gaps within research and education to the creation of spotting demonstration videos to improve safety and protection of circus artists. The findings of the symposium are outlined in this report, with a full breakdown of themes, subthemes and actions found in Table 1 and also shown in an interactive sunburst chart [here](#) and as a packed circles diagram [here](#). These are best viewed on a laptop or iPad, rather than a mobile phone and present the same results in three formats to improve the accessibility of the information. It should be noted that gender is only one factor of many which impacts inequality in the circus world. Sexuality, ethnicity, disability and neurodivergence amongst many others, are topics deserving of their own research in order to reduce discrimination. However, for the purpose of this research, the focus is exclusively on gender.

Currently, women and non-binary people are under-represented in research across sports medicine and exercise science (Costello, Bieuzen and Bleakley, 2014). In a 2023 systematic review of published sports medicine research only 8.8% of studies focused exclusively on female athletes whilst 70.7% focused exclusively on male athletes (Paul et al, 2023). The rates of evaluating male, female and mixed athlete groups based on year of publication can be seen in Figure 1 (Paul et al, 2023). The gender bias in research not only limits our knowledge of how to improve women's performance, but has various other repercussions which limit progression in how we respond to women's injuries, how we improve equality in sport participation and how we provide data-driven care for athletes (Cowley et al, 2021; D'Lauro et al, 2022).



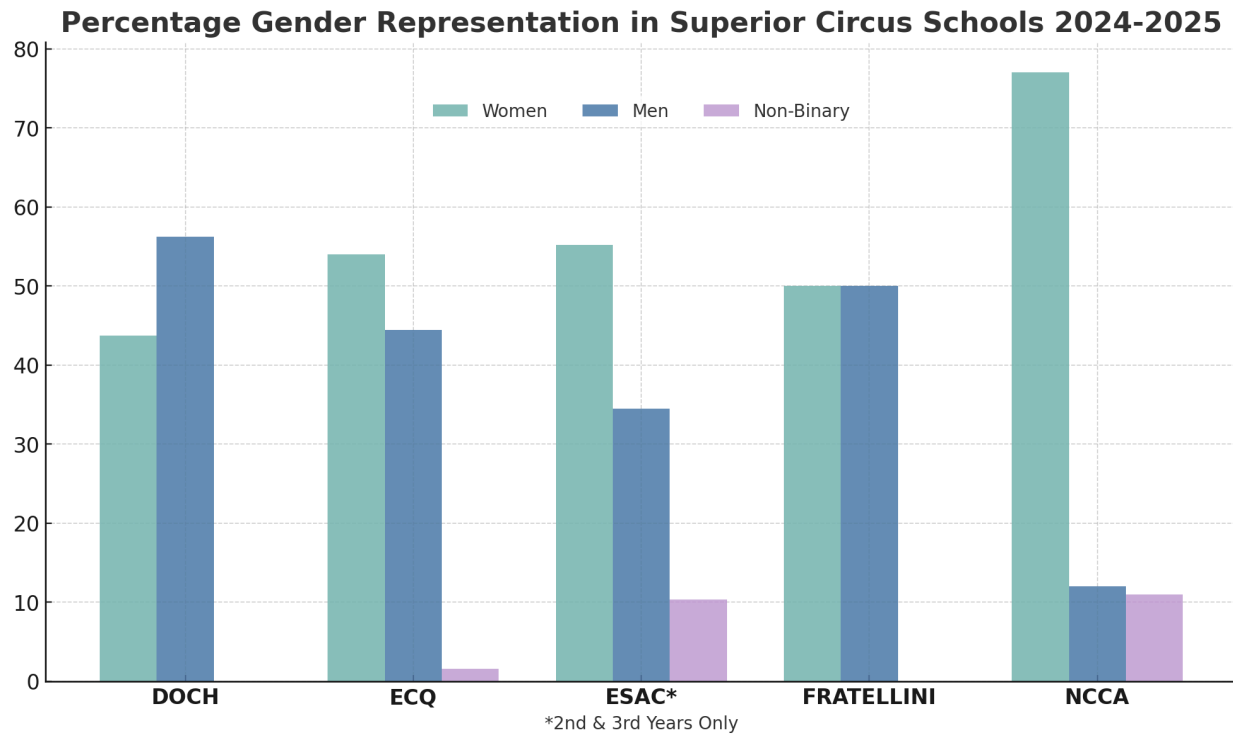
**Figure. 1** From Paul et al, 2023; Rates of evaluating male, female and mixed athlete populations based on year of publication.

Whilst scientific research which focuses exclusively on improving gender-related issues within the fields of sports science and medicine is rare, published, quantitative research of this kind within the field of circus is virtually non-existent. Some important studies should be noted which have covered topics such as gender identity within contemporary circus, asymmetry in professional circus education, gendered difference in early circus participation and heteronormativity in circus newsletters (Tait, 2005; Seymour, 2018; Funk, 2018, Harrison, 2019). These studies provide critical insights to specific gender-related issues, however the circus community is still lacking accessible, holistic information regarding how gender affects training, performing and opportunities and what approaches can be taken to improve gender equality in the world of circus. At present, even basic information such as gender representation within circus schools is difficult to access. The last open-access published research on this topic which could be found by the author was conducted in 2017, following a review of six circus schools and finding that 60% of circus graduates were male (Figure 2, Funk, 2018). As many schools have put active effort into improving gender equality over the last eight years and the 2017 study did not include a category for non-binary students, there is a need for up to demographic information to be published. To try to provide more current insights, the author contacted ten superior circus schools to request information regarding the proportional representation of women, men and non-binary students across their schools for the year 2024-2025. Only four schools provided the information, one school responded that they do not have the information regarding gender of students and students at one school gathered and provided the gender data themselves. The updated results from five schools in the year 2024 are shown in Figure 3, demonstrating important changes in gender representation since 2016.



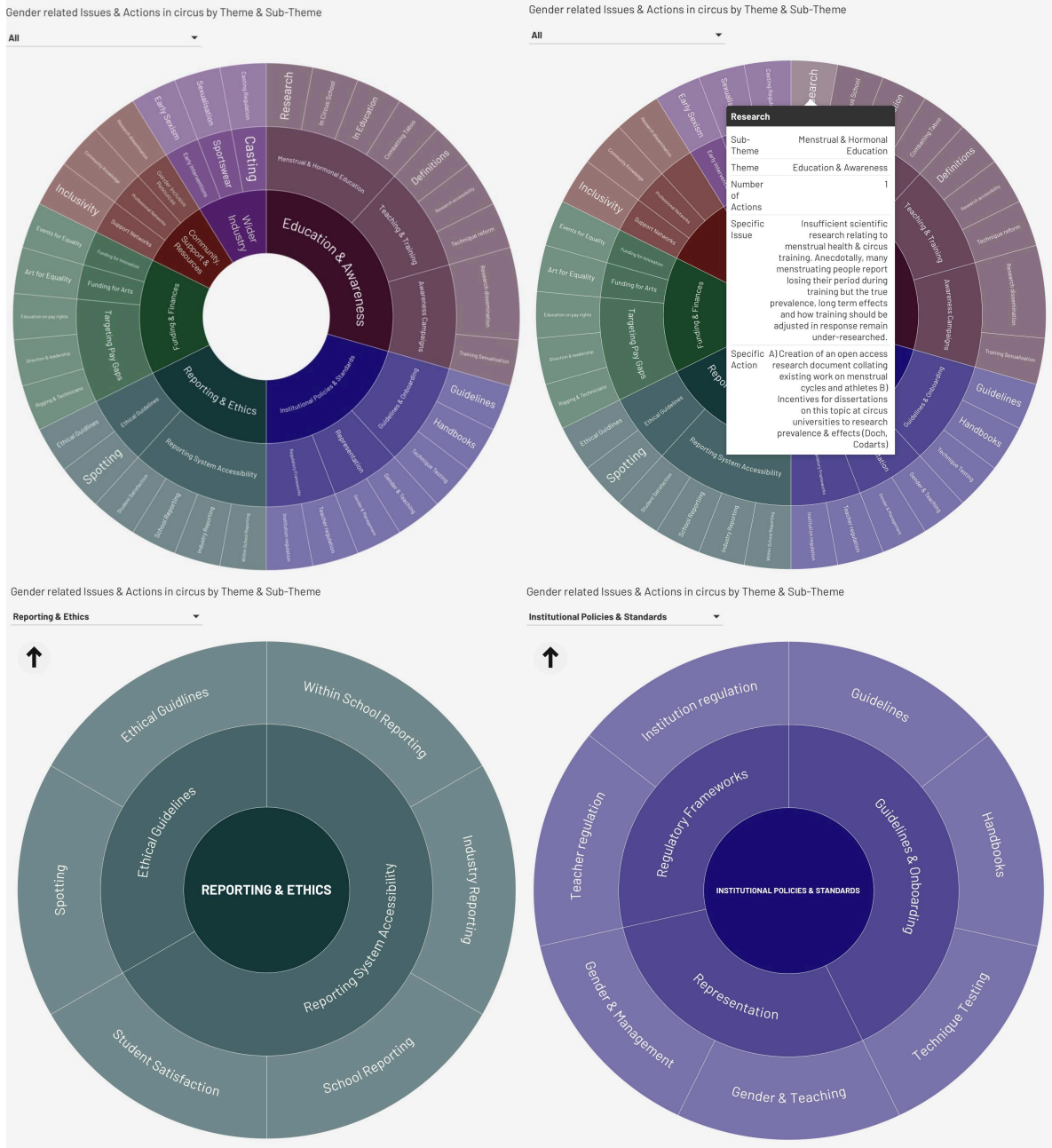
Data from respective school websites and available Internet data gathered by A. Funk in March 2017.

**Figure 2.** Average male and female graduates from 2010-2016 across five circus schools, gathered from school websites and internet data published by Funk, 2018.



**Figure 3.** Percentage gender representation at superior circus schools, for the year 2024-2025. Data was provided by the circus schools administration or current students & alumni, in response to email request from the author for anonymised data on proportional gender representation. Note that some schools did not specify whether their percentages included all years in attendance or only the new cohort beginning studies in 2024.

Despite the proportional representation of women and non-binary students appearing to improve significantly since 2017, there is still a clear lack of information regarding how gender impacts training and working in the circus world and what actions can be taken to improve gender equality and prevent gender-based violence and discrimination. With this research gap in mind, the Womens & Non-Binary Straps Symposium was designed to create a collaborative environment in which a large group of circus professionals and students could work together to outline current gender-related issues in circus and strategies to address them. On the first day of the symposium participants drew together information from previous research (i.e Sarah Repond, menstruation & circus surveys), work in related professional fields (such as dance & gymnastics), insights from their own circus communities and personal experiences to describe how gender impacted various aspects of their life in the circus world and the struggles relating to this. Participants worked in small groups and information was transcribed and then collated by designated representatives. The second day of the symposium was solution focused, aiming to take the issues discussed on day one and outline various ways to combat them. Some strategies participants described were taken from existing programs in circus which have yet to be widely endorsed, others were original ideas, others borrowed concepts from different professional fields and described how these could be applied to circus. Following the symposium, master lists which combined all participants' work were digitalised and a thematic analysis using inductive coding were used to identify themes and sub themes. The full results of these are shown in Table 1 at the end of this document and in the two interactive diagrams linked above. Figure 4 below shows stages of interaction with the sunburst chart, which should detail information through pop ups labels.



**Figure 4.** Still images from the interactive sunburst chart of results. The chart is published open-access here: <https://public.flourish.studio/visualisation/20183021/>. This is viewed better on a computer than a phone, and if there are technical issues accessing information, please reload the page and wait for the data to load. Hovering the mouse over the outer circle should lead to pop ups of detailed information regarding issues & actions. This information is also detailed in Table 1 and as a packed circle diagram here: <https://public.flourish.studio/visualisation/20238522/>.

The six major themes identified were: Education & Awareness, Institutional Policies and Standards, Community, Support & Resources, Reporting & Ethics, Wider Industries (sports & performing arts) and Funding & Finances. Within each theme, various problems were raised across multiple stages of progress often beginning with a lack of knowledge or research through to accessibility of this knowledge, through to application of this knowledge which each represent distinct problems with correspondingly distinct solutions. For example if we take the problem of lack of inclusive & safe teaching, simply researching what constitutes inclusive and safe teaching is not enough to improve teaching at a wider level. This research is necessary to build resources and training which can then be made accessible for teachers across schools, who then must implement the training into how they teach. Only when all three steps are complete will teaching actually improve. In the table, where possible, the issues and suggested solutions are listed chronologically as usually the gathering of information is required before the application. Prioritised, immediate calls to action are listed below, separated by target population or institution.

Calls to action:

#### FEDEC:

1. **Creation of a clear set of simple Ethical Guidelines for circus schools to follow**, which promote equality, inclusivity and respect for students and their welfare. These should be made open access and published online. (*Theme 2, Institutional Policies and Standards*).
2. **Create an accessible, anonymous survey in which students can evaluate their experience at their school, including the reporting of malpractice.** Student satisfaction with their schools should be used to produce open-access data, so that future students can choose their schooling partly based on how satisfied previous students were. This will encourage schools and institutions to improve their own practices and help to create safer circus education. (*Theme 4, Reporting and Ethics*).

#### INDIVIDUAL SCHOOLS:

1. **Create a handbook which outlines the rules and values of your space, which is accessible online.** This should provide clear information for students and staff which promotes mutual respect and prevents misunderstandings and malpractice. This could include information on topics such as rules regulating training topless, teacher student boundaries, welfare support and reporting pathways amongst others. (*Theme 2, Institutional policies and Standards*).
2. **Improve gender diversity in teaching and management.** All students during their studies should have the opportunity to be taught by more than one gender (even for brief periods of time or through substitute teaching). This prevents gender stereotyping of disciplines and will likely lead to positive effects on the evolution of techniques in historically gendered apparatus. In management, having women in positions of leadership has been shown to promote gender equality (Guthridge et al, 2022). Schools and institutions which currently only have men across all leadership positions, should make an active effort to improve gender representation.

#### INDIVIDUAL TEACHERS:

1. **Use a gender inclusive, respectful approach when teaching.** This means, at minimum, using consensual spotting practices, having an understanding of how gender differences and individual body differences impact circus training including the impact of the menstrual cycle. Hopefully, there will be a collaborative creation of a short video on gender inclusive teaching in the future, which will give specific guidance with regards to spotting and teaching practices. (*Theme 1, Education and Awareness*)

#### CIRCUS ARTS FUNDERS:

1. **Allocation of funding for artists and companies who are actively challenging negative gender stereotypes or promoting gender inclusivity through their work.** This could be used to fund LGBT companies, women in roles stereotypically given to men and vice versa. (*Theme 6, Funding and Finances*).

2. **Allocation of funding, spaces & support for individuals and groups actively working to improve equality in the circus world.** This could be funds within circus communities to support marginalised groups or funds for events such as conferences and symposiums.

To summarise, the discussions at the inaugural women’s & non-binary straps symposium detailed a wide range of gender-related challenges facing the circus community and over thirty specific actions to address these challenges. Many issues often stemmed from a single problem such as the lack of clarity regarding ethics and regulation of circus spaces, the absence of comprehensive research on how gender impacts training and the lack of gender-inclusive teaching methods. The proposed solutions emphasise the need for systemic change, calling for better educational resources, improvements to institutional regulation and enhanced support for marginalised groups. By working to implement these strategies, the circus community can take meaningful steps towards improving gender equality and creating a safer, more inclusive environment for all circus students and professionals.

Table 1. Full results of the symposium categorised by theme, problem and solution.

Theme 1	Subthemes	Category of problem	Specific issue	Category of solution	Specific actions
Education and awareness	Menstrual and hormonal education	Research	Insufficient scientific research relating to menstrual health & circus training. Anecdotally, many menstruating people report losing their period during training but the true prevalence, long term effects and how training should be adjusted in response remain under-researched.	Research & dissemination	A) Creation of an open access research document collating existing work on menstrual cycles and athletes B) Incentives for dissertations on this topic at circus universities to research prevalence & effects (Doch, Codarts)
		Education in circus schools	Lack of professional circus education on menstruating bodies and circus.	Education in circus schools	Introduction of mainstream education of menstrual cycles along with anatomy, nutrition and injury prevention in circus schools.
		Education in school	Lack of emphasis on women's health education in mainstream education.	Education in school	Campaign to improve women's health education in mainstream education.
		Social Taboo	Lack of knowledge in the circus community of the phases of the menstrual cycle and common effects on	Social Media Campaign	Organisation of a social media campaign improving awareness of the effect of the menstrual cycle on

			training & performing		training. Ideas such as #lutealphase, demonstrations of the change in skills during the cycle.
Teaching and Training	Research: specifically, a lack of consensus of what inclusive, effective and safe teaching means	Widespread disagreement on what is considered “safe” and “effective” in circus schools. As found by the FEDEC speak out survey, many institutions regard abusive practices as pedagogical tools. To regulate schools and prevent abusive practices, we need to set standards and for this we need to understand what practises currently work safely and effectively.	Research	Comprehensive qualitative research from current students, alumni, institutions and schools. Likely using a mix of focus groups, online questionnaires and a think tank event to create a document outline international consensus standards.	
	Research Accessibility	Following the research, this information needs to be produced in an accessible, convenient format for teachers & institutions	Teacher Training courses	Using the research, a short video on gender inclusive teaching, including spotting, terminology and navigating gender within the discipline can be created which can be made accessible online to all circus institutions.	
	Gender Bias in definitions of “technique”	Straps technique has largely been invented and defined by men, using the male body as a reference. In some cases this puts women & non-binary people at an inherent disadvantage for “technical progression”	Technique reform	Creation of a modern straps video dictionary of non-traditional technique, especially women + NB favouring technique. This will function at multiple levels to equalise teaching, training and performing.	
Awareness Campaigns	Research & dissemination: Results of the symposium	International networks & organisations need to support this work in order for it to reach the necessary audiences.	Open letters to FEDEC & IETM	An open letter to FEDEC & IETM calling for the actions we would like them to be involved in. This includes publication of gender inclusive guidelines and a call for discussions on topics such as FEDEC regulated anonymised	

					school evaluations from students and a ranking or award system in which schools and institutions can be rewarded for gender inclusive practices.
		Sexualisation of training clothes	Firstly, a significant proportion of training clothes are designed in a sexualised fashion making them impractical for circus training (i.e bras that slip, shorts that ride up). Secondly, the language used to describe women's versus men's training clothes often differs (i.e aesthetic descriptions for women's clothes such as "sculpting" and functional descriptions for mens such as "sweat wicking" and "high performance". These descriptions send a message that women should train to look better whilst men train to perform better.	Social media campaigns & protests	Organisation of a social media protest against the sexualisation of training clothes. Demonstrating A) the difference in descriptions in training clothes between genders (functional for men, "sweat wicking" "high performance" and aesthetic for women "sculpting" and "uplifting bra". B) demonstrations of how clothing fails in the circus, videos of clothes ripping, moving, riding up, revealing nipples. Create a call for brands to create functional clothing too!
		Research accessibility: Strategies from related professions	Many of the well researched strategies to improve gender equality in sport and performing arts are not widely known in circus communities	Ted talks / videos	Creation or identification of a standalone video on sports & gender. Simply presenting current research to raise awareness of the gap and strategies being employed more generally to reduce it. E.g summarising the EU report on improving sport equality <a href="https://op.europa.eu/en/publication-detail/-/publication/684ab3af-9f57-11ec-83e1-01aa75ed71a1#">https://op.europa.eu/en/publication-detail/-/publication/684ab3af-9f57-11ec-83e1-01aa75ed71a1#</a>
<b>Theme 2</b>	<b>Subthemes</b>	<b>Category of Problem</b>	<b>Specific issue</b>	<b>Category of solution</b>	<b>Specific actions</b>
Institutional policies and	Guidelines & onboarding	Lack of guidelines	There are no widely accessible guidelines	Gold standard guidelines	Creation of a single page set of guidelines for all



standards			for circus schools	published, open for use by all circus establishments	circus establishments to use if they wish, to improve best practice in circus.
		Lack of information regarding circus schools, companies and organisations.	Many schools, companies and organisations do not offer any information regarding rules & values prior to admission	Onboarding Handbook specific to each institution	A push for all circus schools & organisations to create a handbook which shows the rules and values of the space including toplessness, boundaries and expectations of relationships between staff & students and reporting pathways. The goal is to make this the “norm”, as it is in academia and other professions.
		Technique testing protocol	Technique assessments disadvantage menstruating people if they fall during the worst phase of a cycle.	Actions around accounting for cycle fluctuation in schools	Campaign for schools which test students technique to ALWAYS offer two dates for ability tests (two weeks apart) for all students. This way you are not tested during the worst phase of your cycle.
	Representation and quotas	Lack of gender diversity in teaching	This can perpetuate gender stereotypes with specific disciplines (i.e Aerial hoop = feminine, Aerial straps = masculine)	Quotas / Targets in teaching to prevent students being taught only by one gender for their whole education.	All disciplines during every year should have some experience being taught by both genders. If you always have a male teacher, active efforts should be made for the cover teacher / guest teacher to be a woman or non-binary, so students have more than one gender as their teaching reference in their discipline.
		Lack of gender diversity in management	Women in leadership positions promotes gender equality (Guthridge et al, 2022).	Managerial positions	A campaign for all schools to strive for at least 30% female representation in the direction. At minimum no schools should have only male directors (e.g. Flic).
	Regulatory	Lack of	To the best of our	Use of a	A discussion with

	frameworks	regulation in teaching	knowledge there are no qualifications necessary to be able to teach in professional circus schools	Sports federation model to regulate teaching qualifications	FEDEC on the collaborative creation of a standardised teacher training course which *could* be fedec regulated, offering a qualification.
		Lack of regulation in institutions	To the best of our knowledge there are no international regulations or inspections of circus schools in the EU	Use of a higher education model to offer safety inspections & rewards for inclusivity / high quality teaching.	Introduction of a regulated award (either by fedec) or use of an existing sport equality one for use in circus schools, to allow schools to demonstrate safe practise and active efforts to improve equality in the school environment.
<b>Theme 3</b>	<b>Subthemes</b>	<b>Category of problem</b>	<b>Specific issue</b>	<b>Category of solution</b>	<b>Specific actions</b>
Community support and resources	Support networks	Lack of inclusivity in circus	Systemic access issues mean that there is a lack of representation and visibility for many sociodemographic groups.	Emphasis on organisation of events, spaces, meetups for marginalised groups.	An effort from circus schools, institutions and training spaces to actively create space and community for marginalised groups. (gender, sexuality, ethnicity). This will be included in the calls to action.
	Professional networks	Lack of systematic professional collaboration	Finding circus professionals often still relies on word of mouth, meaning that accessing good physios, producers, riggers etc can be complex in each new city.	Group based database on circus professionals like physios, nutritionists	Collaborative effort from circus artists and students globally to create an open access database in which you can add and find circus experienced professionals like physios / nutritionists / osteopaths in different locations. Possibly accessible through the FEDEC site.
	Gender inclusive resources	Research accessibility	Even when research is conducted it rarely reaches the people who will benefit from it, or it is written in inaccessible format.	Books, existing research made available and accessible, podcasts, apps, ted talks on gender and space	Emphasis on schools to offer (where possible) students gender inclusive resources. These can be books, online freely accessible articles, podcasts, youtube videos or documents on the

Theme 4	Subthemes	Category of problem	Specific issue	Category of solution	Specific actions
Reporting and ethics	Reporting systems made clear, open and accessible	Complex reporting systems within schools, companies and institutions	Reporting can be difficult for many reasons, but the sheer complexity of who to tell and what the repercussions will be is a large barrier in itself.	Clear, simple reporting pathways made accessible to all students or artists when they join schools, companies or institutions.	The School handbook or onboarding documents should always include detailed clear descriptions of pathways to reporting and standards of safe practice (i.e spotting). This includes who to report to and what will happen.
		Complex reporting systems outside of schools companies and institutions.	Reporting external circus-related professionals such as physios or osteopaths can be even more complicated, especially in a foreign country.	Pathways to reporting circus- related staff such as physios or osteopaths.	Research and publication of a clear document on how to report circus-related professionals in different countries. This includes simple legal advice published in English and helplines or websites which offer guidance.
		Lack of reporting of malpractice in circus schools.	Currently, there is no clear pathway to give feedback to a third party on schools, companies or institutions. Without this knowledge it is very difficult for the circus community to progress towards safer practises.	Creation of an anonymous feedback form for circus schools and an industry version to give opportunities for open access feedback.	This should be FEDEC regulated or externally regulated. The idea would be to create a route through which data on schools can be collected which is anonymised. The data can be both positive and negative. This should help to prevent systemic abuse or malpractice.
		Lack of understanding of experiences within schools, companies and institutions	Unlike universities, there is little information regarding student / artist satisfaction with a school, company or institution which would be useful to have .	If an anonymous survey is too complex, at minimum the creation of a “circus survey” to gain an understanding of the landscape of opinions currently.	This should ideally be open access and linked to a ranking system, so that prospective students can search for the schools which rank highest for topics such as “student satisfaction” or “teaching quality”.

	Ethical guidelines	Spotting malpractice to protect students and staff	Widespread disagreement with regards to spotting practices e.g consent with touching, verbal warnings prior to spotting.	Creation of universal spotting terms with clear examples. Progress is evident with the FEDEC guidance on spotting practises.	A widespread effort to adopt universal question and answer spotting terms. “Ready”&“yes” or “next”&“yes” (in any language). Students are therefore active in spotting decisions, reducing miscommunication. This will be included in the spotting video.
		Lack of ethical guidelines	Even within information packs regarding onboarding to a school, these rarely include specific ethical guidelines. E.g they may say “we respect all people” but this is vague enough that it is difficult to criticise a school for failing to meet their own guidelines. Guidelines should be grounded in specific actions such as i.e “Discrimination is not tolerated in any form, all incidences should be reported to ***?”	Ethical guidelines for schools and institutions to be included in handbooks and onboarding documents.	These include the communication methods used by the school / institution (for example not whatsapp/ not out of these hours etc). Ideally schools and institutions will create digital handbooks which are openly accessible online in order for prospective students to gain a clearer understanding of the type of institution they are thinking of joining.
<b>Theme 5</b>	<b>Subthemes</b>	<b>Category of problem</b>	<b>Specific issue</b>	<b>Category of solution</b>	<b>Specific actions</b>
Wider industries (sports and performing arts)	Early interventions	Systemic sexism in sports	From a young age, the segregation of exercise type based on gender sends the message that some sports are more “appropriate” for women or men. This is perpetuated in adulthood by some disciplines & sports still exclusively competed by specific genders (i.e gymnastics rings for men & beam for women)	Gender equality at the school level in physical education & shift away from gender exclusive sports & disciplines	Campaign to DESEGREGATE the type of exercises taught in P.E at school. Gender discrimination in sport begins here, with girls being taught dance whilst boys do football or rugby. The same sports can be taught within gender groups. I.e all students partake in both dance and football, but can be taught within their own gender groups. In elite sports, all genders should have the opportunity to train and compete on all disciplines (i.e rhythmic

					gymnastics should be open to men and decathlons should be open to women)
	Sportswear	Systemic sexism in sportswear	Training clothes perpetuate gender stereotypes, can be impractical and increase sexualisation of women in sport	Multi-step campaign to address gender inequality within the sportswear industry. This may seem insignificant, but early impressions of sport are shaped by the sportswear campaigns, so this has a key role to play in improving sport gender equality	This involves three key steps. Firstly, social media protests as described earlier to highlight the sexualisation of female training clothes and the non-functionality of them for circus. Secondly, positive alliances with companies doing well: creating functional, ethical and sustainable clothing. Thirdly a qualitative analysis on the words used to describe womens sports clothes versus mens sports clothes (sculpting, uplifting, versus performance based).
	Casting regulation	Systemic sexism in casting	Many castings still involve sending semi-nude photos which could be replaced with tight clothing and static measurements which for many women are unrealistic to normal fluctuations in body shape as part of the menstrual cycle.	Changes to practise of Photos, weight ranges, size ranges.	A call out to casting directions & casting industry to stop the use of static measurements + sizes. People fluctuate in weight and size, so the norm should be to put a range (i.e Waist 28-32 not waist 28). The call out will also include an emphasis on moving away from use of bikini photos towards clothing in which you can see the figure.
<b>Theme 6</b>	<b>Subthemes</b>	<b>Category of problem</b>	<b>Specific issue</b>	<b>Category of solution</b>	<b>Specific actions</b>
Funding and finances	Rewards for breaking gender norms	Lack of representation and visibility for non-stereotypical gender roles	The lack of representation leads to exclusion of trans & non-cis performers, and reinforces potentially damaging stereotypes. Circus has the potential to challenge the status quo and promote gender equality.	Funding for companies, creations and artists who are breaking gender norms or demonstrating active inclusivity.	Letters and discussion with UK and EU Arts councils, Creative Europe, International arts funds and an open call for funding for gender inclusive performing art in circus through circus corporations such as

					Stagelync.
	For events + innovations	Lack of funding	The lack of funding for innovative events, conventions, symposiums and conferences hinders progress in circus.	Funding for symposiums, conferences, protests.	Call for funding for events such as the symposium, from gender equality NGOs, Circus innovation companies, Performing art funding groups, sports equality groups and sports medicine groups.
	Targeting pay gap	Gender bias in non-performing circus roles	Some of the pay gap in circus may relate to differences in the type of non-performing circus work different genders tend to do.	Increases in female riggers and tech.	Requests for rigging and tech aspects to be taught as part of the curriculum in circus schools (published in the calls to action for schools) and an active effort to create space for female rigger + tech meetups + swaps.
		Lack of women and non-binary representation in leadership	Whilst many institutions have improved, some still remain with only men in positions of leadership. Evidence suggests women in positions of leadership leads to improvements in gender equality throughout a company (Guthridge et al, 2022).	Women in positions of power in institutions	Quota of target for 30% women in direction / managerial positions in circus schools and institutions.
		Lack of artist knowledge regarding pay & contracts	Many performers, especially new graduates lack the knowledge regarding their pay rights and contract rights.	Open conversations with equity. Involvement in next symposium	To help spread accessible information regarding pay rights, companies and unions such as Equity in the UK could be contacted to collate resources which breakdown information regarding pay, such as minimum standard hourly / day rates. Additionally, they could be involved in the next symposium in March 2025, to present their own information, which could then be published online..

## References

- Costello, J. T., Bieuzen, F., & Bleakley, C. M. (2014). Where are all the female participants in Sports and Exercise Medicine research?. *European journal of sport science*, 14(8), 847-851.
- Cowley, E. S., Olenick, A. A., McNulty, K. L., & Ross, E. Z. (2021). "Invisible sportswomen": the sex data gap in sport and exercise science research. *Women in Sport and Physical Activity Journal*, 29(2), 146-151.
- D'Lauro, C., Jones, E. R., Swope, L. M., Anderson, M. N., Broglio, S., & Schmidt, J. D. (2022). Under-representation of female athletes in research informing influential concussion consensus and position statements: an evidence review and synthesis. *British Journal of Sports Medicine*, 56(17), 981-987.
- Funk, A. (2018). Gender asymmetry and circus education. *Performance Matters*, 4(1-2), 19-35.
- Guthridge, M., Kirkman, M., Penovic, T., & Giummarra, M. J. (2022). Promoting gender equality: A systematic review of interventions. *Social Justice Research*, 35(3), 318-343.
- Harrison, M. (2019). Gender representation in circus arts: a case study. *Theatre, Dance and Performance Training*, 10(1), 21-37.
- Paul, R. W., Sonnier, J. H., Johnson, E. E., Hall, A. T., Osman, A., Connors, G. M., ... & Bishop, M. E. (2023). Inequalities in the evaluation of male versus female athletes in sports medicine research: a systematic review. *The American journal of sports medicine*, 51(12), 3335-3342.
- Seymour, K. (2018). Briefs: Bending Gender in Australian Contemporary Circus. *Performance Matters*, 4(1-2), 52-56.
- Tait, P. (2005). *Circus Bodies: Cultural identity in aerial performance*. Routledge.