Royal Welsh College of Music and Drama- BA Stage Management and Technical Theatre

What are the barriers preventing women from entering and progressing in the entertainment lighting industry?

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Rationale

Despite progress in many other technology-based industries, in my opinion, the entertainment lighting sector remains heavily male dominated. In my experience within the industry, women make up a small percentage of the roles such as production electrician, programmer and designer and its even rarer to see a woman in a leadership position. I have always questioned why the atmosphere within the industry can make it feel unwelcome and inaccessible to women.

I feel that historical, cultural and educational barriers, alongside years of unconscious bias and discrimination have contributed to this gender imbalance. It is my opinion that female voices need to be heard and represented as without the input from a range of voices the industry will miss out on fresh perspectives and new ideas. The contribution from women will only benefit the industry as it will lead to the better reflection of the diversity of modern-day society.

What stands out to me is how entertainment lighting has always been seen as a technical and physically demanding role due to its long hours and demand for manual lifting, which are career traits that have long been associated with the male population. This perception of the industry reinforces dangerous societal gender expectations, and I think this is one of the reasons why women are discouraged from pursuing a career in this sector. Furthermore, as a woman I've personally struggled imagining a career in entertainment lighting due to the small number of successful female role models. Therefore, my own experiences have led me to research what are the barriers preventing women from entering and progressing in the entertainment lighting industry?

I aim to explore what the industry is already doing to combat the gender imbalance and what further ideas can be suggested. Based on my own first-hand experiences and initial research, I expect to find many barriers such as the lack of role models, lack of support, gender discrimination and societal gender role expectations which play a large role in maintaining the imbalance. I feel strongly that these issues need to be discussed and addressed.

Throughout this dissertation, I want to highlight the stories from women who have a career in entertainment lighting and shine a light on the need for change. I hope to raise awareness and encourage more women to enter the industry where their opinions will be heard. I also want to explore how the industry can support women better, not just through making policies, but through visibility, community and real ongoing support.

Introduction

Throughout history, theatres and entertainment lighting have developed significantly. As early as 450BC, Greeks are known to have built their performance spaces so that sunlight would hit their stage instead of shining on the audience. The introduction of gas-controlled lighting in the 1800's meant by adjusting the gas to each oil lamp they had flexibility of brightness during the performance. (Schiller, 2016). Due to Thomas Edisons's invention of the light bulb in 1879, theatres began using lamps with tungsten filaments which created brighter outputs and reliable colour temperatures. (Schiller, 2016). This led to the introduction of a lighting designer role as the tungsten lamps transformed stage lighting from being a technical function to a creative and artistic element that helped tell the story of the performance.

The first lighting designer, who was female, is considered to be Jean Rosenthal, a woman born in New York city 1912 who is known as a pioneer in lighting design. She designed lighting for several well-known Broadway musicals such as West Side Story (1957), Hamlet (1964) and Cabaret (1966) (Fippin, 1999). 'Rosenthal believed that 'the most successful and brilliant work a lighting designer can do is usually the least noticeable'' (Fippin, 1999) which demonstrates her innovative strive for creativity and the ability to see light as a beautiful and tactile element of a performance. Rosenthal introduced the 'elimination of shadows' (Shirsat, 2019) and her ability to control angles to create contrasts on stage are techniques that are widely used today in dance shows and theatre performances (Shirsat, 2019). Another high-profile woman in lighting design is Tharon Musser who was born in Virginia 1924, as she designed many Broadway shows such as a Chorus Line (1975) and Dreamgirls (1981) (Billie Rose Theatre Division, n.d). Her design on a Chorus Line is considered revolutionary as it was the first show to use an electronic lighting desk which demonstrates the advancements in technology throughout her career (Billie Rose Theatre Division, n.d). Although pioneers like Rosenthal and Musser opened doors for future generations, lighting design has since become a male-dominated profession, an imbalance that remains visible in the industry today.

Recent statistics highlight a significant gender imbalance within the technical theatre industry. An American company, Howl Round Theatre Commons (a free platform for theatre makers to discuss worldwide (Howl Round, n.d) records the percentages of women holding technical and production positions on an annual basis. In 2022 it was reported that in America out of 3,698 lighting roles only 20.9% were held by women. In contrast to this, costume which is a field historically associated with female traits, was dominated by women with 70.4% of positions (Theatre Squared, 2022) This statistic supports the argument that whilst creative roles, that have been historically associated with feminine attributes, remain accessible to women, but more technical roles like lighting are male

dominated. Furthermore, in the same study, 'of the 589 people who responded to the study, 533 (90 percent) reported having experienced a negative work environment, gender-based harassment, and/or pay disparity' (Theatre Squared, 2022). These first-hand accounts highlight the impact of gender imbalanced workplaces can have on its employees.

In the UK the statistics are similarly concerning as reflected in a survey conducted by PLASA (Professional Lighting and Sound Association). The survey revealed that 70% of the roles in the entertainment and events technology industry are held by men and in the 2023 London Plasa show, 'only 17% of visitors were female' (PLASA,2024). This shows low female visibility and interest in popular industry spaces and events. A survey conducted by the Women in Lighting posed the question 'Have you ever experienced or witnessed sexism in your workplace?' (WIL, 2021). The responses were that 56.19% of women answered yes, alongside 55.88% of males who stated that they 'have a very men dominated team, which can sometimes lead to 'lad banter' of inappropriate/ sexist remarks and jokes' (Anon, 2021,). When asked the question of 'Do you feel every gender is treated equally in your workplace?' (WIL, 2021) one recipient stated that 'l see many women needing to prove themselves before being promoted while many men counterparts have a more expecting and entitled approach to promotion' (Anon, 2021). This highlights the potential difficulties for women to get into leadership positions.

These figures paint a clear picture of the persistent gender imbalance and a working environment that can be unwelcoming and alienating to women. Despite decades of progress in other backstage sectors such as stage management as in 2013 it was discovered that over 60% of positions went to women (Peterson, 2017), lighting continues to reflect deep rooted structural inequalities.

This dissertation aims to explore the underlying reasons for the gender imbalance in the lighting industry, and seeks to understand how the historical context, societal gender role expectations and other barriers have influenced the low female representation.

The research will explore the following sub questions-

- What historical and social factors have influenced the gender imbalance in lighting?
- What are the barriers preventing women from entering and advancing in this industry?
- How does education and subject choice affect women's access to technical roles?
- What changes have been made or could be made to pursue careers in lighting?

Gender inequality and discrimination remains a pressing issue across many industries as '50% of women in STEM (science, technology, engineering and maths) jobs say they have experienced any of the eight forms of discrimination in the workplace because of their gender' (Funk and Parker, 2018).

In addition to this 'in workplaces where most employees are men, about half of women in STEM say their gender has been an impediment to success on the job' (Funk and Parker, 2018). These findings reflect a broader issue and conversation that extends into other STEM industries across the world.

A more inclusive lighting industry would not only reflect the diverse voices of today's society but would open doors for unique and new perspectives for the audience. Also, in understanding the barriers women face in male dominated industries, society can work to create new solutions that make environments feel more inclusive to all.

By shedding a light on these issues, the research will contribute to the wider conversation surrounding gender equality and deeply rooted societal bias. It will aim to raise awareness of the challenges women face in the industry, provide support and encourage the next generation of women to pursue careers in the lighting field.

Research Methodology

The research for this study will combine primary and secondary research to get a full overview of the current position of the lighting industry for women. Secondary research will provide historical context and current statistical data found through surveys and industry reports. These sources have also influenced the questions asked in primary research interviews to be able to compare successfully and prove the ongoing gender imbalance.

Primary research will be conducted in interviews with female lighting professionals who are experts in different roles. These individuals were selected because of their first-hand experiences of navigating a male dominated field and their insights will reveal the true state of the industry and what barriers they have faced in entry level and leadership positions.

Paule Constable is an ideal person to interview for this research as she is one of the most notable lighting designers in the world. After graduating with an English Degree from Goldsmiths College London, she fell into the world of lighting design by accident and found a passion for the role. She is an award-winning lighting designer who has received four Olivier Awards and a Tony Award in 2011 for her work on War Horse. Constable is constantly raising awareness to the lack of women in technical roles and frequently gives talks in universities to encourage up and coming female technicians to pursue a career in lighting. Due to her achievements and many years in the industry Constable is an important person to interview to gain an insight into how gender imbalance has improved over the years.

Another key participant in this study is Elanor Higgins, a freelance lighting designer based in the UK. As well as being a graduate of the Royal Welsh College of Music and Drama (RWCMD) she has worked as a full-time lighting technician for the Welsh National Opera (WNO), the National Theatre and works as a guest supervisor at RWCMD as a mentor in lighting design. With credits including 'Blaze of Glory' at the WNO she provides a great insight into the lighting industry.

Mary Crook, who is currently working as LX 1 on Clueless the Musical in the West End, brings a different but equally important viewpoint to the study. Crook specialised in stage management in college, as felt this was a discipline which was easier for women to progress. However, after discovering a passion for lighting, she has worked in roles such as Deputy of Electrics and as an LX 3 on various productions. As she has been involved in many aspects of the industry, she provides a fresh perspective to this study.

Cara Hood was selected as a participant in this study as her career is in its early stages. Hood is a freelance lighting designer who graduated from the Royal Welsh College of Music and Drama and

now mainly works in subsidised theatre. She has experience in working in lighting within the television industry which will be a good comparison to the theatre. She has created a successful career in a short amount of time and will provide a recent insight into any barriers that women may face.

Also contributing to the research is Sharon Stammers, Co-founder of Light Collective. Light Collective is a unique lighting consultancy which promotes lighting design internationally and published the book 'Women in Entertainment Lighting'. This book connects women with a passion for lighting across the world, celebrates their achievements and addresses the unfair gender imbalance. Stammers started her career as a stage electrician and lighting designer, before transferring her skills into the architectural lighting industry. However, whilst raising her family she found that the career was not compatible due to lack of flexible working and support. Her experience is valuable to the research as it explores societal gender roles within the industry and the effect it has on women.

Josie Allen is a senior stage technician at the Wales Millenium Centre in Cardiff, and her experience working in a venue rather than on a specific show will be valuable to the research. As a venue technician, she will encounter multiple touring companies with different approaches and mindsets, so it would be interesting to discuss any barriers or difficult situations she has faced.

In addition to Josie Allen, Tamykha Patterson offers a valuable perspective as a lighting programmer and assistant lighting designer. With credits including Sunset Boulevard (2023) and MJ the musical (2024) she has worked across the West End and Broadway. The perspective of a lighting programmer would ensure that the research would be able to cover most aspects of the roles in the lighting industry and explore any gender imbalance and differences between them.

This research will only contain interviews from women to shed a light on their true experiences and challenges they have faced. By using interviews, it will provide rich, narrative data that cannot be captured through statistics alone, making them ideal for a subject which is focused on live experiences and workplace challenges.

All participants will be informed of the purpose of the research topic and will be asked to provide written consent before taking part. Anonymity will be offered to all interviewees, and they will be asked if they give approval for the conversation to be recorded. They may also withdraw from the research at any time.

Chapter 1- Educational Barriers

Gender imbalance in STEM subjects has been a complex issue for a significant amount of time. Women are represented in 'around only 28% of the workforce in science and technology worldwide' (Steel, 2024), the gender imbalance is an eye opening and shocking issue. In a study completed by HESA (who are they and where) it was discovered that out of student enrolment for technologybased subjects in the academic year 2023/2024, 139,360 were male whilst only 39,125 were female (HESA, 2024). In the same survey, male enrolment for creative and design subjects was 62,660 whilst women were considerably higher at 117,615 (HESA 2024). This data demonstrates the clear difference between technology and creative degrees and what are considered to be female and male orientated. From an early age, children can be introduced to gender roles which influence their interests and aspirations, such as the toys they play with and the clubs that are available. When being influenced to these gender stereotypes from a young age, it discourages children to aspire in careers in which they feel they don't belong. Sharon Stammers described how architecture and electrical engineering backgrounds 'are industries that women were not encouraged to go into' (Stammers 2025) and that 'stem subjects still have a complete lack of women going into them' (Stammers, 2025) which supports how persistent stereotypes deter young girls from pursuing these subjects.

Although performing arts subjects have a clear larger intake of women, the backstage technical theatre is still largely male dominated. Sharon Stammers talked about how her 'daughter is studying costume' and that she will 'doubt that she'll ever have to prove to a roomful of people that she knows what she's talking about' (Stammers, 2025). Costume and stage management are seen as female based careers as Mary Crook described how in her early years, she chose stage management because 'it was the easier one for women to get into' (Crook, 2025) even though she had a clear passion for lighting.

The low numbers of women in STEM subjects reflects the reduced number of women entering, progressing and succeeding in the lighting industry which creates a lack of role models for future generations.

Chapter 2- Lack of role models

The presence of role models plays a crucial role in shaping career aspirations across all industries. The lack of women in entertainment lighting, contributes to a perception that the industry is not meant for women, enforcing a harmful unwelcoming environment.

Participants in this study expressed how a lack of female role models shaped their early experiences in the industry. Sharon Stammers, who first began as a stage electrician, recalled that when she started 'there were absolutely no women' (Stammers, 2025). She then linked this to a lack of visibility stating that 'you have to see it to believe it... how can I move into that space if I don't see other women doing it?' (Stammers, 2025). Paule Constable similarly noted that when she began lighting designing 'there were two or three women' (Constable, 2025) working in lighting design across the UK. She then added how that stepping into a male dominated industry you 'can really feel on your own' and that 'as more women become designers, more women feel able to become designers' (Constable, 2025) which reinforces the idea that more female visibility will create momentum for the next generation. The lack of female role models also affects the day to day working experience of a woman, Cara Hood shared how 'it's hard, even as simply at lunchtime, you go and have your sandwiches or food, and I'm stuck what to talk about. I've got no real shared experience' (Hood, 2025), she then described how she 'felt like the odd one out because I was just different' (Hood, 2025). This highlights the isolation that women face in environments that in which they are the only woman in the room.

Elanor Higgins also shared the same experience as whilst working at the National Theatre she and her colleague were 'the first females to get full- time jobs in the lighting department' (Higgins, 2024). Cara Hood also said that at one point she was 'the only female sparky in Wales' (Hood,2025) showing that gender representation in lighting also stretches to the television industry. Hood then reflected that 'when you have male dominated spaces... you're gonna be the first woman there before you're the second or third' (Hood,2025) which shows how important it is to have female role models as without them it can make women feel like outsiders in their profession.

The Women in Lighting Project curated by Light Collective is 'an inspirational and global digital platform that profiles women working in the field of lighting and lighting design' (WIL, n.d). The project promotes achievements and celebrates the work of women in lighting around the world 'to help encourage, support and inspire the next generation' (WIL, n.d). Sharon Stammers described its purpose as 'to celebrate and not to be a platform where we are moaning,' stating 'we want to show the world that we've done all this incredible stuff' (Stammers, 2025) in the hope that it inspires others. Whilst this highlights the true importance of female role models, she also acknowledged that

many women in lighting 'haven't gone out to the world and fought for other people' possibly because they don't want to appear as if they are 'making a point, making a statement, being political' (Stammers, 2025).

These observations are supported by secondary research. An anonymous respondent in the Women in Lighting (WIL) survey explained, 'I found the company I worked for had no idea how to deal with women in the workplace and had very few real role models in senior positions' (Anon, 2021, WIL survey).Whilst another participant wrote how 'sexism is always there, but I like to think that I and others like me are helping to make it better for those who come behind us' (Anon, 202, WIL survey). These honest reflections show that the presence or absence of role models can significantly impact job satisfaction and a sense of belonging for female professionals.

Paule Constable, who has been an avid role model in the field for young women, reflected on the cultural silence that has surrounded women's struggles in the industry. 'There was a lot of role models of women who preached that you had to fight to get in place. Nobody was going to give you anything by being quiet' (Constable, 2025) she explained. The lack of open and honest discussion about the struggles and barriers women face in the industry may be a reason of discouragement to younger women as they may not realise that the challenges that they are facing are systemic rather than personal.

The impact of limited role models doesn't just affect the individual but can be considered a widespread structural problem. As stated on the Women in Lighting website, 'Our hope is that by profiling these women artists who use light within their work, we are opening doors for others to do the same' (Light Collective, 2023). Women in Lighting is just one example of what can be done to help raise awareness by recognising and celebrating women's contributions to lighting, meaning that the industry can begin to overcome deeply outdated assumptions and encourage diversity. The absence of role models leads to a lower number of women pursuing this path and therefore a lack of support in place for women starting out in their careers.

Chapter 3- Lack of support and guidance

Due to the absence of visible female role models in the lighting industry, many women in the industry report a lack of support and guidance. This lack of support can manifest in various ways, such as the absence of mentorship and the failure to recognise the barriers and issues women face in technical male-based environments.

For many participants in the study, emotional and peer support was highlighted as a necessity for a good working environment, and it was something which the lighting industry lacks for its female employees. Paule Constable reflected on the early stages of her career, saying 'if you're the only casual in your local theatre who's a woman... where's your safe space?' (Constable, 2025). Her comment shows a recurring theme across the primary research, which is when women find themselves isolated in male dominated spaces there is often no one for them to turn to for familiarity, guidance and support. Sharon Stammers supported this statement by honestly sharing that whilst there has been some progress around talking about women's wellbeing, such as menstruation, menopause and mental health, these subjects are largely still avoided (Stammers, 2025). Stammers described how these crucial conversations are avoided because 'no one wants to have them' (Stammers, 2025), which proves that societal discomfort with these topics are isolating in a male dominated workspace.

Whilst individual discomfort around women's struggles can be harmful, the research has shown that it structurally affects the workplace as well. Stammers referenced a survey she conducted, which revealed that the number of companies with policies supporting women's health and wellbeing (such as addressing menstruation, menopause or mental health) was 'very very small' (Stammers,2025). This lack of policy contributes to a harmful environment for women as they often must experience day to day life in a work culture which assumes the male experience as a default. This was further reinforced by the Women in Lighting survey as a survey responder wrote 'there is no support for any grievance procedures or complaints, there is no elected union representative' (Anon,2021, WIL survey). Whilst another presumed that the lack of policies and supportive systems in place was because 'all of the directors and managers are men' (Anon, 2021, WIL survey).

Sharon Stammers, who has first-hand experience of the incompatibility parenthood has with the industry shared how 'trying to maintain a job with travel, late nights, and hard project deadlines with a small child... it's not very compatible' (Stammers,2025). She questioned, 'is it fair that people need to choose, or should the world change to accommodate that?" (Stammers,2025). Her words reflect the difficulty many women face in balancing a career with family responsibilities, often without any support from employers. A male responder in the WIL survey observed that women with children in

the lighting industry have 'reduced hours and salary' (Anon, 2021, WIL survey) to manage their personal life, which shows an impact on career progression but also showcases a huge structural gender inequality.

Whilst formal support systems are clearly lacking, informal support networks between women have shown to be invaluable. Cara Hood described the importance of women 'connecting with each other' (Hood, 2025) to find support and understanding. This group support helps combat the feelings of alienation and isolation, especially in environments where women are often the only female in their space. Mary Crook described how exhausting it can be to explain issues to colleagues who don't share the same experiences, saying 'having these obstacles in front of you that are so difficult to explain to somebody who doesn't get it at all is so annoying' (Crook, 2025). Male colleagues are likely to not understand the difficulties women face due to lack of experience in isolating environments and its subsequent effects.

The lack of support and guidance for women in lighting not only hinders women's ability to progress but also reinforces the view that technology-based roles are incompatible with a woman's personal needs and experiences. This lack of support can deter women away from pursuing a career in lighting as it can be an isolating environment and without considerable structural change and a willingness to have an open conversation, progress to a more inclusive industry remains slow.

Chapter 4- Gender discrimination and unconscious bias

Despite the growing awareness of diversity and inclusion in STEM based industries, gender discrimination and unconscious bias continues to be one of the main barriers for women in the lighting industry. This discrimination may not always be serious, but it has a significant impact on workplace dynamics and the exclusion of women in technical roles.

Gender discrimination is defined as 'when someone is treated unequally or disadvantageously based on their gender' (Stanford University, 2024). This can include being overlooked for promotional roles or being paid less than others in a similar role. Similarly, unconscious bias refers to 'holding ingrained attitudes and stereotypes that a person is unaware of' (Stelman College,2025). This unconscious bias can affect how women in the workplace are perceived and treated, even when people believe they are acting fairly.

Many women working in the lighting industry have experienced both gender discrimination and unconscious bias. Elanor Higgins, who spent years working in a predominantly male environment recalled how 'it could be really challenging at times' adding that there were many moments that she felt 'quite alien' (Higgins, 2024). She shared how she chose to dress 'as androgynously as possible' (Higgins, 2024) wearing baggy and dark clothes to ensure that she was judged on her ability and not her gender. She shared how she 'always wanted to feel that I was being accepted because I could do the job' (Higgins, 2024) Her experience is an example of how women have felt pressured to portray themselves as more masculine to be more respected in male dominated environments. This was also supported by Mary Crook who has noticed that 'a lot of women, they've had to really reject their femininity' (Crook,2025) and she felt that when she entered the industry, she felt judged by other women as they often had the viewpoint that 'you can't look pretty whilst you're lifting a light because I wasn't allowed to' (Crook,2025).

Paule Constable, who described the 'deep rooted, deep- seated misogyny' (Constable,2025) still present across the industry, shared her own experiences with sexism such as colleagues mocking her or not believing in her ability to do the job well. She sees unconscious bias to be 'more dangerous' (Constable, 2025) nowadays as it is harder to identify and challenge as people don't always realise that they are acting upon this bias. She explained that 'people don't know how to check their unconscious bias'' and that 'they can feel aggravated about you and not really understand why they have an emotional response to you' (Constable, 2025). These reactions often stem from generalised stereotypes about women's ability in manual labour and technology-based careers.

Paule Constable also pointed out that the lighting industry is still governed by stereotypical norms in explaining that 'the way that certain behaviours are held as good and important... is deeply misogynous' (Constable,2025). For example, traits such as assertiveness and competitiveness, traits often associated with men, are highly valued whereas collaboration and emotional intelligence may be undervalued as personality traits in an employee.

Mary Crook discussed that men think 'women just don't want to work in lighting' (Crook,2025). This statement not only highlights the dismissive attitude that men can have as they refuse to face the reality of the true imbalance of the lighting industry. Crook reflected about the industry stating that 'you still have a lot of sexist people up there, deciding that it's not a woman's job' and she followed this with 'it's so much effort to have to prove yourself every single time you walk onto the stage' (Crook,2025). The pressure of having to prove yourself takes a psychological toll on many women, making the workplace environment uncomfortable and less appealing to younger generations. Furthermore, Elanor Higgins described having to find strategic ways to present and get her ideas through to her male colleagues as she described how she would 'persuade men in your department that if you've got an idea, actually maybe you're working with them so they make up the idea' (Higgins, 2024), this need to reflect credit in order to be heard is a clear example of gender bias in team dynamics.

Secondary research aligns with these personal experiences. One respondent in the Women in Lighting survey (WIL) shared that she had been told that she was 'not just a pretty face' or 'didn't expect that from a girl' (Anon,2021, WIL Survey) after she gave high quality work. Another female respondent from the survey shared that authentic conversations about the gender imbalance in the workplace are rare due to fear of backlash, 'fear by the victims of bullying and harassment of reprisal... and fear by the male dominated sponsors who feel uncomfortable with discourse about sexism' (Anon,2021, WIL survey).

Trade unions such as BECTU (broadcasting, entertainment, cinematographic and theatre union) and professional communities like the ALPD (the association for lighting production and design) have acknowledged the issue of gender inequality in the industry. BECTU preached its commitment to 'fighting for gender equality both in the workplace and within society' (BECTU, n.d). Similarly, the ALPD has publicly supported 'recent conversations that shine a light on abuse, harassment and bullying in our industry' and promised to 'support our members to the best of our ability' (Town,2018). These organisations acknowledging that change is needed, supports the fact that there is a gender equality issue in the lighting industry, however, to create lasting and impactful change the

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industry must commit to deeper investigations that examine the true reasons that continue to marginalise women in the workplace.

Chapter 5- Societal Gender Role Expectations

Societal gender role expectations continue to shape how welcome and comfortable women are in the lighting industry and how likely they are to succeed. These roles are built off expectations and assumptions about what jobs and characteristics are considered appropriate for men and women in the workplace. These expectations often go unchallenged, but their impact is significant.

Gender roles assign qualities like leadership and assertiveness to men, whilst women are often assigned emotional and support based roles. In the lighting industry, which is frequently associated with technology, physical strength, late nights and long shifts the role begins to be typically perceived as masculine. Due to this, women often find themselves entering a field and having a job which is perceived as incompatible to them.

Sharon Stammers reflected on the additional pressure that women experience whilst balancing work and home life describing how 'no man ever stands up and says, 'oh I've managed to have children and a career' (Stammers,2025). Stammers added that women often end up 'buying the birthday card' or 'doing the dishwasher' (Stammers,2025) due to expectations which are deeply rooted in social gender role expectations. She exclaimed how women 'are working harder' and said, 'but I think that's universal, I don't think it's just lighting' (Stammers,2025), enforcing the idea that societal gender roles extend beyond the lighting industry but also into STEM based careers.

This is further explored in wider research as one respondent in the Women in Lighting (WIL) survey said that women were regularly ignored for high profile projects but are expected to take on administrative and 'pastoral interactions' (Anon, 2021, WIL survey) which are roles which are regarded as more feminine. Another respondent described the 'very traditional mindset' still present in many workplaces, explaining how older men in leadership roles resist change because 'it's how it's always been' (Anon, 2021, WIL survey).

An example of this traditional mindset comes from the same survey as a female respondent shared her experiences of being asked to make tea, bring cakes and being ignored by a male manager for two years simply for being a woman on the team (Anon, 2021, WIL survey). 'It's still a boys club' (Anon, 2021, WIL survey) she said whilst she described how she only felt comfortable to speak out after being promoted within the company.

Mary Crook had her own opinion on this issue saying that 'there are more men because its less comfortable for women to be in these positions because of everything we've had to deal with. So, then the cycle continues' (Crook, 2025). When workspaces are reluctant to adapt and continue with outdated gender expectations, women are often left feeling uncomfortable and out of place.

In one article, it describes how women who present feminine traits are often undervalued whilst women who display masculine behaviours are being told they are too assertive and cold (Barker, 2013).Until the industry begins to value women who have a wider range of characteristics and strengths, women will continue to feel isolated, not due to lack of skill but due to long lasting societal gender expectations.

Chapter 6- Improvements

As gender imbalance remains an ongoing issue in the lighting industry, several people and organisations are actively trying to improve diversity and inclusivity. These efforts are supported by legalisation such as the Equality Act 2010 which protects individuals from discrimination based on sex, sexuality, race and other protected characteristics (UK Government, 2010). This legalisation places a legal duty of care on employers to prevent discrimination in the workplace and ensure fair treatment and equal opportunities to all, however many of these legal responsibilities are under enforced in many environments.

Within the lighting industry, projects like Women in Lighting (WIL) have played a crucial role in raising awareness and creating safe spaces for women. Women in Lighting is a platform in which women can share experiences, support each other and discuss wider change in the industry. Paule Constable, who is a member of the Women in Lighting community, has been an inspiring and vocal advocate about gender equality and discrimination in the lighting industry. Constable often gives talks, visits colleges and universities and supports female lighting professionals in their early careers. Her visibility and willingness to speak out about problems in the industry has helped provide a role model giving support and guidance for women who feel isolated in male dominated environments.

Though progress is still slow, many of the interviewees in the primary research noted that the industry has improved over time. Many spoke of finding 'safe spaces' (Hood, 2025) within the industry and Elanor Higgins confirmed that the industry 'is nowhere near as bad as it was, as there are lots more females out there' (Higgins, 2024) showing the clear improvement in today's entertainment lighting field environment.

Evaluation

This research set out to explore the barriers preventing women from entering and progressing through the entertainment lighting industry. It combined both primary and secondary research to get a well-rounded understanding of the subject. Overall, the research was successful as it meant that reoccurring themes such as unconscious bias, lack of support and societal gender role expectations were identified as being key barriers to women in the industry.

Qualitative data was gathered during interviews as primary research, using qualitative data over quantitative data meant that raw and detailed responses were given. This gave the study high validity and honesty and highlighted the true emotional impact that gender imbalance can have on women in the workplace. Gathering this open and inspiring data would not have been possible using secondary research alone as using direct quotes from interviewees gave the research a sense of depth.

Secondary research was also heavily successful in providing correct historical context and statistics which reflect present day society. The Women in Lighting survey has helped reinforce points which have been reiterated in primary research interviews as due to anonymity it ensures raw responses from its respondents. Furthermore, whilst researching into companies such as the ALPD and PLASA it allowed for further insight into organisations that are trying to combat the issue of gender inequality.

However, there were some challenges whilst conducting the secondary research. One of the main challenges was accessing specific data which focussed completely on UK entertainment lighting sector. Whilst statistics were available for the industry in America and could be mentioned, it was important that the research was focussed on the UK lighting industry. Furthermore, statistics of gender intake in technical theatre-based subjects were difficult to access as many universities wouldn't give public access to specific intake data.

During primary research it was difficult to maintain a unbiased tone with interviewees, as with a strong personal connection to the topic it was difficult to interview without sharing experiences which may have influenced the conversation. The personal connection served as a motivating factor and brought an authentic voice to the research process.

As part of the primary research, women across different roles in the industry were approached to be interviewed but unfortunately some didn't respond to an interview request. This led to a gap in the research relating to lighting programming and touring industries as Tamykha Patterson and Josie Allen did not respond. Although their input would have been interesting and valuable to the

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research, the interviews that were held still showcased a true insight into the barriers women face in today's entertainment lighting industry.

Overall, the research process was both insightful and challenging. Whilst some areas were more difficult to explore due to the availability of online data, the combination of responses from surveys and first-hand interviews provided a strong basis to explore the research question. The honest and brave stories from women who have faced the very barriers that the research is centred around reflect a constant theme of determination that fuelled the importance of the dissertation.

Conclusion

This dissertation set out to explore the barriers that are preventing women from entering and progressing in the entertainment lighting industry. Through a combination of historical research, statistics and first-hand interviews, the study has revealed a range of issues that continue to influence the lack of female representation in the lighting field.

The research revealed that despite gradual improvements in the number of women in the industry, lighting remains a heavily male dominated profession. This can be first traced back to it historically being perceived as a physically demanding and technical role which are traits culturally associated with male gender expectations. Even though the nature of the work has developed over time, the outdated perceptions still influence who is encouraged to join the field, how they are treated and an employee's chance of progression.

One of the most prevalent barriers that was discovered during the research is the lack of role models and support and guidance for women in lighting. The absence of female role models makes it harder and more daunting for women who imagine themselves in the industry. This leads to the feelings of isolation and alienation. This links to societal gender roles where women are expected to mainly have caregiving responsibilities or adopt masculine traits to be taken seriously. Many participants described the feeling of having to prove themselves and suppress their feminine identify to fit into the environment around them.

During the research, the educational barriers that young women face has become clear. With the lack of encouragement for young women to go into careers which are typically associated with men, it reduces the chances of female intake for STEM based subjects. Whilst stage management and costume are typically associated with female traits such as organisation, lighting is immediately associated with male traits such as heavy lifting.

Discrimination also remains an ongoing issue, whilst obvious forms of sexism have reduced over time, unconscious bias is still very prevalent in the industry today. Unconscious bias is harder to confront and can be heavily imbedded in workplace culture and through many of the interviews its showcased that this bias can make women feel disrespected and excluded in the industry.

Despite these challenges, the research also does identify some signs of progress. Initiatives like the Women in Lighting project and the individual work of women such as Paule Constable help to raise awareness, celebrate achievements and create supportive and safe spaces for women in the field. Industry organisations such as PLASA and the ALPD have begun to acknowledge the importance of diversity and have preached commitment to encourage safer and more inclusive environments.

Legalisation such as the Equality Act 2010 also provides a way to hold organisations accountable for discrimination, however the number of women afraid to speak up does remain high.

Overall, the findings of this research suggests that the lack of representation of women in lighting is not due to lack of ability or interest but due to barriers that have been identified. In addressing these barriers which include lack of role models, lack of support, education, societal gender expectations, discrimination and unconscious bias is the first step towards change in the industry.

The voices that have been captured in this research showcase the many difficulties that women continue to experience in their careers in lighting. Their determination will help to raise awareness of the true gender imbalance that affects their day-to-day working life. Hopefully this dissertation will contribute to the wider conversation that needs to be held in the lighting industry and across all areas of technology STEM based fields.

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