

NEXTGEN



SKILLS ACADEMY

Gender Balance Research & Development Programme for the Games Industry Report

Marie-Claire Isaaman

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1. Executive Summary

NextGen Skills Academy (NextGen) instigated the Gender Balance Research and Development Programme for the UK Games Industry (GBRDP) in response to the Creative Skillset Employment Census (2012) – which found women under-represented within the UK game industries at only 14% of the workforce – and #GamerGate 2014. The programme was co-funded by the Creative Skillset Skills Investment Fund, an initiative that helps companies invest in the development of skills and talent in games and other creative industries.

The GBRDP launched in December 2014, conducting a survey and interviews with women and employers in the game sector across the United Kingdom. In particular, the survey asked questions regarding women's experiences of employment, barriers to career progression and other challenges that might be encountered in the workplace. Importantly, the research also sought to identify and explore the obstacles to achieving a gender-balanced workforce companies and organizations face, believing that only by identifying and understanding the perspectives of both employee and employer can practical and workable solutions emerge.

The research was conducted in the aftermath of Gamergate, a series of controversial online attacks on women working in the game industries that began in August 2014 and continued into 2015. These attacks solicited a resilient response from many women (and supportive men), quickly becoming an online 'culture war' and receiving extensive exposure in both global game industry and mainstream news media. The long-term impact of this controversy remains unclear. However, this report highlights initial responses to Gamergate within the UK game industries in order to consider its possible impact, and help develop positive strategies to support both women and game companies to counteract attacks of this nature in future.

This report initially outlines the nature of the research conducted and themes that emerged from it, before exploring and evaluating initiatives instigated by NextGen as a response. The report then identifies further themes that emerged through deeper analysis of the research before making recommendations for future action.

2. Introduction

“An Internet Advertising Bureau study published in 2014 found that 52% of gamers in the UK are women, yet women only make up 14% of the industry workforce. It’s important that the games industry is made up of a range of people reflective of the demographics of its customers, to ensure relevance to the mass market and the commercial success of the UK Games Industry. The results of the Gender Balance Workforce Survey will help us work towards strengthening our industry and ensuring that the British games industry remains relevant and competitive on a global scale.”

Gina Jackson, Managing Director of NextGen Skills Academy, 2015

This report provides a narrative account of the Gender Balance Research and Development Programme for the UK Games Industry (GBRDP), from initial conception through data collection to resultant ongoing initiatives. The research that informs it set out to gain a further understanding of the workplace context in the UK game industries – specifically in relation to women – by identifying themes and issues to inform strategies and actions. The aims were to help enable a culture more supportive of young women aspiring to enter the sector, and support women already working in the game industries to improve career progression and development. However, the challenges faced by women in the UK game industries are neither unique nor unusual. Therefore, before this report describes findings of the NextGen research, it must first identify the wider historical context of women in the workplace.

2.1. Women in Work

Universal suffrage was granted to women in the United Kingdom during the summer of 1928. This gave all women over the age of 21 the right to vote, therefore enabling them to have a political voice and participate in the democratic process. However, for most women the work they did remained invisible and undervalued. Although women toiled in the home, it was not until the World Wars that they worked widely on the land and in factories doing work normally associated with men. After the Second World War the extensive contribution and full extent of women’s skills and capability could no

longer be ignored. Additionally, as a consequence of the increased economic and personal freedom that accompanied earning a wage, the expectations of women also became raised. Wider changes in society – e.g. increased access to Higher Education in the 1960s and 1970s – saw baby-boomer women seeking more freedom of choice, particularly in regards careers. Consequently, the struggle for equality in the workplace and equal pay became increasingly politicised during this period, culminating in major legislation. First, *The Equal Pay Act 1970* enshrined in law that “for men and women employed on like work the terms and conditions of one sex are not in any respect less favourable than those of the other” (The Equal Pay Act 1970). Then in 1975 *The Employment Protection Act* followed and introduced a statutory maternity provision that made it illegal to sack a woman because she was pregnant. Also in that year, *The Sex Discrimination Act 1975* finally gave British women the right to open a bank account in their own name and take out a mortgage without the signature of their husband. This enabled further economic and personal freedom for women, supporting them to develop careers throughout the economy.

As a consequence of these developments, the roles and conditions that exist for women in the contemporary workplace are markedly different from 40 years ago. However, they are still far from fully equal. Inequality persists in many spheres but particularly in career development and progression, reward and recognition, and pay. Indeed, data gathered by the Office for National Statistics (2015) revealed that on average women in full-time roles across the UK still earned nearly £5000 less than men doing the same job. The *Equal Pay Portal* (2016) also showed that in the year to April 2015, the average gender pay gap in the UK remained at over nine percent and that women over 40 were paid substantially less than their male colleagues. Such disparity was further highlighted in research by the Trades Union Congress (2015); this revealed that at the top level the annual salary gap results in men being paid a massive 55% more than female colleagues.

2.2. Women in Games

Digital games are not only a popular form of entertainment but an increasingly valuable part of modern culture. The contemporary game industries – stated here in the plural to emphasise the heterogeneous nature of the sector – emerged as a by-product of computer science research within the ‘high technology’ sector. This relatively

new industry has yet to be substantially explored, researched or articulated; therefore a variety of important narratives have not been fully exposed or disseminated. One of these narratives is that of women working within the game industries.

Women were pioneers of technology and computer programming. Ada Lovelace worked on the Babbage Analytical Engine in the early nineteenth century and her notes included the first algorithm to be carried out by a machine. Lovelace was highly important to early computing but it took nearly 150 years for her to achieve recognition when a computer language developed for the United States Department of Defence was named after her. In much the same way the work of women in either the home or the factory was often ignored, women working in technology – e.g. Jean Jennings Bartik or Grace Hooper – also had their work overlooked. There are many accounts of how during the 1950s these women were not invited to public events celebrating a computer they helped develop, or given public recognition for pioneering work performed on groundbreaking systems. Consequently, they have remained relatively invisible in the history of technology. This invisibility represents a major barrier for young women interested in a career in technology: a lack of visible role-models. Founder and CEO of *Girls Who Code*, Reshma Saujani, states, “If women had been more prominently talked about in computing, both in the history books and schools, we literally would not have the lack of women programmers that we do today...It’s about role models. You can’t be what you cannot see” (Bilton 2014). In an attempt to address this invisibility, classrooms at *Girls Who Code* are named after pioneers such as Lovelace and Hopper.

There also exists a widespread disparity of pay between genders in the game industries. *Gamasutra* conducted an international survey at the *Games Developers Conference 2014* (GDC) that revealed large salary gaps – particularly in art, animation, design and audio – and highlighted that in all roles women earned less than men. Of all respondents working as game artists and animators, 91% were men. And on average, these men earned over \$20,000 more than women in the same roles (Gamasutra 2014). Further research over the past decade by organizations such as the Independent Game Developers Association (2005) and the research-based book series *Advances in Human and Social Aspects of Technology*, confirm these findings and further suggest that not only are women under represented and underpaid within the industry but that extensive vertical and horizontal segregation also exists (Prescott and

Bogg 2011). These terms refer to the unequal distribution of men and women within the occupational structure of any industry. Vertical segregation describes the clustering of men at the top of organizational hierarchies and of women at the bottom, horizontal segregation describes how, at the same occupational level, men and women tend to have different job roles and tasks.

In addition to computer science and technology roles, digital game development requires artists, animators and designers to conceptualise, visualise and implement the aesthetic content of a game. Game development combines science and technology with art and design, with all disciplines needing to work together to ensure a successful end product or service. However, research has shown that women are hugely under-represented as game makers. Prescott and Bogg (2011) discovered widespread horizontal gender segregation in their international study of female game workers, supporting findings identified in the Haines Report of 2004. The Haines report – conducted in North West England – discovered only 27% of women in the sector worked making games (cited in Prescott and Bogg 2011). This leaves the other 73% employed in support roles such as Human Resources (HR), Finance, Personal Assistants, Marketing or Public Relations (PR), roles more traditionally associated with women.

According to a 2005 Independent Game Developers Association (IGDA) report exploring workplace diversity, horizontal segregation was clearly present (see Figure 1). This research sought to answer the simple question of ‘who makes games?’. The data gathered suggested it was not usually women. Indeed, of the major ‘making’ roles such as art, design, audio and programming, all were more than 89% male. The only category close to achieving parity was that of Operations/Information Technology/HR, and even that may have been misleading due to its somewhat unsatisfactory grouping of categories. Of course, these findings are ten years old and not UK specific. In fact little detailed research has been conducted within the UK to specifically identify horizontal segregation within the games industries beyond the work of the Haines Report, Prescott & Bogg (2011) and Prescott & McGurren (2014).

Vertical segregation has been identified within the majority of industries, with few women advancing into executive positions within organizations. The ‘glass ceiling’ is the favoured metaphor used to describe the vertical segregation of women, identifying an “...artificial barrier based on attitudinal or organizational bias that prevents

Figure 1. IGDA 2005 Study of Male/Female Spilt of Game Industries (Source: IGDA)

	Male	Female
Ops/IT/HR	53%	47%
Writing	70%	30%
Mkt/PR/Sales	75%	25%
Production	79%	21%
QA	87%	13%
Executive	88%	12%
Visual Arts	89%	11%
Design	90%	10%
Audio	90%	10%
Programming	95%	5%

qualified individuals from advancing upward in their organization” (United States Department of Labor 1996). It is evident from research that glass ceilings exist throughout most technology based workplaces for women and minorities. In late 2015, *The Guardian* revealed that only 17% of technological roles at Google are held by women; a figures that decreases to 15% at Facebook and only 10% at Twitter. In comparison, across these companies over 50% of support roles – e.g. Marketing, Sales and HR are held by women (Guardian Writers 2015). Again there has been little research into vertical segregation specifically in the UK game industries.

Ultimately, it is this inequality and segregation within the UK game industries – and the underlying causes that sustain it – that the NextGen Skills Academy Gender Balance Research and Development Programme set out to identify, understand and address by conducting specific and original research.

3. NextGen Gender Balance Workforce Survey

In light of the historical context and previous research conducted, it appeared likely the games sector in the United Kingdom contained a high degree of gender imbalance and inequality. Further insight into these issues was clearly required, consequently the NextGen Gender Balanced Workforce Survey (GBWS) was designed and disseminated throughout the UK game industries in late 2014.

3.1. Research Context

The author of this report – an educational consultant and expert on games pedagogy, particularly in Higher Education – has previously researched gender balance in the game industries, particularly regarding the relationship between education and the talent pipeline. She has actively supported young women into careers in the games industry, developing curricula that address gender representation alongside exploring the gendered history of digital games and play, encouraging both male and female students to understand and support each other's perspectives. This has resulted in extensive empirical knowledge that helped inform both the research conducted and the writing of this report. The issue of gender imbalance in the workplace has now become a 'hot topic' on the global political stage and secondary research has been utilised from a range of publications, articles and reports that explore, investigate and analyse this topic across various sectors. This is augmented by the limited amount of academic research regarding the UK game industries and gender. However, the majority of data underpinning this report comes from primary research conducted as part of the GBRDP in the form of online survey, employers survey interviews, workshops and feedback gathered from the NextGen *Aspiring Women* mentoring programme.

3.2. Methodology

The GBWS adopted a 'real world research' approach and utilised the fixed design of a 'sample survey' method for data collection. This survey was distributed using an online platform and all responses were anonymised to protect the privacy of those who participated in the research. Although the timeframe for data collection was relatively short, the goal was to obtain the largest achievable sample to ensure findings were as representative as possible and could therefore provide meaningful suggestions for

dealing with issues studied and recommendations for change (Robson 2011). The idea was to bridge the gap between academia and the commercial world, seeking to deepen understanding of issues and challenges faced by women and their employers in real world situations, rather than simply advancing theory or academic discipline. The primary tool for data collection was the online survey for women working both in industry and in education within the field of games, complimented by the NextGen Gender Balanced Workforce Survey for Employers (GBWSE), a further questionnaire for employers conducted via telephone interview. Both surveys were designed using a series of open and closed questions to elicit both qualitative and quantitative data. However, the GBWSE generated more qualitative data due to its interview format. Further data was collected in feedback from initial workshops and mentoring, then from the ongoing *Aspiring Women* mentoring programme that superseded these initiatives.

3.3. Emergent Themes From The NextGen Gender Balance Workforce Survey

The 2014 NextGen Gender Balance Workforce Survey was completed by 307 women. Over a quarter of responses were from women up to 25 years old, nearly 50% were between 26–35 years old, just over 21% between 36-45 but only around three percent of women were aged between 46-50 and those over 50 represented a mere two percent. Full-time workers constituted the majority of respondents at nearly 70%, with part-time workers making up only three per cent. Freelancers and those on short-terms contracts constituted a further 18% of respondents, 10% identified as Company Owners, with Interns and 'Others' making up the remainder. The survey canvassed a variety of company sizes. A third of respondents stated they worked in large game companies (250+ employees), 21% in medium (50-250 employees) and 20% employed in small companies (11-50 employees). Women working in micro game companies represented a further 15% of respondents, while over seven percent worked in a freelance capacity and four percent in games education.

The survey located respondents in six categories of activity: Games Development, Games Publishing, Games Development Support (middleware, tools and technology), Games Development Support (other services e.g. PR, legal, consultancy) and Games Education. The vast majority of respondents (76%) said they worked in Games Development. The final 'Other' category identified responses from women working in sec-

tors including Video Game News and Content, Journalism, Quality Assurance, Localisation and Simulations, Infographics, Gamification and Serious Games. In addition, the survey asked what platforms women were working on. The majority of respondents (54%) worked within mobile/tablet games development, with the next two largest areas being console and PC games respectively.

3.3.1. Personal Skills Development

A major theme arising from the survey was women's desire to develop careers and improve personal skills. Nearly 80% of women who responded to questions around personal development skills said they would be either 'highly interested' or 'interested' in developing two areas:

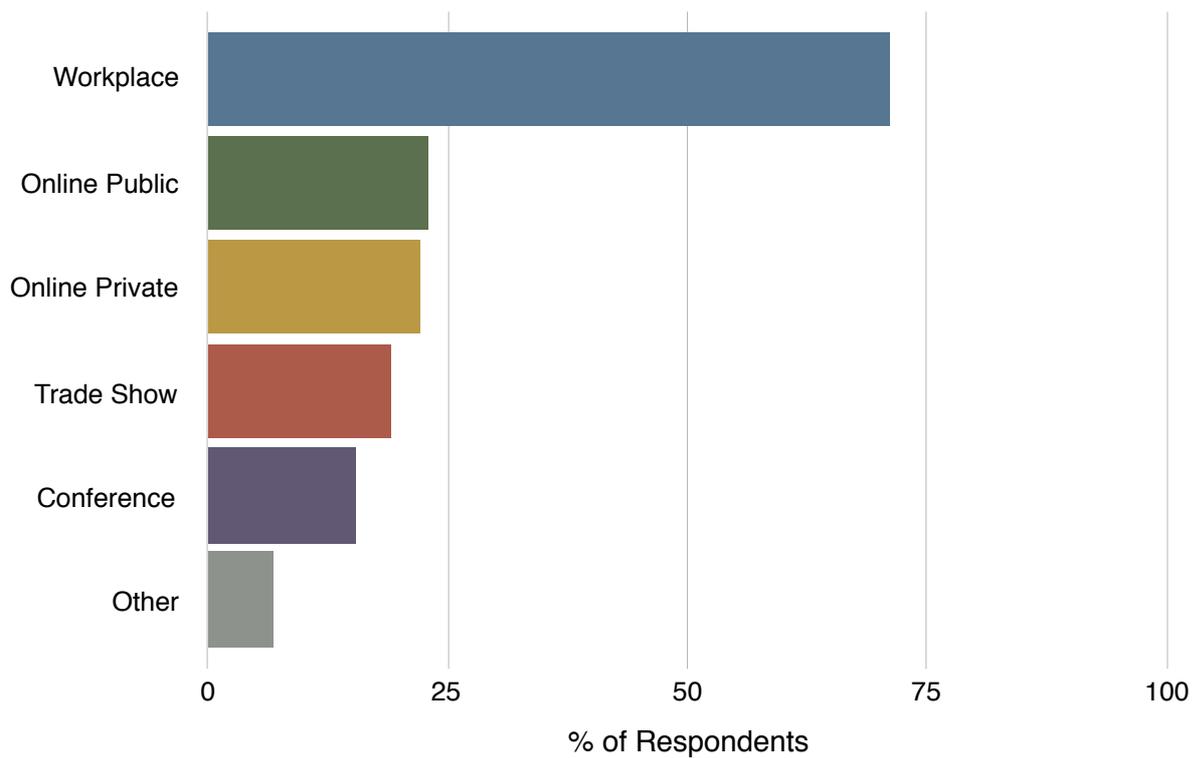
- Improving communication and influencing skills (finding your voice)
- Personal branding (reputation and how people perceive you).

Other development areas highlighted by respondents were leadership, management development and entrepreneurial skills development. Entrepreneurial skills were also identified in the survey in relation to 'other training needs'. There was further reference to the provision of help for freelancers/self employed women, in particular starting your own business e.g. planning, tax, legal, IP, insurance, finance, marketing, funding and areas such as revenue models. Another frequent request was for 'meet-ups' or forums with other women working in games to exchange information and support each other, particularly in facing work-related challenges. The survey also asked how women would prefer to receive help in developing these skills, with workshops, practical and interactive activities, mentoring and one-to-one coaching being the most popular. As a result of this data, initial workshops and mentoring were undertaken then further incorporated into the NextGen *Aspiring Women* programme.

3.3.2. Harassment and Bullying

The next theme to emerge was of particular concern. When asked if they had experienced any form of bullying or harassment whilst working in games or being associated with the game industries, over 45% of women responded in the affirmative. Of these, the vast majority (see Figure 2) said this bullying or harassment had occurred in the workplace, or outside of working hours at a work-related social event/party. Over

Figure 2. Location of Bullying or Harassment



80% of this bullying was conducted by someone the victim knew, with over 70% of the perpetrators working for the same company and over 40% of these in a position of power. Women stated that the biggest impact bullying and harassment had was a detrimental effect on their personal confidence, although 20% also felt it had affected their career development. When asked whether they had brought these instances of harassment to their employer's attention, nearly 40% said they had not. The most common reason for not doing so was a fear that it would negatively affect career progression, and/or that the perpetrator was in a senior position within the company so the women felt nothing could or would be done. Reasons for keeping silent included:

- "People may think I am a troublemaker"
- "Fear of loss of job or respect"
- "There was no-one available to take it to"
- "My career development has already been stunted as a result, and I do not want to further ostracise myself"
- "It wasn't outright bullying or strong harassment but more general teasing. I used to work in a very male dominated environment before my current job and

found that a lot of typical, sex/gender based jokes or remarks would be made towards women. I've found that if I take offence to any of these jokes or remarks that I am called a 'feminist'. I feel that I am not allowed to say if something offends me, as it was only meant as 'a joke' and that I am being irrational".

Of those respondents who did raise the matter with someone in their organization, 44% stated they did not receive a satisfactory outcome. Such results expose a worryingly high level of bullying and harassment within the game industries. They also suggest that insufficient is being done to combat it; that there exists a possible 'blind spot' within many organizations regarding the bullying and harassment of female staff. This is further evidenced by responses from the employers questionnaire. When asked what impact employers felt bullying and harassment had on their business, over 90% said it was damaging to the company culture and nearly the same amount said it reflected badly on the company. Further, over 80% said they thought it increased staff turnover and more than 70% said they thought it increased both absence rates and the risk of conflict within the business. However, less than 23% of employers said they were aware of any bullying or harassment in their organizations, and over 50% stated that best practice guidelines or support in relation to bullying and harassment (and general equal opportunities/dignity at work standards) were either 'not applicable' or 'not required'. Clearly this evidences a degree of disconnection between the experience of many women working within the game industries and their employer's perception of that experience. Although it is unlikely this is deliberate in the vast majority of cases, it is deeply concerning and represents an area that should be addressed.

Unsurprisingly, many respondents requested help in this area, including practical support in handling harassment and bullying. Most also felt that it was important for employers to have processes in place to combat such behaviour and to provide support and advice to victims when it occurred. When asked how issues of workplace harassment and bullying could be better dealt with, suggestions included:

- A need for better general awareness plus anti-bullying and harassment policies incorporated into company values and culture, with a clear understanding of the difference between banter and bullying/harassment

- Easily accessible support for victims and a safe way to report harassment and bullying. Many women felt they could not raise these issue for fear of losing their job or other repercussions
- More training for managers and those in senior positions, as many examples of harassment are from males in this category
- Employers should ensure a duty of care for younger women in particular. Many women stated they were 'young and naive' when bullying or harassment occurred and felt unable or unsure of how to react
- Employee Assistance Programmes to help those affected to deal with the anxiety and depression that resulted from harassment.
- Trade show managers should have a code of conduct that does not tolerate gender related harassment or bullying. A considerable amount of harassment was said to have occurred at trade shows/conferences, and many women felt there should be someone available to report incidents to
- An industry HR contact centre should exist where those being harassed or bullied can seek advice. Many small or micro studios do not have a dedicated HR manager who can help, and even in studios that do it might be useful to get advice from someone impartial and outside the organization.

However, bullying and harassment are not confined to the workplace. Virtually all women surveyed stated that they use social media. Of these, 29% stated they had personally experienced 'unacceptable and/or negative communications' through social media channels, and nearly 60% claimed to have witnessed these type of communications online. The majority of respondents (58%) said that they felt these negative communications had been gender related. Some comments regarding behaviour experienced or witnessed online included:

- "...comments made on any form of article or opinion piece by a female writer is often criticised using ugly language and gender slurs [these] often focus solely on the gender of the author as opposed to the content
- "This text-box just isn't big enough. If you can imagine a horrible thing a man/boy could say then I've seen it said/threatened/photoshopped/cartooned/hacked/whatever"

- “I have been contacted in totally unwanted, unprofessional and unsolicited ways by other members of the industry, looking for a date, or making lewd comments over social media aimed at me personally, not work related at all”
- “On a private forum for professional game developers I regularly saw misogynistic comments and attitudes including the discussion of another female developers sex life. I broke the forum rules in order to report this...and was subsequently banned”
- “Gamergate has been all over social media”
- “Gamergate. Enough said”
- “I’ve had a very close eye on the Gamergate situation, and things prior to that. I can say that three of the people I referenced in my university papers have left the industry because of gender based harassment since I graduated, and that was before Gamergate emerged! Since then I can only imagine the damage that’s been done to the state of women in the games industry from aspiring students to professionals leaving”.

Throughout comments from respondents were mentions of regular sexual harassment and even rape threats, being reviled for being ‘a feminist’, constantly being shouted down online and receiving unsolicited comments about their appearance. When asked if, as a response to this online harassment and bullying, women had withdrawn from or changed their actions on social media, over half of respondents replied they had. These comments – and the accompanying data – evidence extensive gender-related harassment and bullying in online spaces used by the UK game development community. It is also obvious that while Gamergate exacerbated and intensified this behaviour, it had been widespread previously. Such harassment and bullying clearly acts as a form of censorship, forcing women to either withdraw from discussions online, or dilute their opinions and comments for fear of attack. Not only is this unacceptable within the context of free speech but it inhibits meaningful discussion and debate of important issues within gaming culture, weakening it in the process.

3.3.3. Career Progression Barriers

When asked whether women felt they had or will encounter barriers to their career progression within the game industries related to their gender, 45% of respondents replied in the affirmative, 34% said 'no' and 21% said they were 'unsure'. When asked to explain the barriers they had encountered or felt they might encounter, 102 respondents left examples of gender-related barriers to their career progression, including:

- Being sidelined and overlooked for pay rises in favour of less experienced male colleagues or given the lowest pay rise in the team
- Not being able to network effectively due to a male-dominated and at times misogynistic senior management community in the UK game industry
- Men preferring to socialise and bond with other male colleagues. This is not necessarily done consciously. However when senior management go for lunch, drinks, sporting events together, women tend not to get invited
- Feeling that when, in the future, family becomes a larger priority in life they will be penalised because they will not be able to commit to the additional hours "expected from a game developer"
- "I've been in project meetings where my opinion has been disregarded...[I] have shared the same opinions with my male colleague who received praise for the exact same proposal."
- "I've had a lot of trouble, for example, being taken seriously when applying to speak at conferences. I often get mistaken for the marketing girl when I do turn up. I've had problems with my (male) employees being taken for the boss, or credited as the 'creator' of my games."

A constant theme that emerges from these comments is that of 'invisibility', non-acknowledgement and ostracism, in addition to general sexism, unconscious bias and a lack of support or encouragement. Ostracism in the workplace is the experience of being ignored and avoided at work. Recent research at the University of Ottawa claims that ostracism can be more harmful to an individual's emotional and psychological well-being than either bullying and sexual harassment, stating that it is an issue with important implications for employees, managers, the productivity of the workforce and the bottom line of any company (O'Reilly *et al.* 2014). And it is clear from the re-

search that many women working in the UK game industries feel either ostracised, ignored or not taken seriously because of their gender.

3.3.4. Career Development

When asked what were the major challenges to advancing their careers, respondents cited finding time to pursue a career development plan as the biggest challenge (37%). This was closely followed by obtaining access to mentoring and guidance to help achieve career goals (35%) then formulating an actual career development plan (35%). Other challenges listed included deadline pressures, working unpaid overtime and poor work/life balance. Many women also cited examples of positive experiences and practices that supported their career development, including the following:

- “I have had a couple of amazing mentors (one female, one male) who have tutored and brought me on while being good friends as well”
- “I have had positive encouragement from other ladies in the games industry which has helped me with working in the industry”
- “A particular boss who was very supportive and attentive to the feelings of his colleagues, and challenged sexist attitudes”.

Most comments around best practices highlighted the need for support, mentoring and encouragement to help women build and develop their careers.

3.3.5. Work/Life Balance

Achieving a healthy and sustainable work/life balance can help negate stress, promote mental health and ultimately lead to a happier, more effective workforce (CIPD 2012). The GBWS questions tended to focus on issues of balancing family with work. Of the women who responded around half either planned to have children (30%), already had children (19%) or were currently pregnant or in the process of adopting (1%). Of those planning to have children or currently pregnant or adopting, around 37% planned to return to work in the game industries. Those that did not cited concerns regarding job security, accommodating childcare and the availability of flexible and/or part-time working to accommodate women with children. Of those with children who had taken maternity/adoption leave, the majority only received standard statutory

pay entitlements. The survey of employers supported this, revealing that only 22% offered an enhanced maternity pay package.

When asked if they were currently working part-time, or considering it for the future to accommodate childcare, respondents cited their preferred working arrangements as a shorter working week (27%) or shorter working days (26%). Only nine percent of women who responded worked part-time, seven percent had worked part-time previously but around 35% had considered working part-time. Encouragingly over 80% of those who requested part-time hours had their requests accepted. Declined requests tended to be due to inflexible project deadlines and insufficient budget to employ extra staff to share workload, or little or no explanation provided by the employer.

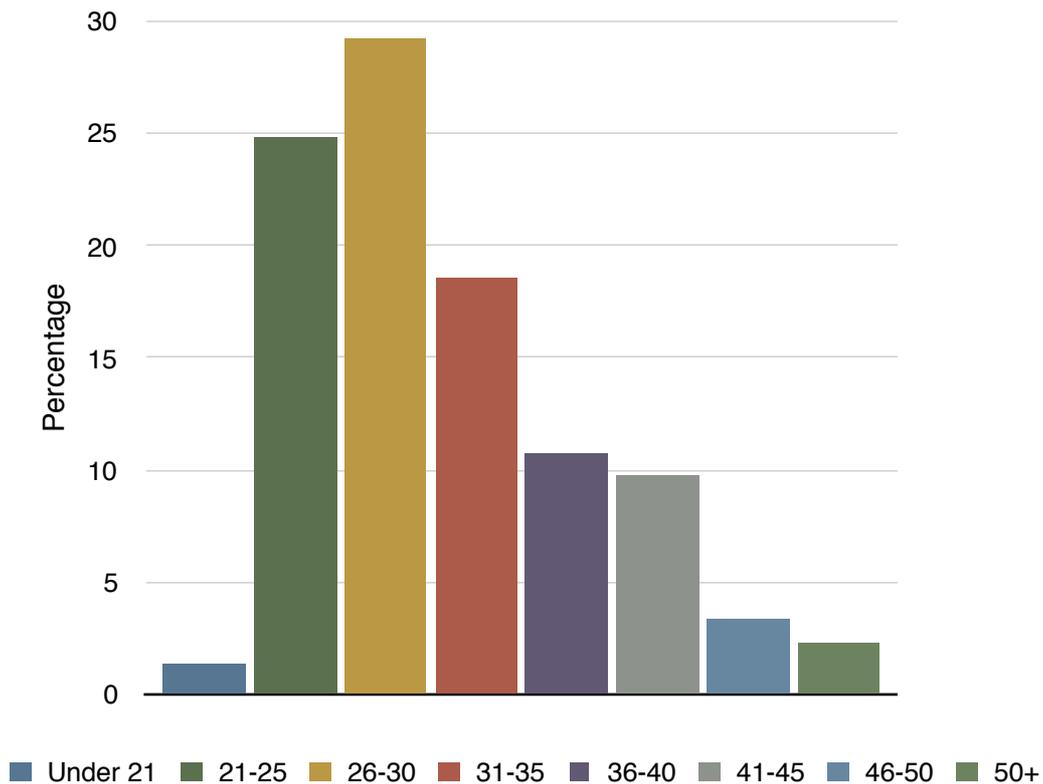
3.3.6. Age, Seniority and the Absence of Women from the Boardroom

The majority of women working in the UK game industries appear to be younger than 35 years old, constituting 74% of all respondents to the survey. Women between 36 and 45 made up approximately another 20% before a dramatic decline between 46-50 (3%). Only two percent of respondents were aged over 50. Research suggests that the average age of a FTSE 150 board member is between 50 and 60 years old (Spencer Stuart 2015). As only seven women who responded to the survey fall within that age range, it seems likely there are few women in such senior positions working in the game industries. Certainly there might be mitigating factors, such as the relative youth of the sector and many who work within it. However, the NextGen employers survey revealed that nearly 44% of responding game companies had no female board members, and a further 35% only had between one and three. Vertical segregation is prevalent throughout the wider UK economy, with women generally under-represented on executive committees or in the executive pipeline, therefore it would be surprising if the game industries were an exception.

3.3.7. Most Women Don't Make Games

The survey also revealed a considerable amount of horizontal segregation within UK game development. As stated previously, the survey placed respondents in six categories according to the type of work they do. Of the total respondents (307), 76% stated they worked within game development but further investigation into stated job roles revealed that 62% appeared not to be directly involved in the act of making

Figure 3. Age of Respondents



games e.g. as artists, animators, designers and programmers. The survey data does not provide granular detail regarding job roles and duties, therefore this delineation can only be performed by interpretation of job title. However, of the 38% of women who do make games, artists and animators constituted the majority, followed by designers then programmers (including software and network engineers). This suggests that the majority of women working in the game industries do not actually make games, performing support roles instead. And even among women who do make games, most work in roles that might be viewed as more ‘acceptable’ for their gender – e.g. Art and Design – rather than programming and technology roles.

3.4. Emergent Themes From The Gender Balance Workplace Survey for Employers

As stated, NextGen also designed a survey to garner the views of employers on gender balance in the workplace. These views had been mostly ignored in previous research and it was felt that by listening to employer perspectives – hopefully revealing some of the challenges organizations face in achieving a gender balanced workforce – this would promote a more rounded understanding of the issue and help devise more practical, consensus-based solutions. The NextGen 2014 Gender Balance in the

Workplace Survey for Employers (GBWSE) adopted the same approach and methodology as outlined in section 3.2, contained over seventy questions – many echoing those in the employee survey – and received a response from 24 companies across the UK. Most of these companies (67%) were in the small and medium size brackets, over 90% were involved in game development activity.

A key finding of the GBWSE was the existence of a substantial consensus among employers regarding women's positive impact and value to the game industries. The vast majority of employers (86%) thought the industry would benefit from – and should strive for – a gender balanced workforce. A further 74% stated they believed women had a positive influence on their workplace, company profitability and the quality of products and services produced. This was expanded on by further comments:

- “It is beneficial to have a balance of opinion and ideas”
- “A more diverse team is far better suited to creating products for a diverse audience. Overlooking female staff is as foolish as overlooking 50% of your game's players, and no successful company can afford to do that”
- “We try to hire across the board. No quotas or policies but naturally attract people interested in our games resulting in a diverse workforce. Female applicants are unfortunately fewer”
- “In a creative industry, we need creative thinking and innovation. A mixed workforce helps...us appeal to broader audiences and create new experiences”
- “Half the audience playing games are women. People making games have to represent the demographic of the players”.

Clearly, most employers value the contribution women can make to their business, with many recognising that the game playing audience is increasingly diverse and consequently requires diverse products and services to satisfy its needs. However, as the survey progressed, themes emerged regarding barriers companies face in attaining a gender balanced workforce.

3.4.1. Recruitment Pipeline and Education

One barrier to gender balance employers continually referred to concerned the amount of women who apply for jobs in the game industries. Employers were asked

what the major challenges to recruiting and maintaining a gender balanced workforce were. Consistently responses noted that a lack of women applied to advertised jobs, with one employer stating that out of 1600 applications for 12 vacancies, only five came from women. Some employers attributed this to the industry not appearing attractive to women – due to perceptions of it being male dominated and/or the masculine nature of certain games produced – but many suggested education has a part to play in outputting more women to the recruitment pipeline. Comments included:

- “The main challenge is in attracting women to the industry without positive discrimination practices, the low percentage of female applicants we are getting will make us very slow in getting a real balance (50/50)”
- “From our experience, one issue is a dramatic lack of female applicants for coding positions; we've seen response rates of over 100 male to one female!”
- “It requires more females looking to get into the industry for a start, but it also requires good management to keep them in the business”
- “Getting woman to even apply for the jobs in the first place. We are simply not attracting girls from the start. We need to start at primary schools”
- “Go into schools - nobody thinks it's an option/serious career, therefore only a few consider it and they still tend to be young boys”
- “Schools do a bad job at pointing people at life choices. Junior schools are focused on getting people to universities and not what their career should be. This is based on games not being seen as serious and it is holding back the pipeline for the games industry”
- “Getting to the root of the problem and changing the perception set very early that developing games is more for boys than girls”
- “Confidence can be made or broken in secondary schools. Bullying etc e.g. a girl programming will be targeted for being different”
- “Scrapping Computer Science in school under the last government was very damaging, and policies to encourage girls to study computer science don't appear to be working”

- “We need to rely on abilities of education bodies to bring more females to the different courses useful in video game development”
- “Need more graduate recruits coming in with more equal gender balance”.

These comments evidence that employers often struggle to attract women to job vacancies, and that many attribute this to shortcomings in the educational system. Interestingly, the school system is most consistently singled out for criticism, with many employers worried that girls are not encouraged in technology subjects, nor made aware that careers in game development exist or represent a valid career path to pursue. Universities attract less criticism than has historically been the case, although some employers still think universities should do more to attract girls to technology subjects. This change is possibly due to improved relations between the UK game industries and Higher Education in recent years, enabled through increased communication and collaboration. Encouragingly, 56% of employers said they now engaged in outreach activities with education providers, although most interaction was with universities. However, it is clear from the responses that encouraging girls towards game development and/or technology subjects early in their educational journey is seen by employers as key to achieving a gender balanced workforce in the future.

3.4.2. Training

The majority of employers canvassed were generally positive when it came to supporting training initiatives for their female workers. As a result of early feedback from the GBWS, NextGen already planned to deliver initial workshops focussed on developing communication and influencing skills, and conflict resolution/building assertiveness skills. When asked, 79% of employers said they would be supportive of women workers attending these workshops, although 44% said this support would be dependent on cost. Notably, a common theme that emerged from supporting comments was that employers thought this training should be available for both women and men.

However, when asked what other training employers thought female workers might benefit from – in addition to that identified for the initial NextGen workshops – 45% replied ‘none’ and 35% thought this was not applicable to them. Of the 20% who thought more training would be useful, a common area for development was confidence building, encouraging women to speak up and to promote “the importance of

belief in yourself". This suggests that many women working in games lack confidence in the workplace; what is not explored or made explicit is whether this is the result of individual personalities or the culture and environment in which they work. As previously stated, the GBWS revealed that many women working in games often feel 'invisible' or unable to speak out; therefore both surveys seem to agree that this represents a significant barrier to be overcome for the mutual benefit of all in the game industries.

Employers were also asked if they would support their female workers in attending a mentoring scheme to advance skills. This kind of initiative has occurred previously in the Film and Television industries and been well received. The scheme was envisaged to run for up to 26 weeks with mentoring occurring every fortnight. Nearly 60% of employers said they would support women in attending, although cost was again an influencing factor. Nearly 10% of the employers supporting attendance said they would only do so if there was zero cost to the business, another 14% said the cost would need to be less than £500, and a further five percent stated they would contribute no more than £1200 towards attendance.

Cost emerges as the principle barrier to training and mentoring throughout the GBWSE. Although a minority of employers canvassed seemed to see little need for relevant training, the majority of respondents were supportive as long as it did not cost them too much. This is understandable; game development is a highly competitive and often complex undertaking, mostly conducted in the UK by micro and small sized businesses (Mateos-Garcia et al. 2014). Certainly, larger companies with more financial capacity have little excuse for not investing in their workers but the small and micro businesses that constitute the majority of the UK game industries often operate on small margins in an uncertain environment with limited financial capacity. The GBWSE evidences that the vast majority of these businesses acknowledge the value of training and mentoring but are concerned about whether they can afford it. When asked if they would support broader training for themselves and their employees over 95% responded in the affirmative – but only if it was part-funded.

3.4.3. Bullying, Harassment and Social Media

Bullying and harassment represents an area of concern not only for female workers who might be victim to it but for their employers as well. The vast majority of respondents to the GBWSE thought the impact of bullying and harassment was highly nega-

tive and detrimental to their business. However, as previously stated, a substantial majority (78%) said they were either unaware or unsure of this behaviour occurring either in their workplace, at a conference, trade show or online; a response at odds with those of female workers, many of whom had experienced bullying or harassment in all these contexts. Interestingly, the majority of employers (69%) also either had no social media policy or, if they did, had no specific guidelines regarding online bullying, harassment and how to deal with them. Both these points represent an area for concern for both female workers and their employers. The disconnect between the amount of bullying and harassment experienced by female workers and that either detected by – or reported to – employers represents an area for possible tension, conflict or demotivation that could destabilise the workplace and affect a company's ability to retain high quality female workers. The absence of social media policies and guidelines regarding bullying and harassment may also send the wrong signal to female employees, implying that employers do not take this online misbehaviour seriously.

4. Actions

After results of GBWS and GBWSE were analysed and reviewed by the research team, they were formally presented to the Gender Balance Research and Development Programme Advisory Group in a meeting held at the The Association for United Kingdom Interactive Entertainment (Ukie) in January 2015. This advisory group was made up of a wide range of professionals from the game industries, game educational providers and professional bodies that support the game sector in general. Emergent themes were discussed by the group, and a series of initial actions were agreed to inform the future direction of the Gender Balance Research and Development Programme.

4.1. Advisory Group Meeting

The group agreed it was important to consider and compare the UK game industries workforce to other industries by asking the following questions: are the challenges the same? What have other industries done to make improvements? And is there anything the game industries can learn from them? To answer these questions it was agreed that more research would ultimately be required. It was also agreed that it would be beneficial to continue the work started in the initial surveys by repeating the process regularly to gain the most up to date information on sector trends and patterns, and to monitor whether initiatives toward achieving gender balance in the sector were working. The group also decided it would be valuable to learn from other nations with more progressive policies towards gender equality; by studying their approach it might be possible to identify 'best practice' for achieving increased equality for both men and women, and better understand how to improve work/life balance for all. It was also agreed that the GBWSE provided tangible evidence that employers fundamentally wanted to achieve a gender balanced workforce, if help was available to surmount the challenges to doing so. The question was, what constitutes appropriate help? Certainly the issue of cost arises throughout the GBWSE as a barrier to training and mentoring but are there other barriers such as time, availability of expertise or information? The group decided that further insights were needed to identify how companies can be supported to engage with gender balance and other equality initiatives.

Work/life balance was further discussed, particularly the challenges women face by starting a family. The issue of childcare and balancing a career was seen as highly

problematic for both the employee and the employer. This is also an issue for both men and women, as decisions regarding who does or pays for childcare affect both genders. Part-time work might offer a solution but it can limit earning capacity for employees and be costly for employers to implement, particularly for micro or small businesses. Remote working might represent a potential solution; it can work well if trust and clear target driven processes are in place but there is often resistance to this mode of work due to employers wanting to maintain on site protocols.

Education was seen as a major factor in driving positive change within the sector. As previously mentioned, the GBWSE identified a low ratio of female applicants for jobs and it emerged that many employers identified an urgent need to engage with schools to encourage girls toward careers in the game industries. It was suggested by an advisory group member that below the age of 11 interest in game related subjects is evenly divided between genders, however, beyond this the figure declines in favour of boys. If this is the case, it begs the question of why this occurs? Is it related to cognitive development or to the teaching environment? Again it was agreed more research was needed to fully understand this issue. The advisory group welcomed that the Science, Technology, Engineering, Maths (STEM) agenda had now been superseded by STEAM (Science, Technology, Engineering, Art, Maths) i.e. there has been a recognition that Art and Design subjects are equally important as Science and Technology within game education and the commercial sphere. As a result it was thought important to emphasise the interdisciplinary nature of subjects teachers and lecturers must understand in order to design and deliver relevant curricula. While there are successful initiatives such as Ukie's *Digital Playhouse* and a growing number of after-school clubs, more support needs to be made available to educators across the nation and at all educational levels.

It was further agreed that gathering more data on harassment and bullying would be crucial to gaining a deeper understanding of issues faced by women in games. Some group members suggested that Human Resource (HR) departments were often perceived as part of management, or as serving the interests of the employer over those of employees; consequently workers might think HR departments unapproachable in harassment and bullying situations. Questions were posed regarding the real position of HR departments within companies, how partisan they might be, and whether HR was always the right place to raise issues of harassment and bullying?

The advisory group acknowledged that a consensus appeared to exist – among employees and employers – that it was beneficial to have a gender balanced workforce within the sector. Therefore it is important to gather further, more specific data on gender balance in all areas of the game industries and all disciplines. What do women actually do within the sector? Are there areas where women are particularly under-represented? From the data it is evident that horizontal segregation exists within the UK game industries, and that a relatively low proportion of women are involved in making games – why might this be the case? Is it a product of a dysfunctional educational pipeline or of an industry perceived as predominantly male by women? Furthermore, issues regarding age, seniority and the absence of women from the board room were seen as in need of addressing.

As a result of this discussion the group agreed that gender balanced development teams and workplaces might be encouraged through a more gender balanced approach to the language and visuals used in job advertisements. At policy level linking diversity points to tax relief was proposed as a possible incentive to enable companies to engage fully with gender equality. The group also suggested that mentoring programmes in particular needed rethinking and might benefit from gender balanced programmes where men mentor women and *vice versa*. Finally, a set of initial workshops were proposed to address some of the issues that had emerged from the data. These would include training for women on:

- Improving communication and influencing skills
- Personal branding
- Leadership and management development skills
- Entrepreneurial skills.

A range of speakers and workshop contributors with appropriate knowledge and delivery skills were proposed to deliver a series of workshops in three locations across the UK – Manchester, Bristol, London – in February 2015. Feedback from these initial workshops would then go on to inform the NextGen *Aspiring Women* mentoring programme that was planned to launch in October 2015.

4.2. Skills Development Workshops

In response to questions in the GBWS regarding perceived career challenges, barriers and personal skills development, respondents identified three main areas they felt would support them in achieving career goals: workshops with practical/interactive aspects (45%), a mentoring programme (43%) and one-to-one coaching (41%). Based on this, a series of four workshops were designed and developed to run throughout February 2015; three *Skills Empowerment For Women Working in The Games Industry* workshops aimed at women working in games and another separate workshop for employers. The three employee workshops were: *Finding Your Voice and Understanding Your Personal Branding* by Jon Torrens and Liz Rivers; *Leadership, Management & The Psychology of Different Personality Types* by Katherine Foy; and *Cultivating your Capacity for Creative Leadership* by Jessica Farrell.

4.3. Employer Workshops

The employer workshop, *How to Recruit and Retain A Gender Balance Workforce*, was an all-day event held at the Ukie offices in London on 19 February 2015. This was presented as a Continuing Professional Development (CPD) event and attended by a range of employers from the game industries. The content explored the commercial and cultural advantages of a gender balanced workforce in sessions entitled: *How to Challenge Our Unconscious Bias* by Rosamond Quincey; *Tackling the Root Cause and Supporting the Future Talent Pipeline* by Marie-Claire Isaaman; *Getting the Best People* by Geraldine Cross.

4.4. Mentoring Programme

It emerged in feedback from the February workshops that there was demand for additional specialised mentoring for women working in the games, animation and VFX sectors. In response the NextGen *Aspiring Women* mentoring programme was launched as a professional development programme to run between November 2015 and May 2016. This programme is designed to support self-motivated, mid-career level professionals who have specific career or personal development goals. On joining the programme participants are matched with experienced industry figures who act as their mentor throughout, helping them address career challenges such as progressing to the next level, up-skilling in a new role, dealing with new responsibilities after promotion, moving into a new discipline, setting up as a freelancer or running your own pro-

duction company, returning to work after maternity leave or redundancy and achieving better work/life balance. As well as one-to-one guidance given by mentors, participants in the programme also benefit from seminars, workshops, masterclasses and networking events. These are designed to enhance skills, boost confidence and provide ongoing support in a peer-to-peer environment. NextGen's *Aspiring Women* participants agree to be committed, proactive and willing to share their own knowledge and experiences with the group.

As the GBWSE identified, employers are mostly supportive of training initiatives but cost is often a prohibitor to training provision. To overcome this, the NextGen mentoring programme was part-funded. The cost of the programme is £1500 but 80% (£1200) is subsidised by funding from the *Creative Skillset Diversity Scheme*; only the remaining £300 has to be covered by the individual or their employer. This financial support for companies and participants to the programme has been invaluable in removing barriers to participation.

5. Analysis

5.1. Strengths

The initial mentoring workshops and the NextGen *Aspiring Women* mentoring programme have been well received. Feedback forms were distributed at each initial workshop event and used to gather information regarding the value of the workshops and diversity data. On a scale of one to five – with one being excellent and five being poor – the majority of workshops scored one or two, with no workshop rating worse than three. Comments gathered in the feedback were analysed then used to inform the content delivered in the *Aspiring Women* programme and further emerging initiatives and research.

Alongside professional development – including presentation skills, CV writing, professional profile and self promotion – participants in the *Aspiring Women* programme have also learned how to interpret ‘feelings’ and ‘hunches’ more analytically through being introduced to a wide range of theories relating to the dynamics of the workplace. Psychological theories such as ‘transactional analysis’ – a way of considering how we relate and communicate to others and negotiate contractual agreements – and strategies to deal with ‘unconscious bias’ in the workplace have also been explored. In line with the data from both the GBWS and GBWSE, many women on the programme expressed a lack confidence and fear they were not good enough for their roles. During a workshop they were introduced to ‘imposter syndrome’, a term used by psychologists Clance and Imes (1978) that refers to high-achieving individuals having an inability to internalise their accomplishments and having a persistent fear of being exposed as a ‘fraud’. Impostor syndrome is particularly common among high-achieving women, and some participants strongly related to this state of mind but through the workshop learned how to counteract it. By gaining core knowledge of the underlying dynamics of the workplace environment participants in the programme are able to contextualise their own interaction within it and form clear personal strategies for career development and focus.

Geraldine Cross, NextGen *Aspiring Women* Programme Producer, has been collecting feedback from the group to date. This has been overwhelmingly positive. In January 2016 – half way through the six month programme – the group were asked what they

felt they had achieved so far. They collectively expressed a sense of greater self-confidence (including not beginning conversations with an apology) and feelings of empowerment. One participant stated she felt empowered and more assertive, able to engage in conversations she had previously avoided regarding pay and training opportunities in the business. All thought being part of the programme was inspiring, motivating and energising.

5.2. Further Areas for Development

During the writing of this report further themes have emerged from the original data provided by the two surveys and gained in the feedback from both initial workshops and the Next Gen *Aspiring Women* mentoring programme. These themes highlight areas believed to be important for further research or action in order to help achieve a more gender balanced workplace in the UK game industries of the future.

5.2.1 Equality, Fairness and Work/LifeBalance

The original employee survey provided a limited snapshot of issues regarding work/life balance. It did not seek to define what this was, ask women how they thought work and life might be successfully balanced, or what might support women (and their families) to balance a successful career with a rewarding personal life. According to research that surveyed 25,000 UK women regarding barriers to career progression, a major finding was that problems are often related to who will care for children, and that usually women are left holding the baby (PWC 2014). When – or indeed, if – a women returns to work after childbirth, the survey discovered they are more likely to attempt to fit their careers around their children – by working part-time or flexibly – than men.

The Nordic countries (including Denmark, Finland, Iceland, Norway, and Sweden) consistently lead the world in gender equality and work/life balance for both men and women (World Economic Forum 2015). A key contributor is that these countries recognise that both men and women should be able to balance a career and family life. For example, childcare and household tasks are shared more evenly between parents, enabling a fairer distribution of labour at home and improved work/life balance for both genders. This is made explicit in the overarching visions contained in the *Nordic Frameworks for Cooperation on Gender Equality* (Norden 2015):

- women and men have equal access and opportunities to influence and participate in decision-making processes, and in the design of the Nordic welfare societies
- women and men in the Nordic countries have equal access to and opportunities to participate in the media
- the sexualisation of public space is counteracted
- the backlash against gender equality is countered, as is gender-based hate speech
- women, men, girls and boys in the Nordic Region have equal access to education, learning and research, in order to develop their personal ambitions, interests and talents
- women and men in the Nordic Region have equal opportunities to participate in the labour market and to be financially independent
- women and men in the Nordic Region have equal opportunities to reconcile family life and work; there will be a zero-tolerance approach to gender-related violence
- knowledge of the health of women, men, boys and girls is improved, and that women, men, boys and girls have equal access to health care, social services and opportunities for good health and well-being.

These policy statements are clearly organized around principles of equality for all genders, in particular the equality of opportunity. Women, men, boys and girls are always described together, and the use of language in the document both implicitly and explicitly foregrounds equality and inclusively. Conversely, in the UK these issues are often discussed in terms of diversity – which by its very nature foregrounds issues of difference – rather than equality. It is possible that framing the debate in terms of equality for all may have helped create a sense of shared purpose, minimised adversarial impulses and ultimately contributed to the success of Nordic nations in achieving higher levels of gender equality and work/life balance. There is no doubt much to be learned from these nations but additionally we need to learn more about ourselves. A more detailed exploration of how women working in the UK game industries – and their families – manage and organize their time, childcare, family-related expenses

and general work/life balance is required to further understand the UK context, and support development of future policies.

5.2.2 Education

Nearly 51% of the UK population is female, and as mentioned in responses to the GBWSE, girls and women constitute a significant audience for the output of the UK game industries. However, this is clearly not represented in the workforce making games. Therefore a question must be: how do we bridge the gap between consumer and maker?

Employers have consistently identified a lack of women applying for jobs in the games sector, suggesting something is deterring women from progressing through the educational pipeline in numbers sufficient to correct the current gender imbalance. Education – from primary school through to Higher Education – has consistently been highlighted in the research as an area for substantial improvement. And it seems likely that change needs to occur – particularly in schools – in order to fully engage girls and young women in making games or enjoying technology subjects.

The educational sector can be bureaucratic, with processes and protocols within educational organizations often a barrier to rapidly developing and delivering the core knowledge and specific skills required by fast moving sectors such as games. Many educational organizations need to become more agile and adaptable to changing contexts in order to address some of the issues outlined. For example, some employers surveyed suggested that schools had yet to take games seriously, either as a cultural form or as a valid career path for their pupils, male or female. In an era where digital games are exhibited in art galleries and museums, and where UK game industries contribute more than £1 billion to the nation's economy (TIGA 2015), this is no longer tenable.

To overcome the kind of disconnect that appears to persist between schools and the game industries, many Higher Education game courses and some Further Education courses – e.g. the Aim Awards/NextGen qualifications in Games, Animation and Vfx – are today designed in collaboration with industry. Indeed, most universities now have an 'Industry Liaison Board' that contributes to the design and development of curricula. However, these groups can perpetuate the gender imbalance in both sectors. Of-

ten there are no female industry members, and equally there may be no female course staff. This makes it unlikely that gender imbalance in cohort recruitment, or gender bias in the course curriculum, is either discussed or addressed. Consequently, little or no action is taken in these areas, perpetuating the imbalanced status quo within games-related Further and/or Higher Education, and ultimately the commercial sector. Colleges and universities can only recruit a more gender balanced cohort of students – and more female graduates consequently progress into industry - if both sectors actively strategise and collaborate in this area. Furthermore, if girls are not choosing or progressing through relevant subjects in school, then both Further and Higher Education will suffer from a lack of appropriately qualified applicants.

There has been renewed focus on apprenticeships recently, with the UK Government introducing Apprenticeship Levies in an attempt to achieve its target of over three million new apprenticeships during the current parliament. These have been cautiously welcomed by the UK games sector and its trade bodies, for example Ukie have argued that levies must be flexible to the needs of Creative Industries and not become a replacement for other public investment in skills development (Blackwell 2015). However, there are other areas for concern regarding apprenticeships. Research conducted for the Young Women's Trust suggests that young women are missing out at every stage of apprenticeships, including being underrepresented, achieving poorer outcomes and being paid less. The charity found that for every female apprentice working within engineering – like game development, a traditionally male dominated sector – there are 25 males. In addition, female apprentices received only £4.82 an hour compared with £5.85 for their male counterparts, making them on average £2,000 a year worse off. They also receive less training than men, and are twice as likely to be out of work at the end of their apprenticeship (Young Women's Trust 2015). If these figures are replicated in the game industries they would represent a severe impediment to achieving a gender balanced workforce, consequently the sector needs to monitor this process and take any necessary action to counteract such bias within apprenticeship programmes.

The focus of the vast majority of extant research into gender balance in the games sector has so far been on industry. However, the industry does not exist in a vacuum. While there is still considerable room for improvement within the commercial sector regarding gender balance and other related issues, there is clearly now a need for fur-

ther research into gender balance throughout the educational pipeline and within game related apprenticeships.

5.2.3. Dignity at Work, Harassment and Bullying

Gaining better understanding of what constitutes bullying and harassment is crucial in developing effective counter-measures. The ferociousness of the Gamergate attacks, primarily conducted through social media, brought unwelcome attention to the games sector and highlighted some of the negative attitudes present within the extremes of both game industries and games culture. Respondents to the GBWS consistently identified significant harassment and bullying in the workplace and via social media, usually by male employers and/or co-workers. However, there is currently no single or uniform definition of what constitutes bullying or harassment at work either in the UK or EU. This makes such behaviours both harder to recognise and harder to challenge.

Researchers use definitions with some common features; bullying at work usually means harassing, offending, socially excluding or negatively affecting someone's work tasks through an escalating process where the person confronted ends up in an inferior position and becomes the target of systematic negative social acts (Einarsen *et al.* 2011). In Germany, industrial psychologist Dr. Heinz Leymann has devised a comprehensive taxonomy of what constitutes bullying or harassment activities in the workplace. Organized into five general categories – Attacks on Communicative Ability, Attacks on Social Relationships, Attacks on Social Image, Attacks on Quality of Workplace Situation, Attacks on Health – these provide an authoritative point of reference that enable both employers and employees to recognise and effectively deal with unpleasant and damaging behaviour.

Cyberbullying is described as the act of harassing or harming someone using information technology and social media. Often common among teenagers, it came to the fore within the games sector during Gamergate. Some nations – e.g. Sweden and France – have legislation for cyberbullying but as yet the United Kingdom does not. With events such as Gamergate, the unpleasant effects of cyberbullying are increasingly visible. EU nations, including the UK, are working on new laws to combat this online behaviour but this alone is not enough. There needs to be a better understanding of internet practices, social media interaction and safety processes to enable individ-

uals to protect themselves. In the workplace, companies can help by providing training and clear guidance and policies regarding online bullying. As a technology industry the games sector should be proactive in introducing such guidance and advice to its staff teams through internal channels and CPD. Equally, educational providers at all levels should integrate digital citizenship into their curriculums. The internet is not responsible for bullying and harassment but it can make such activities far easier to carry out while also providing a level of anonymity to perpetrators. This needs to be fully understood so that respectful communication can be encouraged online, at work and at leisure.

5.2.3. Age, Seniority and the Absence of Women from the Boardroom

According to Wittenberg-Cox (2010) there is no a glass ceiling. Instead she suggests the problem is more sobering and endemic, that in almost every company the number of women relative to men at management level drops. Wittenberg-Cox further argues that the question for the twenty-first century is not what is wrong with women, but what is wrong with companies that fail to attract, retain and promote the majority of today's talent pool or connect with the majority of the market?

Equality in the workplace – and how to develop policy to achieve it – is currently high on the global political agenda. The EU Commission (2012) published a consultation report placing emphasis on addressing and countering 'the glass ceiling effect' that results in only one in ten women on management boards in publicly listed EU companies, and to raise the number of women in economic decision making positions. Further, the EU Commission now views gender equality as a genuine social and economic responsibility. A survey conducted by the European Commission (2015) among individuals and organizations resulted in six prioritised themes to be tackled:

- Women being paid less than men for the same work or work of equal value
- The small number of women in positions of power in politics and businesses
- Facing prejudice because of preconceived ideas about the image and role of women and men
- Gender-based violence
- Widespread violation of women's rights worldwide

- The unequal sharing of caring and household tasks between men and women.

These themes prompted initiatives within the UK Government, and a new steering group for women on boards was proposed by Lord Davies in October 2015. This states that more action needs to be taken to increase women progressing through to the executive pipeline in all sectors. Gender segregation within sectors can play an important factor in perpetuating inequality. If women do not get into senior positions this can lead to issues of gender inequality and imbalance being ignored. These broad policy consultations are extremely important as a starting point to national policy making and to addressing these issues sector by sector. However, sectors themselves should be more proactive in addressing gender segregation, inequality and imbalance rather than waiting for legislation to be handed down.

5.2.4. Most Women Don't Make Games

Analysis of job descriptors and comments within the GBWS strongly indicates that both vertical and horizontal segregation exist within the UK game industries. Worryingly this data suggests that the majority of women in the sector don't make games. The levels discovered in our research are broadly inline with previous research as stated. Further supporting evidence also comes from a global sample conducted at GDC 2014 by *Gamasutra*. The *Gamasutra Salary Survey* (2014) (see Figure 4) collected data on salaries within the sector but also provided information regarding the segregation of job roles. The survey – which received 4000 responses – found that all roles listed were male dominated, with the highest female representation amongst producers at 22%. Nearly 90% of game designers were male, over 90% of audio, art and animation roles were taken by men, and just five percent of programmers and engineers were female.

Encouragingly the GBWS revealed a slightly higher percentage of women in making roles than the *Gamasutra* study. This could be an indication of progress toward more gender balance in the UK game industries. However, it could equally be a statistical blip related to the nature or size of the sample group. Whatever the reason, it is still safe to conclude that there are significantly lower percentages of women making games than men. This means women have less say in game conceptualisation and content. Sheri Graner Ray's book, *Gender-Inclusive Game Design* (2005), presented ground-breaking material in an attempt to understand the evolution of games, the de-

velopment of the market and the necessity to expand the market by fully engaging with an audience of both male and female players. Over a decade old, the core concerns of the book remain depressingly relevant today. To fully engage with the whole market, game industries need to make games that reflect the market itself, with women equally represented. The easiest way to do this is to have more women making games and helping to decide the nature of those games. Progress may be occurring but it is slow, as a result of reasons identified in this report. More must be done.

Figure 4. Percentage of Men and Women by Job Description. Source: Gamasutra Survey 2014

	Male	Female
Producers	78%	22%
All Business & Management	79%	21%
Game Designer	87%	13%
QA Testing	88%	12%
Audio	91%	9%
Artists & Animators	91%	9%
Programmers & Engineers	95%	5%

6. Recommendations

In conclusion, this report makes a set of recommendations to encourage and promote a gender balanced workforce within the game industries. These are based on the five categories previously identified as requiring further action:

Equality, Fairness and Work/Life Balance

- Increase focus on gender equality, fairness and work/life within the workplace and wider culture and society
- Encourage, reward and recognise organizations that equally support and reward male and female talent
- Strengthen work/life balance by ensuring both men and women can achieve a rewarding work and family life
- Support training and materials to engage organizations and individuals with issues of gender equality, fairness and work/life balance
- Learn from other countries that lead in this area to identify new knowledge, positive policies and best practices that can be adapted and introduced to the UK
- Collaborate with other creative industry sectors to form larger strategic bodies to share information, research and orchestrate change more effectively
- Connect to organizations and associations working in gender-related fields.

Education

- Raise awareness and actively promote the game industries – and the career paths available within them – across all levels of education
- Support schools in particular to understand and develop knowledge about the game industries that can be effectively communicated to pupils and parents

- Research and review recruitment policies and practices in FE and HE sectors to gain a clear understanding of why courses recruit so few females
- Support educational providers at all levels to attract and maintain a gender balanced staff and student cohort using best practice exemplars. Ensure a variety of perspectives are included in course or subject content
- Ensure the educational sector is proactive in recruiting talented women to sit on liaison groups and participate in curriculum and programme development related to the game industries
- Ensure apprenticeships programmes in the game industries are gender balanced, non-discriminatory and encouraging to female applicants.

Dignity at Work, Bullying and Harassment

- Game industries should be proactive in raising awareness of gender-related bullying and harassment, and have effective policies in place to combat them
- As new UK and EU legislation on bullying, harassment and cyberbullying are enacted to protect workers, HR policies should be updated and the changes clearly communicated to the workforce
- Digital Citizenship ideals should be introduced and included in both commercial organizations and throughout the educational pipeline
- Further research to develop CPD and educational materials on Digital Citizenship, Netiquette and use of Social Media should occur. Findings would promote a safer environment within game communities, education and the workplace.

Age, Seniority and Absence of Women in the Board Room

- Ensure achieving gender balance in senior roles becomes a priority. This will help transform the image of the UK game industries as male dominated environments and provide visible role models for girls and younger women

- Engage men in senior roles within the sector to mentor and promote women into decision-making positions
- Conduct further research into vertical segregation within the game industries and related education.

Most Women Don't Make Games

- Conduct further research of horizontal segregation in the game industries and the educational pipeline that feeds them. Discover the true nature of the roles women perform in the sector
- Discover what impact women not making games has on products, the perceptions of the sector, education and recruitment into the industry
- Help women make games by developing strategies to counter horizontal segregation in the game industries.

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