#### CITIZENSHIP AT WORK

### **DIVERSITY AMONG VIDEOGAME DEVELOPERS, 2004-2015**

## COMPARED RESULTS OF IGDA INTERNATIONAL SURVEYS 2004, 2005, 2009, 2014 & 2015 AND 2013-14 CANADIAN INTERVIEWS

# SUMMARY REPORT AUGUST 2017

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#### Introduction

The international video game industry's revenue was estimated at 91.5 billion US dollars in 2015 (Sinclair, 2015) and it is the source of a growing number of direct and indirect jobs around the world. Games are quickly surpassing other entertainment media in both revenue and user rates. The Entertainment Software Association (ESA) reported that 155 million Americans play video games, and that 42% of Americans play regularly (ESA Essential Facts, 2015). The Canadian arm of the ESA reported that 19 million Canadians play video games (54% of the total population) and the industry contributed 3 billion dollars to Canada's GDP in 2015, up 31% since 2013 (ESAC Essential Facts, 2015).

However, games and the industry that makes them continue to face significant challenges associated with **diversity** in terms of the content of the games made, the people who play the games, and the demographic makeup of the game industry labour force. These challenges are particularly salient for the representation of females and the industry is the object of criticism regarding the sexism present in games (Lynch, Tompkins, van Driel, & Fritz, 2016), among gamers (Fox & Yen Tang, 2014), and within game development workplaces (Jenson & De Castell, 2013).

According to the 2015 International Game Developers Association (IGDA) Developer Satisfaction Survey (DSS), over half of the respondents (52%) felt that there was a negative societal perception of the games industry. When asked to specifically attribute sources for that negative perception, 57% of respondents said sexism among gamers (the top response), 52% said sexism in the games, and 40% said sexism in the workforce. Racism among gamers was selected by 36% of respondents while racism in the games and racism in the workforce were selected slightly less frequently (25% and 19%, respectively). Lack of overall diversity was selected as a factor that affects the negative perception of the game industry by 35% of respondents (Weststar & Andrei-Gedja, 2016).

The topics of sexism and the experiences of females in the game industry have received considerable attention in recent years due to a number of high profile events.

The **first** occurred in 2012 when feminist media critic Anita Sarkeesian announced a Kickstarter campaign to fund a video series that would critically examine the tropes used in the depiction of women in videogames (*Tropes vs. Women in Video Games*). Immediately Sarkeesian became the target of a vicious and prolonged misogynistic campaign of online abuse which continues to this day.

A **second** event occurred in late 2012. The Twitter hashtag <u>#1ReasonWhy</u> went viral as mostly female game developers replied to the tweet, "Why are there so few lady

game creators?" with a deluge of accounts of sexist and inequitable treatment. The #1ReasonToBe hashtag was sparked in response to #1ReasonWhy and featured prominent female game developers celebrating the positive reasons why they work in games. Since 2013, #1ReasonToBe has become a standing session at the annual Game Developers Conference (i.e., 2013 GDC, 2017 GDC).

A **third** event is summarized with the Twitter hashtag <u>#Gamergate</u>. Following a negative portrayal in a blog post, female game developer Zoë Quinn became the target of online abuse and harassment and was accused of attempting to garner favourable reviews for her video game. Her accusers coalesced under the moniker <u>#Gamergate</u> and professed a desire for higher journalistic standards and ethics in the videogame media. However, <u>#Gamergate</u> was quickly associated with the topic of sexism and misogyny in the game community due to the nature of abuse and harassment directed at Quinn and other prominent female game developers, journalists and media critics, and other women in the industry. Vitriolic hate speech and threats became a defining feature of <u>#Gamergate</u> and the locus from which a subsequent debate about gender equality and inclusion in the industry and game content emerged.

It is against this backdrop that we summarize the demographic trends, the incidence of demographic differences, and the perceptions of diversity in the game industry over an 11 year span. Throughout the report we consider diversity to refer to demographic diversity based on factors such as gender, ethnicity, age, ability, and sexual orientation.

#### **Methods**

Two sets of data inform our discussions: the first are quantitative and qualitative data from international surveys with game developers and the second is a set of interviews with game developers in Canada.

### **Quantitative Data: IGDA Surveys**

The first set of data consists of statistical data collected through five IGDA surveys from 2004-2015. In 2004, the IGDA launched its initial *Quality of Life* (QoL) survey in an effort to gain a much clearer understanding of some employment issues such as "crunch time" and compensation. In 2005, the IGDA administered a *Demographics Survey* to answer the question "who works in the game industry". In 2009, the IGDA partnered with us to develop and analyze a new version of the QoL survey. In 2014, this partnership took on a broader scope, focusing on questions of employment, demographics, the state of the industry and diversity in a more encompassing

*Developers' Satisfaction Survey* (DSS). A shorter version of the DSS was conducted in 2015 which retained the detailed sections on demographics and diversity.

In each case the survey was distributed through the IGDA to its members and was also circulated through the game development community by word of mouth. The response rates for each survey are unknown as we do not know the size of the sample population (i.e., how many developers saw and had the opportunity to take the survey) nor the total population (i.e., the number of people who work in the video game industry internationally). According to reports of the Entertainment Software Association (Siwek, 2014) US game companies are estimated to employ 42,527 people overall and Canadian game companies directly employ 16,500 (ESAC, 2014). In the UK, it is estimated that the video game industry employs 30,000 workers (University of Kent Careers and Employability Service, 2015) with over 9,000 of these being highly skilled development staff (TIGA, 2015). As such, the survey sample sizes represent a small proportion of the global workforce.

For the purpose of this report we will not use the complete data sets for each of these surveys as we want to focus on those working directly in game development. Table 1 provides an overview of the sub-samples for each survey used in this report. In short, exclusions occur for the 2014 and 2015 data (see also Weststar & Legault, 2015).

Table 1
Survey Sample Overview

Survey Name	Sample Inclusions	Sample Size	Published References
2004 QoL	Whole sample as no means to distinguish role type; from frequency tables provided by the IGDA	n=994	IGDA 2004
2005 Demographics	Core development and support roles restricted to respondents from the US, Canada, the UK and Australia; from data included in the published IGDA, 2005 report	n=3128	IGDA 2005
2009 QoL	Whole sample as respondents in peripheral roles were not included/identified	n=3362	Legault & Weststar 2012
2014 DSS	Core development and support roles	n=1773	Weststar, Legault, Gosse & O'Meara, 2016
2015 DSS	Core development and support roles	n=1666	Weststar, Legault, Gosse & O'Meara, 2016

### **Qualitative Data: IGDA Surveys and Canadian Interviews**

#### IGDA Surveys

In addition to the statistical survey data outlined above, we also collected extensive qualitative data from a number of diversity-related open-ended questions in the 2014 and 2015 Developer Satisfaction Surveys.

#### In 2014 the survey asked:

- If you have been in the game industry for more than 2 years, has diversity in the industry changed?

#### In 2014 and 2015 the survey asked:

- If you have experienced or witnesses inequality toward yourself or others, please share your story and elaborate on the incident and what action was taken
- In your opinion, what is the biggest obstacle to diversifying the game industry?
- Please share any ideas or suggestions about how to improve diversity in the game industry.

#### Canadian Interviews

Running parallel to later IGDA surveys, we conducted 94 in-depth interviews with Canadian developers through 2013-14. These took place in three of the largest Canadian game making hubs:

- 34 in Vancouver, British Columbia;
- 32 in Toronto, Ontario;
- 27 in Montreal, Quebec.

The sample contained roughly equal numbers of males and females, despite the low proportion of female workers in the industry; on the Canadian scene, females account for 14% of creative workers and 5% of technical workers (Nordicity, 2013). We make no claims about statistical representativeness.

The **age** range of interview respondents was 20 to 48 years old, and the average age was 30. We do not have a record of other demographic characteristics such as **ethnicity**, **ability** or **sexual orientation** for the interview respondents.

The in-depth interviews were semi-structured and lasted one and a half to two hours. Many questions were posed as standard procedure to everyone, so simple descriptive statistics can be summed up, though the study was qualitative. Data were analysed with the grounded theory procedure (Charmaz, 2000).

Though the focus of these interviews was on employment and working conditions, in

analysing the data we found many spontaneous comments about diversity in the industry, specifically about females in games. Only these segments of the interviews are used here.

#### **Identity Sub-Samples**

When possible, throughout the report we separate the data so that we can isolate salient demographic or occupational groups from the whole sample. This is particularly meaningful and relevant for a report on diversity. We labelled these subgroups: whole sample (as outlined above), manager sub-sample, developer subsample, male sub-sample, female sub-sample, white workers sub-sample, and workers of colour sub-sample. Table 2 defines each group for quick reference.

#### Sub-Sample Notes and Caveats

In addition to the sub-samples identified in Table 2, in the Diversity section of this report we also include a 'white male' sample as a category of inquiry. This category is derived from the male and white workers sub-samples. This allows us to compare the responses of those individuals who belong to both the dominant gender and ethnicity in the industry to responses from those who occupy only one or neither of those subject positions. The video game workforce is predominately white and male. This has implications for the work culture that may be less perceptible to those who occupy the dominant subject position.

Regarding gender categorizations in the DSS 2014 and 2015, it is important to note that a small percentage (1-1.5%) of respondents identified as 'transgender' and 'other.' These respondents are included in the **female sub-sample** to recognize a shared minority status. Moving forward, this report uses the term 'female' to refer to participants who did not identify as 'male.'

Despite this grouping, we would like to point out our **dissatisfaction in relying on language that reinforces a traditional gender binary.** The authors of this report recognize gender plurality and appreciate the importance of giving voice to transgender and non-gender binary workers, particularly in a report aiming to address issues of diversity within the videogame industry. However, because the sample of those workers who identify as transgender or other is so small, we cannot draw substantive conclusions about their experiences without assuming a great deal and overstating the generalizability of their experiences.

Regarding the ethnicity categories, it is also important to acknowledge that **grouping** all workers of colour together is problematic. Workers of different racial/ethnic groups fare differently in the workplace and given the international nature of the survey (particularly in 2014 and 2015) many respondents deemed workers of colour

from a white Western European and North American perspective would not be visible minorities when working in their native countries. However, as with participants who identify as transgender, the sample sizes were often too small for meaningful assessment of more precise groupings.

In the 2014 and 2015 data, respondents who identified as bi- or multi-racial/ethnic with white/Caucasian/European were included in the workers of colour sub-sample.

Table 2
Survey sub-samples used in report

	Inclusion Criteria					
	Those in roles central to game development including:					
	Those in managerial roles including founders, owners, project managers, producers and team leads;					
	Those in core development roles such as programming, software engineering, visual art, audio, game design, writer/editor, localization and user-experience;					
Mhalagamula	Those in quality assurance and testing roles;					
Whole sample	Those in roles supportive to game development such as administrative support, customer support, technical support;					
	Those employed on a full-time or part-time basis, in self-employment, as an independent contractor or freelance, or as salaried employees					
	Those currently unemployed in any role but who responded thinking about their last job					
	Students studying games or to work in the game industry					
Manager sample	Those in managerial roles central to game development including: founders, owners, project managers, producers and team leads					
	Those in non-managerial roles in core areas of game development including: programming, software engineering, visual art, audio, game design, writer/editor, localization and user-experience					
Developer sample	Those who are employed on a full-time or part-time basis, either in self-employment, as an independent contractor or freelance, or as salaried employees					
	Those currently unemployed in core development roles but who responded thinking about their last job					
Male sub-sample	In 2014 and 2015, those from the whole sample who responded "male" when asked "How do you identify your gender"					
Female sub-sample	In 2015, those from the whole sample who responded "female", "male to female transgender", "female to male transgender", or "other" when asked "How do you identify your gender"					
	In 2014, those who responded "androgynous" were also included (option not offered in 2015)					

White workers subsample	In 2014, those from the whole sample who only selected "Caucasian" when asked "Which of the following designations best describes your race or ethnicity?"  In 2015, those from the whole sample who only selected "white/Caucasian or European" when asked "Which of the following best describes your race/ethnicity/ancestry"			
Workers of colour sub-	In 2014, those from the whole sample who selected any of "Arab or West Asian", "East/South-East Asian", "South Asian", "Black/African American or African", "Hispanic or Latino", "Indigenous", "Pacific Islander" or "Other" or those who selected any of the above in combination with "Caucasian" when asked "Which of the following designations best describes your race or ethnicity?"			
sample	In 2015, those from the whole sample who selected any of "Arabian or West Asian", "East/South-East Asian", "South Asian", "Black/African American or African", "Hispanic or Latino", "Aboriginal or Indigenous", "Pacific Islander" or "Other" or those who selected any of the above in combination with "white/Caucasian or European" when asked "Which of the following best describes your race/ethnicity/ancestry?"			

This wealth of data allows us to compare the demographic evolution of the industry over a ten-year period. What we aim to do here is to take stock of the evolution in the international industry's issue of diversity and to paint a portrait of the phenomenon and its implications. Who works in this industry and what are their differential experiences? Where do workers, educational institutions and employers stand on cultivating diverse workplaces? Due to the nature of the many controversial debates in the industry, we give significant attention to gender as a differentiating identity category, but also include data regarding differentiation due to ethnicity, age, sexual orientation and ability.

In this report we describe the data without any theoretical framework.

### **Part I: Demographics**

#### Gender

The videogame industry is still dominated by males, however, there has been a consistent trend toward increased representation of females since 2004 (Table 3), at the very least in terms of response rate to these international surveys.

Table 3
Gender, whole sample, DSS 2004, 2005, 2009, 2014, 2015

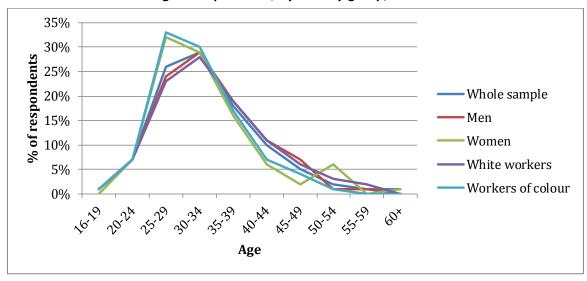
	% of respondents							
	2004	2004 2005 2009 2014 2015						
Male	93	88	86	78	76			
Female	7	12	14	22	24			

#### Age Breakdown

The age of the video game workforce is **fairly young** by comparison to the workforce at large. In the 2015 DSS, the mean age for the sample was 32 and two-thirds of respondents were between 20 and 34 years of age. This has remained the same since the 2005 Demographics Survey. For comparison, the average American worker was 42.4 years old (Bureau of Labor Statistics, 2014) and the average Canadian worker was between 45 and 54 years old (Statistics Canada, 2015). This means that the industry workforce has not aged much over the last 10 years and implies a reliance on new and young workers with considerable attrition of the labour force beyond age 40.

Females and workers of colour reported being slightly younger than males and white workers, most commonly between 25 and 29 years of age (Figure 1). This likely reflects the fact that females and workers of colour are newer to the industry and therefore make up more of the younger ranks (Weststar & Legault, 2012).

Figure 1
Age of respondents, by identity group, DSS 2015



### **Possible Rising Trend in Ethnic Diversity**

Although still representative of the vast majority of respondents, the data suggest a decline in the overall prevalence of white respondents over the ten years captured by the 2005-2015 IGDA surveys (there is no ethnicity data available in 2004) (Table 4). In comparison we see a positive trend in the frequency of Asian and Hispanic/Latino respondents. The frequency of Black respondents has remained unchanged and is the least represented group.

Table 4
Ethnicity, whole sample, DSS 2005, 2009, 2014, 2015

	% of respondents						
	White	Asian*	Hispanic / Latino	Black	Other**		
2005	83	8	3	2	5		
2009	82	9	4	2	2		
2014	80	10	8	2	6		
2015	79	11	6	2	4		

<sup>\* &#</sup>x27;Asian' refers to respondents who identified as Arabian/West Asian, East or South-East Asian, or South Asian.

### Disability rates on the rise

From 2005 to 2015 there was a marked increase in the percentage of respondents who said that they had a disability (13% in 2005, 17% in 2014 and 26% in 2015). This percentage is somewhat high when compared against that of the total populations in the United States and Canada (the countries most represented by workers in the 2014 and 2015 surveys). According to census data, 19% of Americans identified as having a disability (United States Census Bureau, 2012) and in Canada, 14% of the population reported having a disability that "limited their daily activities" (Statistics Canada, 2012). The comparatively high percentage warrants additional research into the mental and physical well-being of developers on and off the job.

Consistently across all survey years, the most frequently reported disability was 'psychiatric or a mental illness'. Female respondents reported having a disability at a higher frequency than any other sub-group and reported psychiatric disabilities or mental illness at a rate four times higher than males in 2014 and over two times higher in 2015 (Table 5).

<sup>\*\* &#</sup>x27;Other' refers to respondents who identified as Aboriginal, Pacific Islander, or Other.

Table 5
Self-reported disability by identity group, DSS 2014, 2015

	% of respondents							
	Ma	ales	Females		Females White worker		Workers of colour	
	2014	2015	2014	2015	2014	2015	2014	2015
Intellectual / Cognitive	2	3	3	3	3	3	3	4
Physical / Mobility	2	2	4	5	3	3	4	4
Psychiatric/ Mental	3	6	12	14	6	9	4	6
Neuro.	2	3	2	3	2	2	0	3
Visual	4	5	5	5	4	5	6	7
Hearing	1	1	1	2	1	2	0	1
Other	0 *	0	1	1	0	1	0	0
Total	14	20	28	33	19	25	17	25

### **Marital Status and Dependents**

The data on marital status and dependents do not show significant changes over time; between 50-60% of the respondents reported being married or partnered.

Though about half the sample is consistently married or partnered across each survey year, the majority of respondents did not have children. This can largely be explained by the relatively young age of respondents. However, there are characteristics of the working environment – such as long and unpredictable hours, and employment insecurity – that make these domestic choices difficult to reconcile with work life.

The domestic choices of workers may also be gendered. Across survey years, **females have consistently been the group who least frequently report having children;** an exception is 2009 where **workers of colour** reported having children least frequently (Table 6). Research on the project-based work environment of the IT sector suggests that work demands are difficult to balance against the responsibilities of being the primary caregiver at home (Legault & Chasserio, 2003, 2012) and VGDs are a comparable group.

Table 6
Workers without children by identity group, DSS 2004, 2009, 2014, 2015

	% of respondents							
	No children							
	2004	2004 2009 2014 2015						
Whole Sample	78	73	68	73				
Males		72	65	72				
Females		79	78	81				
White workers		71	66	72				
Workers of Colour		82	75	77				

A review of the data from open-ended questions about inequitable treatment in the 2014 and 2015 Developer Satisfaction Surveys reveals a perception that workers with children are less committed to the work and cannot live up to the standards of the 'ideal worker'. This attitude may be one reason why female game developers, in particular, choose to delay or forgo parenthood.

My previous CEO frequently referred to female employees as 'chicks'. He paid them less than male employees with less experience. He would often comment that 'they can't be counted on like the guys because they'll get pregnant and leave'. - M.M.01725.2015

My manager said I wasn't putting enough hours in, (I was already working 10+hours a day), I was extremely burnt out and having trouble sleeping. I told him that I missed my family and we are planning on having children and that the hours were too much. He then asked me to write my resignation letter. On the way out I wished him and the company luck, he said, "good luck with the baby making." A week later I found out I was pregnant. Due to me "quitting" no action could be taken. - F.D.00977.2014

### **Education and Training**

Though the vast majority of game developers who answered the IGDA surveys have post-secondary degrees, these diplomas are not always deemed to be directly or at all related to game development. In both 2014 and 2015, males more frequently reported holding a degree that was somewhat or directly related to the games industry than females (80% compared to 73% in 2014 and 74% compared to 65% in 2015). White workers reported this more frequently than workers of colour (80% compared to 75% in 2014 and 72% compared to 57% in 2015). This suggests that traditional, direct and/or linear pathways into the industry are well-utilized by

white males, but that groups that are currently underrepresented in the industry may find or be required to find alternative entry points.

The qualitative responses from the DSS offer some potential socio-economic insight into the **under-representation of females and workers of colour** in the industry that is connected to access, education and training. Many developers suggest that some students are **introduced to computer science programs earlier than others**. Because the equipment is expensive for such programs, more affluent schools are likely to host them, and this wealth is often divided along **racial lines**.

An adequate pipeline has not been built to inform students how to enter the industry. From observation, minorities / under-represented groups in the game industry may have less ready access to resources to understand what game development is, and understand the process for what it takes to enter. This lack of information makes it hard to enter the industry, as it's very difficult to enter the industry without solid experience. On a more basic level and yet potentially the elephant in the room, is that building the skills to enter game development takes financial resources that can easily be out of reach for many under-represented groups. On some level, there is a relatively high upfront cost to start building the skills for game development on the core creation side. - F.M.02588.2015

But even when females have what might be deemed as the 'proper' education, it is important to note that things are not settled.

At this point, sexism is a huge problem, but more than that, for people just graduating from new programs, it's really hard to get in. As someone with the 3d diploma from out of the province, there's no interim to be able to get into the studio. The competition's really fierce, and nobody's willing to take a chance, there's not enough mentorship going on. I'd really like to see more people taking proactive stance with female candidates to kind of try to help that industry become more open. (F-11-07-M-S-24-11-13-16-02-PB)

#### Part II: Nature of Work

### Occupational Segregation by Gender & Ethnicity

Females reported working in programming or engineering roles at rates significantly lower than males in 2005, 2014 and 2015, although not in 2009 (Table 7). Conversely, females reported working in visual arts roles at higher rates than males in 2014 and 2015, although not in 2009. Females are more prevalent, though still outnumbered, in administrative and support roles and also seem to have a growing presence in management roles such as team lead and project manager. Across ethnicity, workers of colour were least represented in core developer roles (e.g., programming, art) though they showed some increase over the survey time periods

(14% in 2009 to 23% in 2015); they showed consistently **higher representation in support roles outside of core development** (29% in 2009 to 34% in 2015).

Table 7
Primary role by gender, DSS 2005, 2009, 2014, 2015

	% of respondents							
	20	005 <sup>*</sup> 2009		009	2014		2015	
	Males	Females	Males	Females	Males	Females	Males	Females
Operations/ IT/Support					4	2	1	0
Admin/HR/ Personnel/ Legal support	53	47	2	1	3	7	0	4
Hardware engineer					2	1	0	0
Writer	70	30	3	7	9	13	2	4
Marketing/ PR/Sales	75	25	2	3	13	15	2	7
Team lead/ Producer/ Project Mgr	79	21	24	24	44	48	12	17
QA	87	13	6	6	9	7	4	4
Executive/ Investor <sup>†</sup>	88	12	8	8	51	52	22	17
Visual Art	89	11	17	17	13	28	9	17
Designer/ Scripter	90	10	4	4	27	26	14	10
Audio	90	10	1	3	4	3	1	1
Programmer / Engineer	95	5	28	26	41	13	27	11
Upper Mgr			6	4	8	7	3	2
Customer support			0	0	4	1	1	1

†Executive/Investor also includes "Owner" and "Founder" for 2014 & 2015

<sup>\*</sup> The data from 2005 is different because it represents the distribution of gender across each role (i.e., 70% of writers are male and 30% are female). This is how it was reported in the 2005 IGDA Demographic Survey report. The data from 2009 to 2015 shows the distribution of roles across each gender (i.e., 2% of all male respondents and 4% of all female respondents are writers). As such, the

**2005** data showcases the **dominance of males** across all roles, due to the dominance of males in the industry as a whole. In the 2009, 2014 and 2015 data we sometimes see higher percentages for females than males. This does not mean there are more females in that role. Taking 'Writer' as an example we see that in 2015 4% of all female respondents were writers while 2% of all male respondents were writers. This means that writer is a more common role for females than males; but, as the 2005 data shows, there are still more male writers than female writers in studios because there are simply more males in the industry.

#### **Employment Status**

Consistently over each year shown, females worked in temporary roles at higher rates than males. Furthermore, the general pattern suggests that males are more likely to occupy full-time jobs than females though the difference may be decreasing. In 2009, more males reported working in full-time roles than females by a difference of 7%; this difference was 6% in 2014 and 2% in 2015. Given general employment trends across the labour force over this time period this may reflect a reduction in full-time, permanent hiring for males, as opposed to an increased hiring of females. Workers of colour also reported working as permanent employees in full- or part-time roles less frequently than white workers (Table 8).

Table 8

Permanent employment status (full- or part-time) by identity group, DSS 2004, 2009, 2014, 2015

	% of respondents					
	Males	Workers of colour				
2004	75	79				
2009	65	58	67	56		
2014	70	68	73	67		
2015	70	68	70	64		

Table 9

Contract/freelance/temporary employment status (full- or part-time) by identity group, DSS 2004, 2009, 2014, 2015

	% of respondents					
	Males	Workers of colour				
2004	8	11				
2009	11	16	12	11		
2014	13	17	12	19		
2015	14	19	14	17		

Open-ended survey responses illustrated the struggle that females and workers of colour face in finding full-time, stable, and fairly compensated employment:

...most of the opportunities I have found in entry level roles within the games industry have either not wanted to utilize my skills at all (but paid me to complete tasks, ie, testing), or acknowledged my skills, but refused to compensate me for them as I should be 'glad to be in this industry just for the experience' (mostly within visual development/design). Not everybody is born with a silver spoon in their mouth, especially as a minority and a female, this means I have to work twice as hard for not nearly the same compensation as the majority, but I cannot survive off of underpaid freelance work, underpaid temp contracts, or unpaid 'experience', I finally realize. - F.D.00975.2014

### **Part IV: Workplace Profile**

### Tenure & expected tenure

Across the whole sample, the majority of respondents (55%) to the 2015 survey had worked in the industry for six years or less. This data is consistent with prior survey years.

In 2015, there were more males and more white workers in the 15-24 year bracket than females and workers of colour. Correspondingly there were slightly more females and workers of colour in the lower year categories, suggesting a potential influx of females and workers of colour to the industry (Table 10).

Table 10

Tenure in industry by identity group, DSS 2015

		% of resp	ondents	
	Males	Females	White workers	Workers of colour
Less than 1 year	6	4	5	6
1-3 years	21	27	21	27
4-6 years	25	33	27	25
7-9 years	18	14	16	18
10-14 years	15	14	15	12
15-24 years	14	6	13	9
Over 25 years	2	3	2	2

#### Part V: Compensation, Benefits, and Advancement

#### **Compensation**

Gender wage gaps continue to persist in many industries. Wage gaps in the videogame industry have been well documented (for instance see <u>Gamasutra Salary Report</u> 2014). In 2015 and controlling for job tenure and occupational role, the largest gender discrepancy in earnings emerged at the highest and lowest income brackets; 10% of males reported earning \$150,000 or more, and only 3% of females did. Males occupy both the highest and lowest income brackets for their work in game development while females are more clustered around the middle income brackets.

Workers of colour reported earnings in the lowest income bracket at higher percentages than white workers. The compensation for both identity groups was more evenly matched in the mid-range earning brackets, and in the higher-income brackets, more white workers reported earning over \$75,000 than workers of colour (Figure 3). When controlling for the impact of job tenure and occupational role on compensation, there is a significant difference between white workers and workers of colour such that white workers earn more.

Figure 2 Income by gender, DSS 2015

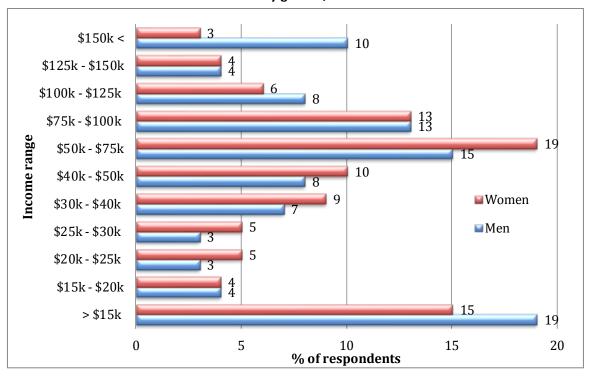
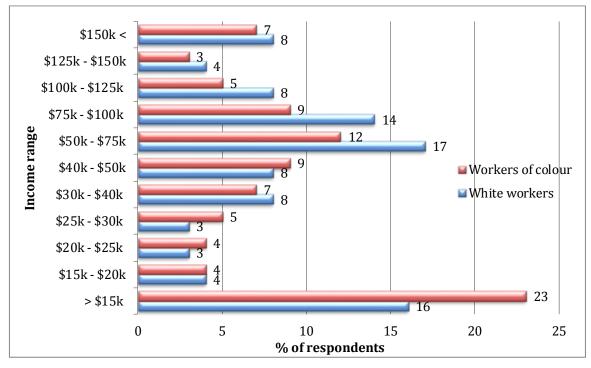


Figure 3
Income by ethnicity group, DSS 2015



Open-ended comments from the female survey respondents revealed significant dissatisfaction and feelings of inequity with respect to pay.

I was hired in on a significantly lower salary than my male predecessor (8.5% less). When another man was brought on-board just 3 months later into the same position with the same level of experience as myself, he was hired in at the same pay level as my predecessor. - F.T.02740.2015

This sense of inequity also applied to racial minorities.

I learned that a male co-worker of mine, while doing the majority of content design work on our main project, was the lowest paid designer at the company in spite of having the most seniority. He was black. I don't know for sure that was why, but I do know that they took him for granted and treated him poorly. Women in QA at that same company were paid significantly less than their male co-workers. - F.D.02730.2015

#### Perception of compensation rate

The 2009, 2014 and 2015 surveys each asked questions about the perceived fairness of received compensation. About half of respondents from each year agreed that they are compensated fairly (52% in 2009, 50% in 2014, and 52% in 2015), and just under one third disagreed (28% in 2009, 29% in 2014, and 28% in 2015). The remainder were neutral.

**Females** and **workers of colour** more frequently reported not feeling fairly compensated in 2009 and 2014 than their male and white counterparts, with the exception of 2015 (Table 11).

Table 11

Do you feel fairly compensated for the work you do? Identity comparison DSS 2009 2014 2015

		% of resp	ondents									
		2009										
	Males	Females	Workers of colour									
Agree or Strongly Agree	52	49	54	48								
Neither Agree nor Disagree	20	21	19	22								
Disagree or Strongly Disagree	28	30	27	30								
		20	14									
	Males	Females	White workers	Workers of colour								
Agree or Strongly Agree	51	47	52	46								
Neither Agree nor	20	19	19	20								

Disagree					
Disagree Disagree	or Strongly	29	34	29	35
			20	15	
		Males	Females	White workers	Workers of colour
Agree or St	rongly Agree	52	53	51	55
Neither Disagree	Agree nor	18	20	19	19
Disagree Disagree	or Strongly	30	27	30	26

#### **Child-care and Parental Benefits**

The availability of **child-care provisions** is quite low; only 6% of respondents indicated that their company provides on- or off-site day care in 2014 and only 4% in 2015. A higher frequency of these services amongst employers could facilitate greater gender equity within the industry. However, as noted above, **only 21% of respondents reported having a child or children who lived at home in 2015**.

The data on parental benefits also highlights the **relative invisibility of parenthood in this industry.** In 2015, while 40% had maternity benefits and 36% had paternity benefits, approximately 37% were unsure whether their company offered these. Though some would argue that this means it is a non-issue, lack of awareness and discussion about these topics does little to change the culture of the industry.

In our interviews, both male and female developers reported challenges as parents, whether due to an employer's unwillingness to accommodate interruptions to the working day, the stigma of parenthood, or the 'unsociable' hours demanded by the industry.

I have had a number of jobs that I am more than qualified for turn me down because I am a mother and will have to accommodate my children's schedules/sick days. I had to accept a \$30,000 pay cut to find a job that will let me work from home and have a flexible schedule. - F.D.02737.2015

A common assumption made about me is because I am male I do not have child rearing responsibilities and so unsociable hours (or "crunch time") are constantly unloaded on to me. I have been condescendingly spoken down to by higher ups for complaining about this - M.D.02108.2015

#### Advancement

In 2009, 2014 and 2015 female workers and workers of colour reported 'poor' advancement opportunities slightly more frequently than male and white workers (Tables 12 and 13).

Table 12
"I have no options for promotions or change of jobs responsibilities [at my job]." Identity comparison DSS 2009

		% of respondents									
	Male	Female	White	Workers of colour							
Strongly agree	8	14	8	11							
Agree	20	20	21	20							
Neutral	26	18	25	26							
Disagree	31	36	32	29							
Strongly disagree	15	13	14	13							

Table 13

"How would you rate your company on the potential for promotion or advancement in your career?" Identity comparison DSS 2014, 2015

		% of respondents										
	Male		Female		White		Workers of Colour					
	2014	2015	2014	2015	2014	2015	2014	2015				
Poor	16	17	20	18	16	19	19	13				
Fair	12	13	9	13	11	15	12	10				
Neutral	28	25	29	27	28	24	27	29				
Good	28	28	26	29	28	27	28	33				
Excellent	16	16	15	13	18	15	15	15				

Open-ended responses illustrated that female developers were more consistently denied promotions and many perceived this to be a result of bias against them for their gender.

The first company I worked for, the upper management delayed giving me a lead role due to the other male designers inability to listen to a woman. F.M.00876.2014

Mostly men get promoted at our company, even though many women who have worked there for a long time have the same experience (and even more experience). A lot of young women were laid off during our employee negotiations. We have only two women in our management team, and the one who got laid off was of course a woman. She was liked by everyone! Some men in the board were really disliked, but still remain in their positions. - F.N.02460.2015

Female respondents also worried more than males that their family time would affect their promotion opportunities (Figure 4).

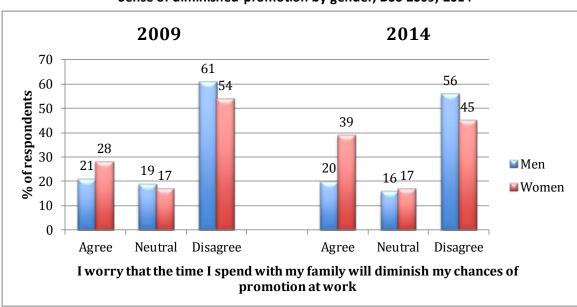


Figure 4
Sense of diminished promotion by gender, DSS 2009, 2014

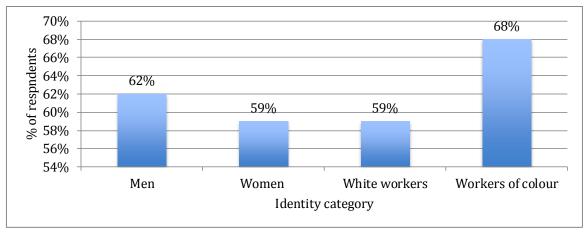
### Part VI: Working Hours

As documented in our report on working time (Legault & Weststar, 2015), the trend over the past 10 years has been a reduction in longer hours and this is true across gender and ethnicity.

### **Everyone has crunch**

While high numbers of respondents across all identity groups reported that their jobs involved crunch, this sentiment was felt most strongly by workers of colour (68%)(Figure 5).

Figure 5 "Does your job involve crunch?" Identity comparison DSS 2015



In 2014 and 2015, respondents across identity groups reported an average intensity of between 50 and 59 hours or 60 and 69 hours during crunch.

There were a small number of open-ended responses that indicated that males experience more pressure to crunch as employers assume that they have fewer familial responsibilities than their female counterparts.

A common assumption made about me is because I am male I do not have child rearing responsibilities and so unsociable hours (or "crunch time") are constantly unloaded on to me. I have been condescendingly spoken down to by higher ups for complaining about this - M.D.02108.2015

Sometimes it feels like I as a male, who does not have a family, am supposed to take urgent extra work without extra compensation just because I don't have any responsibilities during evenings. - M.N.01333.2015

### **Negative impact of crunch**

Across all respondents, about half reported a negative effect on each of family and personal relationships, emotional health, and physical health. Females were more likely to report a negative effect of crunch on emotional health than males (Table 14).

Table 14

Negative effect of crunch. Identity comparison DSS 2014, 2015

		% of respondents										
	Family and personal relationships		Emotional health		Physical health		Financial well- being					
	2014	2015	2014	2015	2014 2015		2014	2015				
Males	46	49	51	53	48	53	14	17				
Females	46	49	54	63	51	55	16	15				
White workers	46	50	52	57	49	54	13	16				
Workers of colour	47	45	51	53	49	51	18	19				

#### Part VII: Diversity: a portrait

#### The importance of diversity among developers

In 2005, male and female respondents agreed in equal measure that their teams and companies were diverse and that diversity was important to their employers (Table 15). In fact, females were even more positive than males about the diversity of their team and the importance of diversity to their employer. That said, females were more likely than males to feel that their future team should be more diverse (49% versus 35%) and they were less likely to agree that the game industry workforce as a whole was diverse (27% versus 37%).

Females were twice as likely as males to strongly agree that a diverse team has a direct impact on the games produced (34% compared to 16%) and that diversity in the workforce was an important factor in the future success of the industry (41% versus 21%). Workers of colour showed a similar pattern of response (when compared to white workers) as females (data not shown).

Table 15
Perceptions of diversity by gender, DSS 2005

		% of respondents							
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree			
The game industry	Male	7	30	21	32	10			
workforce is diverse	Female	5	22	16	39	18			

The company I work for is	Male	11	34	28	22	6
diverse	Female	11	34	28	21	7
My current project/team	Male	8	32	29	24	7
is diverse	Female	11	33	26	23	7
It appears that diversity is	Male	9	28	43	15	4
important to my employer	Female	14	33	36	13	4
A diverse workforce has a direct impact on the	Male	16	37	29	13	5
games produced	Female	34	41	19	5	1
My future project/team needs to have more	Male	8	27	44	16	5
diversity	Female	14	35	39	10	2
Workforce diversity is important to the future	Male	21	37	26	11	5
success of the game industry	Female	41	38	17	3	2

In 2014 and 2015, the majority of respondents said diversity was important within a) the industry at large, b) their own workplace, and c) the video game content they produced. Females said that diversity was important more frequently than males; the average difference across all three questions was 15%. The frequency of male respondents who perceived diversity in the workplace and industry to be important dropped by 6% from 2014 to 2015. This is possibly an artefact of the events of #Gamergate in which acute tensions emerged around issues of diversity and equity in the videogame industry.

In 2015, workers of colour were the least likely across all three questions to report that diversity was important (Table 16). This is a shift from 2014, where white males were the group who most frequently viewed diversity as unimportant. It is also different from the 2005 data, where workers of colour were more likely than white workers to strongly agree that diversity was important for games, development teams and the future of the industry.

However, the positive sentiments toward diversity held by workers of colour in 2015 may be misleading due to the **lack of** *females of colour* respondents in the workers of colour sample. In

2015, there were 116 females of colour and 424 males of colour in the sample. When we isolate responses from females of colour we find higher percentages; 77% said diversity was important in the workplace, 77% said it was important in the industry, and 80% said it was important in game content. This suggests that this issue of **diversity is more salient in terms of gender** than it is of ethnicity.

Table 16
Importance of diversity by identity group, DSS 2014, 2015

				% of res	pondents				
	M	lales	Fen	nales	White	workers	Workers of colour		
		Diversity in the workplace							
	2014	2015	2015 2014 2015 2014 2015 2014						
Important	73	67	85	85	75	74	77	55	
Neutral	19	19	11	8	18	15	17	25	
Not Important	8	14	4	7	7	11	6	20	
			D	iversity in	the indus	try			
	2014	2015	2014	2015	2014	2015	2014	2015	
Important	78	71	86	87	79	77	82	60	
Neutral	15	18	12	8	15	14	12	24	
Not Important	7	12	3	6	6	10	5	17	
			Di	versity in	game con	tent			
	2014	2015	2014	2015	2014	2015	2014	2015	
Important		76		88		81		63	
Neutral		14		6		12		19	
Not Important		10		6		7		18	

### Perception of equal treatment, equal opportunity, & equity

opportunity and treatment for all in the game industry. The results suggest that the majority do not. In 2014 and 2015 half responded 'no' there is not equal treatment (49% in 2014 and 50% in 2015). That said, the number of respondents who felt that they were unsure decreased from 2014 to 2015 (22% in 2014; 12% in 2015), and more held a positive view (30% in 2014; 38% in 2015). Additional years of data are needed to understand whether this is a feature of the sample or a positive trend.

In 2014 and 2015, females said there was not equal treatment and opportunity with the highest frequency (68% and 69%, respectively). On average this was 23% higher than male workers.

In 2014, white males most frequently reported that there was equality (36%); however, in 2015 workers of colour most frequently reported a sense of equal treatment (49%). This is a significant departure from 2014; there was a 26% increase in workers of colour who reported that there was equality in treatment and opportunity.

Without diminishing the positive experiences of workers of colour in the DSS 2015, and without reducing the impact of those experiences on the industry at large, we must also remember that the sample size of workers of colour was quite small in both years (347 in 2014 and 540 in 2015), and that a one-year longitudinal analysis is less likely representative of macro-level changes, than it is of the varying personal experiences of different respondents in the sample.

As with the questions above about the perceived importance of diversity, the **lack of females** among the workers of colour in 2015 respondents also plays an important role. When responses from female workers of colour are isolated we see a 24% jump in the frequency of those who reported that there is **not** equal treatment and opportunity; 63% of female workers of colour responded that there is not equal treatment. Overall this suggests that different perceptions of unequal treatment are driven primarily by gender rather than ethnicity.

Figure 6

"Do you feel there is equal treatment and opportunity for all in the game industry?"

Comparison by gender DSS 2014, 2015

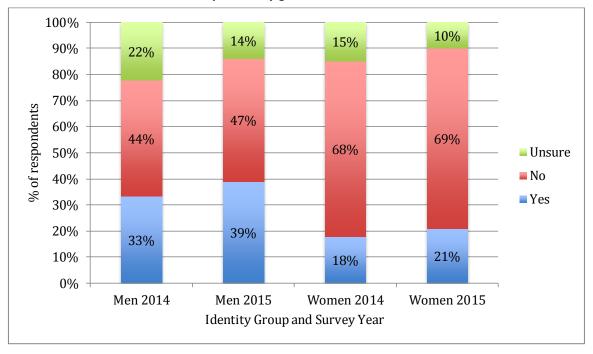
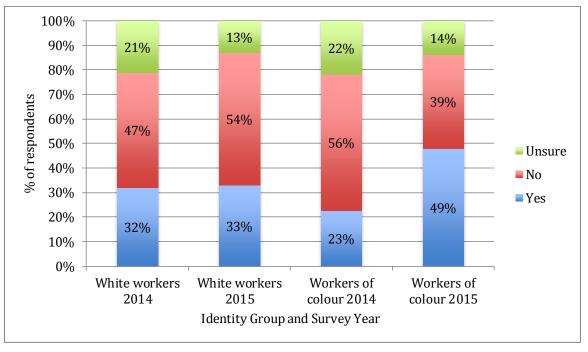


Figure 7

"Do you feel there is equal treatment and opportunity for all in the game industry?"

Comparison by ethnicity DSS 2014, 2015



### **Experiences with inequity**

In the 2014 and 2015 DSS, respondents were asked if they had **personally experienced inequity** towards themselves (Table 17). In the DSS 2015, **white males** were the least likely to report experiencing any form of inequity (21%), while over two-thirds (70%) of the **female** respondents reported experiencing some form of inequity.

Table 17
Experience of inequity toward oneself by identity group, DSS 2014 & 2015

		% of respondents										
	White Males		Females		Males		Workers of colour		White workers			
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015		
Recruitm ent	6	7	18	16	8	8	15	12	9	9		
Hiring	8	7	19	18	9	8	15	12	10	10		
Promotio ns	5	5	27	20	7	6	17	8	10	9		
Job Roles	4	4	25	21	5	4	1	7	9	8		

Compens	6	5	32	28	7	6	17	11	12	10
Social/ Interpers onal	6	8	44	46	7	10	19	20	15	17
Micro- aggressio ns	6	7	36	44	8	8	20	17	12	16
Workloa d	4	5	8	8	5	5	8	8	5	5
Working condition s	2	3	7	8	4	3	7	5%	4	5
Other	3	2	6	2	3	2	3	3	4	2
None of the above	77	79	27	30	74	77	53	65	66	67

Note: Columns do not total to 100% due to multiple response allowances

### Witnessing inequity toward others

In addition to asking respondents about any inequity that they directly experienced, the 2014 and 2015 surveys asked whether respondents had witnessed inequities toward others (Table 18). In 2015 males reported witnessing inequity at greater rates than directly experiencing it, and females reported experiencing inequity at greater rates than witnessing it. Over both years, workers of colour were slightly more likely to report both experiencing and witnessing inequity than white workers.

Table 18
Witnessing inequity toward others by identity group, DSS 2014 2015

		% of respondents										
	White Males		Females		Males		Workers of Colour		White Workers			
	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015		
Recruitm ent	8	14	19	16	9	14	18	12	10	15		
Hiring	11	16	22	19	13	15	21	13	13	17		
Promotio ns	10	14	22	21	11	13	17	10	12	16		
Job Roles	10	16	22	21	11	14	18	11	12	17		

Compens ation	9	14	22	23	10	13	16	11	12	16
Social/ Interpers onal	18	28	34	47	18	25	23	22	21	32
Micro- aggressio ns	18	25	32	47	18	23	23	19	21	31
Workload	4	7	8	9	5	8	10	8	5	8
Working conditions	5	7	9	13	7	7	12	8	5	8
Other	2	2	1	2	1	2	1	3	2	2
None of the above	62	58	38	39	61	60	49	63	58	53

### **Types of Inequity**

#### Based on gender

Overall, females consistently reported experiencing inequity at much higher rates than males in both survey years across the majority of response options. Male and female respondents only reported 'comparable' rates of experienced inequity in the areas of 'working conditions', 'workload', and 'other'. This fits with earlier data, which showed very little difference in the experience of crunch time.

There were important **quantitative differences across gender** in terms of inequity perceived by developers in the operational or business practices of the workplace. These structural inequities – otherwise known as systemic discrimination – are represented by gender in Figure 8. These figures emphasize the systemic discrimination that limits females' ability to enter the industry and progress in their careers, and is consistent with open-ended responses about wage gaps, denied promotions, and occupational segregation. These differences, while they existed, were reported less frequently across ethnicity.

25% 23% 21% 21% 19% 20% % of respondents 16% 15% 14% 14% 15% 13% 13% 10% **■** Men 5% **W**omen 0% Hiring Type of inequalities experienced

Figure 8
Structural inequalities experienced by developers, by gender, DSS 2015

Across all identity categories in 2015, respondents experienced or witnessed the most inequity in social and interpersonal interactions and in the form of microaggressions (verbal, behavioural and environmental indignities). Females and workers of colour reported experiencing this in far higher percentages than their white male colleagues. These findings suggest that inequity across gender and ethnicity is perpetuated in large part through workplace culture and everyday communicative practice.

#### Based on age

Of respondents who provided open-ended commentary on their experience of inequality, 12% cited ageism as an issue in 2014, and 9% did in 2015. **Younger workers** argued that they were not respected, and **older workers** argued that the industry was dismissive towards them on the basis of their age, or that the requirements of the job were conducive to burnout and incompatible with family responsibilities.

In particular, **ageism** was cited as the most **prominent way that males experience inequity**. Of the male respondents who provided an open-ended response about their experience of inequality, 22% in 2014, and 17% in 2015 cited ageism as the source.

I started working in the industry later than most and am now 40 with grey hair. There's a distinct aura that the game industry is a "young man's game", as is oft quoted, and now that I have a family and strive for work-life balance, there's a noticeable change in how I am treated by others in the industry. For some, it's with more respect. For others,

In contrast, only four female respondents reported experiencing ageism in both 2014 and 2015.

#### **Pursuing Diverse Candidates**

Across the whole sample, many respondents to the DSS 2015 **agreed** that their company pursued diverse candidates (51%). This is up slightly from 2014, where 45% agreed that their company pursued diverse candidates.

Although half of the respondents in 2015 suggested that their company pursued diverse candidates, 46% of them also reported that obtaining diverse candidates to game-related roles is challenging. This sentiment increased from 39% in 2014.

Across both years, more **females and workers of colour disagreed** that obtaining diverse candidates was a challenge (Table 19). This data suggests that the perpetuation of homogeneous hiring practices centered on white males might at least be partially rooted in the rationalization among these white males that it is difficult to locate other candidates and their inability to seek candidates in alternative spaces or places.

Table 19
"Obtaining diverse applicants to game-related roles is challenging." Identity comparison DSS 2014, 2015

	Males		Females		White Workers		Workers of Color	
	2014	2015	2014	2015	2014	2015	2014	2015
Agree	41	48	39	48	41	51	37	35
Neutral	43	32	40	18	42	27	43	33
Disagree	17	20	21	35	17	22	20	32

### Part VIII: Barriers to diversity

### Challenges raised by developers

Respondents in both 2014 and 2015 were asked about the **biggest obstacles to diversifying** the game industry. Below is a breakdown of the various themes identified throughout these responses (Table 20). Fourteen themes were raised in total. The themes are loosely grouped into **four broad categories**: barriers to entry, barriers to progress in the workplace, consumption-production cycle (i.e., games made by males for males), and ideological support to a male-dominated industry.

Table 20
Responses to "In your opinion, what is the biggest obstacle to diversifying the game industry?" Comparison by Gender DSS 2014, 2015

	# of respondents (%)*					
	Whole	Sample	Ma	iles	Females	
	2014	2015	2014	2015	2014	2015
Barriers to Entry (total)	300 (39)	527 (45)	229 (42)	333 (45)	64 (29)	116 (41)
Lack of diverse applicants	139 (46)	153 (29)	119 (22)	106 (14)	19 (9)	29 (10)
Public discourse	45 (15)	237 (45)	28 (5)	147 (20)	15 (7)	38 (13)
Education & mentorship	71 (24)	88 (17)	52 (10)	53 (7)	17 (8)	30 (11)
Lack of resources	45 (15)	49 (9)	30 (6)	27 (4) 13 (6)		19 (7)
Barriers to Progress (total)	228 (30)	241 (21)	153 (28)	152 (21)	75 (34)	71 (25)
Homogenous workforce / leadership	63 (28)	81 (34)	46 (9)	54 (7)	17 (8)	22 (8)
Workplace culture	67 (29)	47 (20)	50 (9)	17 (2)	31 (14)	11 (4)
Everyday sexism	48 (21)	59 (24)	26 (5)	33 (4)	22 (10)	18 (6)
Recruitment bias	50 (22)	54 (22)	31 (6)	34 (5)	19 (9)	20 (7)
Ideological Support (total)	159 (21)	240 (21)	92 (17)	126 (17)	63 (29)	100 (35)
Internalized bias	65 (41)	101 (42)	42 (8)	53 (7)	21 (10)	44 (16)
Ignorance / Indifference	69 (43)	79 (33)	35 (6)	40 (5)	32 (15)	34 (12)
Fear of change	25 (16)	60 (25)	15 (3)	33 (4)	10 (5)	22 (8)
Consumption- Production Cycle (total)	127 (16)	245 (21)	107 (20)	171 (23)	59 (27)	115 (41)
Game content	35 (28)	100 (41)	52 (10)	86 (12)	23 (11)	44 (16)
Risk aversion	46 (36)	88 (36)	29 (5)	53 (7)	17 (8)	50 (18)
Audience / gamer culture	46 (36)	57 (23)	26 (5)	32 (4)	19 (9)	21 (7)

<sup>\*</sup> Please note: The percentage in brackets under the 'Whole sample' columns reflects the percentage of total responses that address the corresponding theme within the category (i.e. 46% of responses

captured under the Points of Exclusion theme argued that the biggest obstacle to diversity was a lack of diverse applicants). This is not true of the overarching category rows (bolded), wherein the percentage in brackets reflects the percentage of all responses (i.e. in 2014 39% of all responses addressed the Points of Exclusion theme). The percentage in brackets under the various "Males' and 'Females' columns is the percentage of males or females reporting the theme of the total males or females who answered the question overall (i.e. in 2014 22% of males who answered this question reported that a lack of diverse applicants was the biggest barrier to diversity).

#### **Part IX: Solutions**

In the 2014 and 2015 DSS respondents shared suggestions about **how to improve diversity**. In 2014 there were 502 responses to this question; 69% were from males, 30% were from females and 1% did not disclose their gender. In 2015 there were 890 responses to this question; 62% were from males, 25% were from females, and 13% did not disclose their gender. Table 21 summarizes the frequency of suggested solutions, grouped by dominant themes.

Table 21

Responses to "Please share any ideas or suggestions about how to improve diversity in the video game industry." Comparison by Gender, DSS 2014, 2015

	# of respondents (% of respondents) *							
	Whole	Sample	Ma	ıles	Females			
	2014	2015	2014	2015	2014	2015		
HR/Workplace policies	133 (26)	173 (19)	84 (24)	104 (69)	49 (33)	58 (26)		
Public discourse	57 (11)	205 (23)	36 (10)	120 (22)	21 (14)	47 (21)		
Education & mentorship	72 (14)	108 (12)	50 (14)	61 (41)	21 (14)	34 (16)		
Game content	52 (10)	130 (15)	38 (11)	71 (47)	14 (9)	42 (19)		
Dedicating resources	48 (10)	75 (8)	30 (9)	43 (27)	17 (7)	28 (13)		
Community outreach	50 (10)	63 (7)	32 (9)	40 (27)	26 (17)	19 (9)		
Diverse leadership	41 (8)	81 (9)	24 (7)	55 (36)	14 (9)	19 (9)		
Early intervention	36 (7)	47 (5)	28 (8)	33 (22)	7 (5)	8 (4)		
Better working conditions	32 (6)	33 (4)	18 (5)	17 (11)	14 (9)	12 (5)		
Direct confrontation	12 (2)	12 (1)	7 (2)	7 (5)	5 (3)	5 (2)		
Solidarity events/safe spaces	6 (1)	12 (1)	5 (1)	6 (4)	1 (1)	6 (3)		
Government/legal intervention	5 (1)	6 (1)	4 (1)	3 (2)	1 (1)	3 (1)		

\* Please note: The percentage in brackets under the 'Whole sample' columns reflects the percentage of total responses that address each solution (i.e. 26% of all responses to this question suggested improved HR/Workplace policies would improve diversity). The percentage in brackets under the various "Males' and 'Females' columns is the percentage of males or females reporting the theme out of the total males or females who answered the question overall (i.e. in 2014 24% of males who answered this question suggested that improved HR/Workplace policies would improve diversity).

#### Conclusion

This report on diversity in the game industry relied on the data collected in five surveys administered by the International Game Developers Association: the 2004 and 2009 Quality of Life Surveys, the 2005 Demographics Survey and the 2014 and 2015 Developer Satisfaction Surveys (DSS).

The demographic data reinforced our understanding of videogame development workers as predominately young, white, male, heterosexual and without dependents (children or elders). The data point to occupational segregation by gender as well as the under-representation of females as a whole. Workers of colour remain highly under-represented in senior management.

The data suggest some differences in compensation by gender and ethnicity at certain points of income (i.e., females were particularly absent compared to males at the highest income levels and workers of colour were disproportionately represented at the lowest income levels). There were few differences by identity group across all income categories once accounting for occupational role and tenure in the industry.

Consistently, females worked in temporary roles at higher rates than males. Furthermore, the general pattern suggests that males are more likely to occupy full-time jobs than females though the difference may be decreasing. Given general employment trends across the labour force in recent years, this more likely reflects a reduction in full-time, permanent hiring for males, than an increase in full-time, permanent hiring of females. Workers of colour also reported working as permanent employees in full- or part-time roles less frequently than white workers.

This report also highlighted a number of important findings directly related to perceptions of diversity in the game industry.

- the majority of respondents to the DSS surveys do not believe that there is equal opportunity and treatment for all in the game industry.
- the perception of unequal opportunity and treatment is most widely held among females.

- As a whole, workers of colour are the most likely to report that the industry is equal for all. However, females of colour overwhelmingly report feelings of unequal treatment. This suggests that the different perceptions of unequal treatment are driven by gender more than ethnicity. This also then indicates that the lack of equity experienced is primarily gender-based.
- There was limited evidence that employers have policies and/or programs in place to bring about a more diverse workforce and more equitable environments.
- The data suggests that the perpetuation of homogeneous hiring practices centered on white males might at least be partially rooted in the rationalization among these white males that it is difficult to locate other candidates and their inability to seek candidates in alternative spaces or places.

This report also documented open-ended comments made by respondents to the 2014 and 2015 DSS about: a) inequity that they have either experienced or witnessed, b) barriers to diversity in the industry, and c) solutions to those barriers:

- a) Females reported both directly experiencing inequitable treatment and witnessing inequitable treatment towards others in very high numbers. Males less frequently reported experiencing inequity and more frequently reported having witnessed inequity towards others.
- b) Barriers articulated in the open-ended comments can be grouped under four broad categories: barriers to entry, barriers to progress in the workplace, consumption-production cycle (i.e., games made by males for males), and ideological support to a male-dominated industry
- c) The top suggestions for improving diversity were improved HR/workplace policies, improved public discourse, education and mentorship for diverse groups, and more diverse game content.

Additional reports from the DSS data can be found at the <u>IGDA website</u> and at http://gameqol.org.