Developer Satisfaction Survey 2021

Diversity in the Game Industry Report

Prepared for the International Game Developers Association

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Introduction

The International Game Developers Association (IGDA) supports and empowers game developers around the world in achieving fulfilling and sustainable careers. We strive for greater global diversity, inclusion, equity, and belongingness (DEIB) within the games industry, and we value the creation and dissemination of knowledge that informs these efforts.

Diversity and equity are central themes to the current discourse of the evolution and trajectory of the games industry. In partnership with Western University, the IGDA is proud to share the latest findings of this Diversity Report that will steer critical conversations on DEIB topics and educate developers and studios on pathways toward a diverse and equitable industry for all.

While the 2021 Developer Satisfaction Survey showed improvements to several key indicators of diversity within the industry, such as an increase in women and developers of color compared to previous surveys, the findings in this Diversity Report extend previous insights and implications by approaching the data with an intersectional lens.

By digging deeper into the data, this report provides additional context and nuance to the discussion of diversity and equity in games by considering the differences and similarities across groups with multiple intersecting identities, specifically gender and race/ethnicity. An intersectional approach better captures the unique lived experiences of the diverse creators driving this global industry toward new heights.

Obstacles to diversity and equity in games remain evident. Take for instance that 74% of respondents believed that there is not equal opportunity and treatment for all in the game industry. More respondents in 2021 reported personal experiences of microaggressions and social or interpersonal inequity compared to 2019. Additionally, one in five non-minoritized men and one in three women and minority men reported having witnessed an act of inequity towards others.

The Diversity Report highlights the need for actionable and measurable initiatives the industry must adopt to meet developers' expectations and demands of more diverse and equitable recruitment opportunities, career progression, compensation, employment practices, workplace cultures, and team compositions across disciplines. Industry leaders, studio executives, managers, and all who are invested in improving the workplace for game developers will glean critical insights from this data that will support the

identification of gaps in one's own work environment alongside opportunities for improvements.

As a global community, we must work together to ensure accessible and equitable opportunities for a fulfilling and sustainable career in the industry. The future of the industry depends on it.

If you would like to assist with translating this report into other languages or helping us reach a wider audience for our next survey in 2023, please reach out to us at staff@igda.org.

Dr. Jakin Vela
Executive Director, IGDA

Survey Overview

The 2021 Developer Satisfaction Survey (DSS) was live from February to April 2021, and it accrued a valid sample of 803 responses. A [summary report on the DSS 2021](#) was released on October 18, 2021 and a report about the [impact of the COVID-19 pandemic](#) on game developers was released on July 31, 2021.

The inclusion criteria for completing the DSS is broad. The data represent the experiences and perceptions of those in core development roles as well as roles that are auxiliary to the making of games or part of the larger game industry community:

85% → primary work making games in a core creation/development role (including QA)
6% → currently unemployed in the industry or looking for first job
4% → academics or game journalists
1% → involved in event planning
1% → eSports players, streamers, influencers
1% → industry investors

Within the majority game makers group, 33% held managerial roles (including project manager or team lead), 64% held core development roles (tech, art, audio, design, QA, etc.) and the remaining 3% held administrative or ancillary support roles (HR, marketing, community management, technical support, etc.)

This report examines the 2021 DSS data through a socio-demographic lens focusing on particular identity groups. The report also zeroes in on specific survey data about diversity policies and practices and experiences of inequity. We make occasional comparisons to the 2015 DSS data as presented in the [2016 Diversity Report,](#) noting that changes across years may be due to the composition of respondents in each sample rather than actual trends.

In this report, we take an *intersectional* lens[1] and present data for the whole sample as well as for the following specific demographic groups: **men, women, persons of non-binary gender, white men, white women, men of color, and women of color** (Table 1 and Table 2). Reporting the experience of people at different intersections of race and gender can better depict how racioethnicity and gender simultaneously contribute to a person's experience.

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[1] The term intersectionality was first used by Kimberlé Crenshaw (1989) and speaks to, for instance, how describing a person of colour's experience separate from their experience as a woman would not illustrate a woman of colour's experience.

We recognize problems in the construction of our identity groupings:

- First, 5% of respondents identified as transgender and 8% identified their gender as "non-binary, gender fluid, genderqueer, two-spirited." These categorizations were not mutually exclusive. Due to this small sample size, we were unable to produce sufficiently generalizable intersectional groups as was possible for men and women. We have produced a [dedicated report](#) to capture the experiences of **LGBTQA2+ persons**. This includes the 11% of respondents who identified as transgender and/or non-binary, gender fluid, genderqueer, or two-spirited and 32% of respondents who identified as gay, lesbian, bisexual, pansexual, demisexual, asexual, and queer.

- Second, we acknowledge problems with grouping all workers of color. Workers of different racial/ethnic groups fare differently in the workplace and our categorization adopts a Western bias. Some of the respondents included in our workers of color category would not be racialized minorities in their countries of work and different racial/ethnic tensions manifest in different regions of the world. However, the sample sizes were often too small for meaningful assessment of more precise groupings. Respondents who identified as bi- or multi-racial/ethnic with White/Caucasian/European were included in the workers of color sub-sample. In the DSS 2021, 78% of respondents to the survey identified as White to some degree; however, 66% of respondents identified exclusively as White.

Throughout the report we make comparisons to general population statistics from the US and Canada. This is appropriate insofar as respondents from these two countries made up 51% of the whole sample (39% US, 12% Canada).

Table 1: Survey sub-samples used in this report

	Includes	% of sample
Whole Sample[a]	Those in **managerial roles** including founders, owners, project managers, producers and team leads Those in **roles central** to game development such as programmers, designers, artists, audio professionals, and quality assurance and testing Those in **roles peripheral** to game development such as administrative support, customer support, technical support, journalists and academics Those **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 any role **Students** studying games or to work in the game industry	100
Men	Those who responded "man" when asked "How do you identify your gender"	62
Women	Those who responded "woman" when asked "How do you identify your gender"	30
Non-binary gender[b]	Those who responded "Non-binary, gender fluid, genderqueer, two-spirited" when asked, "How do you identify your gender?"	8
White Workers	Those who **only** selected "White/Caucasian, or European" when asked "Which of the following best describes your ethnicity/ancestry?"	66
Workers of Color	Those who selected **any of** "Aboriginal or Indigenous", "Black, African American, African, Afro-Caribbean", "Hispanic or Latinx", "Chinese", "Japanese", "Korean", "Pacific Islander", "South-East Asian", "West Asian", or "Other" when asked "Which of the following best describes your ethnicity/ancestry?" Those who selected any of the above **in combination with** "Caucasian"	34

Source: IGDA DSS 2021
[a] Questions related to working conditions in game studios were only asked of those working in a job directly related to making games. Questions about demographics and diversity were asked of the whole sample.
[b] Respondents who identified as transgender are represented across the above gender identity categories. Among transgender respondents, 3% identified as white men, 24% as white women, 10% as men of color, 9% as women of color, and 41% as non-binary.

Table 2. Composition of intersectional sub-samples

Intersectional sub-sample	% of respondents
White men	42
White women	20
Men of color	20
Women of color	10

Source: IGDA DSS 2021

What's the Context? DEIB in the headlines

The workplace cultures of game studios have long been described as a 'boy's club' with a 'frat house' mentality. Many attach the contemporary phrase 'toxic masculinity' to game workplaces and the game community. Where *GamerGate* framed the 2016 Diversity Report, this data is contextualized by the *Black Lives Matter* and *MeToo* movements and the recent spate of sexual harassment allegations in high profile game studios. These have propelled the discourse of diversity, equity, inclusion and belonging (DEIB) and focused attention on workplace practices. With reports of discrimination, sexism, and harassment in the headlines, the game industry's ability to handle a diverse workforce is a pressing issue with implications for the recruitment, retention, and well-being of employees.

The DSS 2021 shows important gaps in how companies address sexual harassment.

> Only 60% of respondents said that their workplace has a policy for sexual harassment and only half of that group said that these policies were adequately enforced.

Despite this, most respondents (83%) said that they would know what to do if they were harassed or witnessed someone else being harassed. That left 9% who said they did not know what to do and 7% who were unsure.

There were important differences across demographic groups.

- Women of color were the most likely to say that they would know what to do if facing or witnessing harassment (90%), followed by White men (88%), White women (86%), men of color (74%), and non-binary persons (70%).

- Workers identifying as a sexual minority[2] were less likely to know what to do than their straight counterparts (81% vs 85%).

There was also a difference between workers in different employment situations. While 90% of the self-employed and 85% of employee developers said they would know what to do, only 69% of freelancers said the same.

For the first time, the DSS 2021 also asked about online harassment at work.

Overall, 69% of respondents said that they had never experienced personal harassment online while carrying out their work, but that leaves 31% who had, and the distribution is not equal.

- Fewer men (25%) reported experiencing online harassment at work than women (42%) and they experienced it less frequently; 4% of men reported daily or weekly occurrences compared to 12% of women.

- More than half of the women of color experienced online harassment at work (52%); for 27% it is a yearly occurrence, but for 9% it happens monthly and for 16% it happens daily or weekly.

Only 40% of respondents said that their company had policies or procedures in place to address online harassment experiences by its workers; 45% said no and 15% did not know.

This data suggests that workers already in precarious positions or with marginalized identities require more support and protection.

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[2] A respondent was defined as a sexual minority if they did not identify as heterosexual

Demographics

Knowing the demographics of a survey sample allows us to gauge whether there are any patterns of experience among groups of people, and it provides the necessary information to track change over time. Demographics are important *especially* through the lens of diversity. As social and cultural shifts take place outside the industry, demographics are a valuable way to determine what impact these shifts have on the industry. As noted in the 2016 Diversity Report:

> An analysis of demographics helps us paint a picture of the issues inhibiting diversity within video game workspaces and the content produced therein. In an article about gaming, author Elsa Henry wrote, "There's little space for disabled characters because games are most frequently written and played by White, cis-gender, heterosexual, able-bodied men. Their experiences are frequently limited to the stories they can access, and the stories that they themselves want to play out" (Henry, 2015). Although this article referred to analog games and disability specifically, we can easily attribute this sentiment to other marginalized or minoritized bodies in both video games and the video game industry (Weststar, Legault, Gosse & O'Meara, 2016: 6).

Greater attention to diversity, equity, inclusion and belonging can have an important influence on the nature of games and the work experiences of game developers.

Age

The game industry is associated with a youthful workforce and though the 2021 DSS affirms historical patterns, the age may be creeping up. The mean age for the sample was 34 with a response range of 15 to 70 years old. On average, women were younger than men (32 versus 35 years). Half of the respondents were between the ages 27 to 38.

The average age of workers in the game industry remains lower than in the general workforce (Figure 1). In 2020, the median age of US workers was 42.5 years old (US Bureau of Labor Statistics, 2021) and in 2021 the average Canadian worker was between 40 and 44 years old (Statistics Canada, 2021).

Figure 1: Age. Whole sample versus Canada and US Labour Statistics
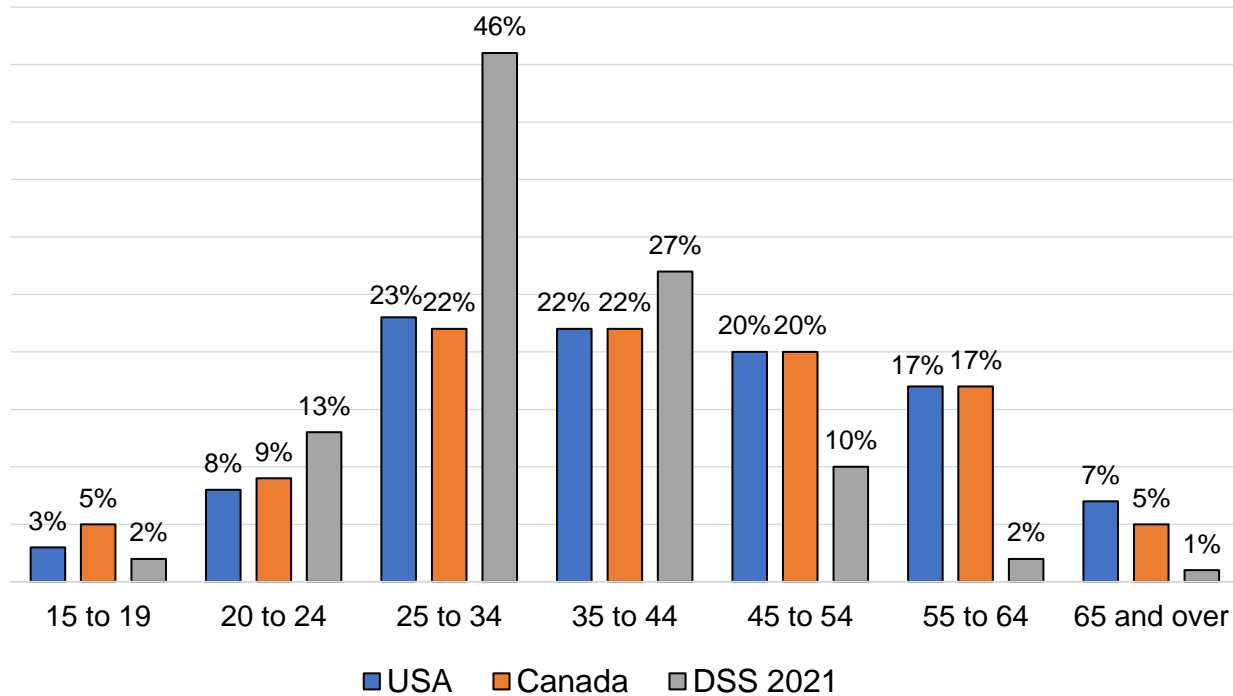
Source: IGDA DSS 2021; Canadian Labour Force Survey Oct 2021; US Bureau of Labor Statistics

Ethnicity, Country of Work, and Immigration

The DSS 2021 has a Western bias in terms of ethnicity, language, and country of work. Like previous years, the data show that most respondents (78%) identified as White (or bi-/multi-racial with White) (Figure 2). The second most represented group was Hispanic or Latino/a/x at 10%. Respondents were given the opportunity to choose up to three options to describe their ethnicity; 13% identified with more than one ethnicity.

Most of the respondents answered the survey in English (90%), followed by Traditional Chinese (2.5%), Japanese (2%), Spanish, German, and French (each at 1.5%) and Italian (0.5%).

Half of the respondents worked in the US (39%) or Canada (12%), followed by 35% who worked in Europe (including the UK) and 6% who worked in Oceania (mostly Australia) (Figure 3). We have produced a dedicated report which provides more detailed regional snapshots for North America, Europe, and the Nordic countries.

Across respondents in all countries, 19% identified as immigrants, an increase from 17% in the 2019 DSS and 13% in the 2016 Diversity Report.

Figure 2: Ethnicity. Whole sample DSS 2021

Ethnicity	Percent
White	78%
Only White	68%
Hispanic	10%
Black	5%
Other	4%
Chinese	4%
Indigenous	4%
Japanese	3%
South-East Asian	3%
West Asian	2%
South Asian	2%
Jewish	1%
Korean	1%
Pacific islander	1%
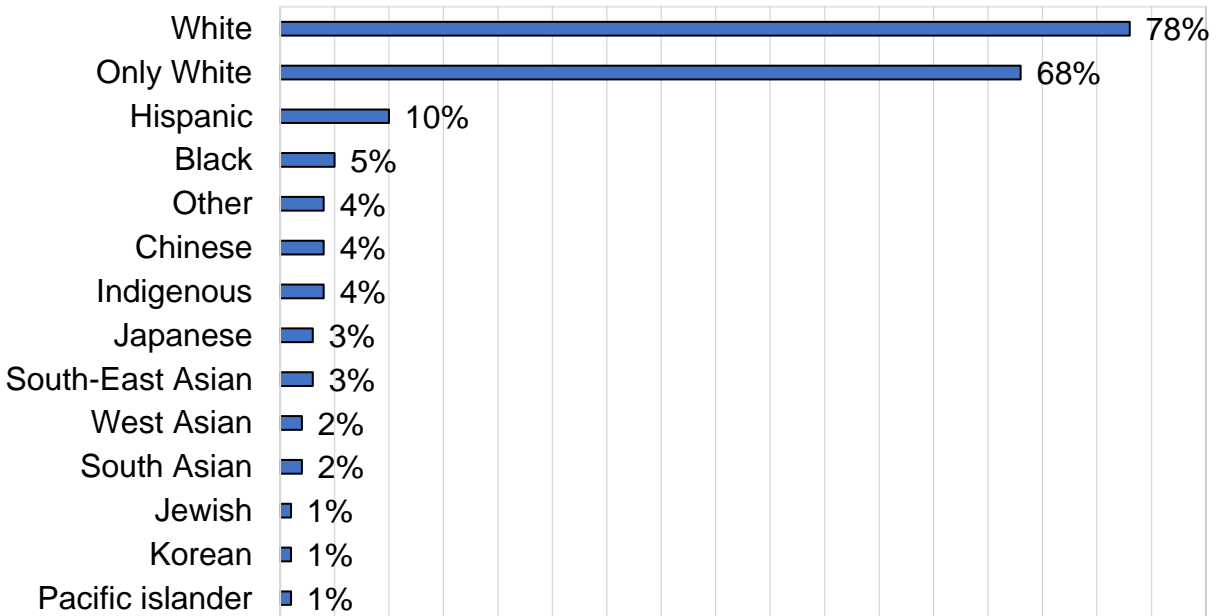
Source: IGDA DSS 2021
Note: Percentages do not add to 100% within categories due to multiple response allowances.
Respondents who identified as Jewish in addition to White were included in the first category.

Figure 3: Country of Work. Whole sample DSS 2021

South/Central America 3%
Africa <1%
Asia 5%
Oceania 6%
North America 51%
Europe 35%
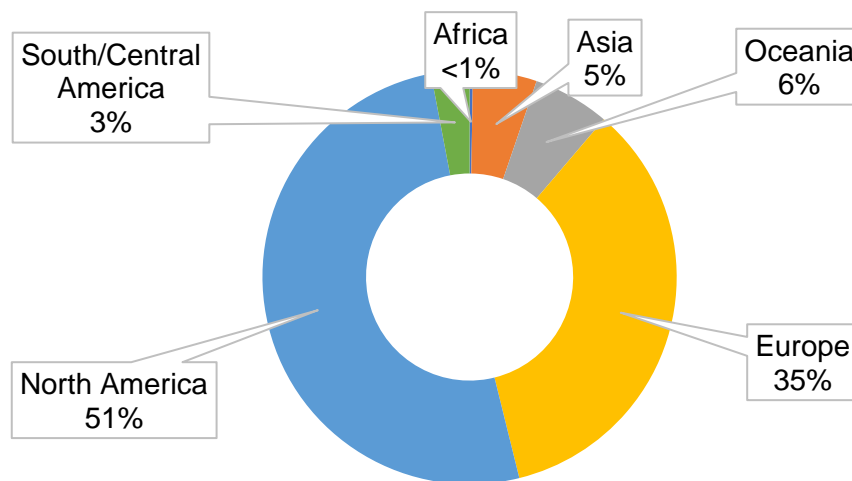
Source: IGDA DSS 2021
Note: Percentages may not add to 100% due to rounding.

Gender, Sexual Orientation, and Family Life

As shown in Table 3, most respondents to the DSS 2021 were heterosexual men. Though more than half of the respondents were married or partnered, the majority did not have children (75%). This is consistent with prior DSS reports.

The lack of dependents can be partially explained by the relatively young age of respondents. However, known characteristics of the working environment – such as lack of childcare, long and unpredictable hours, and employment insecurity – also impact domestic choices. Notably, 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, 2012) According to DSS respondents, only 4% of employers provided onsite daycare or any form of daycare subsidy.

The data suggest that the domestic choices of game workers may be gendered since 26% of men had children living at home as opposed to 19% of women. We also observed intersectional differences. At 29%, White men were most likely to report having children living at home compared to 20% of men of color, 19% of White women, and 19% of women of color. Further investigation is needed to understand why such a small percentage of women and racialized persons in the industry have children relative to White men.

Notably, 9% of the respondents of color and a comparable 8% of White respondents actively declined to disclose their sexual orientation. Twelve percent of respondents of color declined to answer whether or not they were open about their sexual orientation at work, compared to only 7% of White respondents. The conditions that affect a person's decision to disclose their sexual orientation are complex. However, this data might suggest that the perceived threat of harassment or marginalization based on sexual orientation may be disproportionately felt by workers of color. That said, these rates of nondisclosure are much lower than the DSS 2015 sample where 21% of workers of color refused to disclose their sexual orientation. This increase in disclosure may be due to societal change and an increase in global acceptance of homosexuality (Poushter & Kent, 2020), rather than a change specific to the gaming industry.

Table 3: Gender, Sexual Orientation and Family Life. Whole sample DSS 2021

		% of respondents
Gender	Men	62
	Women	30
	Non-binary, genderfluid, genderqueer, two-spirited	8
Transgender identity	Yes	5
Sexual Orientation	Straight/Heterosexual	68
	Gay or Lesbian	6
	Bi/pan/demisexual	21
	Asexual	3
	Queer	2
Marital Status	Single	36
	Married/partnered	61
	Separated/Divorced	3
Dependents	No children	75
	Pre-school children	11
	School-age children	12
	Adult children living at home	2
	Adult children living elsewhere	3

Source: IGDA DSS 2021
Note: Percentages will not add to 100% within categories due to rounding, multiple response allowances, and removal of missing values for some calculations

Disability or Divergence

General population statistics suggest that about one-quarter of adults have a disability (26% in the US and 22% in Canada; Centers for Disease Control and Prevention, 2020; Statistics Canada, 2018). Respondents to the DSS consistently report a higher rate of disability; 31% in 2015, 29% in 2019 and 37% in 2021 (Figure 4).

Further research is needed to understand the reasons behind the rate of reported disability among game workers. The industry may be accommodating to workers with disabilities and thus attractive. Alternatively, the working conditions may be exacerbating or adding to the development of certain

disabilities. For example, repetitive movements can precede physical strains and high stress environments associated with burnout may precede mood disorders. Burnout is associated with both depression and anxiety (Koutsimani et al., 2019). Another factor is that this survey was conducted after one year of the COVID-19 pandemic, which may have exacerbated reports of illness, especially mental illness. Early reports suggest that depression and anxiety have increased during this time (Abbott, 2021). Thus, it is difficult to disentangle the root causes of reported disability in the game industry and to what extent the industry is unique. More specific research is required.

Figure 4: Disability Status. Whole sample DSS 2021.
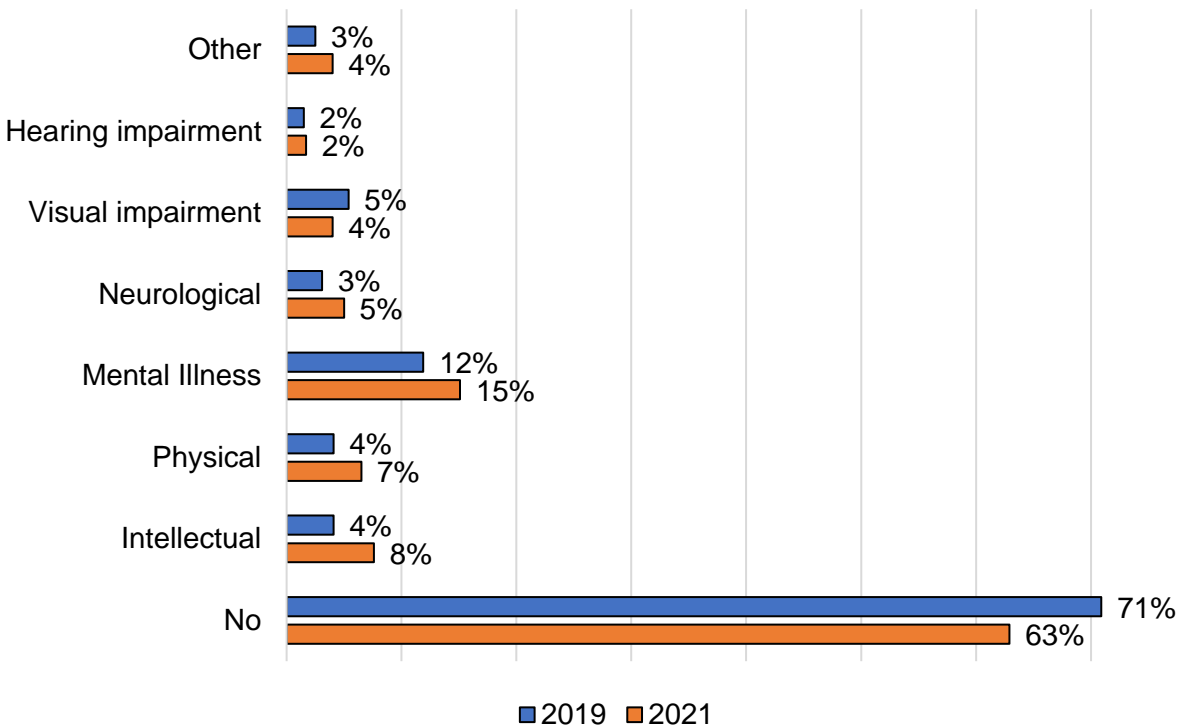
Source: IGDA DSS 2021

Reporting of psychiatric/mental illness differed among demographic subgroups: 29% of non-binary persons, 27% of White women, 18% of women of color, 12% of White men, and 5% of men of color. These rates may be unique to the sample and women and non-binary persons may be more willing to disclose their mental illness, which can be stigmatized compared to other forms of disability. Nonetheless, it is important to explore whether women and non-binary workers have unique experiences on the job that differentially influence their mental health.

Workers of color were more likely to decline to disclose disability than White workers (7% vs. 3%, respectively). The social stigma attached to disability may have been a factor in respondents' willingness to disclose. However, the

percentage of nondisclosures has generally decreased since 2015. Further research could examine whether the perceived threat of marginalization in the event of disclosure is felt more strongly amongst workers of color and the implications this may have for their personal well-being.

Education and Training

The most common path to working in the game industry is through formal schooling or training. Similar to 2015, approximately three quarters (79%) of participants in the DSS 2021 reported having received a college or university degree/diploma or a postgraduate degree (Figure 5).

Participants who identified as women reported higher levels of university or postgraduate education (73%) compared to men (65%), whereas no difference existed between White workers and workers of color (both 68%). One notable outlier is that 33% of women of color have post-graduate degrees compared to 21% of White women, and 17% of both men of color and White men. This data suggest that women of color and White women may be held to a higher standard and need higher credentials than their counterparts (Figure 6). This is consistent with findings that women are expected to meet more requirements to be considered for jobs (Moscatelli et al., 2020).

Figure 5: Highest level of education. Whole sample DSS 2021
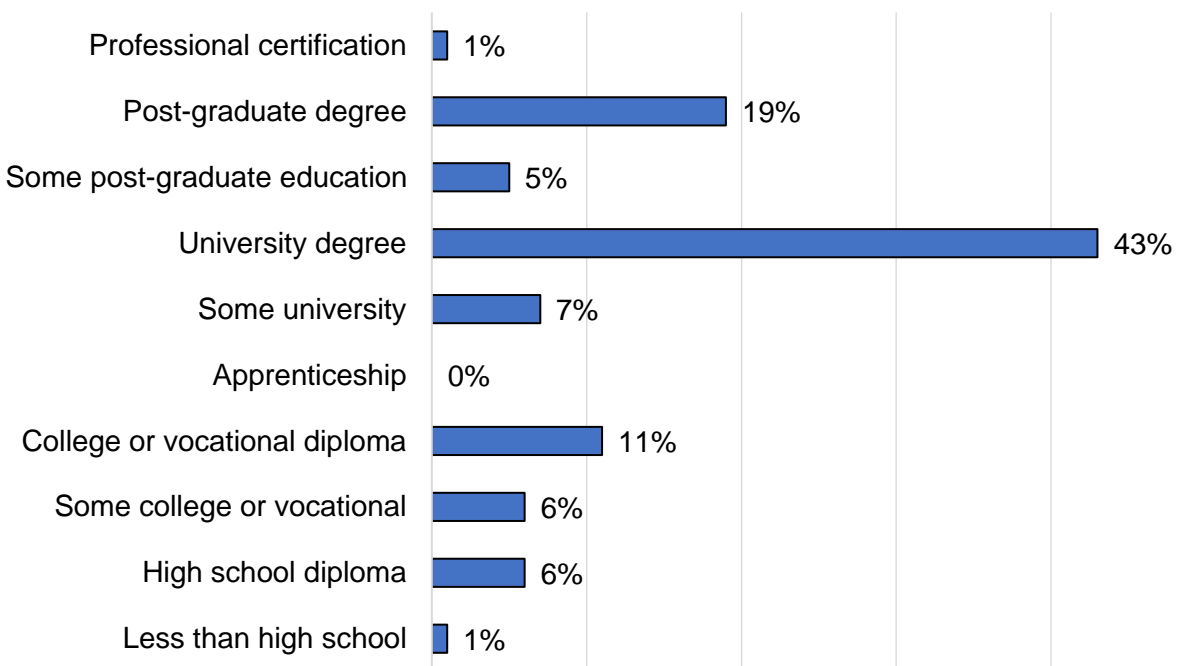
Source: IGDA DSS 2021

Figure 6: Highest level of education. Identity comparison DSS 2021
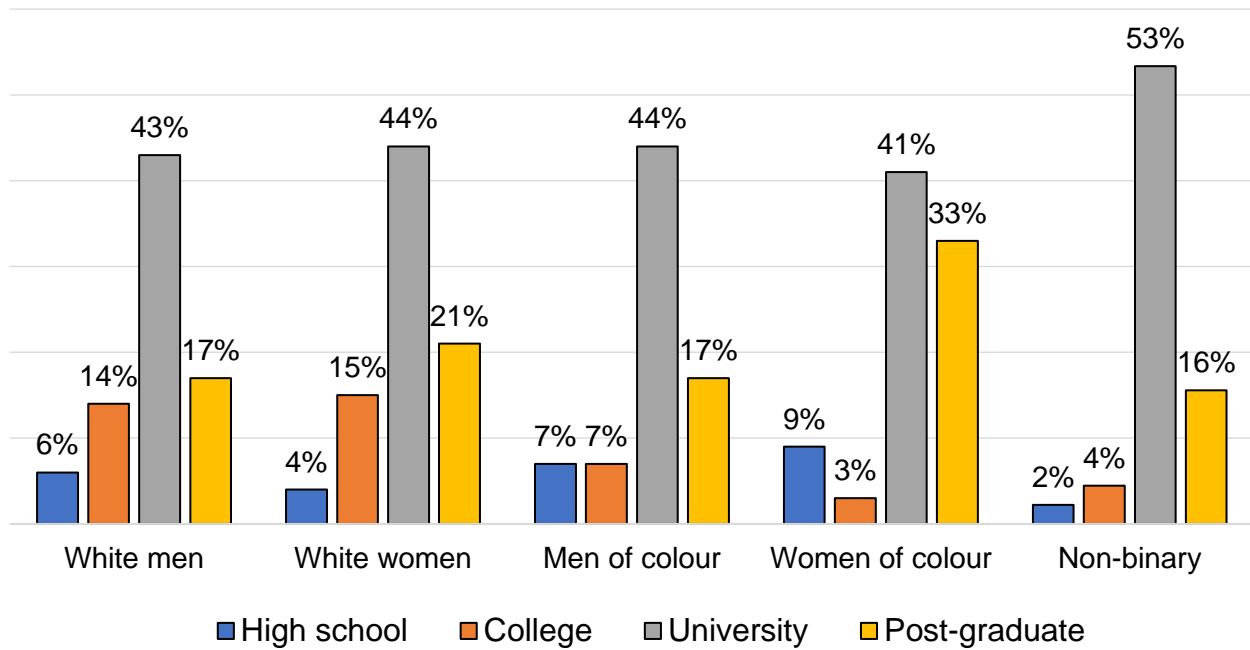
Source: IGDA DSS 2021

Type of Work

The following section contains data only from those working in a core or ancillary role to game development (as employees, freelancers or self-employed) and excludes those in the broader game community (e.g., academics, investors, journalists, players).

Respondents to the 2021 DSS included both full-time (87%) and part-time (13%) workers, who variously identified as permanent employees, temporary employees, freelance or independent contractors, or as self-employed (Figure 7). There was variance in employment type and status across identity categories. Women and workers of color were more likely to have precarious employment.

- Women reported being temporary employees more frequently than men (11% of women of color, 8% of White women and 4% each of White men and men of colour).

- Workers of colour reported employment as independent contractors and freelancers at higher rates than White workers (21% of women of colour, 16% of men of colour, 12% of White women, and 9% of White men).

- Women and workers of colour were more likely to hold part-time positions (15% of White women, 14% each of women and men of colour, and 11% of White men).

These findings suggest that White men dominate the most stable and permanent employment in the game industry. This finding is consistent with the results in 2015.

Primary Role

Table 4 shows the breakdown of occupational roles for the whole sample and within each identity group. Within the whole sample the most common role held by respondents was manager (33%), followed by design (26%), and then programming (24%), and art (10%). Among White women and White men, the most held role was management (41% of women and 38% of men). The most held role among men of colour was programming (37%) and among women of colour it was design (43%).

Figure 7: Type of employment within demographic groups. Identity comparison DSS 2021
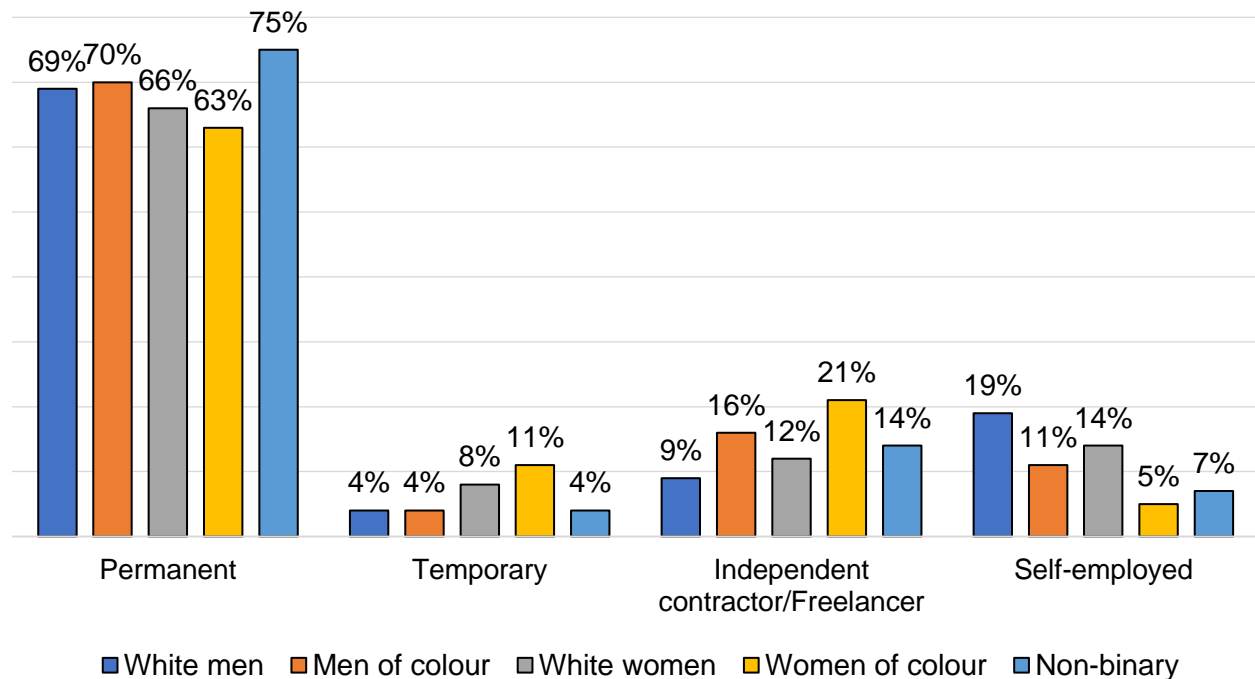
Source: IGDA DSS 2021
Note: Sum within each demographic group is 100%

Table 4: Demographics distribution across primary roles. Identity comparison DSS 2021

Primary Role	% of respondents					
	Whole sample	White men	White women	Men of colour	Women of colour	Non-binary[a]
Management	33	38	41	27	32	3
Programming	24	28	7	37	11	23
Design	26	20	31	23	43	37
Art	10	6	11	5	5	30
Audio	1	4	1	1	3	0
QA	3	2	4	5	5	3
Administration	3	1	6	2	0	3
Other	1	1	0	0	0	0
Total[b]	100	100	100	100	100	100

Source: IGDA DSS 2021
[a] all ethnicities; [b] each column sums to 100% and reflects the prevalence of each role within each identity group

However, analysing occupational representation *within identity groups* belies the fact that women and persons of colour are highly underrepresented in the industry. When comparing across occupations and therefore between the identity groups, the occupational representation was often not reflective of each group's representation in the DSS 2021.

Table 5 presents the data *within each occupation*. It shows that White men are most prevalent in all roles except administration. No White men reported working in audio, but this is a very small sample of 3 respondents and is likely not an accurate representation. Programming is the most homogenous role with 50% White men and 33% men of colour. Roles such as design, art and quality assurance are the most heterogeneous. White women are most prevalent in administrative roles.

Table 5: Composition of each primary role. Identity comparison DSS 2021

Primary role	% of respondents					
	White men	Men of colour	White women	Women of colour	Non-binary[a]	Total[b]
Management	49	17	25	9	1	100
Programming	50	33	6	4	7	100
Design	32	19	24	15	10	100
Art	43	10	21	5	21	100
Audio	0	33	33	33	0	100
QA	29	29	21	14	7	100
Administration	20	20	50	0	10	100
Other	100	0	0	0	0	100

Source: IGDA DSS 2021
[a] all ethnicities; [b] each row sums to 100% as this reflects the demographic composition within each role

Managerial Roles

As shown in Table 4, the majority of respondents reported working in managerial roles. These were defined as a senior, upper or middle manager, producer or project manager, or team lead. Within each identity sub-sample, White women reported working in management positions (41%) more than any other role, but as shown in Table 5 White women were still underrepresented in managerial roles relative to White men (25% versus 49%). Although many women in this sample worked in management roles relative to other roles, within these roles, they were still objectively underrepresented.

Table 6 shows that White men are most prevalent as survey respondents and also in all managerial roles. They are overrepresented in senior and middle management roles and as team leads and underrepresented as producers. Men of colour are highly underrepresented in senior management roles. Women of colour are underrepresented in middle management and team lead roles. Interestingly, White women are overrepresented as producers and to a lesser extent in senior management and team lead roles. Producer roles are challenging positions within game studios, requiring 'soft skills' that are often feminized and devalued.

Table 6: Representation of identity groups within managerial roles

	% of sample	% in managerial roles			
		Senior	Upper-mid	Team lead	Producer
White men	42	59	56	47	37
White women	20	22	17	26	32
Men of colour	20	10	22	21	17
Women of colour	10	10	6	5	12
Non-binary	8	0	0	0	2

Source: IGDA DSS 2021
Note: column totals may not add to 100% due to rounding

The disproportionate presence of White workers in senior management positions is of significant concern because it has implications for workplace culture, game content, and the shape of the industry at large. Having a diverse set of voices at the table is a powerful means by which we can strengthen equality in the industry. As such, these findings further emphasize the importance of continuing to combat the educational and workplace barriers that may be inhibiting general entry for marginalized groups and their advancement to influential positions within the industry.

Programming Roles

Strikingly, the percentage of White men who reported working in programming roles (28%) was four times that of White women and more than double that of women of colour (Table 4). Programming was the most common role reported by men of colour (37%).

There were important distinctions by programming sub-discipline (Table 7). White men were overrepresented as engine and gameplay programmers but underrepresented as tools programmers. Men of colour were overrepresented as tools and gameplay programmers. White women were underrepresented

across all three programming areas. Women of colour were quite underrepresented as gameplay programmers but overrepresented as tools programmers.

Women are objectively and relatively underrepresented in programming roles. Few women work in programming roles overall and they are underrepresented in programming roles relative to other roles.

Table 7: Representation of identity groups within programming roles

	% of sample	% in programming roles		
		Engine programmers	Tools programmers	Gameplay programmers
White men	42	71	29	48
White women	20	0	14	6
Men of colour	20	21	43	34
Women of colour	10	7	14	3
Non-binary	8	0	0	9

Source: IGDA DSS 2021
Note: column totals may not add to 100% due to rounding

Design Roles

As outlined in Table 4, the majority of women of colour reported working in design (43%). This occupation was also common among White women (31%). However, White men were still more prevalent in design overall (Table 5).

There were also differences in the sub-disciplines of design (Table 8). Women of colour were overrepresented in writing and user-experience (UX) and user-interface (UI) positions and underrepresented in level design. White women are also overrepresented as writers. White men were underrepresented as writers and UX/UI. Men of colour were significantly underrepresented as writers.

Table 8: Representation of identity groups within design roles

	% of sample	% in design roles		
		Level design	Writers	UX/UI
White men	42	41	22	20
White women	20	23	33	15
Men of colour	20	23	4	25
Women of colour	10	7	26	25
Non-binary	8	7	15	15

Source: IGDA DSS 2021
Note: column totals may not add to 100% due to rounding

Compensation and Benefits

Compensation

We compiled the data for all employed, self-employed, currently unemployed and freelance game workers. Figure 8 presents income data within each gender and Figure 9 within each intersectional identity.

In Figure 8, we see the largest gender discrepancies in earnings emerge at the highest and lowest income brackets[3]. As men represent 62% of respondents, the income brackets where men represent greater than 62% indicate a disproportionate representation within the income brackets. This is particularly seen in incomes over $100,000. In contrast, women tend to be disproportionately represented in the lower income brackets. This is seen in the income brackets where the bars that exceed 30%. For more information on non-binary respondents, please see the LGBTQIA2+ diversity report.

- Men occupy both the highest and lowest income brackets while women are more clustered in the middle.

- Relative to men, there are fewer women in the high-income brackets and more women in the lower income brackets.

- The largest gender discrepancy is at the top where 10% of men reported earning $150,000 or more compared to only 3% of women.

Figure 9 shows a more balanced income distribution among White men and women of colour whereas men of colour and White women have more clustering at the lower income ranges.

Note that many non-binary persons of colour and women of colour did not disclose their income (57% and 54% nondisclosure, respectively compared to 30-37% for White women, White nonbinary persons, White men, and men of colour). We caution overgeneralization of the data for these groups.

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[3] When controlling for the impact of job tenure and occupational role on compensation, the differences in earnings between men and women in the highest and lowest income brackets are statistically significant, but there are no statistically significant differences between the distributions of men and women in the middle brackets.

Figure 8: Income distribution within genders. DSS 2021.
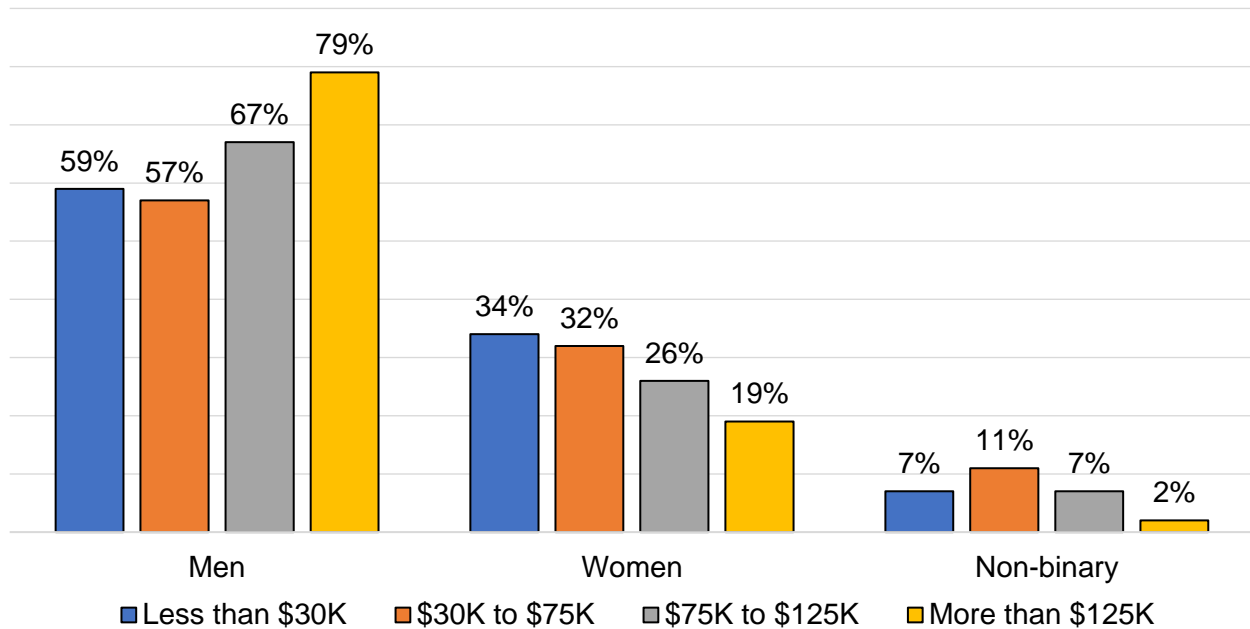
Source: IGDA DSS 2021

**Figure 9: Income distribution within demographic groups. DSS 2021**
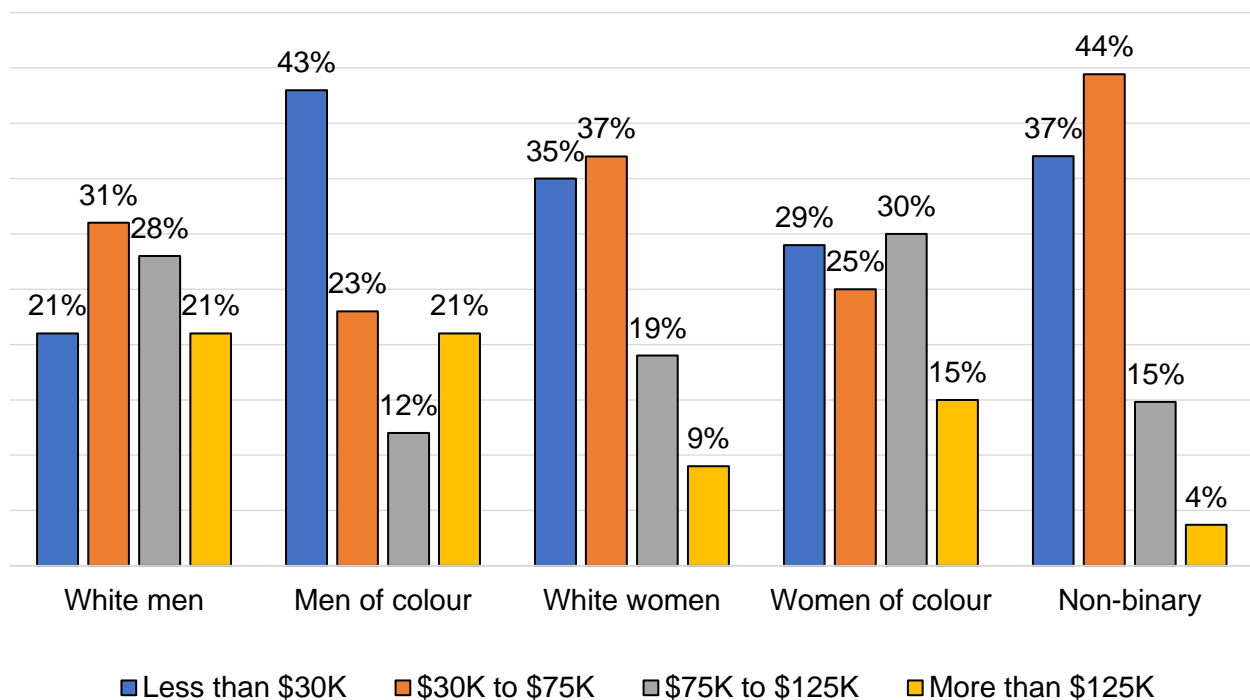
Source: IGDA DSS 2021

Employees

Employees generally have higher earnings than contractors/freelancers and self-employed respondents. Many employees (45%) reported incomes of more than $75,000 USD, while 26% reported incomes between $40,000 and $75,000 USD. Among employees, White women and men of colour were more evenly distributed across the income brackets, while White men and women of colour were more represented in higher income brackets (Figure 10).

Figure 10: Rate of compensation for employees by gender and ethnicity. DSS 2021
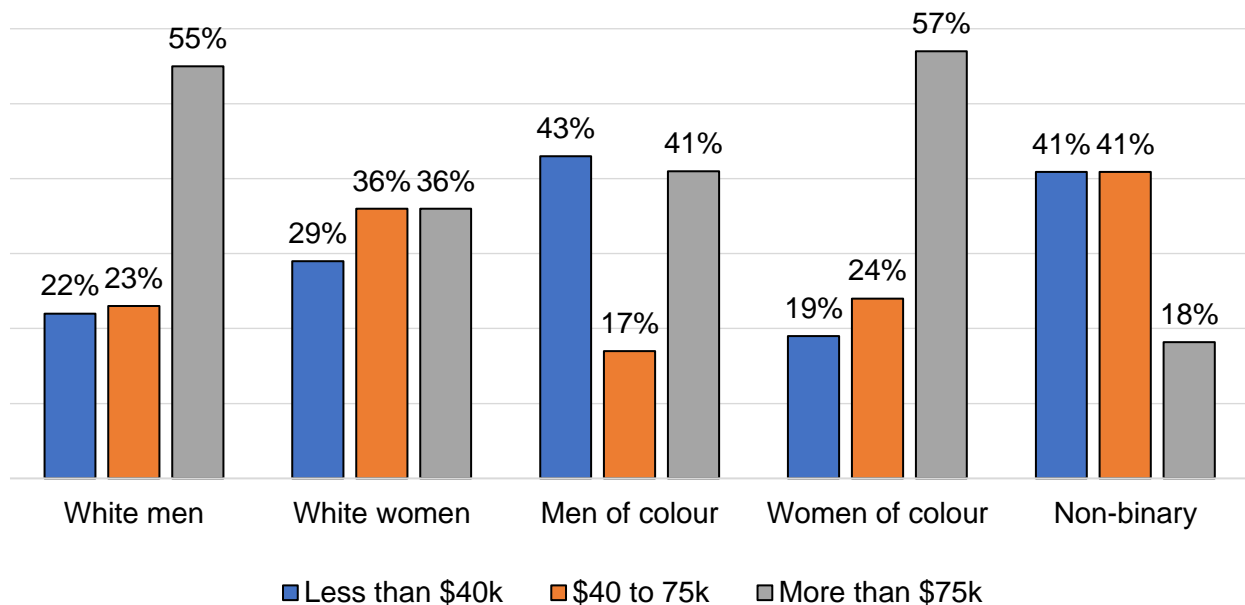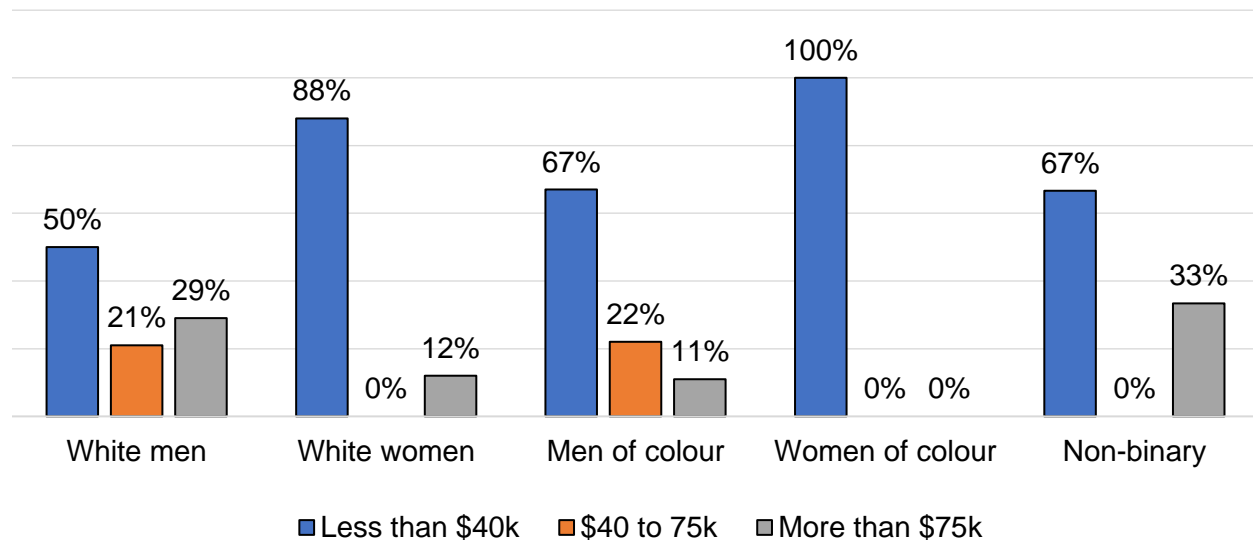

Source: IGDA DSS 2021

Freelance

Most (72%) freelancers made under $40,000 USD, while 16% earned $75,000 USD or more. Half of those in the low-income bracket earned $15,000 USD or less. Figure 11 shows that White men are more represented in higher income brackets and less prevalent in low-income brackets relative to other identity groups. However, due to the small number of freelance respondents, it is difficult to draw definitive conclusions about the identity groups.

Self-Employed

The majority of self-employed respondents were in the low-income bracket with 78% earning less than $15,000 USD in the previous year. Again, the data suggest that White men are more represented in the higher income brackets

and less prevalent in the lower income brackets relative to the other identity groups (Figure 12). However, this sub-sample also has a relatively small number of respondents, so it is difficult to draw conclusions about the identity groups.

Figure 11: Rate of compensation for freelance workers by gender and ethnicity. DSS 2021

Source: IGDA DSS 2021

Figure 12: Rate of compensation for self-employed workers by gender and ethnicity. DSS 2021
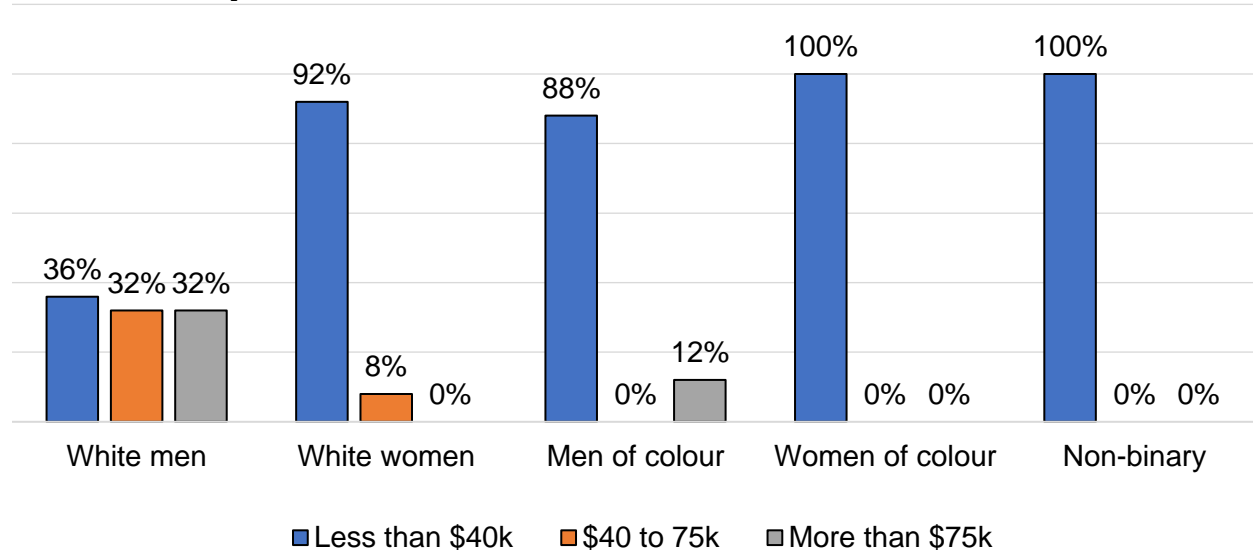
Source: IGDA DSS 2021

Perception of compensation rate

The DSS 2021 asked respondents to reflect on the fairness of their compensation given their experience and role (Table 9). Most employees (58%) agreed or strongly agreed that they were paid fairly compared to 38% of freelancers and only 28% of the self-employed. That leaves many in each employment category who did not perceive their pay as fair.

Table 9: "I am compensated fairly for my experience and the responsibility of my job title". Whole sample DSS 2021

	% of respondents		
	Employee	**Freelance**	**Self-employed**
Strongly Agree	16	8	11
Agree	42	31	17
Neither agree nor disagree	16	17	22
Disagree	18	21	22
Strongly disagree	8	23	28

Source: IGDA DSS 2021

The distribution of people who felt fairly compensated for their work varied slightly across demographic subgroups (Figure 13). For example, more White men and women of colour agreed or strongly agreed that they were fairly compensated (55% each) as opposed to men of colour (49%), White women (46%), and non-binary respondents (44%).

Figure 13. "I am compensated fairly for my experience and the responsibility of my job title". Identity comparison. DSS 2021
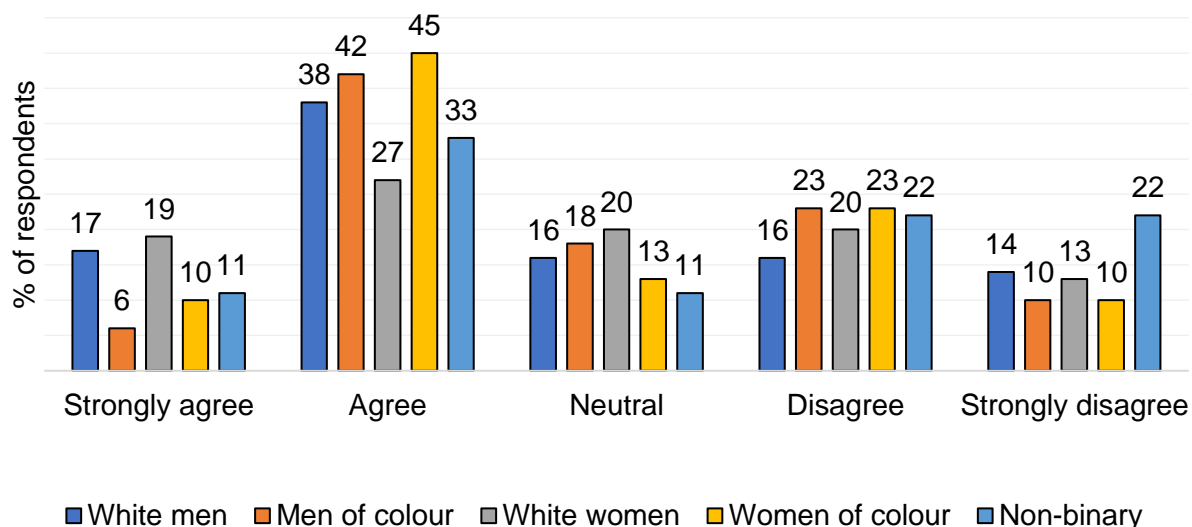
Source: IGDA DSS 2021

Benefits

The DSS asks a range of questions about employer, state and private benefits. In this report we focus on the availability of childcare benefits as they are often associated with differential workplace outcomes by gender and ethnicity.

Though improvements are being made (Legault & Weststar, 2015), the game industry is known for long and unpredictable working hours, which may create barriers for workers with home responsibilities like parenting and eldercare. Domestic care often falls disproportionately on women (England, Levine & Mishel, 2020; Holland, 2015; Kolhatkar, 2015). One strategy to reduce or redistribute this load is to support workers via childcare benefits and parental leave. Strikingly, only 4% of respondents said that their companies offered onsite or subsidized daycare as a benefit.

The majority of employees had access to some form of paid maternity/pregnancy leave (68%) and paternity/parental leave (64%) (Table 10). This was an increase compared to 2015 (58% and 52%, respectively). Consistent across years, a small portion (3%) reported unpaid leaves. About one-third did not know whether maternity/pregnancy leave (29%) and paternity/parental leave (34%) were available, a decrease from the 37% reported in 2015.

Table 10: Access to maternity/pregnancy and paternity/parental benefits. Employee sample DSS 2021

	% of respondents	
	Maternity/ pregnancy	Paternity/ parental
No	2	2
Yes, unpaid	3	3
Yes, paid by employer	30	29
Yes, paid by government program	10	9
Yes, paid by combination of employer and government program	26	23
Don't know	29	34

Source: IGDA DSS 2021

A higher frequency of these services amongst employers could facilitate greater gender equity within the industry. This is particularly true in the United States which lags the global community in state-based pregnancy and parental leave policies. However, only 22% of respondents reported having a child or children who lived at home in 2021 and this drops to 20% for young

children. This leads to a 'field of dreams' sort of debate around family-friendly policies. The data on maternity and parental leave also highlight the relative invisibility of parenthood in this industry. 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. Familial support within and outside of the work environment is incredibly important, especially when anti-maternity/motherhood discourses permeate accounts of discrepancies between men and women who occupy senior management or C suite positions (e.g., CEO or CFO) (Fairchild, 2014; Branson, 2010).

As well, the reported increase of access to leave policies does not reflect the actual uptake of leave by fathers. In a male-dominated workplace such as the games industry, fathers face pressures to adhere to gender norms of being providers, not caregivers, and this is reflected in country data (Haas & Hwang, 2019). The key to a higher father uptake of the leave offered is to designate a portion to fathers-only and provide high compensation during the leave (Karu & Tremblay, 2018). Some regions (e.g., Nordic countries and Quebec in Canada) mandate this in their laws and such differences in parental leave provisions can be viewed in the regional report. To ensure equity in opportunities for career advancement and in participation in childcare, individual companies may consider changing their strategies around parental benefits.

Diversity

In answering the survey questions that correspond to the following sections of this report, participants were prompted to think of diversity in terms of demographic characteristics such as gender, age, ethnicity, ability, or sexual orientation. Certain characteristics may have been more or less salient to respondents based on their identities. They may have also considered diversity in terms of knowledge, skills, and experience.

Up to this point, we have compared respondent experiences by gender and ethnicity and used the four intersectional categories of White men, White women, men of colour, and women of colour. In this section, we examine how responses varied across gender *and* self-identified *ethnic minority-status*. This compares respondents who answered 'yes' or 'no' to the following question: "Do you identify as a member of a racial or ethnic minority in your workplace?" By considering minoritization differently in this section, we are not imposing a *de facto* minority-status on individuals who might not consider themselves ethnic minorities. This categorization can capture the experience of White respondents who are ethnic minorities outside of their home countries and persons of colour who are non-minorities in countries that align with their ancestry. Overall, we are allowing respondents to self-identify as ethnic minorities based on their own perceptions of marginalization in their workplace.

Thus, in this section we compare respondents who self-identified as 1) non-minority men, 2), non-minority women, 3) minority men, and 4) minority women.

It is important to note that only about 65% of all the people who began the DSS 2021 completed the questions about diversity. This may simply be due to survey fatigue, as diversity questions were at the end of the survey. However, respondents may have dropped off due to a lack of interest or awareness of diversity issues, especially if they did not find them to be pertinent to their own workplaces. Nonetheless, the responses demonstrate that there are key differences in perceptions of diversity based on identity.

Importance of Diversity in the Industry, Workplace, and Game Content

Survey respondents were asked to rate the importance of diversity within the industry at large, within their workplace, and in the game content that they helped to produce. In 2021, 87% of the whole sample said diversity was somewhat or very important to the workplace, 90% said it was somewhat or very important to the game industry, and 89% said it was somewhat or very important to game content (Figure 14). These numbers are higher than in the

2016 Diversity Report, where between 62-72% of respondents viewed diversity as important in each context.

Figure 14: Importance of diversity. Whole sample DSS 2021
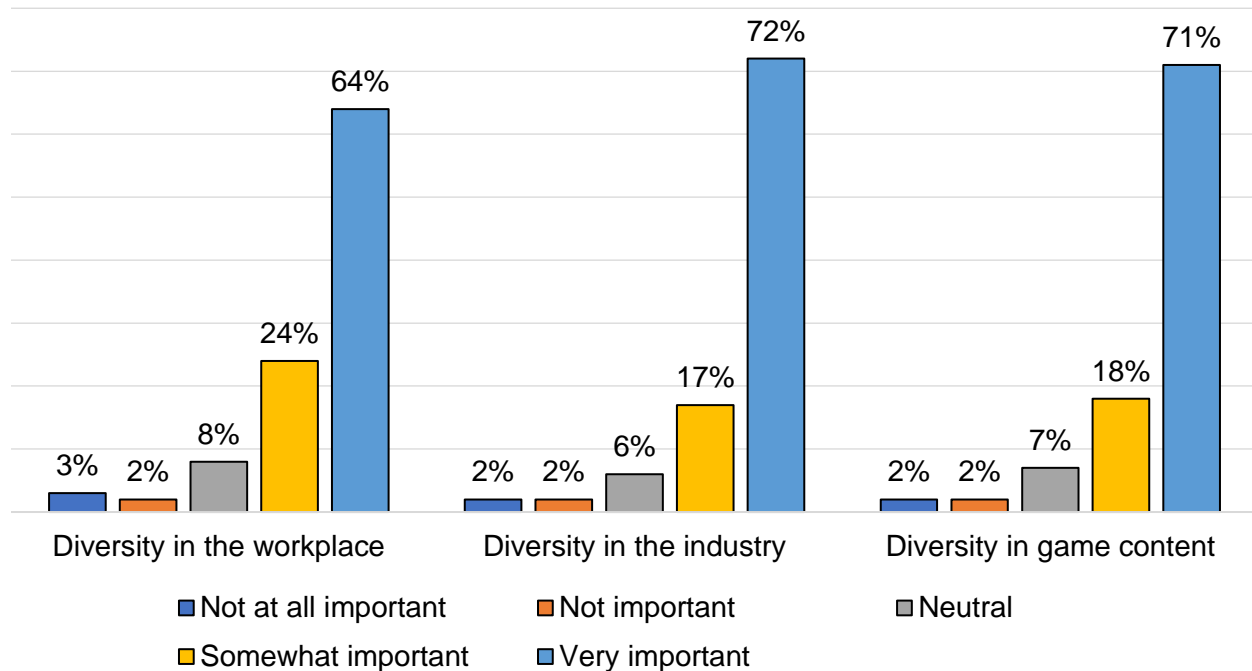
Source: IGDA DSS 2021

When we compare results across different respondent identities, a noticeable gender pattern emerges. More minority and non-minority women said that diversity was important in the workplace, in the gaming industry, and especially in game content when compared to men (Tables 11, 12, and 13).

These results are similar to the 2016 Diversity Report and are not surprising. In addition to being underrepresented in the workforce, women have experienced discrimination in their workplaces, derogatory representations of their gender in game content, as well as general invisibility within the wider game culture. They are more acutely aware of the value in diverse participation and representations.

Table 11: "How important is diversity in the workplace"? Identity comparison DSS 2021

	% of respondents			
	Non-minority Men	**Non-minority Women**	**Minority Men**	**Minority Women**
Important	81	93	83	97
Neutral	11	7	8	0
Not Important	8	0	8	3

Source: IGDA DSS 2021

Table 12: "How important is diversity in the industry"? Identity comparison DSS 2021

	% of respondents			
	Non-minority Men	**Non-minority Women**	**Minority Men**	**Minority Women**
Important	85	94	83	97
Neutral	8	5	11	3
Not Important	7	1	6	0

Source: IGDA DSS 2021

Table 13: "How important is diversity in game content"? Identity comparison DSS 2021

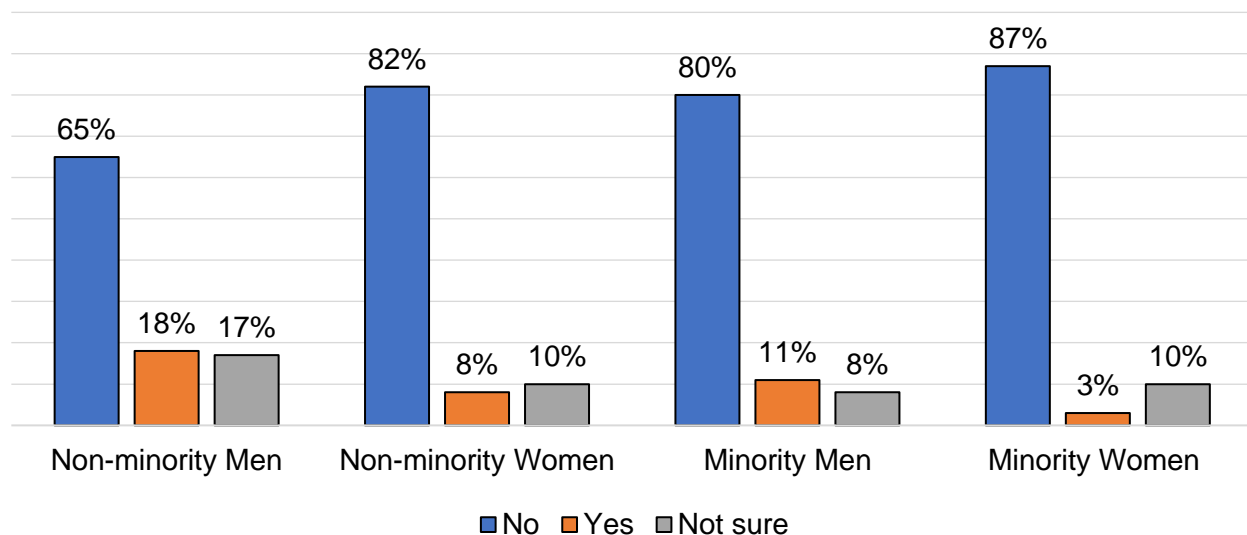|	% of respondents			
	Non-minority Men	**Non-minority Women**	**Minority Men**	**Minority Women**
Important	82	97	86	100
Neutral	11	3	8	0
Not Important	6	1	6	0

Source: IGDA DSS 2021

Equal Treatment, Opportunity, & Equity

DSS 2021 survey respondents were asked if they believe there is equal opportunity and treatment for all in the game industry; 74% selected no, 12% selected yes, and 14% were unsure. These sentiments are worse than 2015, where 49% said no, 39% said yes, and 13% were unsure. Rather than signalling that conditions are getting worse, this may demonstrate growing awareness of existing obstacles to equal opportunity.

The perception of unequal opportunity and treatment is shared across marginalized respondents but is less prevalent among non-minoritized men (Figure 15). Minority women believed most strongly that there is not equal treatment for all in the game industry (87%) while only 65% of non-minority men held this view.

Figure 15: "Do you feel there is equal treatment and opportunity for all in the game industry?" Identity comparison. DSS 2021
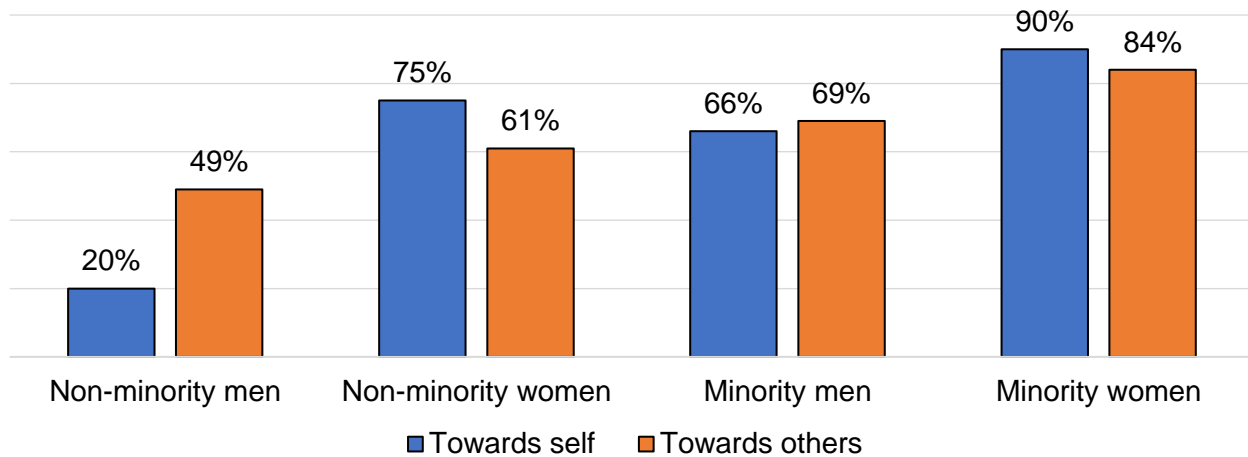

Source: IGDA DSS 2021

Experiences with Inequity

Respondents were asked if they had personally experienced inequity towards themselves and if they had witnessed inequity towards others based on their gender, age, ethnicity, ability, or sexual orientation. Respondents were invited to select multiple areas in which the inequity might have occurred. Non-minority men reported the lowest incidence of inequity towards themselves (20%), but almost half (49%) said they had witnessed some form of inequity towards others (Figure 16). Women and minority men reported incidences of

inequity towards themselves and others at much higher rates than non-minority men.

Figure 16: Perceptions of inequity towards self and others. Identity comparison DSS 2021
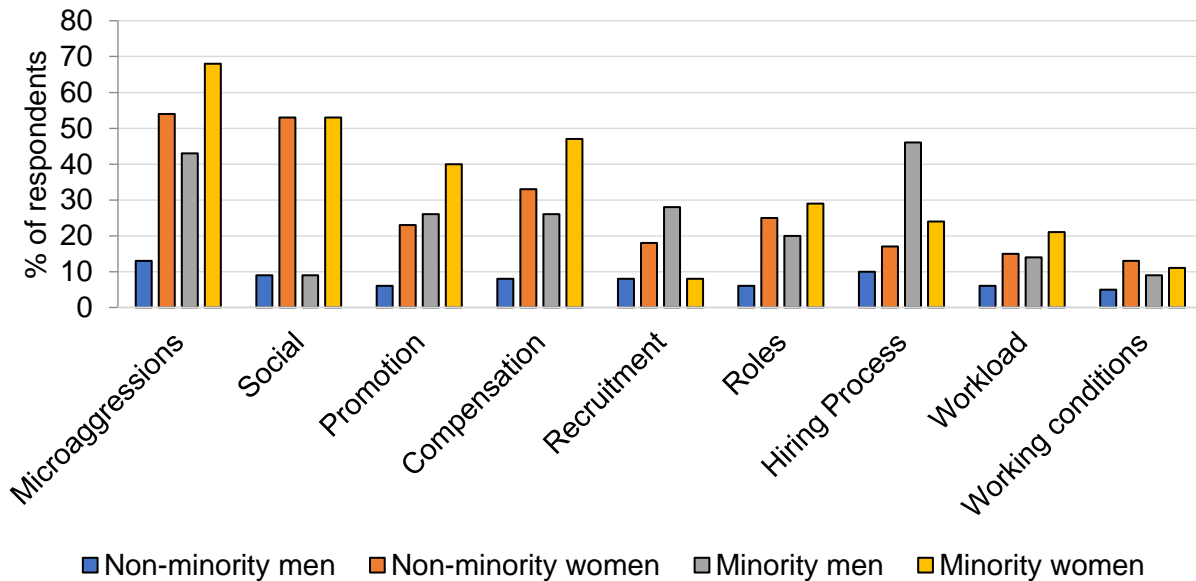

Source: IGDA DSS 2021

Types of Inequity

When examining specific types of inequity, 32% of respondents said they had personally experienced microaggressions and 27% had experienced some other form of social or interpersonal inequity. These numbers are higher than in 2015 (19% and 20%, respectively). Moreover, 47% said they had witnessed microaggressions towards others and 41% witnessed social/interpersonal inequity. These numbers are also higher than in 2015 (26% and 28%, respectively). Although it is possible that these forms of inequity have increased in the video game industry, it may be that individuals have become more aware of them. These issues have received considerable attention over the past six years. In any case, these forms of inequity are insidious; they may take subtle and seemingly inconsequential forms and can be perpetuated through workplace culture and everyday communication.

There were interesting differences by inequity type across identity groups (Figure 17 and 18). Many women (both non-minority and minority) reported experiencing microaggressions and social inequities. Women were also more likely to report pay inequity, inequity in the promotion process, and inequity with respect to occupational roles. This fits with the data presented above about differential income levels between men and women and occupational segregation. These challenges seem more prevalent for minority women. Many minority men also experienced microaggressions, but further reported inequity in the recruitment and hiring process. These would create barriers to entry.

The data about perceived inequity toward others is shocking (Figure 18). Across almost every category, more than one in five non-minoritized men had witnessed an act of inequity towards someone else. Among women and minoritized men, the rate was more than one in three.

Figure 17: Types of inequity. Identity comparison DSS 2021

Source: IGDA DSS 2021

**Figure 18: Inequity toward others. Identity comparison DSS 2021**
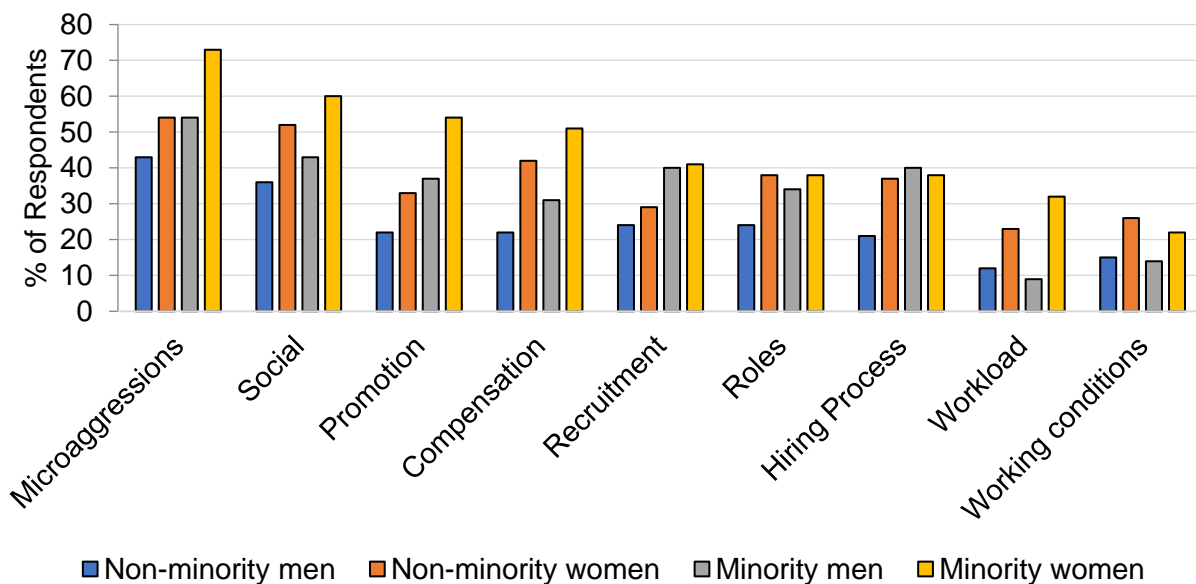
Source: IGDA DSS 2021

Diversity Related Programs and Policies

Workplace-specific initiatives can act as a powerful resource for marginalized workers. To assess the state of current initiatives, the DSS asked respondents to indicate whether or not their company provides diversity-related programs or policies (Figures 19 and 20).

More respondents identified diversity and equity-related programs and policies in 2021 compared to 2015. This may suggest more programs or simply greater awareness of these resources. 'Safe space policy' was added as a new option in 2021. However, there is still a long way to go. Notably, 33% of respondents said that their company did not have any of the listed diversity-related programs and 8% reported that their company did not have any of the listed diversity-related policies. A large number of respondents did not know whether or not their company offered these programs (27%) or policies (22%).

Figure 19: "Does your company, your client, or the company where you work have any of the following equality and diversity related programs?" Whole sample DSS 2015 & 2021
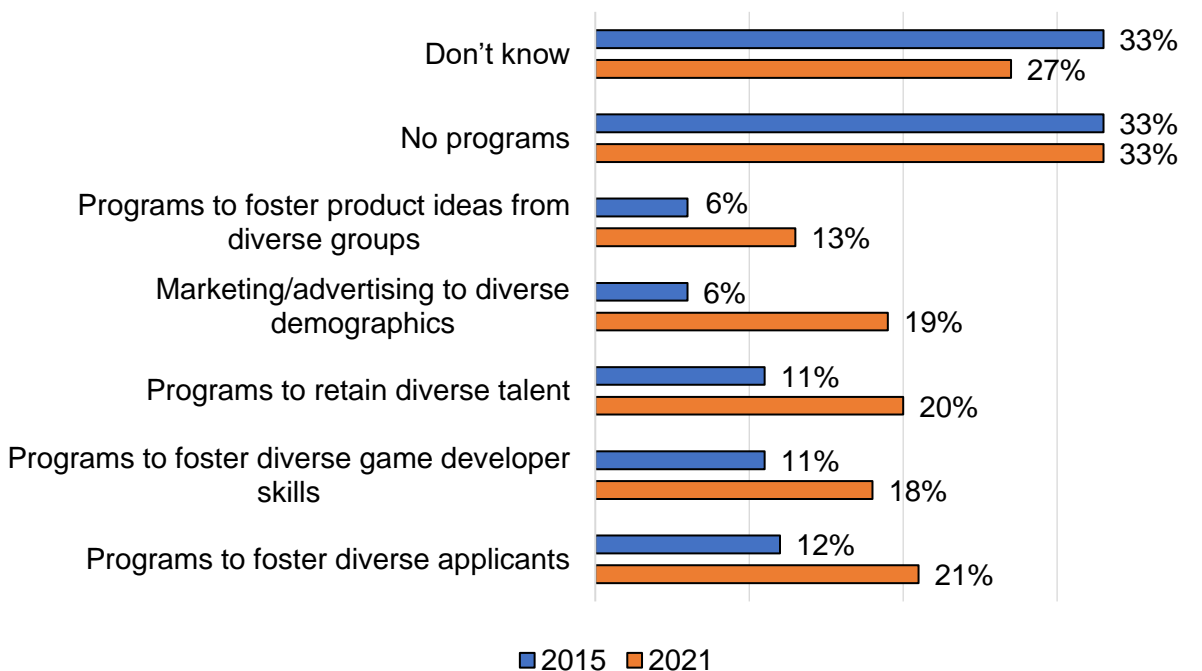
Source: IGDA DSS 2021

Figure 20: "Does your company, your client, or the company where you work have any of the following equality and diversity related policies and procedures?" Whole sample DSS 2015 & 2021
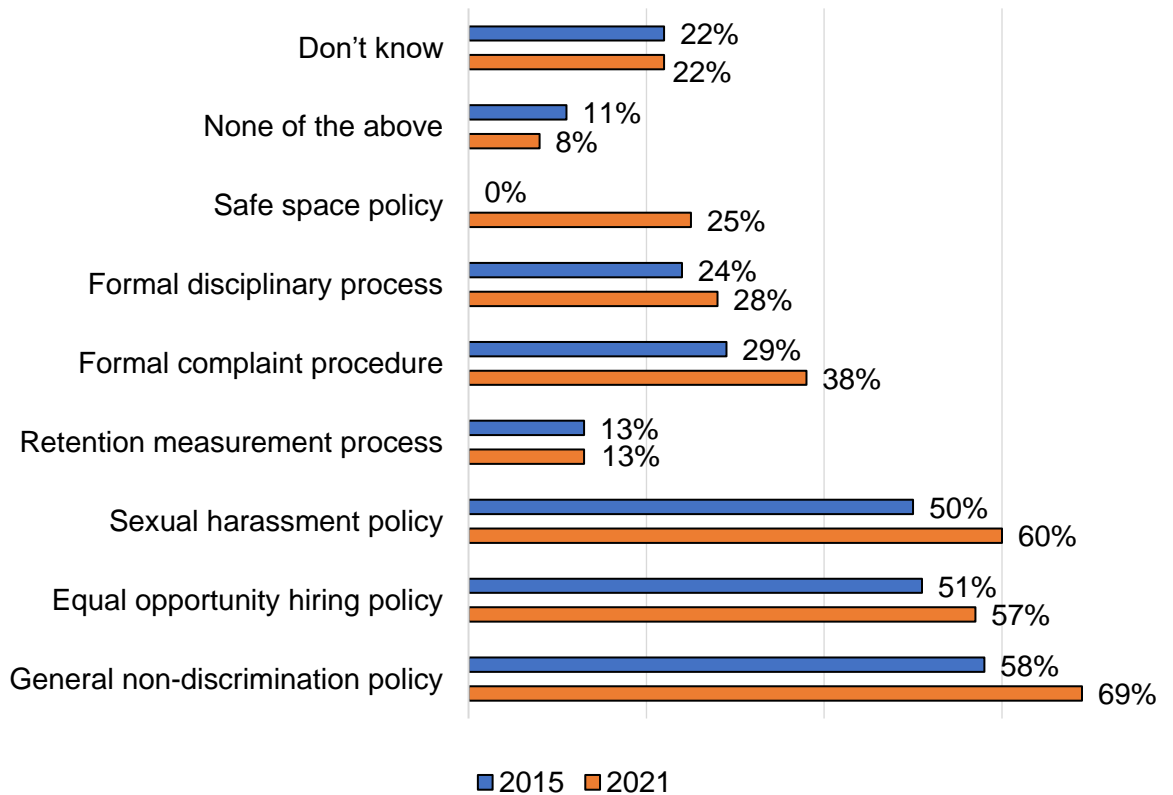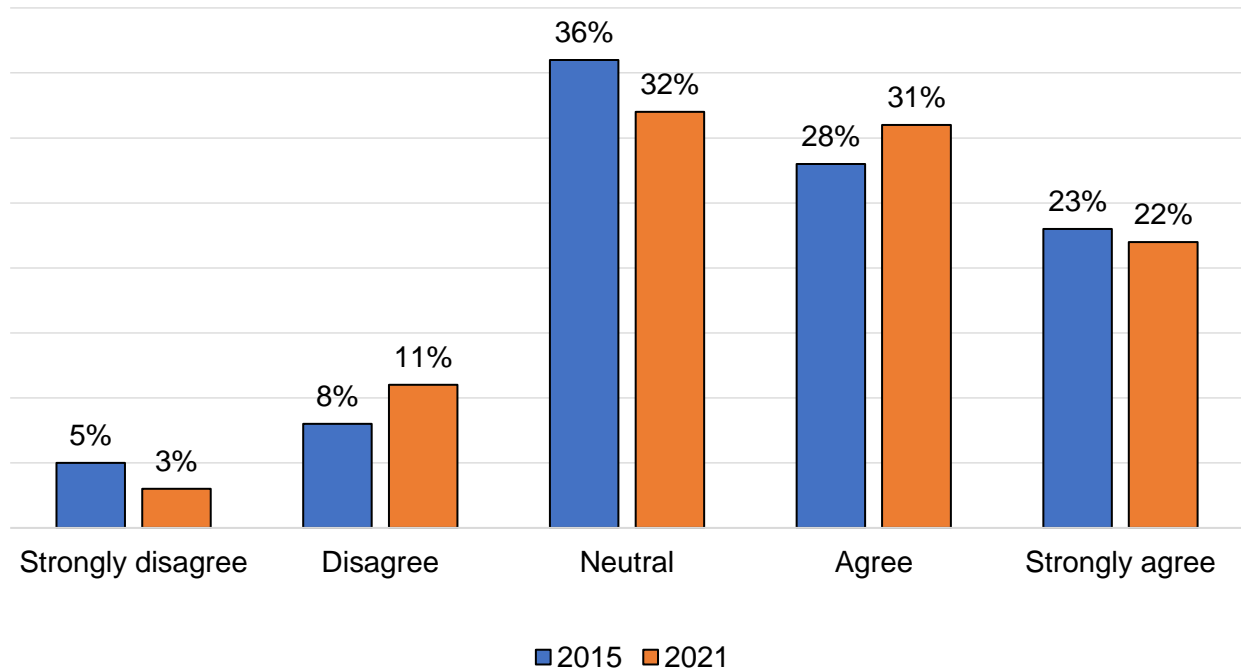

Source: IGDA DSS 2021

Pursuing Diverse Candidates

Recruitment and hiring are key avenues through which organizations can work towards diversity, equity, and inclusion. About half of the respondents to the 2021 DSS agreed that their company pursued diverse candidates (53%), but about one-third gave a neutral response and another 14% disagreed (Figure 21).

There were some notable differences across identity groups (Table 14). Overall, men were more likely to disagree that their company pursues diverse candidates than women. Non-minority women and minority men were more likely to agree than the other two groups. There was a large proportion of neutral responses, particularly among minority women, who were also the least likely to strongly agree. This may suggest that minority women have less confidence in their company's efforts or the outcomes of this practice.

Figure 21: "My company/the company where I work pursues diverse candidates". Whole sample DSS 2015 & 2021

Source: IGDA DSS 2021

Table 14: "My company/the company where I work pursues diverse candidates". Identity comparison DSS 2021

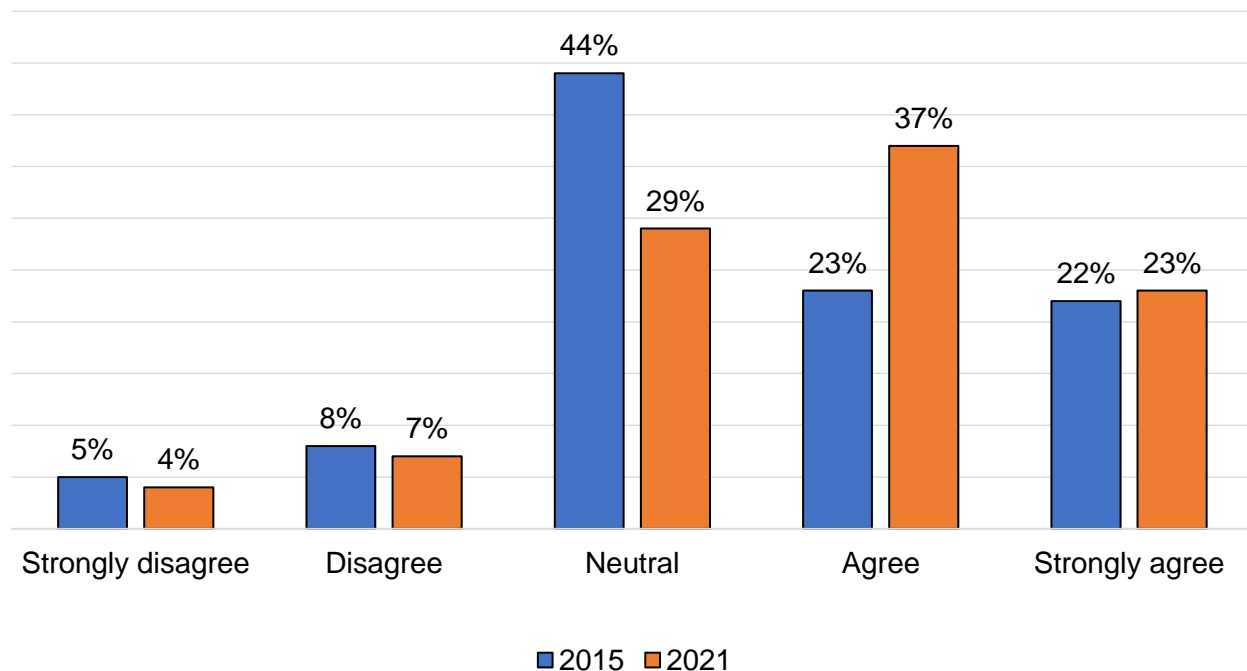|	% of respondents			
	Non-minority men	Non-minority women	Minority men	Minority women
Strongly disagree	3	3	6	0
Disagree	11	6	13	4
Neutral	34	30	22	44
Agree	34	30	34	44
Strongly agree	18	31	25	9

Source: IGDA DSS 2021

Support for Diversity Initiatives

Respondents were asked their opinion about whether their company supports diversity initiatives (Figure 22). Two-thirds thought yes, with most others indicating a neutral response. Compared to the 2015 DSS, fewer respondents gave negative or neutral responses in 2021, suggesting greater certainty. This may reflect an increased prevalence of diversity initiatives as game companies respond to actual problems or heed public calls to generally do better. It may also reflect greater awareness and attention to such policies by game workers. However, it may also reflect a different respondent sample from 2015 to 2021.

Responses were similar for each identity group, though non-minority men indicated fewer agreement and more neutral answers compared to others (Table 15). Diversity interventions are typically aimed at women and racial/ethnic minorities, who are underrepresented in the game industry. As a result, non-minority men may simply be unaware of or uninterested in them.

Figure 22: "My company or the company where I work supports diversity initiatives". Whole sample DSS 2015 & 2021

Source: IGDA DSS 2021

Table 15: "My company, client, or the company where I work supports diversity initiatives". Identity comparison DSS 2021

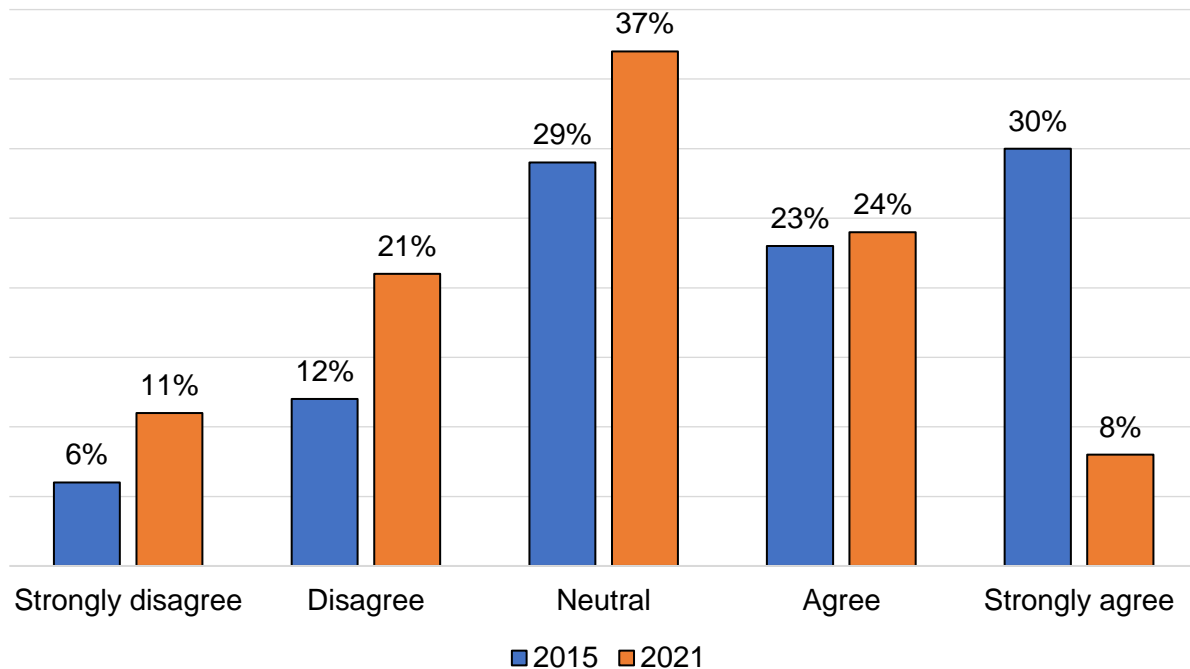|	% of respondents			
	Non-minority men	**Non-minority women**	**Minority men**	**Minority women**
Strongly disagree	3	3	9	0
Disagree	8	3	3	9
Neutral	34	28	22	22
Agree	38	36	38	48
Strongly agree	18	30	28	22

Source: IGDA DSS 2021

Qualifications over Diversity

Respondents were asked whether their company looks for qualified applications rather than considering diversity. In 2021, responses were quite evenly split, with 32% expressing agreement, 27% indicating a neutral response, and 33% expressing disagreement (Figure 23). This pattern is different from the 2015 responses, where more respondents expressed (strong) agreement. There were few differences across identity groups for this question (Table 16). Non-minority men seem more inclined to agree with the merit argument and less inclined to disagree, and minority men and women were less likely to provide neutral responses.

Although there is still uncertainty in responses in 2021, this data may indicate that more companies are considering employment equity compared to 2015. It is important to note that affirmative action policies do not discount competence, but instead encourage hiring members from minority groups when candidates are equally qualified in order to combat historical discrimination.

Figure 23: "My company or the company where I work does not consider diversity. We/they look for qualified applicants". Whole sample DSS 2015 & 2021

Source: IGDA DSS 2021

Table 16: "My company or the company where I work does not consider diversity. We/they look for qualified applicants". Identity comparison DSS 2021

	% of respondents			
	Non-minority men	Non-minority women	Minority men	Minority women
Strongly disagree	9	17	7	9
Disagree	19	21	33	26
Neutral	35	37	30	30
Agree	30	14	20	35
Strongly agree	8	11	10	0

Source: IGDA DSS 2021

Change Over Time

Despite the challenges to diversifying the game industry, 49% of DSS 2021 respondents said that it had become more diverse in the past two years. Only 2% said that it was less diverse and 28% thought it had remained the same. However, another 20% were unsure.

Non-minority men were more likely to say that diversity had increased compared to other identity groups. This makes sense given that racial/ethnic minorities and women are very underrepresented in the game industry. These groups may hold a higher standard for what counts as an improvement and also recognize that changes in demographic diversity could be overstated. Minority women were the most ambivalent about diversification (25% unsure). These data suggest the need for continued diversity efforts.

Table 17: "If you have been in a job related to the game industry for more than 2 years, has the demographic diversity in the industry changed"? Identity comparison DSS 2021

	% of respondents			
	Non-minority men	**Non-minority women**	**Minority men**	**Minority women**
Less diverse	1	3	0	0
Same	25	33	41	30
More diverse	54	44	41	45
Not sure	20	20	19	25

Source: IGDA DSS 2021

Obstacles to Diversifying the Game Industry

In 2021, respondents were asked to select the top two obstacles to diversifying the game industry (Figure 24). Systemic or unconscious bias in decision-making (e.g., recruitment, hiring, advancement) was selected most frequently. Other notable factors included a homogenous workforce and leadership, ignorance or indifference, and workplace culture (e.g., long hours, passion, heroic efforts).

Figure 24: "In your opinion, what is the biggest obstacle to diversifying the game industry". Whole sample DSS 2015 & 2021
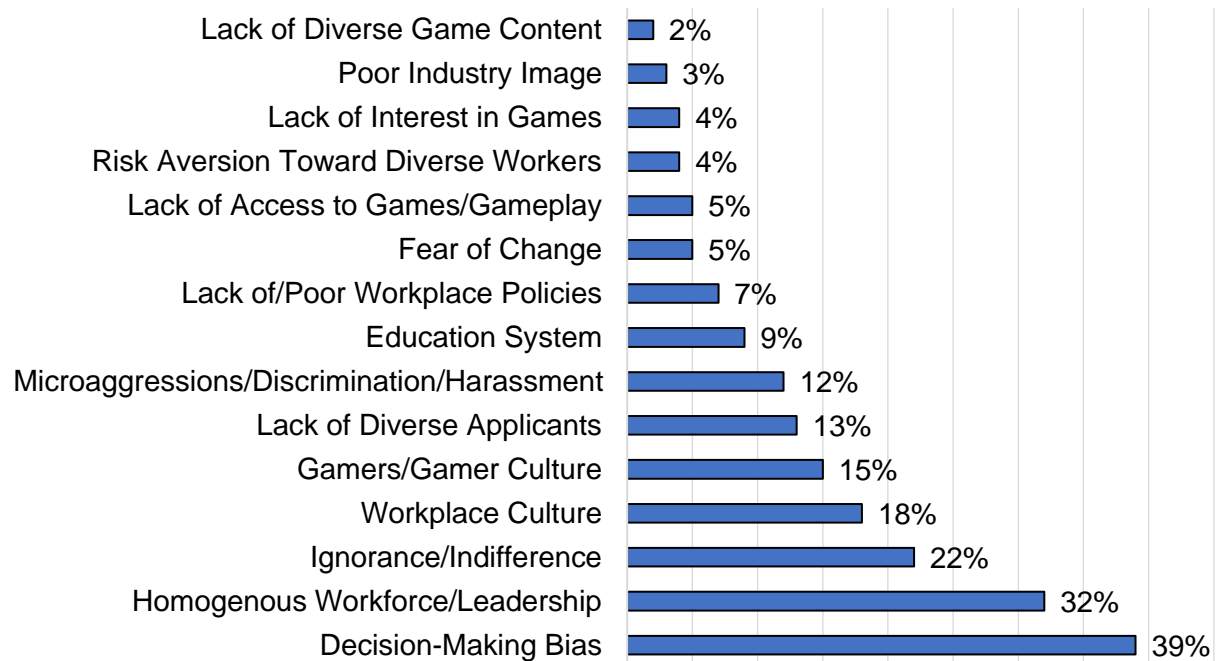
Source: IGDA DSS 2021

There were some differences in responses based on identity groups. The top responses across all groups were still decision-making bias and a homogenous workforce/leadership, but women selected them each more frequently than men (Table 18). Women were also less likely than men to select a lack of diverse applicants as a barrier to diversity. Interestingly, minority men actually selected that option quite frequently. Minority women viewed workplace culture and a lack of or poor workplace policies as a significant barrier to diversity more frequently than others. Most of these identified obstacles reflect the general underrepresentation of women in the game industry and the fact that men make most of the key workplace decisions, shape the culture, and frame the discourse around diversity hiring. In line with this, more non-minority men selected ignorance or indifference as a barrier than other groups.

Table 18. "In your opinion, what is the biggest obstacle to diversifying the game industry"? Identity comparison DSS 2021

	% of respondents			
	Non-minority men	**Non-minority women**	**Minority men**	**Minority women**
Decision-Making Bias	37	47	30	41
Homogenous Workforce/Leadership	27	43	24	36
Ignorance/Indifference	27	16	21	18
Workplace Culture	17	19	12	23
Gamers/Gamer Culture	14	17	24	8
Lack of Diverse Applicants	17	8	24	0
Microaggressions/discrimination/harassment	10	17	12	15
Education System	9	11	15	5
Lack of/Poor Workplace Policies	5	4	6	21
Fear of Change	5	4	6	10
Lack of Access to Games/Gameplay	2	4	6	5
Risk Aversion Toward Diverse Workers	4	3	0	8
Lack of Interest in Games	6	2	3	0
Poor Industry Image	3	4	0	0
Lack of Diverse Game Content	2	1	6	3

Source: IGDA DSS 2021

Conclusion

This report presented data from the IGDA DSS 2021 with specific attention to issues of diversity, equity, and inclusion. It focused on the diversity questions from the DSS and data about the working conditions known to be prone to differential treatment and discriminatory practice. Throughout the report we adopted an intersectional lens and analysed the data for distinct demographic identity groups. In the first section we used gender and racial/ethnic identity to focus on four groups: White men, White women, men of colour and women of colour. In the Diversity Section we used gender and self-reported ethnic minority status to refine our four groups to: non-minority men, non-minority women, minority men and minority women. We briefly reviewed distinctions by employment status (employee, freelance and self-employed).

First, we observed pay differentials across game workers based on employment status and demographic identity. Game workers hired as employees earn more than freelancers, contractors or the self-employed. On average, employees earned medium ($45,000 to 75,000 USD) to high incomes (over $75,000 USD). Precarious workers like freelancers usually fell into a lower-income bracket (under $45,000 USD) and most of the self-employed reported making under $15,000 USD per year. White men tended to receive higher compensation and had more stable employment than other demographic groups. Compared to employees, freelancers and the self-employed were less likely to feel that their compensation was fair given their roles and responsibilities. White men were most likely to perceive their compensation as fair.

Second, occupational segregation by gender has not changed since the data reported in the [2016 Diversity Report](#). Women continue to be underrepresented in programming roles (making up 30% of the survey sample, but only 10% of programming roles). They are more prevalent in art and design roles and in the position of producer. Women of colour and men are underrepresented in art roles (15% in art vs. 30% of respondents in the sample). Despite any overall changes to diversity in the industry, occupational segregation persists.

Third, we found differences in game workers' perceptions of equal opportunity and fair treatment at work. Whereas most agreed that there is a lack of equal opportunity and treatment for all in the industry, this sentiment was expressed most by self-identified minority women and expressed the least by men who did not identify as an ethnic minority in their workplace. However, over 80% of respondents, regardless of demographic identity, agreed that diversity is important to the game industry. The data show that there is a will, but the industry is still struggling to find a way. The industry needs to reconcile the

value that workers place on diversity with experiences of mistreatment by people of diverse backgrounds.

Fourth, and related, we continue to observe differential experiences of inequity. Though all groups identified microaggressions and social inequities the most, we saw differences across identity groups. Non-minority men were the least likely to have experienced workplace inequity themselves. Many minority men experienced inequity in the recruitment and hiring process and many women (both minority and non-minority) experienced inequity in pay, promotion and related to occupational roles.

The data about perceived inequity toward others was shocking. Across almost every category, more than one in five non-minoritized men had witnessed an act of inequity towards someone else. Among women and minoritized men the rate was more than one in three. Women or color also experienced online harassment as part of their work at rates well above other identity groups.

In 2021, there were more programs and policies related to equity and diversity. Namely, there were more partnerships between organizations and groups, communities, and non-profits to broaden applicant pools, boost skill development, and provide mentorship. Respondents also reported increased policies on non-discrimination, equal opportunity hiring, sexual harassment, and formal complaint systems. The reported increase in the incidence of these programs and policies in 2021 compared to 2015 is encouraging.

Some metrics on gender parity also appear promising. The representation of women in management roles is similar to their representation as survey respondents (e.g., 25% white women in management vs. 20% in sample; 9% women of colour in management vs. 10% in sample). However, 34% of women in management is still a far cry from the 50% in the general population.

Visit the IGDA DSS website to find reports from past surveys, for the DSS 2021 Summary Report, the DSS 2021 COVID Report as well as two additional diversity reports using the DSS 2021:

- Diversity in the Game Industry: LGBTQA2+
- Diversity in the Game Industry: Regional Snapshots

The next Developer Satisfaction Survey will go live in 2023. If you would like to help with spreading the word or localizing the survey for your region, please contact the IGDA at: info@igda.org

If you wish to sign up for the mailing list for future surveys, please visit: http://www.gameqol.org/

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