



Developer Satisfaction Survey 2019

Summary Report

20 November 2019

AUTHORS

Johanna Weststar

Associate Professor, DAN Department of Management and Organizational Studies
Western University, Ontario, Canada

Eva Kwan

PhD Student, Industrial & Organizational Psychology
Western University, Ontario, Canada

Shruti Kumar

MSc Candidate, Industrial & Organizational Psychology
Western University, Ontario, Canada

ACKNOWLEDGEMENTS

The International Game Developers Association (IGDA) would like to thank the tremendous support of their actively engaged volunteer community for their contributions to the development of the survey and this resulting report. From all the survey respondents to the many Chapter and Special Interest Group leaders who helped disseminate the survey, as well as studio affiliates and media partners, the IGDA appreciates your help in making this research possible.

The authors would like to thank John R. J. Thompson for his research assistance in preparing the dataset.

This research was made possible through a grant from the IGDA Foundation.

CONTENTS

AUTHORS	1
ACKNOWLEDGEMENTS	1
CONTENTS	2
INTRODUCTION	4
OVERVIEW	5
DEMOGRAPHICS	9
Snapshot: Country of Origin & Country of Work	9
Snapshot: Marital Status	9
Snapshot: Children & Elder Care	9
Snapshot: Educational Background	11
Snapshot: Specialized Degree in a Game Related Discipline	11
DIVERSITY	12
Snapshot: Age	12
Snapshot: Gender and Sexual Orientation	12
Snapshot: Race/Ethnicity/Ancestry	13
Snapshot: Disability	13
Snapshot: Attitudes toward Diversity	13
Snapshot: Discrimination	14
TRENDS AND OUTLOOK ON THE GAME INDUSTRY	16
Snapshot: Game Genres	16
Snapshot: Important Platforms for the Future	16
Snapshot: Common Distribution Platforms	17
Snapshot: The Future of Game Development	18
Snapshot: Localized Versions of Games	18
Snapshot: Society's Negative Perceptions of Industry	18
Snapshot: Preferred Employer	19
EMPLOYMENT OVERVIEW	20
Snapshot: Employment Status	20
Snapshot: Games as Primary Business	20
Snapshot: Employment Volatility	20
Snapshot: The Unemployed	21
A PROFILE OF EMPLOYEES	22
Snapshot: Demographics	22
Snapshot: Experience and Job Security	22
Snapshot: Company Type	22

Snapshot: Job Role	23
Snapshot: Company and Team Size.....	23
Snapshot: Salaries	23
Snapshot: Incentives and Overtime.....	24
Snapshot: Benefits and Time Off.....	24
Snapshot: Hours of Work	25
Snapshot: Career Path and Advancement	25
A PROFILE OF FREELANCE/CONTRACTORS	26
Snapshot: Demographics	26
Snapshot: Experience and Job Security.....	26
Snapshot: Company Type	27
Snapshot: Job Role	27
Snapshot: Company Size and Composition	27
Snapshot: Salaries	28
Snapshot: Incentives and Overtime.....	28
Snapshot: Benefits and Time Off.....	28
IP and Credit	29
Hours of Work	29
Snapshot: Why Freelance?	29
A PROFILE OF THE SELF-EMPLOYED.....	31
Snapshot: Demographics	31
Snapshot: Experience and Job Security.....	31
Snapshot: Company Type	31
Snapshot: Job Role	32
Snapshot: Company Size and Composition	32
Snapshot: Salaries	33
Snapshot: Incentives and Overtime.....	33
Snapshot: Benefits and Time Off.....	34
Snapshot: Benefits and Time Off for Employees.....	34
Hours of Work	34
CONCLUSION	36
LIMITATIONS AND NEXT STEPS.....	38

INTRODUCTION

The mission of the International Game Developers Association (IGDA) is to support and empower game developers around the world in their pursuit of fulfilling and sustainable careers. Part of the core set of tools that the IGDA uses to achieve this mission and to empower game developers is knowledge and information. The Developer Satisfaction Survey (DSS) conducted in partnership with Western University is a valuable source of information about the well-being and opinions of developers and of the game industry as a whole.

This report contains the results and findings of the sixth DSS, conducted in the first quarter of 2019. While some changes show improvements within the game industry, we still have more progress to be made in the representation and support of game developers.

Notably, we have seen a rise to 24% of game developers identifying as female, and a total of 29% of game developers not identifying as male. This is a 10% increase in the representation of female developers seen previously. The attitudes towards the importance of diversity in the game industry and in game content have also continued to improve. These changes may suggest positive effects from recent diversity efforts, but improvements still need to be made to continue this growth of diversity.

Additionally, this survey shows a growing number of developers with children (35% compared to 29% in 2017) and an increase in the overall average age of game developers. These changes suggest that game developers feel supported enough to stay in the industry for a longer period and that they are able to provide for their families while managing their careers.

In order to produce high-quality games in a sustainable and consistent manner, we as an industry need to foster and cultivate the talent available to us. No one should ever avoid or leave our industry because they feel unsupported or unwelcome.

Acknowledgement of these areas of weakness, particularly with hard numbers to support them, is key in taking the steps to amend these problems. Some of these results should be disheartening, but empowering. All are welcome and encouraged to share this report and these findings with others to encourage change and long-term solutions that will improve our industry and its accessibility for all developers.

This is our call to action to push forward initiatives and changes to create a better industry for game developers around the world. Together, we can create a welcoming and supportive environment in which game developers will be able to thrive in both their careers and their lives.

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 2021, please reach out to us at staff@igda.org.

Renee Gittins, Executive Director, IGDA

OVERVIEW

The 2019 IGDA Developer Satisfaction Survey was live from March to May 2019. It accrued 1116 valid responses.

When reading this report, the following should be kept in mind:

- The response rate indicated that 1116 people answered at least one section of the survey question. Not every respondent was asked every question (as questions were tailored to respondent type), not every respondent answered each question presented to them due to the voluntary nature of the survey, and not every respondent completed the survey entirely. The percentages presented in this report are based on the number of valid responses to each question and the sample size changes for each.
- The DSS 2019 is a self-report survey spread largely through word of mouth. It does not use random sampling of a known total population and therefore does not produce a sample that is necessarily representative of the entire global population of video game developers. Therefore, when reading the report, keep in mind that the statistics provided are indicative of the sample of individuals who took the survey and should not be interpreted as population estimates.
- Totals of statistical groupings may not add exactly to 100% due to rounding

The survey was targeted broadly and captured responses from people with various connections to the industry (Table 1). Most of the survey respondents said that they make games in core creation or development roles. This was followed by a smaller proportion who make games as a portion of their work (i.e., academics, those in transmedia companies, students concurrently making games). A third group of respondents work in studios in supportive or ancillary roles to game creation. These three respondent groups were asked the most survey questions regarding the nature of their work and form the core of this report. Other respondents answered select question sub-sets (i.e. for students or the unemployed) and/or answered general questions about demographics, diversity and industry trends.

Table 1: What is your connection to the game industry?

	% of respondents
Makes games in a core development role (includes QA)	66.4
Portion of work is games-related or to make games (includes academics who make games); or makes games for commercialization on the side	15.4
Supports the development of games in administrative, support or ancillary roles that are not game creation (e.g., admin, HR, technical support)	6.8
Currently unemployed	3.5
Looking for first job in the industry	2.8
Academic studies/teaches about the game industry	2.0
Fine artist using games as a medium	1.7
Involved in the production of game-related events	0.8
Makes games as a hobbyist	0.2
Game journalist or critic	0.2
External investor	0.1
Total	100
Student studying to make games or about games/game industry	12.6*

Source: IGDA DSS 2019;

*Students counted separately; those working on games for pay or goal of pay are included in main figures

Most answered the survey in English (91.67%). Other languages were represented as follows: Traditional Chinese (1.16%), Japanese (0.45%), Spanish (1.08%), German (0.72%), French (4.66%), Simplified Chinese (0.27%), Italian (0%).

A large portion of respondents were working in the United States (49.21%) and participants from North America make up 60% of the sample. While North America plays a large role in the global video game industry, developers in this part of the world are likely overrepresented in the picture painted here while some important regional and national variation cannot be summarized accurately. The distribution of the sample on some additional key dimensions are included in Table 2.

This report is a summary of the primary observations from the 2019 survey data and, outside of a few select occasions, does not attempt to compare this data to prior IGDA surveys. The first part of the report includes sections of questions that were presented to all respondents:

Demographics, Diversity, Education, and Business Trends and Future Outlook. The second part of the report paints a profile of the work experiences of particular groups of workers who are making games for pay (employees, freelancers, and the self-employed) as well as the currently unemployed and students.

Table 2: Key Sample Characteristics

	% of respondents
Company Type	
Developer who is not owned by or dependent on a single publisher and engages primarily in self-publishing	31
Developer who is fully owned by a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game console	25
Developer who develops games under contract with one or more publishers for one or more platforms, but is not directly tied to a primary consumer product/game console	11
Developer who is fully owned by a company that manufactures a video game console	9
Company that does not exclusively make games (i.e., advertising, film/tv/web, transmedia)	6
Developer who is a subsidiary or under partial ownership of a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game console	4
Work-for-hire game developer (i.e., branded game, training)	3
Tools or developer services (i.e., middleware, server back-end, game engines)	3
Support services (i.e., localization, QA, outsourcing)	2
Government institution/public sector (i.e., public universities and colleges, military)	2
Developer who is a separate entity from a console manufacturer but is exclusively tied to one through contract or partial ownership	2
Non-profit sector (i.e., private universities and colleges)	2
Hardware/accessories	<1
Company Size	
≤10	23
11-50	27
51-100	12
101-500	19
≥501	20

Primary Role	
Management	30
Programming	26
Design	20
Art	10
Audio	1
QA	3
Admin	3
Other	8
Employment Type	
Employee	74
Self-employed	15
Freelancer	11

Source: IGDA DSS 2019

DEMOGRAPHICS

This data presents the prototypical game industry worker as being a 36 year old white male with a university degree who lives in North America and who does not have children. More demographic characteristics are discussed in the diversity section below.

Snapshot: Country of Origin & Country of Work

Many respondents were born in the United States. They made up 50% of the sample (Figure 1). Canada had 9%, and Mexico had 1%, bringing the overall North American representation to 60%. Asia represented 8% of survey respondents. Europe accounted for 20% of respondents, Australia and Oceania accounted for 8%, South and Central America and the Caribbean made up 4%, and Africa represented 1%.

Many respondents also worked in the United States (53%). This was followed distantly by those working in Canada (11%), United Kingdom (5%), France (4%), and Australia (4%). Country of work is shown alongside country of origin in Figure 1 to give a rough indication of the international mobility of game developers. For the most part national labour markets seem to be serving their own populations. Only 17% of respondents consider themselves to be immigrants. Some countries, such as the US and Canada seem to import game developer labour while others, such as the France and Brazil seem to export labour (see Figure 1).

Snapshot: Marital Status

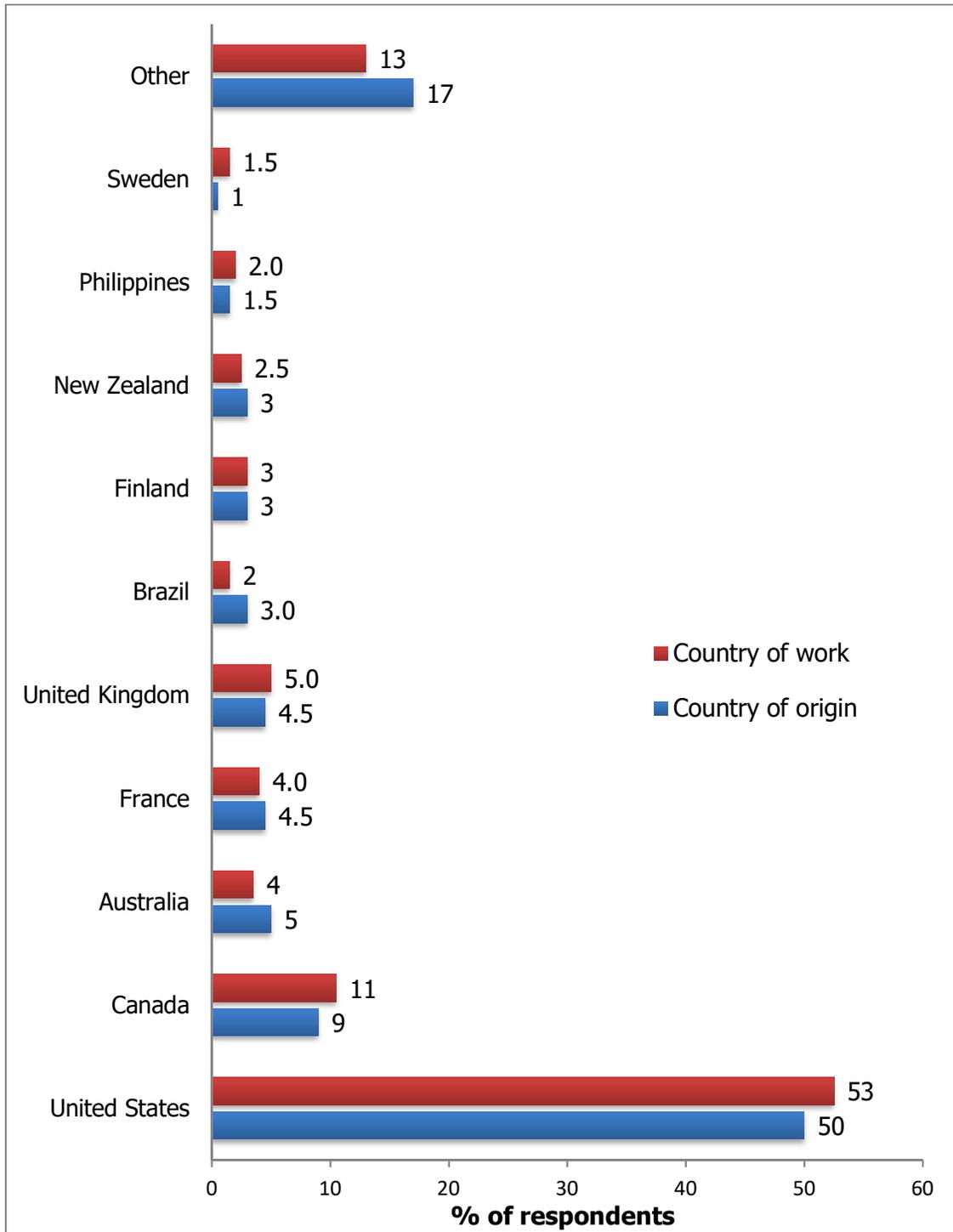
More respondents reported being married or partnered (61%) than single (35%). Another 3% were separated or divorced and 1% responded 'Other'.

Snapshot: Children & Elder Care

A growing number of developers reported having children (35% compared to 29% in the 2017 DSS). Most said they had school aged children (16%), or pre-school aged children (12%), while 7% said they had adult children. Note that these statistics include respondents who said they were students in the game industry. The rate of children was lowest among freelancers (see employment profiles below).

Most were not responsible for elder care (88%). There was, however, a notable group of 12% that was responsible for their older family members who either lived with them or lived separately.

Figure 1: Countries of Origin and Work (rounded to nearest 0.5%)



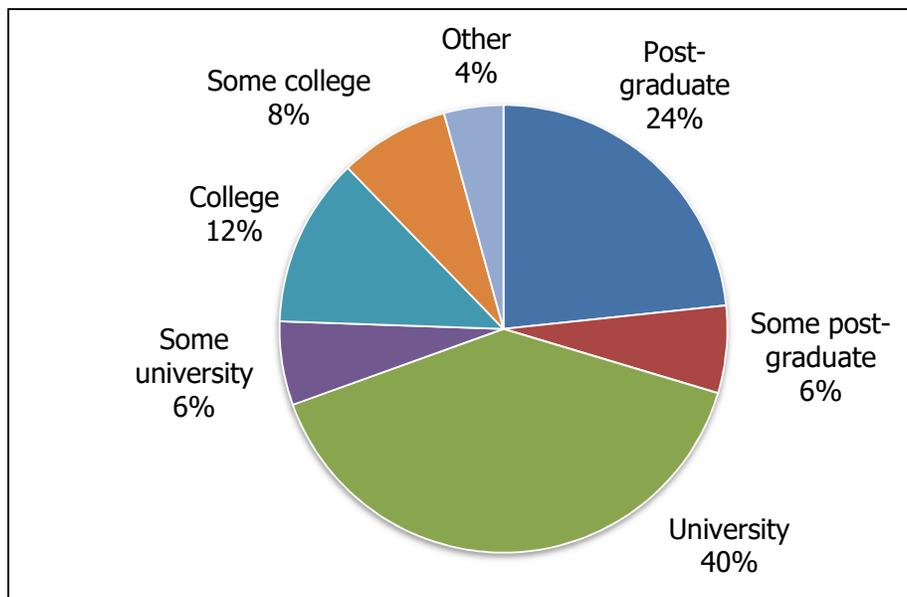
Source: IGDA DSS 2019

Note: Country included if it represented 1.0% or more of the respondents for 'Country of Work'

Snapshot: Educational Background

With the increase in formal academic programs targeted to game development studies, it is not surprising that people who work in the game industry are highly educated. A full 96% of respondents had some college/vocational/trade school or above (Figure 2). The remaining 4% had professional certification, an apprenticeship or less than college.

Figure 2: Highest Educational Attainment



Source: IGDA DSS 2019

Snapshot: Specialized Degree in a Game Related Discipline

Slightly less than half of the survey respondents (42%) reported having a specialized degree that was 'somewhat relevant' to game development and more than a third (37%) reported having a degree that was 'directly relevant' to game development. The remaining 21% had educational backgrounds that they said were 'not relevant' to game development. It is important to remember that a number of survey respondents did not work directly in game development, but rather worked in occupations related to the game industry more broadly.

Aside from a degree or diploma, half of the respondents had also taken supplemental training in game development, including courses at the high school (5%), college (8%), university (9%), and post-graduate (5%) levels, professional certifications (13%), internships (9%), as well as training by their employers (13%).

DIVERSITY

Respondents were instructed when taking the survey to “consider diversity in terms of demographic characteristics such as sex, gender, race, ethnicity, sexual orientation, etc.”

Throughout this section we occasionally make reference to US population statistics. People who were either born in the US (47%) or who worked in the US (53%) made up a large portion of the DSS 2019 sample. However, it is important to note that the population distribution in the other countries represented in this data will differ quite substantially and many who would be identified as minority groups in the North American or Western European context would not be so in their country of origin (recall for instance that only 17% of respondents identified as immigrants).

Snapshot: Age

Survey respondents ranged in age from 20 to 76. Relative to previous IGDA surveys, the 2019 DSS respondents were older. This could be a feature of the sample or signal a larger trend of aging in the industry. The 35 to 39 age bracket and the 40-49 age bracket each made up 22% of the sample. Those in the 30 to 34 age bracket and 25-29 age bracket made up 20% and 17% of the sample, respectively; both a decrease from previous years. Also up from previous years, 9% of respondents said they were 50 years and older. This distribution is much closer than previous IGDA surveys to the [general labour force in the US](#) (mean age = 42 years) and other industrialized countries. Note that this statistic includes students, but they are a small proportion of the sample. See the employment type profiles below for the average age of employed developers.

Snapshot: Gender and Sexual Orientation

Survey respondents were predominately identified as male (71%). Slightly less than one-quarter (24%) identified as female, 3% identified as non-binary, and 2% selected “Prefer to self-describe” as their response. In a separate question, 4% of respondents identified as transgender. Regarding sexual orientation, 79% of respondents identified as heterosexual, 4% as homosexual, 12% as bisexual and 5% selected the option ‘other’.

It is challenging to locate comparator data that does not conflate sex, gender identity and sexual orientation and the following statistics are presented as non-definitive. The [United States Census](#) only reports on biological sex and in 2018 indicated 51% female persons. A [2016 study](#) by the Williams Institute at UCLA School of Law estimated that 0.6% of adults in the US were transgender. A [2017 study](#) by the advocacy group GLAAD reported that 12% of their total sample identified as LGBTQ and 4-12% of those aged 17-71 identified as non-cisgender (depending on age group). Gallup reported a [2017 poll](#) where 4.5% of American adults

identified as LGBT and a [2014 report](#) from the Centre for Disease Control and Prevention estimated that 3.4% of Americas adults identified as gay, lesbian, bisexual or “something else”.

Snapshot: Race/Ethnicity/Ancestry

The majority identified as white/Caucasian/European at 81%. Respondents were able to select up to 3 options for this question. As such, when respondents who *only* selected white/Caucasian/European were calculated, this statistic dropped to 69%. The next most frequently selected categories were Hispanic/Latinx (7%), followed by Aboriginal/Indigenous (including Pacific Islanders) at 5%, and both Chinese and South East Asian, each at 4%. When grouped together those identifying as East, South and South-East Asian constituted 10% of the respondents. Those identifying as Black/African-American/African/Afro-Caribbean and as West Asian each made up 2% of the respondents. Just under 5% selected the option ‘other’ and 3.5% preferred not to report.

The [2018 US Census](#) data reported that 60% of the US population identified as white only, non-Hispanic (note that this definition includes those from the Middle East and North Africa which roughly corresponds to the DSS category of West Asian). The Census also reported that 18% identified as Hispanic or Latinx (of any race), 13% identified as black, 6% as Asian and 1.5% as Indigenous.

When compared with US Census data, the statistics for the DSS 2019 suggest a large overrepresentation of people identifying as white, and a slight overrepresentation of people identifying as Indigenous and as Asian. The data suggest a large underrepresentation of those identifying as black and those of Hispanic/Latinx origins.

Snapshot: Disability

In the 2019 DSS, 28% of respondents identified as having a disability. The most frequently selected category of disability was psychiatric or mental illness (11%). The next most commonly selected categories were visual impairment (5%) and both intellectual or learning disability (4%) and physical disability (4%). This may be slightly higher than the total US working population. It was estimated from [2014 Census data](#) that 27% of people of all ages have a disability; the DSS sample did not include anyone outside 20-76 years old.

Snapshot: Attitudes toward Diversity

The number of respondents who felt that *diversity in the workplace* was very or somewhat important was at its highest in the history of the DSS; 83% of respondents felt that it was ‘very important’ or ‘somewhat important’ compared to 81% in 2017, 78% in 2016, 63% in 2015 and, 75% in 2014. Similarly, 85% felt that *diversity in the game industry* was important, compared

to 84% in 2017, 80% in 2016, 66% in 2015, and 79% in 2014. Over half of the respondents (57%) felt the game industry had increased in diversity over the past two years. This is an increase from 2017 where 42% felt that the industry had become more diverse in the two years prior. About a quarter (26%) reported that diversity had stayed the same. This is lower than the 2017, 2016, and 2015 data (33%, 30%, and 31% respectively). A small group felt that the industry had become less diverse (3%), and this was the same in 2017, 2016, and 2015 (3%, 3%, and 2% respectively). The 'not sure' option was selected by 14% of respondents, a decrease from 2017 (22%), slight decrease from 2016 (19%), and much less than 2015, when 30% were unsure.

Diversity in game content was also deemed important; 87% of respondents indicated that it was either 'somewhat' or 'very' important to the game industry compared to 85% in 2017, 82% in 2016, and 71% in 2015.

Snapshot: Discrimination

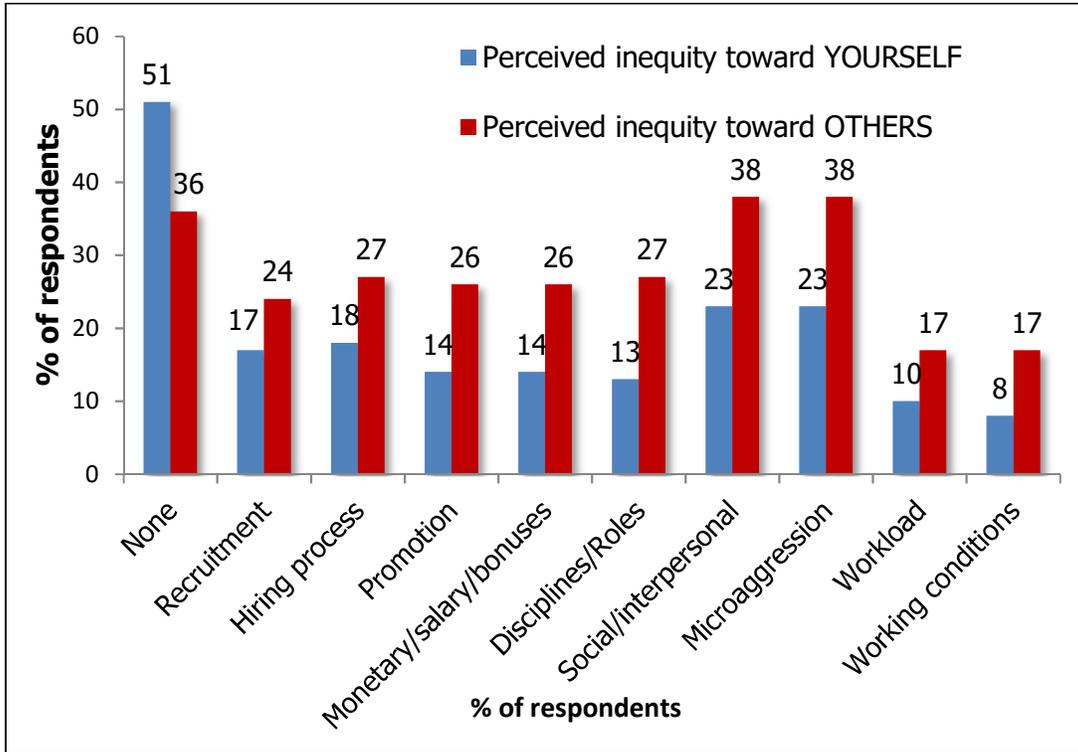
Respondents were presented with a list of broad policies directed toward increasing diversity or equality and asked to check all the ones in place at their workplace. One of the options was that their workplace had no such policies and eight percent of respondents selected this option. This is decrease from 2017 when 14% reported that their workplace had none of the listed policies. Among those whose company did have some form of policy, most said that their company had a 'general non-discrimination policy' (71%), an 'equal opportunity hiring policy' (61%) or a 'sexual harassment policy' (64%). More than one-third (39%) said that their company had a 'formal complaint procedure', and 32% reported a 'formal disciplinary process' related to equality and diversity policies. These numbers were all higher than in 2017. A further 21% reported that their company had a safe space policy and 16% reported a retention measurement process. It is also worth noting that 18% of respondents did not know if their company had these or other types of diversity related policies, though this was less than in 2017 (25%).

That said, only 59% of respondents felt that these policies were adequately enforced, and another 31% were not sure. The efficacy of these policies or other informal initiatives is also called into question by responses to the question, 'Do you feel there is equal treatment and opportunity for all in the game industry?' In the 2019 DSS, 65% of respondents answered 'no', 19% said 'yes', and 16% were not sure. These figures are worse than the 2017 and 2016 data, where 50% and 58% answered 'no'.

Figure 3 shows the responses to two questions that asked, 'Have you perceived inequity towards *yourself* or towards *others* on the basis of gender, age, ethnicity, ability, or sexual orientation in any of the following areas?' A list was provided and respondents invited to check all options that applied. Similarly to 2017, the majority of respondents (51% and 36%, respectively) answered 'none' to both questions, though at lower rates than in 2017. Of those

who did report inequity towards themselves or others, social/interpersonal or microaggressions were the most commonly reported (see Figure 3 below). Overall, respondents reported witnessing inequity towards others at greater rates than directly experiencing it themselves. Compared to 2017, respondents reported higher rates of inequities towards both self and others, with a notable increase in reported perceived inequality towards others in promotions (9% in 2017 and 26% in 2019).

Figure 3: Perceptions of Inequity toward Self and Others



Source: IGDA DSS 2019

TRENDS AND OUTLOOK ON THE GAME INDUSTRY

Snapshot: Game Genres

Action games were the genre being developed the most across those who identified as being employees (50%), self-employed (48%), and freelancers/contractors (54%). The second most selected genre differed across employment type. Among employees and freelancers this was role-playing games (32% and 40%, respectively) and among the self-employed this was casual games (41%).

Table 3: Game Genres Being Developed by Employment Type

	% Respondents by Employment Type		
	Employed	Self-Employed	Freelance/Contract
Action Game	50	48	54
Action Adventure	27	34	24
Adventure Game	17	37	41
Role Playing Game	32	34	40
Sports Game	14	10	10
Strategy Game	27	32	35
Simulation Game	25	27	31
Serious/Educational Game	15	23	28
Casual Game	30	41	36
Art Game	7	17	22
Party or Music/Dance Game	7	7	7
Exercise Game	3	4	5

Source: IGDA DSS 2019

Snapshot: Important Platforms for the Future

When asked to rank the importance of a long list of development platforms to the future growth of the game industry, PC was selected as ‘very important’ by the most respondents followed by consoles, Android, and iOS devices. The top ten responses in 2019 were similar to 2017 with three exceptions: web-based applications (22% in 2017, 17% in 2019) fell from the top ten, dedicated handhelds (19% in 2017, 23% in 2019) rose in the list, and virtual reality (37% in 2019) appeared in the top ten. The top ten responses are listed in Table 4.

Table 4: Top Ten Platforms Deemed 'Very Important' for Future Growth

Platform	% of respondents
PC	76
Consoles	74
Android	53
iOS	50
Virtual Reality	37
Analog Games	31
Dedicated Handhelds	23
Mac	20
Pervasive games/ARGs/Big Games	19
Social Network Games	19

Source: IGDA DSS 2019

Snapshot: Common Distribution Platforms

When asked to list the distribution methods used by their company, Apple iOS, Google Play, and Steam were the top three across all employment types (Table 5).

Table 5: Distribution Methods Used by Companies by Employment Type

Method	% employee	Method	% self-employed	Method	% freelance
Apple iOS	50	Steam	54	Steam	58
Google Play / Steam	48 (tie)	Apple iOS	41	Apple iOS	42
Playstation	39	Google Play	38	Google Play	40
Retail Chains	34	Studio or Personal Web Site	33	Studio or Personal Website	25
Xbox Live Arcade	34	Playstation Network	19	Xbox Live Arcade	21
Publisher Site	29	Amazon	14	Playstation Network	19

Source: IGDA DSS 2019

Snapshot: The Future of Game Development

‘More diversity in game content’ (62%) moved to the top of the list of topics that respondents felt were most important to the growth/success of the industry. This was followed closely by ‘advancement in game design’ (58%), which was first-ranked in 2017. Next was ‘advancement of storytelling in games’ (51%).

Table 6: Ranking of Future Growth Factors

Factors	% of respondents
More diversity in game content	61
Advancement of game design	58
Advancement of storytelling in games	50
Better discovery of games	45
More funding for game development	43
Better monetization of games	21

Source: IGDA DSS 2019

Snapshot: Localized Versions of Games

This year, the vast majority of survey respondents felt that having a localized version of a game is important to its success; 55% of respondents felt that it was ‘very important’ and 32% felt that it was ‘somewhat important’. This is up 2% from the DSS 2017, 5% from the DSS 2016, and 15% from the DSS 2015.

Snapshot: Society’s Negative Perceptions of Industry

Game developers were divided regarding how society views the industry; 38% felt that society has a negative view, 37% felt that society has a positive view, and 25% felt that there is a neutral view. From a list, respondents were asked to select factors that they thought contributed to the negative perception of the game industry (Table 7). When compared to the DSS 2017, with the exception of ‘perceived link to obesity’ which decreased, all other factors were selected with higher frequency in 2019. Most notably, the factors ‘working conditions’, ‘sexism among gamers’, ‘racism among gamers’, ‘sexism in the workplace’, ‘lack of overall diversity’, and ‘racism in the workforce’ each increased at least 10% in selected frequency from 2017 to 2019.

Table 7: Factors Influencing Negative Perception of the Game Industry

Provided Factors	% 2016	% 2017	% 2019
Working conditions	57	54	73
Sexism among gamers	67	57	72
Sexism in games	60	55	57
Perceived link to violence	60	55	56
Racism among gamers	45	40	55
Sexism in the workforce	41	39	54
Lack of overall diversity	43	38	49
Perceived link to obesity or lack of physical activity	46	46	39
Racism in games	29	24	30
Racism in the workforce	20	17	29
Microtransactions	N/A	N/A	2
Gambling and loot boxes	N/A	N/A	1
Other	13	12	13
I don't think there is a negative perception of the game industry	4	7	3

Source: IGDA DSS 2019

Snapshot: Preferred Employer

Respondents were given the opportunity to give an open-ended answer to the question, 'Which developer or publisher would you most like to work for?' There was a wide range of responses to this question. Nintendo received 10% of the vote, followed by 'My own studio' tied with Ubisoft at 6%, then Blizzard Entertainment at 5%, and both Naughty Dog and Valve Corporation at 3%. The ranking of responses differed from 2017 when Blizzard, Valve, Nintendo, and Bethesda led the results in that order. Though Valve remained in the top five (with ties), it has fallen in the rankings since this question was first asked in the DSS 2015.

EMPLOYMENT OVERVIEW

The following section of the report only uses data from those respondents who said that they were involved in making games for pay. This includes those in support roles to core development (HR, marketing, administration, etc.) as well as those in quality assurance and testing roles. This excludes students not yet in the industry, academics studying the industry who do not make games, game journalists, event planners, etc. As such, the figures presented for demographics characteristics will differ from those presented for the whole survey sample above. In addition, following a broad overview, the report separately discusses the characteristics of three types of workers: employees, freelancers and the self-employed.

Snapshot: Employment Status

Of the respondents who were involved in making games for pay, the majority worked in the industry as permanent (71%) or temporary (3%) employees. A further 15% reported being self-employed, and 11% reported that they were freelancers or independent contractors. The vast majority (89%) worked in the industry on a full-time basis, while the remainder (11%) worked part-time. The section that follows this overview will provide details about the work experiences for each of these employment types. This is because the nature of their work can be quite different.

Snapshot: Games as Primary Business

Most respondents worked at or operated companies wherein games and game-related products and services are the primary business. The majority (79%) reported that games made up 100% of the work at their company and 21% reported that games made up at least half of the work that they do.

Snapshot: Employment Volatility

While 71% of respondents indicated that they were permanent employees, when asked about the number of employers they have had in the past 5 years, the response average among employees was 2.2¹. Among freelancers/contractors, the average was higher at 4.1, but not overwhelmingly so. As noted in previous reports, this continues to indicate some volatility among employees in ostensibly permanent employment relationships while also signalling that many freelancers seem to maintain stable relationships with a core set of clients. The average among the self-employed was 2.6, who were asked how many employers they have had in the

¹ In each employment group there were a small number of outliers where respondents reported over 100 employers in the past 5 years. These responses were capped at 10 to calculate the mean values reported in the text. Mean values with all of the data included were as follows: employees = 3.0 (max = 103); self-employed = 2.6 (max = 10); freelance = 6.5 (max = 102); unemployed = 6.3 (max = 102)

past 5 years, including themselves. Coupled with the fact that 71% of self-employed respondents said that they had worked for other game-related employers in the past, this suggests that many self-employed developers start their own businesses after working in the industry and that this is a relatively recent shift for many of the respondents.

Snapshot: The Unemployed

Just less than 3.5% of the survey sample (31 respondents) indicated that they were currently unemployed in the game industry. Among the unemployed group 30% had been permanently laid off, 26% said that their contract had ended and they had not found a new one, 15% had quit, 15% were self-employed, but had no current projects, 11% said they were in between contracts, and 4% had been fired.

Over a third (37%) of unemployed respondents had been unemployed for more than one year and 55% had been unemployed for between 3 and 12 months. The remaining 26% had been unemployed for 2 months or less. The majority wanted to find another job in the game industry (85%).

A PROFILE OF EMPLOYEES

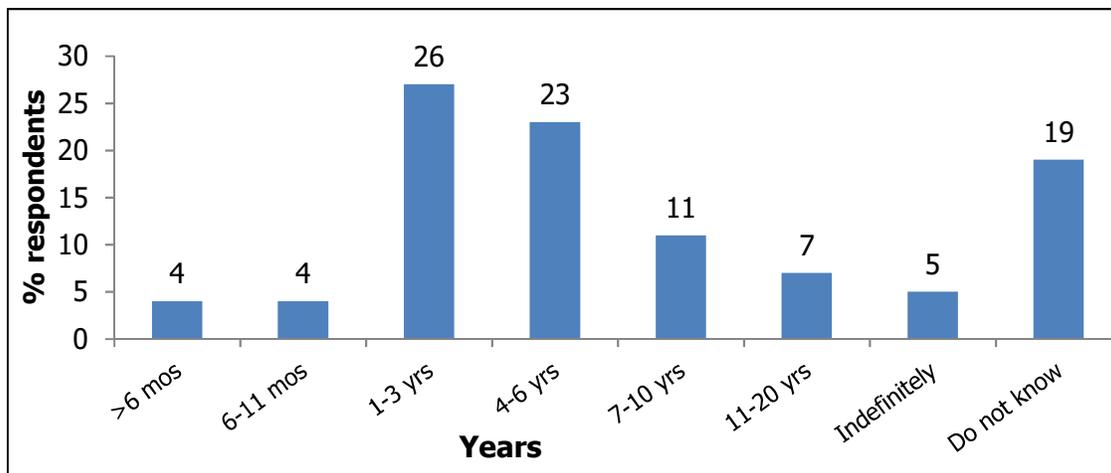
Snapshot: Demographics

The typical employee in this sample was 36 years old, identified as white or as multiracial with white (83%), was male (79%), and was working in the United States (52%). He was heterosexual (81%) and likely to be married or partnered (68%; 29% reported being single). He did not have children (60%) and did not identify as having a disability (74%). He had a university degree (74%) that was somewhat (41%) or directly (34%) relevant to game design/development.

Snapshot: Experience and Job Security

Overall, employees in the industry were evenly split based on their years of experience. Just under half (46%) indicated that they had been in the industry for ten years or more while just over half (54%) had nine or fewer years of experience. Over two-thirds (68%) had had one or two employers in the past five years and over one-quarter (28%) had had three to five employers in the past five years. Industry churn was also reflected in the limited expectation among employees to remain with their current employers for the long term. Most respondents seemed to expect high job mobility (Figure 4).

Figure 4: Years Expected to Remain with Current Employer



Source: IGDA DSS 2019

Snapshot: Company Type

The majority (68%) of the permanent and temporary employee respondents worked in typical game development studios; however, the DSS 2019 sample shows a greater distribution across different company types than the DSS 2017. The top three company types were as follows:

- Developer who is fully owned by a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game platform (31%)
- Developer who is not owned by or dependent on a single publisher and engages primarily in self-publishing (26%)
- Developer who develops games under contract with one or more publishers for one or more platforms, but is not directly tied to a primary consumer product/game platform (11%)

These were followed by: developer who is fully owned by a company that manufactures a video game platform (10%); developer who is a subsidiary or under partial ownership of a publisher (5%); and company that does not exclusively make games (4%).

Snapshot: Job Role

Programming/software engineering/technical design was the most common job held by the employees in this sample, with 27% indicating that this is their primary role. This role was followed by game designer (16%), producer or project manager (11%), senior management (8%), and upper or middle management (7%).

Snapshot: Company and Team Size

Companies with 11 to 50 people were the most prevalent in the DSS 2019 data (26%); however, most employees reported working in large studios: 23% worked at companies with between 101 and 500 people, and 24% at companies that had more than 500 people. Only 15% worked at companies with 51 to 100 people and 13% in small companies with ten or fewer people. Development teams were much smaller: 41% of respondents reported that the development team at their current company was ten or fewer people and 29% reported development teams of 11 to 50 people. Less than one-third of employees (30%) had development teams of more than 50 people.

Moreover, most employee respondents only worked on a few projects at a time: 49% worked on one project at a time and another 43% worked on between two and five projects at a time. Only about 7% of employees worked on more than six projects at a time.

Snapshot: Salaries

Over three-quarters (79%) of respondents said that their income was comprised completely from their work in the game industry, and only 7% said that they earned 50% or less of their income from their game related work.

Most employees (65%) made over \$50K USD per year, with the most common salaries being

between \$50K and \$75K USD per year (17%) or between \$75K and \$100K USD per year (17%).

Over three-quarters of employee respondents (78%) indicated that their company offered some type of raise as part of their compensation. These raises were most often determined by managerial discretion (22%), a fixed percentage (3%), a formula for merit (11%), or a combination of these factors (41%). An additional 12% indicated that they did not get raises at all and 10% were not sure.

Snapshot: Incentives and Overtime

Incentives and bonus payments were a popular method of compensation: 40% of respondents indicated that they received lump sum payments, 27% indicated that they received company equity and another 16% received royalties tied to game success. More than one-quarter (29%) did not receive incentives or bonus payments at all. Note that numbers total more than 100% because multiple selections were allowed.

When employees worked beyond normal office hours (i.e., overtime or crunch), 34% received no additional compensation. Among those who did, this additional compensation came most often in the form of perks like meals (33%) or future time off (25%). Only 8% received paid overtime.

Snapshot: Benefits and Time Off

Regarding benefits, most employees (73%) were provided health coverage by their employer, but fewer employers provided life insurance (51%) or a retirement/pension program (51%). About one-quarter (28%) of employee respondents did not have any form of life insurance, and 19% had no form of retirement plan. A number had purchased these services individually through private vendors (23% for life insurance, and 23% for retirement programs). Note that numbers total more than 100% because multiple selections were allowed.

Regarding time off, many companies (55%) provided a packaged policy where time off for sick leave, vacation, personal days and holidays were treated as one. Among this group, most employees (44%) reported between two and four weeks of paid time off, 21% reported five or more weeks, and 29% reported an open policy whereby they could take as much time as they needed or wanted. Among those whose companies treated days off for different reasons separately (38%), the largest portion reported an open policy for sick days (33%) and between three and five weeks of vacation time (60%).

Regarding parental leave, 35% of respondents reported that their employer paid for maternity/pregnancy leave and 33% reported employer-paid paternal/parental leave. (These numbers rose to 46% and 43% when combination government-employer programs were

included). However, 25% did not know their company's policy on pregnancy leave, and 29% did not know their company's policy on parental leave.

Snapshot: Hours of Work

Just over half of the respondents (54%) indicated that they worked 40-44 hours per week during a regular schedule and 20% worked 35-39 hours per week. Forty hours is a typical 'standard' workweek by North American standards, while European standards more likely range from 35-40 hours. Fourteen percent of respondents indicated that they worked between 45 and 59 hours per week during a regular schedule, and an additional five percent worked between 50 and 59 hours per week in a regular schedule.

Crunch was still a problem, but reported rates were lower than the 2017 DSS: 41% said that their job involves crunch time (compared to 51% in 2017), and another 35% reported working long or extended hours that they do not refer to as crunch (compared to 44% in 2017). Moreover, 36% said they were in crunch more than twice in the last two years, and 42% said that crunch time was expected at their workplace. During crunch, most employees reported working between 50 and 59 hours (38%) or between 60 and 69 hours per week (19%). A sizeable minority (13%) reported working more than 70 hours per week in crunch while 17% worked between 45-49 hours per week.

Snapshot: Career Path and Advancement

Although 46% of respondents indicated that their company had either 'good' (30%) or 'excellent' (12%) potential for promotion or career advancement, 21% had a neutral opinion, and an additional 36% said 'fair' or 'poor'. Respondents seemed relatively divided about whether their occupation had a clear career path. Almost half said that their occupation *did* have a clear career path (42%), but the remainder said that there was no clear career path (42%), or that they were not sure (16%).

A PROFILE OF FREELANCE/CONTRACTORS

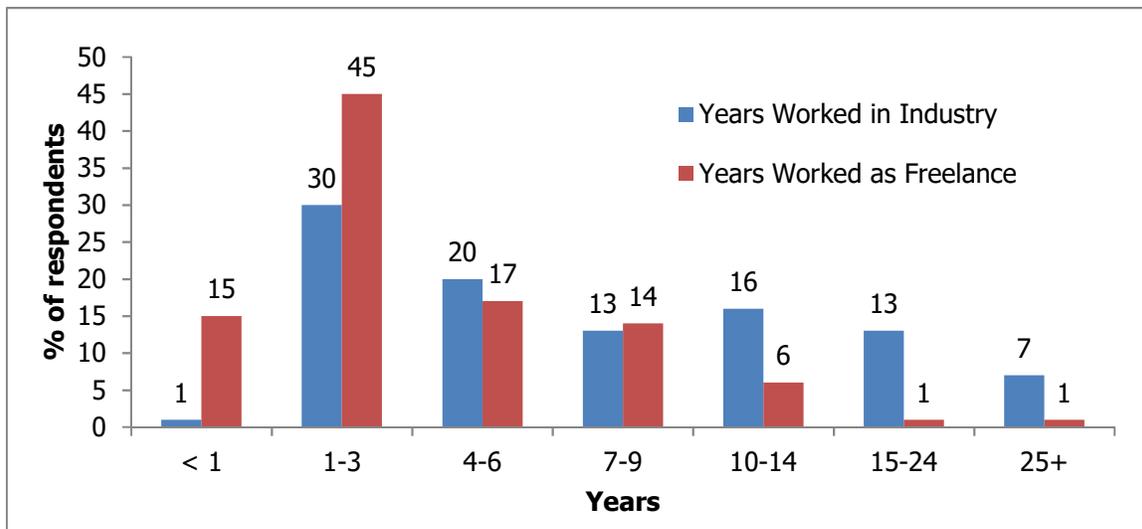
Snapshot: Demographics

The typical freelancer in this sample was 36 years old, identified as white or mixed-racial with white (88%) and male (65%). He likely worked in the United States (58%) and did not report a disability (67%). He was heterosexual (69%), more likely to be married or partnered (56%) than single (38%), and probably did not have children (71%). He had a university degree (72%) that was somewhat (36%) or directly (38%) relevant to game design/development.

Snapshot: Experience and Job Security

Most freelance respondents had not been working in the game industry for long and many indicated that they had been freelancing for only a few years (Figure 5). Almost one-third (30%) had previously been a permanent or temporary employee at a game-related company and another 28% had been both an employee and self-employed in the past. A moderate portion of freelancers felt that they would stay in the industry indefinitely (35%) and a further 38% did not know how long they would remain. Only 8% said they would move on within the next six years.

Figure 5: Years in Industry and as Freelance



Source: IGDA DSS 2019

A majority of freelancers seemed to concentrate their work with a handful of employers: 56% reported having only one to three employers/clients in the past five years and a further 31% reported having four to nine employers. However, a sizeable minority reported having ten or

more employers (12%). Similarly, most freelancers were only working on one project at a time (75%); 21% were working on two or three projects; and only about 4% were working on four or more. For the freelancers working on multiple simultaneous projects, those contracts were most often with different employers (95%).

Freelancers were also asked to indicate the length of their current contracts. The majority were working on contracts of one year or less (56%) with the most common length being less than three months (22%). Surprisingly, a sizeable portion (20%) reported that they did not know the length of their current contract.

Snapshot: Company Type

The majority of freelancers reported working for the same three company types as employees (above) though the order was slightly different. The top three company types reported by freelancers were:

- Developer which is not owned by or dependent on a single publisher and engages primarily in self-publishing (33%)
- Developer which is fully owned by a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game platform (15%)
- Developer which develops games under contract with one or more publishers for one or more platforms but is not directly tied to a primary consumer product/game platform (14%).

This was followed closely by developer which is fully owned by a company that manufactures a video game platform (11%).

Snapshot: Job Role

Most freelancers in this sample were visual artists (18%), programmers/software engineers/technical designers (15%), writers (15%), or game designers (12%). Interestingly, 11% reported senior management as their primary role and 8% were producers or project managers.

Snapshot: Company Size and Composition

Freelancers were most likely to be found at small to mid-sized companies: 46% worked at companies with between two and ten people. Another 31% worked at companies of between 11 and 50 people, and only 17% worked at companies of 51 or more. In line with this, freelancers were most likely to work on small development teams of two to five (38%), or six to ten (28%) people.

Freelancers overwhelmingly tended to work from home in a dedicated space (77%), at an employer's studio (31%), in various ad hoc spaces in their own homes (13%), or in public spaces (18%; note that numbers total more than 100% because multiple selections were allowed). Compared to the DSS 2017, the number of freelancers working in co-working spaces is much lower (4% in 2019 versus 20% in 2017).

Snapshot: Salaries

Overall, freelancers in this sample earned significantly less than their employee counterparts. Almost half (42%) reported earning less than \$15K USD per year, and another 33% reported earning between \$15K to \$50K USD. Only 25% reported making more than \$50K USD per year. Freelancers were paid an hourly wage (38%), per deliverable (49%), by the day (10%), or on ongoing retainer (10%). Many freelancers arranged a combination of these compensation practices (24%).

Snapshot: Incentives and Overtime

Generally, freelancers did not negotiate incentives or bonuses as part of their compensation (68% had none). However, some did negotiate royalties or shares tied to the success of the game (18%), company equity (13%), and/or lump sum bonuses (8%; note that numbers total more than 100% because multiple selections were allowed).

Similarly, most freelancers (64%) did not negotiate extra compensation for overtime hours worked beyond normal office hours. About half of freelancers (51%) reported that they had not been expected to work unpaid hours on a contract in the past two years, but that left 45% who had been expected to work unpaid hours and 4% who were not sure.

Snapshot: Benefits and Time Off

Regarding benefits, employer coverage of health care and life insurance for freelancers was rare (9% for health and 6% for life). Rather, freelancers in this sample reported relying upon government-provided health coverage (23%) and/or individual or private coverage (23%). Another 20% relied on parents or partners for their health coverage. Unlike health coverage, most freelancers (65%) did not have life insurance at all. If they did, it was often a private plan obtained individually (18%) or through their partner (6%). Similarly, most freelancers (56%) did not have a retirement or pension program. If they did have a plan, it was also likely to be through a private individual plan (25%), though some obtained plans through the government (8%) or through their partner (4%). Only 5% of freelancers had a plan through their employers. (Note that numbers total more than 100% because multiple selections were allowed).

Regarding time off, only a handful of freelancers reported contracts that included paid time

off (6%) or accounted for time off as additional pay (3%). Indeed, most reported taking very little time off at all. Almost one-quarter (21%) reported taking no time for sickness and 43% reported taking less than one week per year. The number of weeks per year for vacation varied: 23% reported not having any vacation, 18% reported less than one week of vacation, 11% reported one week, 18% reported two weeks, 12% reported three weeks, and another 14% reported four or more weeks.

IP and Credit

Most freelancers (89%) worked for hire and said their employer owned the IP. In terms of receiving public credit for their contribution to the game, 19% reported that they received no credit for their contribution to a game, 72% said their name was included in the game credits, and another 3% reported that their name was included in promotional material or press.

Hours of Work

Around one-quarter (24%) of freelancers reported working between 40 and 44 hours in a regular workweek and 12% reported working 45-49 hours per week. Half of the sample (50%) reported working 39 hours or less per week. Of these the most reported schedules were 20-24 hours (18%) and 35-39 hours per week (12%). A sizeable minority (about 15%) reported that they worked 50 hours or more in a regular workweek.

Freelance work did involve crunch time. Around one-third (34%) of respondents indicated that they engaged in crunch and 39% reported that they had experienced crunch more than twice in the past two years. As well, 56% reported that crunch time was an expected by their clients as a normal part of their job. Among those who said they did not engage in 'crunch', 31% said that their work required long hours or extended overtime, but they just did not refer to it as 'crunch'. About 44% of freelancers reported working 50-69 hours per week during crunch, and 20% reported working 70 hours or more.

Snapshot: Why Freelance?

Sometimes people choose to work on a temporary or contract basis. Other times this is the only option for them given their circumstances and the realities of their regional or national labor markets. This survey captures both of these dimensions. Most respondents said they worked freelance for reasons related to personal control over their work and life, but many also said they could not find permanent employment at an established studio (Table 8; note that numbers total more than 100% because multiple selections were allowed):

Table 8: Ranking of Why Respondents Work Freelance

	% of respondents
To have more control over working conditions like hours	61
To have more control over the content of my work	43
To make the games that I want	35
Could not find a permanent job at an established studio	49
To work on more varied projects/games	40
To work on a smaller team	21
To have more control over my employment stability and/or risks	29
I don't live near an established studio and did not want to move	30
Established studios closed or left the area and I do not want to move	0

Source: IGDA DSS 2019

A PROFILE OF THE SELF-EMPLOYED

Snapshot: Demographics

The typical self-employed developer in this sample was 38 years old, identified as white or multi-racial with white (78%), was male (79%), and worked in the United States (52%). He was heterosexual (79%), likely to be married or partnered (65%) rather than single (27%), and probably had no children (61%). He was unlikely to report having a disability (66%). He was likely to have a university degree (68%) that was somewhat (61%) or directly (22%) relevant to game design/development.

Snapshot: Experience and Job Security

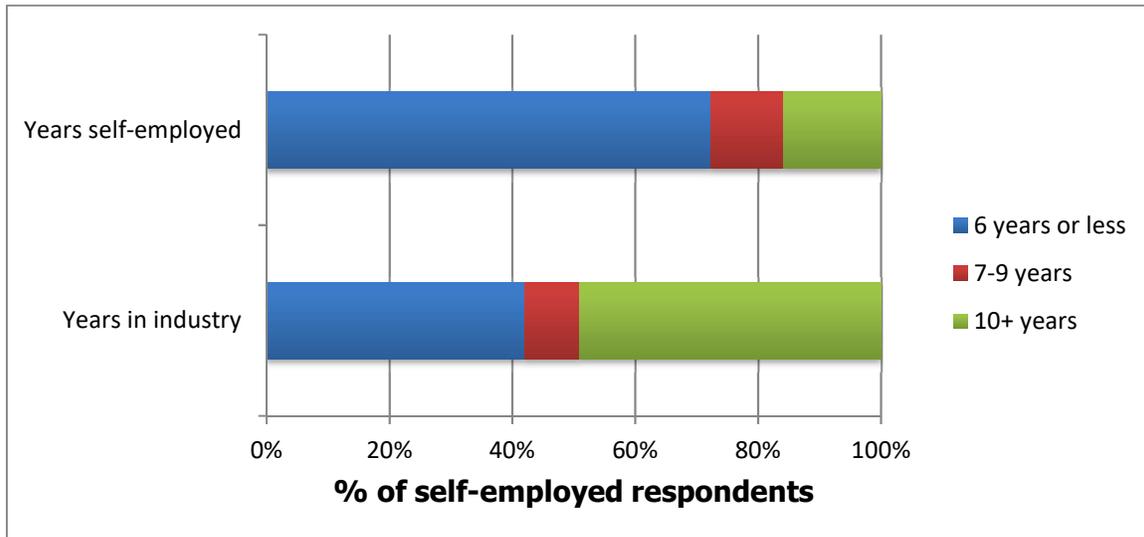
The responses from self-employed developers showed that many had been in the industry for a number of years (Figure 6); 49% had worked in the industry for ten years or more. Less than half of respondents (42%) reported working in the industry for six or fewer years (24% between one and three years, and 17% between four and six years). Another 9% had been working in the industry between seven and nine years. However, it appears that the decision to become self-employed was made in recent years, as 73% reported being self-employed for six years or less. Notably, a sizeable minority (16%) reported being self-employed for more than ten years. In line with these findings, most self-employed respondents had worked as permanent or temporary employees in the past (51%), and 19% had worked as freelancers.

Most respondents saw themselves staying in the industry indefinitely (62%), although fewer (41%) estimated that they would remain self-employed indefinitely. In fact, 30% of respondents were unsure how long they would remain self-employed.

Snapshot: Company Type

The majority (52%) of the self-employed respondents identified as independent developers who engaged primarily in self-publishing. This category was followed very distantly by the typical third party model (developers which make games under contract with one or more publishers for one or more platforms, but are not directly tied to a primary consumer product/game platform) (15%), companies that do not exclusively make games (8%), work-for-hire studios (6%) and developers fully owned by a company that publishes games for one or more platforms, but is not directly tied to a primary consumer product/game platform (6%).

Figure 6: Comparison of Years in Industry and Years Self-Employed



Source: IGDA DSS 2019

Snapshot: Job Role

In addition to their role as owner, many self-employed respondents identified as programmers/software engineers/technical designers (27%), game designers (22%), senior management (17%), or producers/project managers (8%).

Snapshot: Company Size and Composition

The self-employed respondents in this sample typically owned small companies, which were often one-person shops (37%) or employed/contracted two to five people (47%). A smaller proportion said they employed/contracted six to ten people (13%), or 11 to 50 people (3%). Development teams were most often comprised of between two and five people (74%), or six to ten people (26%).

When staffing their teams, the self-employed reported deploying contractors more often than hiring employees. Almost half had more contractors than employees (45%) with 29% deploying only contractors. One-third had more employees than contractors with 20% hiring only employees. Just over one-fifth (21%) reported that they use half contractors and half employees.

Similar to the other employment profiles, most self-employed respondents reported working on only few projects at once: 39% indicated that one project at a time is typical, 57% had two to five projects running at one time, and only about 4% reported six or more projects.

Most self-employed respondents worked from a dedicated home office (57%) and their

employees were likely to do the same in their own homes (62%). However, 30% said that employees worked in the owner's studio or office.

Snapshot: Salaries

The majority of self-employed respondents said that they worked full-time (75%) and many (55%) reported that 90% to 100% of their income came from their work in the game industry. However, they were not making much money. Notably 6% said that none of their income came from their game-related work. Nearly half (43%) reported that their annual income in the previous year (2018) from game-related work was less than \$15K USD. In addition, 41% percent said that they do not make a salary or wage as they always forego self-payment to cover other company needs (such as payroll or general overhead costs). Only 22% said that they never had to forego their salary or wages.

Most self-employed respondents reported relying on self-funding to support their companies (69%), and 33% reported that they relied on sales. Another 20% indicated that they had no funding. Other sources of funding included family and friends (13%), investors (12%), crowd-funding (10%), arrangements with publishers (8%), and private or public granting agencies (6%). Note that numbers total more than 100% because multiple selections were allowed.

Snapshot: Incentives and Overtime

In the 2015 DSS data, 40% of self-employed respondents reported that they did not provide raises to their workers, but this percentage declined over the years. In 2016, 26% did not provide raises; in 2017, 30% did not provide raises; and in 2019, 25% did not provide raises. In the current 2019 DSS, most self-employed respondents provided raises, and these were determined based on managerial discretion (25%), a fixed percentage (6%), a formula for merit (14%), or a combination of these factors (31%).

Similarly, only 16% did not provide incentive or bonus payments. Among those who did provide incentive or bonus payments, payments included lump sum bonuses (33%), company equity/stock options (18%), and/or royalties or shares tied to a game's success (45%; note that numbers total more than 100% because multiple selections were allowed).

During periods of overtime and crunch, only 10% reported that they did not provide compensation when their employees/contractors worked beyond their normal hours. This is a decline from previous reports (37% did not provide compensation for overtime in 2015, 16% in 2016, and 30% in 2017). Among those employers who did provide compensation in the current 2019 DSS, this took the form of time off/comp time (14%), perks (such as meals, 12%), paid overtime (10%), a combination of money and comp time (10%), lump sum bonuses (8%), or company equity (such as shares, 2%).

Snapshot: Benefits and Time Off

Self-employed respondents took very few sick days; 38% took less than one week per year, and an additional 22% did not take sick days at all. Vacation was slightly more common. Only 23% took less than a week or none, and 70% took between one and four weeks.

Most self-employed respondents did have a form of health coverage, though 16% said that they did not. Rather than company plans (7%), most self-employed developers relied upon government plans (30%), or private plans (26%).

A greater percentage of the self-employed had neither life insurance (54%), nor a pension program (47%). Among those with life insurance, most relied upon a private insurer for life insurance (25%), and among those with a pension plan, most relied upon an individual plan (22%) and/or a government plan (20%).

Snapshot: Benefits and Time Off for Employees

Given that most self-employed respondents did not have company benefit plans for themselves, it is not surprising that few offered these to their employees or contractors. Less than one-quarter (23%) offered health insurance, 17% provided a pension plan, and none offered life insurance.

Notably, self-employed respondents did offer their employees or contractors various perks, including free drinks (43%), conference travel (46%), fancy coffee or espresso (28%), an open pet policy (31%), and a gaming/arcade lounge (18%). Moreover, the majority allowed flex hours (94%) and/or telecommuting (94%).

Regarding time off, 35% said that they did not provide paid time off to their employees or contractors; 44% said they had a packaged policy that covered all paid time off; and 19% reported that they allocated sick and vacation time separately.

Hours of Work

In general, self-employed respondents reported longer regular workweeks than their employee and freelance counterparts: 24% reported working 40-44 hours per week, 17% reported working 45-49 hours, and 15% reported working 50-59 hours. Notably, 8% reported working fewer than 20 hours a week.

Crunch was also common among the self-employed as 33% indicated that they did crunch. This is a decrease from previous years. One half indicated that their job involved crunch in 2016 and 37% in 2017. However, in the current 2019 DSS, a further 33% of respondents indicated that their job required extended hours of work that they just did not refer to as crunch. Over

one third (36%) reported that they had experienced crunch more than twice in the past two years, and 30% felt that crunch was a necessary part of their job.

The hours per week during periods of crunch were higher for the self-employed than for employees or freelancers: 52% reported working 50-69 hours during crunch, 10% reported 70-79 hours, and an additional 23% reported 80 hours or more.

CONCLUSION

The Developer Satisfaction Survey is an important source of actionable information for the entire game development community. These data points also provide the IGDA with a better indication of whom the association represents and an overview of their concerns, interests and issues.

On the whole, the data indicate that developers are still young, male, white, and most of them do not have children or elder care responsibilities. They are highly educated, and most have been trained in specialized programs relevant to game design or game development. As such, important representational challenges remain. These include immediate negative outcomes such as inequity and discrimination for women, members of racialized groups, and older workers, but also have implications for the career pathways and development, maturation of the industry, innovation in game content, art, and design, perpetuating negative occupational identities and norms, and working conditions such as hours and overtime. In fact, many respondents (65%) felt that there is not equal treatment and opportunity for all in the industry. In addition to this, 45% of respondents perceived inequity towards *themselves* and 65% towards *others* on the basis of gender, age, ethnicity, ability, or sexual orientation. These numbers are higher than the 2017 DSS and continued monitoring is required to determine whether this reflects sampling effects or persistent trends.

On the positive side, the reported value placed on diversity by the 2019 respondents was the highest ever across the DSS (2014-2019): diversity in the game industry, in the workplace, and in game content were rated as somewhat or very important by 83-87% of respondents. As well the number of companies that have programs and policies geared toward diversity and equality initiatives seem to be growing across survey years.

When taken together with previous IGDA surveys, the data point to some maturation; the age of respondents and expectations to remain in the industry for the long term seem to be rising. As well, the vast majority of respondents worked in the industry on a full-time basis as employees. However, as has been reported in previous years, this does not mean that developers are in long-term stable employment nor without employment risks. The job churn and expectations of required mobility among employees remains relatively high. Developers seem to continue to enter self-employment after some experience in the industry, though the evidence suggests that self-employment carries as many if not more employment risks. Freelancers and independent contractors seem to maintain medium- to long-term contracts with a small number of employers/clients. This raises questions about the misclassification and misuse of freelance/independent contract labor. Companies may be skirting the definitions of freelance or independent contractor to hire de facto employees while avoiding regulatory regimes and payroll costs.

Though the model of career advancement within project-based industries like game development is to switch jobs, projects and studios to enhance reputation and access more prestigious projects, this creates an environment of precarity and places many employment risks on workers. Industry churn through start-ups, bankruptcies, studio closures, relocations and mergers and acquisitions, and game project cancellations adds to the fluctuating landscape.

Working on multiple projects remains common for a large number of developers. Although 48% of the respondents only work on one project at a time, 45% work on two to five projects at a time, and another 6% work on six or more. These multiple assignments are an important issue in project management and could present a challenge for team building and individual work organization, work pace, work intensity, stress and health.

Salaries are still individually negotiated or established and are part of a multi-layered compensation system where some components are universal as a minimum and others are variable, uncertain, and meritocratic at the discretion of management. As well, unlimited and unpaid overtime remains a concern even as studios continue to improve both in terms of crunch hours and its compensation.

On the whole, freelancers in this sample earn significantly less than their traditionally employed counterparts. Most do not have any incentives or bonuses as part of their compensation (68%), though some do negotiate royalties or shares tied to the success of the game, company equity, and lump sum bonuses. Similarly, most freelancers (64%) do not negotiate extra compensation for overtime or hours worked beyond normal office hours.

Self-employed respondents likely work full-time at their own indie company. Despite some high-profile successes in recent years, the life of a self-employed indie developer is not easy; almost half (43%) reported less than \$15K USD as an annual income in the prior year. A similar number (41%) had to forego a salary or wage in order to meet company needs. Notably, when compared to the 2015, 2016, and 2017 DSS, the self-employed respondents in this sample reported providing raises and bonuses to their employees more frequently.

While survey data suggests a general decrease in regular and crunch hours of work in the industry over the past 15 years, crunch time remains prevalent. The frequency and intensity of crunch may vary slightly across employment groups, but about 40% of the respondents across the board reported crunch. This often occurs more than once per year and many put in at least 50% more hours during crunch than the typical standard work week of 40 hours.

Therefore, the issue of crunch remains a significant challenge as do the following:

- The demands on employees' contributions versus fair compensation for their time spent at work (i.e., compensation for "crunch" time). A growing concern should be the lack of

retirement savings among developers.

- The continued underrepresentation of women, members of racialized groups and older workers and the associated challenges of equity and discrimination.
- Managerial and individual challenges associated with the short-term employment model of project-based industries.
- The diverse experiences of different workers in the industry (i.e., salaried employees, freelancers and the self-employed) and the need to devise suitable approaches to support each group.

LIMITATIONS AND NEXT STEPS

This Summary Report addressed only the most salient points from the DSS and engaged in limited comparison across questions or to past surveys. Look for past reports on the [IGDA website](#) or the [authors' website](#).

The number of developers who took the DSS 2019 was significantly fewer than in 2015 or 2016, but greater than in 2017, and there continues to be considerable drop-out across the survey (i.e., people start, but do not finish). We continue to tweak the survey to provide for a better experience and to find a balance between comprehensive questioning and survey length. We will continue in our attempts to reach a broader international audience and to achieve a larger representative sampling of the game community. Going forward, the DSS will now be administered on a two-year cycle. The next DSS will occur in 2021.