People behind pixels:
An exploration of working conditions, representation and government support in the Dutch video game industry

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ABSTRACT

This survey research aims to investigate *the current state of working conditions of video game developers (VGDs) and their desire for representation and government support in the Dutch video game industry*. The study used a cross-sectional quantitative design that was supplemented with open-ended questions in the survey and informal discussions. With the aim to add to knowledge about VGDs as an occupational community, this thesis explores their working conditions in the Dutch video games industry, focusing on their work-life quality and the extent to which they desire unionisation or government intervention. The findings suggest that there is a need for better working conditions and increased awareness regarding labour representation for VGDs in the Netherlands. This study also highlights the importance of addressing the occupational impact on well-being and improving the quality of work-life in the video game industry.

KEYWORDS:
Video game industry, unionisation, government support, work conditions, artist labour market

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1. Introduction

"People always say "pop culture." As if we have some high culture to distinguish it from." – Fran Lebowitz[1] (Clemente, 2021)

In a 2002 interview, globally-renowned Japanese author Haruki Murakami said that "Some people think literature is high culture and that it should only have a small readership. I don't think so...I have to compete with popular culture, including TV, magazines, movies and video games" (Kattoulas, 2002). What he probably meant was that culture is what sells, what is consumed. At that time, the idea that video games could be considered a competitive (creative and) cultural product, that too by one of the most commercially successful literary figures of the present era, would probably seem a little odd. However, the video game industry continues to scale new heights, having metamorphosed from being "non-profit creative explorations of capabilities in computers" (Zackariasson & Wilson, 2010) to an innovation-driving global "cultural industry that is becoming hegemonic in the field" (Muriel & Crawford, 2018).

As far as plain numbers go, the video game industry has certainly blown away the competition from both high culture and other popular culture products including fine art, literature, movies and recorded music. As per the Art Basel and UBS Global Art Market Report (2023), the global fine art and antique market stood at an estimated $67.8 billion in 2022. Meanwhile, in 2021, the global theatrical and streaming entertainment market clocked $99.7 billion in revenues (Motion Picture Association, 2022) and the recorded music industry generated $26.2 billion in 2022 (IFPI, 2023). The global market for book publishing was estimated at $99.9 billion in 2022 (GlobeNewswire, 2023). Currently, the video game industry outsizes the commercial impact of each of the aforementioned cultural products by a wide margin. The global video game market is estimated to have generated $184.4 billion in revenues in 2022. (Newzoo, 2023). Various forecasts project that the market size of the video game industry will breach the $300 billion mark in the coming years. (Read, 2022; Fortune Business Insights, 2022). Moreover, driven by the increased proliferation of digital technologies, video games are being played by an increasing number of people, regardless of their demographics (Muriel & Crawford, 2018). It is estimated that in 2021 (Statista, 2022), there were over 3.2 billion gamers or people who play video games across the globe, with Asia leading the market with 1.48 billion gamers, followed by Europe with 715 million gamers. At least commercially, video games are the cultural products that every other creative and cultural

industry will be competing against in the foreseeable future. Apart from possibly being the most lucrative business of the creative industries (Filipovic & Cvetković, 2020), the cultural impact of video games also continues to rise along with the level of creativity and innovation in the industry, with expanding influence in non-media domains such as education and healthcare. Now firmly placed in popular culture, video games have turned into a serious means of affecting mass consciousness, society and culture (Galanina, 2018; Rykała, 2020).

As it grows in size and influence, the video game industry is also becoming a major source of employment in the creative as well as information and communication technology sectors. In 2020, the video game industry directly employed 143,045 personnel and supported a total of 429,646 direct, indirect and induced jobs in the United States (Tripp et al., 2021), while in the European Union, video game studios and publishers employed about 74,000 people (EGDF & ISFE, 2020). While the process of making a video game requires a mix of creative and non-creative skills and is rooted in digital technology, creativity has been the core competence in making successful video games (Zackariasson & Wilson, 2010; Rykała, 2020). At its basic, video game is a form of interactive software which aims to stimulate its user through a combination of video, art and sound multimedia and thus, are full of artist decisions relating to controls, genre, visual presentation, narrative form and sound design, among others (Gai, 2022). And this community of creators with a diverse set of skills and specialisations who are at the centre of the creative process of video game production are called video game developers (VGDs) (Weststar, 2015). From a labour market perspective, VGDs are the new-age workers who sit at the nexus of information and communication technology (ICT) and creative industries. Since video games are digital by definition (Muriel & Crawford, 2018), it may seem the first glance that the industry is highly technological. While it is true to some extent as the industry wholly exists because of technological advancements and also acts as a catalyst for progress in the computer hardware and software industry, particularly in the fields of graphics processing and physics processing (Zackariasson & Wilson, 2010; Filipovic & Cvetkovic, 2020). However, artistic and creative perspectives remain integral in most parts of the video game development and publishing process (Zackariasson & Wilson, 2010). And the project and intellectual property-based nature of the video game development process and the passion exhibited by the VGDs towards the craft of making games makes them more reminiscent of the creative labour force (Weststar, 2015). As VGDs are at the forefront in this era of digitalisation which is increasingly transforming the creative and cultural space, studying

video games and their creators can provide us with key tools to understand contemporary cultural industries and their workers.

Despite the commercial and cultural influence of video games, they have received remarkably little attention within cultural economics, even though they have come under increased scrutiny more recently (Borowiecki & Prieto-Rodriguez, 2015; Rykała, 2020). Moreover, research about workers who make video games is even more limited, even though it is fraught with reports of poor or toxic working conditions, long working hours, low quality of work-life, burnout and low pay and shares various characteristics of creative/cultural labour market (Weststar, 2015; Klimas, 2018; UNI Global Union, 2022; Forsdick, 2018; Spindler, 2022; Semuels, 2019; Keogh & Abraham 2022). Klimas (2018) notes that not only VGDs remain under-researched, but their business models have also been changing dramatically in recent years even as they remain industry-dependent and studying them can foretaste changes in other industries.

More particularly, only a few researchers (Legault and Weststar, 2017; Mendes, 2020) have touched upon the state of working conditions for VGDs, with most of the knowledge about the topic coming from media coverage and various industry-wide surveys conducted by International Game Developer Association (IGDA), UNI Union Global and others. Meanwhile, instances of poor working conditions, low pay and harassment have led to sporadic instances of collective actions (such as strikes and walkouts) (Mendes, 2020; Grayson, 2021) and attempts at unionisation and collective representation have gained academic attention, but they remain understudied topics (Weststar and Legault, 2017b; Keogh & Abraham 2022; Dorigatti et al, 2022). Similarly, government support for VGDs also remains a largely unexplored topic. Industry-based surveys depicting the working conditions of VGDs (IGDA, 2021; UNI Global Union, 2022) have global coverage but fail to provide any significant localised insights. Dorigatti et al (2022) note that even though there have been recent explorations into problems related to working conditions faced by VGDs as well as worker's collective organisation, they are largely limited to Anglo-Saxon countries. In this context, this research aims to aid in filling this gap in the literature by adding to the stock of knowledge about VGDs as workers, the present state of labour conditions and their opinions about unionisation and government support.

In particular, this research focuses on the Dutch video game industry to gain more localised insights about video game developers. The Netherlands is an interesting case study

due to several reasons – despite being a comparatively young and smaller market, the video game industry is fast expanding in the country; and has been hardly explored from a research perspective (Dorigatti et al, 2022). According to Dutch Game Garden (DGG) (2022), the revenue growth of almost 18% annually on average for Dutch game companies (to €420 million - €440 million in 2021) is above the global average in the industry. Dutch Game Garden also reported that the number of people working in the industry increased by over 5% year-over-year to 4,560 in 2021, noting that overall industry growth was led by the number of employees between 2015 and 2018 and by increased revenues in the last three years. The gaming industry in the Netherlands is said to have a clear growth potential and is considered to be "leading internationally" when compared to neighbouring countries (Nieborg and Kloet, 2016). Additionally, the Netherlands on average outperforms the Organisation for Economic Co-operation and Development (OECD) nations in jobs, incomes and work-life balance (OECD, n.d.), has notable levels of union activity (CBS, 2022) and offers a wide variety of government support to the creative and cultural sectors (Association of the Compendium of Cultural Policies and Trends, 2019). This provides an interesting backdrop to study an industry often characterised by low pay, poor working conditions, burnouts and lack of unionisation.

Given the overall picture, the main objectives of this study are (1) evaluating the state of VGDs working in the Dutch video game industry, (2) understanding VGDs' perspective on unionisation and government support and (3) measuring their quality of work-life and burnout levels. Therefore, this study poses the following research question: What is the current state of working conditions for video game developers and their desire for representation and government support in the Dutch video game industry? The research question is further divided into sub-research questions as follows:

(1) How do video game developers characterise their working conditions in the Dutch video game industry and how does it compare to the global peer markets, artist labour markets and the Dutch labour market?

(2) What is the level of desire for unionisation and government support among VGDs in the Dutch video game industry and the reasons behind it?

(3) What are the quality of work-life and burnout levels among VGDs in the Dutch video game industry?

To achieve the objectives of this study and given the relatively small size of the Dutch video game industry, a cross-sectional quantitative survey was carried out and data was analysed using descriptive statistics, correlations and thematic content analysis.

The results of the study show that VGDs in the Dutch video game industry share similar characteristics with global VGD peers as well as creative labour markets. While poor workplace conditions are somewhat less prevalent than in the overall video game industry, they still have a significant presence in the market, with issues like excessive workloads, inadequate payments, inadequate health and retirement benefits and job insecurity being the most prevalent ones. Gender discrimination in the Dutch game industry remains a concerning issue as male dominance in the workforce outpaces the wider video game industry as well as the general labour market in the Netherlands. While unionisation is generally seen favourably among the VGDs under study, there is a fair amount of unclarity and concerns about collective representation. The study also highlights a lack of government support and VGDs expectations regarding it as well as correlations between occupational well-being indicators and working conditions.

This research has not only the potential to add to the existing knowledge base about VGDs but also has implications for practice as it can provide essential insights to policymakers and industry players regarding shortcomings in job conditions in the Dutch game industry as well as possible interventions to improve those conditions. The results of this research can be used to draw inferences about the attractiveness of the Dutch game industry for a growing talent pool which can easily access more mature video game-producing markets through immigration and remote working.

2. Literature Review

Even as video games continue to be a growing source of entertainment and socialisation for millions of people with expanding influence in non-media domains such as education and healthcare, the working conditions of those who create them have come under some scrutiny in recent years. Since that is the primary subject of this research as well, this literature review first aims to provide context regarding the place of the booming video game industry and the creative workers who make it all possible in the creative and cultural economy. Following that, the existing research and data on the working conditions of creative workers, as well as labour representation and regulation in the industry, will be discussed. Finally, this review will explore the theoretical perspective of the occupational impact on well-being, with a focus on the specific constructs applied in this study. In addition, this section also formulates the hypothesis to answer the research questions.

2.1 The virtual dominance of the cultural world

British cultural critic and author Alan Kirby (2009) argues that the era of postmodernism in the cultural context has come to an end and it has been succeeded by a new "hegemonic" paradigm shaped by innovations in computer and digital technology which he calls "digimodernism." He posits that digimodernism has become the cultural-dominant since the late 1990s and "denotes the point at which digitalization intersects with cultural and artistic forms." Digitalization has not only transformed the way cultural and creative goods are produced, distributed and consumed but also enabled the emergence of new forms of creative goods and services, the most notable of which are video games (Handke & Towse, 2013). Banks and Cunningham (2013) note the video game industry is the major "born global/born digital" creative industry, characterised by impressive growth and rapid innovation cycles. The scope of video games also continues to expand beyond the domain of entertainment through 'gamification' (the use of game design and mechanics in non-game contexts applications) and applied (or serious) in many industries such as defence, health and education. So if, as Muriel & Crawford (2018) state, digimodernism is the hegemonic cultural paradigm of contemporary society, then video games, digital by definition, provide the best entry point and the key tools to understand the current cultural landscape.

According to the 2023 Global Games Market Market by games and esports analytics and market research firm Newzoo (2023), the global video game market is estimated to have

generated $184.4 billion in revenues in 2022. Although it was a 4.3% decline from a year ago, 2022 is expected to be an outlier corrective year after two years of lockdown-fueled growth during the coronavirus pandemic, the report noted, adding that over 2020 to 2025, the market is forecasted to grow at 3.4% compounded annual growth rate (CAGR) to $211.2 billion. Regionally speaking, in 2022, Asia-Pacific was the largest video game market with $87.8 billion in total revenues, accounting for 48% market share, followed by North America ($48.4 billion revenue; 26% market share), Europe ($32.9 billion; 18%), Latin America ($8.4 billion; 5%) and Middle East & Africa ($6.8 billion; 4%). In the case of the Netherlands, the video game industry is estimated to have generated revenues of €420-440 million, an 18% year-over-year increase and an up to 196% jump from €225-300 million revenue in 2018 (DGG, 2019; 2021; 2022). Meanwhile, the number of companies in the Dutch video game industry has increased to 673 in 2021 from 575 in 2018 (DGG, 2018; 2022).

Moreover, the video game industry is not just limited to relationships within the industry, but also with other industries such as the film and TV industry, publishing industry and toy industry by creating products based on game characters and vice versa, as well as sports, music and fashion industry (Rykała, 2020). Despite the wide-ranging influence of the video games industry, it is the creativity in video games that remains the essence that drives the industry.

2.2 Understanding industry structure

In terms of platforms and distribution channels, Newzoo (2023) broadly classifies the video games industry into four categories – mobile games, console games, downloaded/boxed PC games and browser PC games. Mobile games are the largest segment, generating half of the global industry revenues with $92.2 billion in 2022. Console games ($51.8 billion revenue; 28% market share in 2022) and downloaded/boxed PC games ($38.2 billion; 21%) make up most of the remaining market, with browser PC games just accounting for about 1% of the market (Newzoo, 2023). However, the size, scope and growth of the video game industry hides a complex and sometimes structurally volatile structure characterised by frequent changes in dominant players, driven by platform changes and protean consumer preferences (Banks and Cunningham, 2013).

The video game industry has come a long from its initial era of arcade machines and the dominant platform has since shifted from console and PC games towards small handheld

devices with mobile- and tablet-based gaming currently leading (Banks and Cunningham, 2013; Newzoo, 2023). While there are certain oligopolistic structures in the global video game industry, with few dominant players in different segments of the market (e.g. Nintendo, Sony and Microsoft in consoles; Steam, Epic and PC manufacturers in PC gaming; Tencent, Apple in mobile gaming; Ubisoft, Activision-Blizzard in third-party publishing), Banks and Cunningham (2013) suggest that the constant changes in the underlying market dynamics lead to "more porous power structure than seen in many other industries." Nonetheless, it is conventionally accepted that the video game sector constitutes four main groups of actors: game developers, game publishers, game distributors and console (or hardware) manufacturers (Rykała, 2020; Cadin and Guerin, 2006).

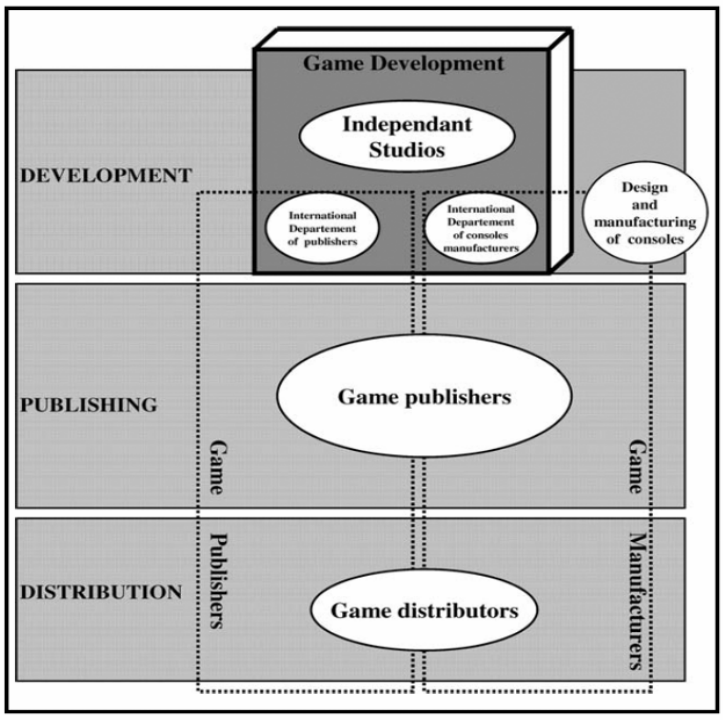

Figure 1: Structure of the video game industry
Source: (Cadin and Guerin, 2006). pp. 248-255.

Developers are the ones who create games, while publishers finance and promote games to console manufacturers and console manufacturers develop hardware platforms (including dedicated gaming consoles, computers and smart mobile devices) and distributors (both retail and online) make games available to the final user (Cadin and Guerin, 2006). However, as Figure 1 shows, the players in this structure don't exist in silos, but in tandem with often overlapping priorities. Console manufacturers (especially Nintendo, Sony and Microsoft) frequently develop internally exclusive games and other intellectual property (IP) for their

platforms, finance and buy games from independent developers and distribute games through their channels. Publishers also have their studios and buyouts of small firms which show promise by dominant publishers are a regular feature of the game industry (Cadin and Guerin, 2006; Banks and Cunningham, 2013). Cadin and Guerin (2006) further note that the video game industry is led by distributors and players who are the most vertically integrated.

Video games belong to the system of mass cultural production (Galanina, 2018) and creativity is present throughout the entire structure of the video game industry (Zackarisson and Wilson, 2010). Contrary to the outward perception that video games are driven by technological innovations, it is the other way around as artistic and creative perspectives constitute most parts of the process of developing and publishing a video game (Zackarisson and Wilson, 2010; Banks and Cunningham, 2013). As the video game industry closely resembles the traditional publishing structure seen in many other CCI sectors, creativity can often be a negotiated result but it also allows for alternative means of production and distribution (Zackarisson and Wilson, 2010). Galanina (2018) states that the video games industry is creative, has strong potential, and it changes cultural space.

2.3 The happiness engineers

Filipovic and Cvetković (2020) describe video games as "a sum of different artistic and technological achievements from the past, which caused their genesis and existence." Juul (2005, as cited in Zackarisson and Wilson, 2010) defined video games as consisting of six main features: they have their own rules; have variable outcomes; outcomes are measured differently; require effort from players to influence the result; outcomes have an emotional impact on the players; and can be played with or with real-life consequences. According to Zackarisson and Wilson (2010), video games must consist of three essential features: setting, sensory stimuli and rules. Settings refer to the given genre, plot and interface of the video games, while sensory stimuli are experienced by the gamers while players and rules guide the structure of the video game experience. However, in theory, Zackarisson and Wilson (2010) state, video games be anything and the only limitations are those imposed by the developers themselves, their creativity and imagination. Simply put, video game developers form the creative core of the industry as they are the ones who conduct the artistic and technical work of building the game (Weststar, 2015; Mendes 2020).

McGuire and Jenkins (2008, as cited in Mendes, 2020) mention that games are a combination of art and science, defining a game developer as a multidisciplinarian who undertakes the whole or part process of video game creation, including mechanics (gameplay, controls, etc.), content (art style, music, narrative, etc.) and technology (software, compatibility, etc.). All of this could be done by even one person or team involving hundreds of VGDs, depending on the size of the project or the vision of the creators.

While VGDs often have a diverse set of capabilities and carry out multiple roles, they can broadly be classified into four categories: *designers, programmers, artists and other major occupations* (Liming and Vilorio, 2011). Designers are the ones who imagine and conceptualise almost everything about and in a video game and work closely with programmers and artists during game production. Various types of video game designers include lead designers, content designers, game mechanic designers, level designers and writers. Programmers are the more technical members of a development team as they are involved in building the underlying software structure of the games through coding languages and include types such as lead programmer, artificial intelligence programmer, graphics programmer, network programmer, physics programmer and user interface programmer. Artists design a game's aesthetic, or visual style, including artwork, environment, characters and objects as well as marketing material and can be categorised as art directors, lead artists, concept artists, modellers, animators and other artists. Audio workers, executives, producers and quality assurance testers make up other major occupations (Liming and Vilorio, 2011).

Most commonly any video game production comprises four teams – programming, art, audio and design – which depend upon cooperation among groups and require coordination of objectives with successive progress Zackariasson and Wilson (2010). Figure 2 provides an example of the organisation and workflow of a video game developer, indicating how much the typical development process relies on cooperation between individual groups.

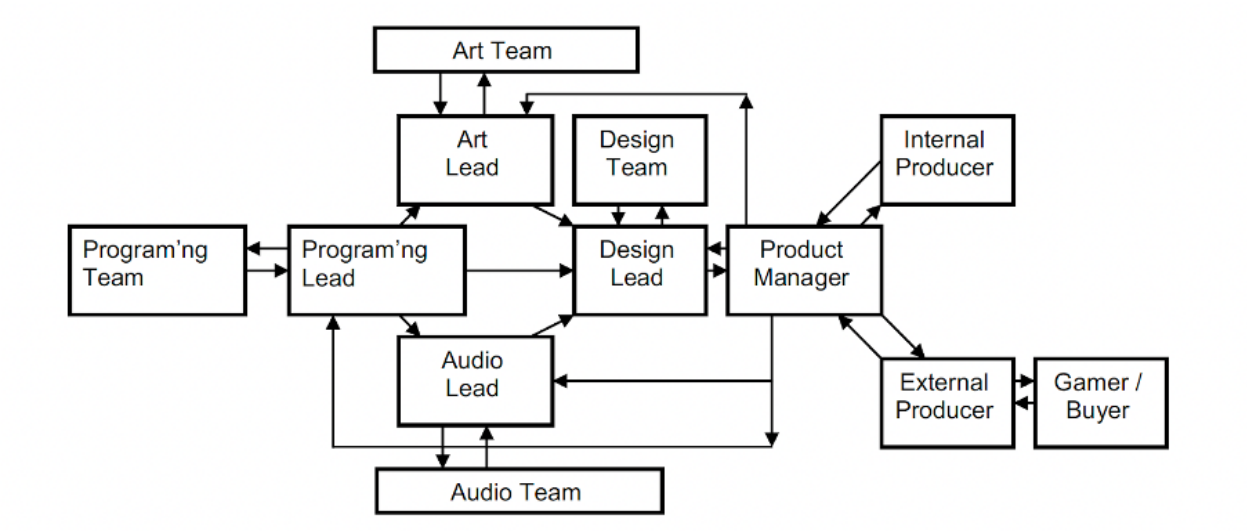

Figure 2: Organisation and workflow of a VGD

Source: (Zackariasson and Wilson, 2010)

VGDs can form four distinct types of relationships in the gaming industry: relationships with other game developers, with publishers, with distributors and with console manufacturers (Klimas, 2015, as cited in Rykała, 2020). Zackariasson and Wilson (2010) further state that there are three ways in which developers relate to a publisher – as a third-party developer, working under contract with a publisher; as an in-house developer for a publisher; or as an independent developer, who develops and publish games on their own by leveraging online marketplaces. However, for independent developers, despite some examples of high-profile success stories, the video game industry is volatile and high-risk with a very low likelihood of commercial and economic success (Banks and Cunningham, 2013). This is reminiscent of the artists' labour market where a few top performers dominate the dominant monetary rewards and cultural discourse, which was called the 'superstar' phenomenon by Rosen (1981). Weststar (2015) also notes that like other star systems, even in the video game industry, developers who succeed are well rewarded.

For video game developers, Klimas (2018) claims that it's fruitless to separately assess human and knowledge resources, as regardless of business model, types of games developed or monetization method, people along with their knowledge are considered the most important type of resource in the video game industry, in line with other creative industries which are mainly knowledge-based professionals (Rykała, 2020). Meanwhile, digitalisation has made means of producing and distributing cultural goods widely available and accessible, consumers have gained the ability to become the producers themselves, leading to a 'produsage,' a mixture

of production and use (Hesmondhalgh and Baker, 2011). Even in the video game industry, gamers are no longer seen at the end of the value chain, instead, they are involved in the making, promoting and distributing games, characterising the co-creative relationship that exists between gamers and developers. More often, creative and knowledgeable workers inclined to work in the video game industry do so out of their passion for video games (Weststar, 2015) and having an inclination towards gaming is seen almost as a prerequisite by most employers in the industry (Klimas, 2018).

Klimas (2018) also stated that 'relational resources' i.e. external business and social relationships and networking with their peers was of key importance to VGDs. In fact, through a thematic analysis of secondary online material regarding VGDs, Weststar (2015) concluded that they meet the characteristics of an occupational community that share a common set of norms and values (Salaman, 1971, as cited in Weststar, 2015), which goes beyond geographical boundaries. As the trade or the crafts are increasingly defining the environments of the workers today, instead of their firms, they often depend on their occupational community for networking, improving knowledge and skills, finding job support, and sharing identity and meaning. As per Weststar (2015), like other occupational communities in the creative and cultural industries, VGDs also showed an inclination to spend leisure time with their occupational community members and indicated a love for game development and an inability to perceive doing anything else as a career. Weststar (2015) further states that a VGD typically "chooses video game development not because of the fit with his skill set, but because of a deeper connection to the work that makes him different…".

And they are indeed different, in more ways than one. In his book *Reality is Broken*, McGonigal (2011, p. 35-52) notes that the game industry is increasingly drawing on positive psychology to understand the emotional and psychological impact of games, and game designers are turning the art of optimising human experience into an applied science. And therefore, he says that VGDs are among "the most talented and powerful happiness engineers on the planet." But are the happiness engineers happy? While that is naturally difficult to assert either way for anyone, Weststar (2015) states that viewing the VGD community from the occupational lens can allow a better understanding of their labour conditions and characteristics, as well as to contextualise and compare them with other organisational, industry and societal norms.

2.4 Current State of Affairs

In an occupational sense, video game developers sit at the nexus of creative and cultural industries and the ICT industries (Weststar, 2015), and thus have become a growing source of employment for creative as well as technology professionals. In 2020, the video game industry directly employed 143,045 personnel and supported a total of 429,646 direct, indirect and induced jobs in the United States (Tripp et al., 2021), while in the European Union, video game studios and publishers employed about 74,000 people (EGDF & IFSE, 2020). Meanwhile, in the Dutch video game industry, the number of people working in the industry has increased by over 5% year-over-year to 4,560 in 2021 and by more than 18% since 2018 (DGG, 2018; DGG, 2022). UNI Global Union (2022) also estimates the workforce in the Dutch video game market to be less than 5,000.

While many VGDs may enter the industry because of their passion for games, renowned journalist and author Jason Schreier (2021) describes the video game industry as a sector that does not treat people well and "sells the illusion of careers." He notes that the poor working conditions associated with the video gaming industry are particularly striking as it is a massively profitable global juggernaut. (Schreier, 2021). Working in video game development is not as dreamy as the experiences VGDs strive to create. Instead, it is fraught with reports of poor or toxic working conditions, long working hours, burnouts and low pay (UNI Global Union, 2022; Forsdick, 2018; Spindler, 2022; Semuels, 2019). Video game development and publishing companies, like most of the companies in cultural and creative industries (CCI), have a project-based environment and their economic relevance depends on the fruitful implementation of these created projects (Weststar, 2015; Zackariasson and Wilson, 2010). As a result, VGDs also face the challenges often associated with other project-based workers, including crunch (or the practice of compulsory sustained long working hours), unlimited and underpaid overtime, poor work-life balance, burnout, IP loss, non-compete or non-disclosure agreements, and constrained training opportunities (Weststar, 2015). Despite widely reported problems with work conditions and the environment in the video game industry, the research on VGDs as workers have been sparse (Weststar, 2015). More particularly, only a few researchers (Legault and Weststar, 2017; Mendes, 2020) have touched upon the state of working conditions for VGDs, with most of the knowledge about the topic coming from media coverage and various industry-wide surveys conducted by International Game Developer Association (IGDA), UNI Union Global and others.

A survey by the IGDA (2021) indicated that socio-demographically, the majority of VGDs identified as male (61%) and about 33% as female, were mostly young (with 79% under the age of 40%) and highly educated (73% with at least a college degree or diploma). While 72% of VGDs had either part-time or full-time employment, 14% were self-employed and the remaining 13% worked as freelancers (IGDA, 2021). The survey showed that significant percentages of VGDs experienced inequality and long work hours at their jobs and showed strong support for unionisation. As per the IGDA (2021) data, less than half of the respondents said that they had not faced any form of workplace discrimination themselves and only 29% had never witnessed it against others, with microaggression being called out as the most common issue. Moreover, around 47% of VGDs felt that crunch or long hours was expected as a normal part of their job, which was particularly higher for freelancers (73%). In terms of job experience and job security, most employees had less than nine years of experience and most expected high job mobility (IGDA, 2021). Meanwhile, in another survey conducted by UNI Global Union (2022), the top workplace issues identified by VGDs were low pay (67%), excessive work demands and/or hours (43%), inadequate benefits (43%), lack of access to training, software, etc. (39%), job insecurity (37%), and discrimination and/or sexual harassment (35%). A significant number of women (46%) and non-binary VGDs (43%) reported gender discrimination as a workplace issue.

VGDs often deal with extremely demanding work conditions and despite some recent improvements, crunch remains a prevalent issue in the video game industry. Previously, Legault and Weststar (2017) had also made similar assertions, noting that while there was a downward trend in the frequency of crunch, unpredictable and long work hours continued to prevail as they are built into the project-managed work environments.

In the Dutch game industry context, there is little recent literature available to gauge the working conditions of workers. However, Nieborg and Kloet (2016) reported that job security is "non-existent" and there is a remarkable absence of trade unions which leaves VGDs with a lack of collective support. On the other hand, the Netherlands is considered to be among the top countries when it comes to work-life balance across the overall labour force (Smith, 2018). As per the OECD Better Life Index, the Netherlands has the best work-life balance among 38 member nations of the OECD, with only 0.3% of Dutch workers enduring long hours at their jobs (OECD, n.d.). The Netherlands outperforms the average in jobs and work-life balance in OECD countries. Additionally, per World Bank (2022), women made up 46.9% of the overall Dutch labour force.

From a CCI perspective, it does not seem that the VGDs are much better placed than their peers. Abbing (2008) and Towse (2006) note that most participants in the artist labour market fail to achieve significant economic success. Thom (2016) states that there are few full-time or permanent employment opportunities for fine artists and most end up pursuing work on a freelance or self-employed basis. Researchers have said that artists tend to work in their chosen crafts out of their passion for it, rather than sustenance, and as per Throsby's (1994, p. 69-80) 'work preference model', most artists try to 'buy time' and end up doing both arts and non-arts work in order to support their passion for art-related works. In a study of three cultural industries – magazines, music and broadcasting – Hesmondhalgh and Baker (2011, p. 134), stated that "creative work often demands long, sustained periods of efforts, especially when work is near complete," which is basically what happens during crunch in the video game industry. Feelings of insecurity were also prevalent across all three sectors, even among those with salaried positions, and given the short-term nature of contracts, job-seeking was relentless (Hesmondhalgh and Baker, 2011, p. 113-138). The authors also concluded that low wages were a persistent problem across industries, combined with the long working hours as workers are required to be flexible with their time and yet are not paid consummately for hours actually worked.

2.5 Unionisation, representation and government support

Coles (2016) states that as a neoliberal construct, unionisation and collective bargaining are largely absent in the creative economy as the individual labour market power of the creative workers makes them irrelevant. Moreover, the author notes that cultural labour problems are more often than not acknowledged or addressed as cultural policy problems. Hesmondhalgh and Baker (2011, p. 113-138) in their study of cultural industries also found that unionisation was declining even in sectors which were previously characterised by a high proportion of unionised workers (such as TV broadcasting), and most freelance workers negotiated rates individually.

There is little research available on topics of unionisation, representation and government support in the context of the video games industry. According to IGDA (2021) data only 12% of VGDs were unionized, but the situation has improved significantly from 6% in 2019. The report further notes that most VGDs hold favourable views about unions as they increasingly feel that unionisation can benefit them, and a country-based union of all VGDs was the most positively-viewed form of unionisation. Similarly, UNI Global Union's (2022)

global survey found that 79% of VGDs supported forming a union, with the support touching 85% for Europe-based VGDs. Weststar and Legault (2017b) stated that while the labour process of videogame development is the antithesis of the union archetype, most VGDs support unions, the type of unionism matters and that national industry union is a salient model for such workers. More recently, Dorigatti et al (2022) studied the interest representation in the video game industry in Denmark, Italy and the Netherlands. The authors noted that union membership among VGDs in the Netherlands is close to zero, with little effort from any of the established trade unions to organise the video game industry. They further noted that even professional associations are less well established and collective bargaining is almost absent in the Netherlands. However, there are no studies that directly indicate the support for unionisation among VGDs in the Dutch video game industry.

In the case of the overall Dutch labour market, as of March 2021, 16% of male workers and 19% of female workers were part of a trade union, although the numbers have declined for both men and women by over 5% and 7%, respectively, over the previous two-year period (CBS, 2022). In addition, the unionisation level was slightly lower in the culture, sports and recreation sector (14%) and much lower in the ICT sector (6%).

2.6 Occupational Impact on Quality of Life

Abraham Maslow theorized that most people want more than they have, arguing that once a person has met their most basic needs, they then develop higher needs (Daniel, 2019; Bora, 2015). Maslow developed a hierarchy of needs consisting of five levels: physiological needs, safety needs, love and belonging, esteem needs, and self-actualization (Daniel, 2019).

In the lives of most people engaged in productive activities, work plays a central role, and therefore, the work environment plays a key role in the life and well-being of the workers (Razak et al, 2015; Bora, 2015). Quality of work life (QWL) as a concept has steadily gained importance in industrialised countries as the role and status of human beings are being increasingly changed in the modern technological environment (Bora, 2015). However, despite advancements in the labour discourse, a universally accepted definition is lacking, even though a myriad of definitions of quality of work-life exist. Researchers have highlighted various aspects of QWL, including valuable consequences of work life, a goal, a process, and a philosophy (Afroz, 2017). Other researchers, such as Sirgy et al. (2001), focus on need satisfaction and define QWL in terms of satisfaction with higher-order and lower-order needs.

The concept of quality of work life (QWL) is based on three indicators: physiological, psychological, and behavioural. Physiological indicators relate to physical manifestations of well-being, psychological indicators involve negative attitudes or emotions, and behavioural indicators encompass changes in an individual's behaviour (Daniel, 2019). Bora (2015) highlights the central role of work in people's lives and the benefits of QWL, such as improved self-esteem, job satisfaction, commitment, health, and productivity.

2.6.1 Quality of Work Life

Quality of Work Life (QWL) can be defined as the extent to which an employee's personal and working needs are satisfied while working for an organisation. It is a multidimensional construct which considers various variables such as job satisfaction, stability and income as well as physical, physiological and social factors (Swamy et al, 2015). QWL involves workers' satisfaction of basic needs such as health and safety and economic and family needs as well as growth needs like social, esteem and recognition (Sinval et al, 2013). One of the instruments designed to measure QWL includes the Quality of Work Life Scale (QWLS) which measures the satisfaction of specific needs at work (Sinval et al, 2019).

QWLS measures 16 parameters on a seven-point agreement-disagreement scale to evaluate various job components such as working environment, job demand, and behaviour of manager, among others. It is based on two theoretical frameworks: need satisfaction theory and spillover theory (Sirgy et al, 2001; Tasdemir Afsar & Burcu, 2014; Sinval et al, 2019). Need satisfaction theory suggests that individuals have certain basic needs that must be satisfied for them to feel satisfied with their lives, while spillover theory suggests that the experiences and feelings that individuals have in one area of their lives can spill over into other areas, such as work. In this case, the dependent variable is the quality of work life (QWL) and the independent variables are the different aspects of need satisfaction and spillover that are measured in the QWL scale. The independent variable measure employee satisfaction with two sets of needs: Lower-order needs constituting (i) health/safety needs (NShs), (ii) economic/family needs (NSef); and higher-order needs constituting (i) social needs (NSs), (ii) esteem needs (NSt), (iii) self-actualization needs (NSa), (iv) knowledge needs (NSk), and (v) aesthetic needs (NScs).

Mathematically stated: **QWL = NShs + NSef + NSs + NSt + NSa + NSk + NScs**

The validity and reliability evidence of QWLS investigated by various researchers (Tasdemir Afsar & Burcu, 2014; Razak et al, 2016; Sinval et al, 2019) found the measure to be consistent across geographies and occupations.

2.6.2 Burnout

The World Health Organisation (WHO) has classified burnout as an occupational phenomenon defining it as a syndrome "resulting from chronic workplace stress that has not been successfully managed" (WHO, 2019). As burnout occurs in the work context, it is affected by situational factors such as job, work environment and organisational factors and has been often cited among the main reasons VGDs leave the industry (Mendes, 2020). Among the instruments used to measure burnout among employees, this paper uses the Oldenburg Burnout Inventory (OLBI) (Halbesleben & Demerouti, 2005) which evaluates emotional exhaustion and disengagement.

OLBI also uses 16 parameters on a five-point agree-disagree scale to measure burnout through exhaustion and disengagement. In this case, the dependent variable "burnout" is measured through eight independent variables each for the two dimensions of burnout – exhaustion and disengagement. The disengagement factor refers to distancing from work in terms of both object and content and to the development of cynical and negative attitudes and behaviours concerning one's job (Bakker et al., 2004; Sinval, 2019b). Exhaustion refers to feelings of physical fatigue, the need to rest, and feelings of overtaxing and emptiness concerning work (Demerouti et al, 2010; Sinval, 2019b). It contains both positive and negative statements with scoring being reversed for 8 statements.

The validity and reliability evidence of OLBI measure by various researchers (Bakker, 2014; Reis et al, 2015; Sinval et al 2019) found the measure to be consistent across geographies and occupations.

2.7 Hypothesis formulation

The main objectives of this study are (1) evaluating the state of VGDs working in the Dutch video game industry, (2) understanding VGDs' perspective about unionisation and government support and (3) measuring their quality of work-life and burnout levels.

Therefore, the all-encompassing research question of this study is: What is the current state of working conditions for video game developers and their desire for representation and

government support in the Dutch video game industry? The research question is further divided into sub-research questions as follows:

(1) How do video game developers characterise their working conditions in the Dutch video game industry and how does it compare to the global peer markets, artist labour markets and the Dutch labour market?

(2) What is the level of desire for unionisation and government support among VGDs in the Dutch video game industry and the reasons behind it?

(3) What are the quality of work-life and burnout levels among VGDs in the Dutch video game industry?

To answer sub-research question (1), given the wide prevalence of poor working conditions among VGDs and on assumption that VGDs in the Dutch video game industry are also part of the global developer community, the following hypothesis is proposed:

H1: *VGDs in the Dutch video game industry also face workplace problems that are associated with the global video game industry.*

Given the majority of indicative support for unionisation, as seen in the literature, this study formulates the following hypotheses to answer the sub-research question (2):

H2a: *VGDs in the Dutch video game industry strongly support unionisation.*

H2b: *VGDs in the Dutch video game industry show a strong desire for government support.*

Considering that poor working conditions and burnouts among VGDs are widely accepted norms, the following hypotheses are assumed to answer the sub-research question (3):

H3a: *VGDs in the Dutch video game industry have a low-quality of work-life balance.*

H3b: *VGDs in the Dutch video game industry show high levels of disengagement and exhaustion.*

3. Methods

3.1 Choice of Methods

This study uses a cross-sectional quantitative survey research design to examine working conditions as well as support for unionization and government intervention among VGDs in the Dutch video game industry. To gain objective insights from the broadest possible representation of VGDs, a cross-sectional design is a practical approach for this research given its limited time frame and the multiple variables under analysis here. A quantitative survey was designed and deployed to make the findings more generalizable to the overall Dutch video game industry. The survey provided access to a diverse range of VGDs including different roles, positions, levels of experience, and companies and the results are more likely to reflect the reality of the industry as a whole.

Quantitative research design can also help measure social reality or phenomena that don't exist naturally in quantitative form such as attitudes and beliefs (Sukamolson, 2007). Moreover, given the deductive nature of quantitative research (Bryman, 2008; Sukamolson, 2007), the current study aims to update the existing knowledge base about VGDs in particular and creative labour in general as well as create a contemporary point of reference for the Dutch video game industry.

In addition, the methods used in this study can help draw comparisons across different groups and existing secondary data and analyze correlations and relationships between variables. Moreover, cross-sectional quantitative design can highlight knowledge gaps that may exist within the industry. This could potentially provide valuable information for benchmarking against industry norms and standards to provide insights into areas that may require improvement and evidence for policy discussions and decision-making. The study has also been supplemented with open-ended questions in the survey to gain deeper thematic insights from VGDs and informal discussions with several industry stakeholders to better understand the findings.

3.2 Constructs and measures

The study was operationalized through an online English-language self-completion questionnaire as it can measure the concepts under analysis through direct and indirect indicators, infer causality by establishing relationships between variables and generalize

findings for the sample population (Bryman, 2008). Despite focusing on the Dutch video game industry, it was decided to draft the questionnaire (or survey, used interchangeably henceforth) in English because nearly 90% of the Dutch population speaks English (Publications Office of the European Union, 2012) and not all VGDs working in the Dutch video game industry reside in the Netherlands, so presumably most respondents would be comfortable answering in English.

The questionnaire consists of several themes namely demographics, working conditions, government support and unionisation, quality of work-life scale (QWLS) and Oldenburg Burnout Inventory (OLBI). The demographic questions related to age, gender*, education, location*, whether they were directly involved in the video game development process, employment status*, company type*, job role*, company size, organisation name*, work experience, work schedule*, promotions, work model, compensation method*, hours worked per week and annual income range. In this study, the socio-demographic variables have been analyzed to create a comparative overview of VGDs in the Dutch video game industry and also used control variables for the subsequent themes. While most of the questions in this section were closed-ended, some questions offered optional or mandatory (for location, company name and job role) text entry options (denoted with *), which were coded for easier dissemination as well as thematic content analysis (Bryman, 2008).

To measure the state of working conditions and test Hypothesis 1 (H1), the questionnaire relied on existing industry surveys by IGDA (2021) and UNI Global Union (2022) as well as past research. The surveys as well as studies by Mendes (2020) and Weststar and Legault (2017b) have shown that low wages, excessive work, inadequate benefits, discrimination and/or harassment are some of the common workplace issues among VGDs. This study aimed to identify whether VGDs working in the Dutch video game industry also identify with similar workplace issues and to what extent. In addition, two open-ended questions regarding personal experiences of discrimination and harassment and opinions about VGD working conditions were also included for this theme and a thematic content analysis method was applied to the responses to draw insights and common trends. Sets of variables for socio-demographics and working conditions are summarised in Appendix A-1 and A-2.

Similar to working conditions, questions about unionisation, and representation were based on past research by Weststar and Legault (2017b), UNI Global Union (2022), IGDA (2021) and Dorigatti et al (2022) to test H2a. Appendix A-3 shows the outline of variables used

to measure the level of representation and support for unionisation shown by VGDs as well as its perceived benefits and drawbacks. Appendix A-4 also summarises the variables used to measure perceptions about government support among VGDs in the video game industry and test H2b. Notably, questions related to perceived drawbacks and benefits of unionisation and type of government support also included an option for text entry to gain the widest possible range of opinions on the subject matters at hand.

The final two sections of the survey consist of a series of agree-disagree statements based on the QWLS measure (Sirgy et al., 2001; Sinval, et al., 2019) and the OLBI measure (Halbesleben & Demerouti, 2005; Bakker, A., 2014).

QWLS measures 16 parameters on a seven-point agreement-disagreement scale to evaluate various job components such as working environment, job demand, and behaviour of manager, among others. In this case, the dependent variable is the quality of work life (QWL) and the independent variables are the different aspects of need satisfaction and spillover that are measured in the QWL scale. (Sirgy et al, 2001; Tasmedir Afsar, 2013; Sinval et al, 2019a).

OLBI also uses 16 parameters on a five-point agree-disagree scale to measure burnout through exhaustion and disengagement. In this case, the dependent variable "burnout" is measured through eight independent variables each for the two dimensions of burnout – exhaustion and disengagement (Bakker et al., 2004; Sinval, 2019b). It contains both positive and negative statements with scoring being reversed for 8 statements. Both QWLS and OLBI are typically analyzed by calculating the mean scores of the underlying subscales separately. For QWLS lower scores indicate poor quality of work life and for OLBI higher scores indicate higher levels of burnout. Appendix A-5 and Appendix A-6 detail the outline of variables for QWLS and OBLI, respectively.

The questionnaire was created on the Qualtrics platform and the entire questionnaire in English with valid responses can be found in additional attachments (Appendix I). The data were processed and analysed using analytic tools available on the Qualtrics platform – Stats iQ for univariate analysis, descriptive statistics and correlations, and Text iQ for content analysis.

3.3 Sampling and data collection

The sample for this study was collected between 15 March 2023 and 28 May 2023 through a combination of judgement sampling and snowball sampling (Bryman, 2008; Fricker, Jr, 2017). As the name implies, judgement sampling allows researchers to select the sample

based on their judgement and snowball sampling allows new sampling units to be recruited by leveraging connections with initial contacts made during the study. As mentioned in the previous section, the online survey was created on the Qualtrics platform, which the respondents could access anonymously by clicking on the link to the survey provided to them in my communications with them. While it was initially estimated that respondents would have to spend roughly 10-15 minutes to complete the survey, it was likely an underestimate for several respondents as the optional open and semi-open-ended questions received a higher number of responses than anticipated.

According to the Dutch Game Garden (2022), the Dutch video game industry consisted of 630 companies and 4,560 jobs in 2021. This is a relatively small population of potential respondents with no definitive directory of companies or VGDs and thus, a variety of efforts were made to reach out to them. At the same time, it was strongly desired that there should be a fair amount of certainty that the respondents are VGD professionals working in the Dutch video game industry. To achieve this, the first step involved defining the Dutch video game industry for the purposes of this study.

The video game industry can be defined as consisting of all companies that engage in "at least one of the following processes in the value chain: the development, production, publication, facilitation and/or electronic distribution of electronic games" (DGG, 2018). This study added additional inclusion criteria to the above definition that respondents either worked for companies that identify as a part of the Dutch video gaming industry through their membership in the Dutch Gaming Association (DGA) and/or have offices based in the Netherlands, or as independent workers based in the Netherlands.

To ensure that these inclusion criteria were met, the initial distribution list included employees of companies that are listed as members of DGA as well as its individual members, who were contacted through their LinkedIn profiles or official email provided on the DGA website. DGA describes itself it is the official sector organization for game creators in the Netherlands with over 100 member companies and is a member of the European Games Developer Federation and Dutch Creative Industry Federation (DGA, 2022). While such professional organizations are less well-established, workers still see the DGA as the main representative body of the industry in the Netherlands (Dorigatti, et al, 2022). I also contacted DGA to request their cooperation for this study and they agreed to distribute the questionnaire link with an introductory message (Appendix B) on internal communication channels managed

by them as well as their partner organisation Dutch Game Garden. A few other respondents and companies who were connected over LinkedIn or email also informed that they have shared the questionnaire with their peers or on internal communication channels. Furthermore, LinkedIn's in-built search function and Google search were used to find more companies and VGDs that met the inclusion criteria (verified through their websites or LinkedIn profiles) and were contacted to participate in the survey.

However, the data collection process was hindered for a couple of weeks after my LinkedIn profile was suspended, apparently due to breaching the website's limit on making new connections, before being restored after a review. These hurdles necessitated the extension of the data collection period by a few weeks than planned initially. However, I believe that my strategy of meticulously ensuring that the inclusion criteria were met provides a fair degree of certainty that the respondents represent the Dutch video game industry despite the anonymous nature of the survey.

3.4 Response rate

It is rather difficult to calculate the exact response rate for the questionnaire due to the multiplicity of channels employed to distribute it. Roughly speaking, more than 1,500 contacts were made over LinkedIn, at least five organisations shared the survey on their internal channels and additional requests were distributed via several emails to companies as well as individuals. In addition, several respondents abandoned the survey at various points, a frequent problem encountered with online anonymous surveys. Therefore, the response rate means that 192 respondents completed at least the first 19 questions on socio-demographic variables in a valid/acceptable manner, which corresponds to over 4% of the total population. Considering the inherent low-response rates of online surveys and the fact that global surveys by IGDA (2021) and UNI Global Union (2022) targeting VGDs and spanning multiple countries garnered 803 and 512 valid responses, respectively, the response rate and the valid sample size for the present study can be considered satisfactory. It should be noted that since some questions were based on respondent's previous responses not every respondent was presented with every question. In some cases, respondents did not answer each question presented to them or completed the survey entirely. Therefore, the results of this survey are based on valid responses for each completed section and the sample size varies for relevant variables for those sections. For some variables, correlations and cross-tabulations, the total statistical groupings

may not sum up to 100% either because of multiple options being allowed for the variable or missing responses.

3.5 Practical Limitations and ethical considerations

The sample is not necessarily representative of the entire VGD population in the Dutch video game industry as the survey was largely limited to online and professional channels. Moreover, web surveys generally present low response rates (Massey & Tourangeau, 2013) and thus the statistics provided are only indicative of the sample of respondents. However, the demographic data showed that the results were fairly consistent with general trends in the global video game industry and video game industry data in the Netherlands.

Several ethical considerations were also kept in mind while carrying out the study, such as obtaining informed consent from the respondents, providing them with comprehensive information about the purpose of the survey and guaranteeing the privacy of the survey respondents. The participation was voluntary and anonymous, and the respondents were able to withdraw at any point in the survey. General data protection regulation in the form of the General Data Protection Regulation (GDPR) in the European Union was adopted to assure respondents that data is to be only used for the stated research purposes.

4. Data Analysis and Results

4.1 Overview of Workers in the Dutch video game industry

A final sample of 192 respondents who have completed the sociodemographics section of the survey indicated that the workers in the Dutch video game industry were largely male, young and well-educated. While this picture is fairly consistent with those presented by IGDA (2021), UNI Global Union (2022) and Dutch Game Garden (2022), there are some notable differences. Table 4.1 shows the summary of socio-demographic statistics (adapted from Appendix D).

First of all, the findings of this study show not only do the male-dominant archetypes of the video game and ICT industries also persist in the Dutch video game industry, but it is also higher compared to the global industry average as well as the local labour market. In terms of gender, most of the respondents identified as male (78%), with 19% as female and 3% as non-binary. In fact, among those who identified as video game developers (163 respondents or 93% of the sample), the percentage of women fell to around 16% and men rose to over 80%. In comparison, the IGDA (2021) survey, which spanned over 30 countries including the Netherlands, showed that 61% VGDs were men, 31% were women and 8% were non-binary or others. Meanwhile, per World Bank (2022) data, women account for 49.4% of the overall labour force in the Netherlands. In technology-related fields, women hold 28% of the jobs, while in the European Union, they make up about 19% of the ICT sector (Radulovski, 2022).

In terms of age, on average, the workers in the Dutch video game industry were younger than their global peers, as 51% of the sample was less than 30 years old, compared to just 36% in IGDA (2022) survey. Those over 40 years old made up 13% of the present sample, while they comprised 22% of the respondents in the IGDA (2022) report. Moreover, women in the Dutch video game industry tend be to younger, with 60% of them being younger than 30 years and only 5% older than 40 years. Women also tend to be more well-educated, with 97% having at least completed graduation, compared to the sample average of 83%.

As is becoming increasingly common in various industries, either due to offshoring or the increased prevalence of remote working, not all those who work in the Dutch video industry are based in the Netherlands. While 88% of the sample said that they were located in the Netherlands, the remaining 12% were based in countries like Argentina (3%), France, Iran, Turkey, Canada, Chile, Hungary, Poland, Portugal, Romania, South Africa, Spain, Ukraine,

UK, US and Uruguay. As the literature also points out, those working in the Dutch video game industry have to carry out multiple roles and are involved in creating more than one type of game. These workers were most prominently involved in creating indie games (50.5%), AAA PC and console games (31%), and mobile games (24%), as well as in providing localisation services, middleware services and hardware. Nearly 28% of the respondents also noted other types of games or services, the most notable ones among them being applied (or serious) games (7%), web-based games (5%), AA PC and console games (4%) and artificial reality/virtual reality games (3%). In terms of job roles, participants were asked to describe their job roles which were later coded in Qualtrics based on the categorization given by Liming and Vilorio (2011). The findings remain consistent with observations that VGDs are multidisciplinarians and often hold multiple roles, with respondents primarily describing their roles as a mix of designers (48%), programmers (31%), artists (23%) and other major occupations (22%) such as founders, producers and audio workers.

Around a third of respondents either worked alone or in companies with less than 10 employees and another 39% in companies with less than 50 employees, while only 22% were in organisations with more than 100 employees. This was to be expected as the average company size in the Dutch video game industry remains small, at about 7 employees on average in 2018 (DGG, 2018).

Self-employed and freelancing individuals accounted for about 25% of the sample, while permanent full-time employees made up just 42% of the sample. The remaining were either part-time or temporary employees (24%) or others (10%), which included students or interns (5%) as well as those who held multiple jobs as employees and/or as self-employed. Compared to the artist labour market, these numbers seem encouraging as creative sectors have up to 2-3 times higher rates of self-employment than the US and European average of 20%-30% (European Commission, 2018; Creative Industries Federation, 2017; Partnership for Young London & Roundhouse, 2019). Notably in the Netherlands, 15.5% of the working people were self-employed (OECD, 2018). However, Weststar (2015) notes that the relatively low rate of self-employment hides the churn resulting from a project-based structure in the Dutch game industry as well, which is evident by the significant portion of part-time or temporary workers. This further is corroborated by the finding that while 55% of respondents had worked in the video game industry for more than 4 years, more than 73% had worked in the same organisation for less than 3 years. The number of respondents who had worked less

than a year in their current company (33%) was about double of those with less than one year of overall industry experience (16%).

Table 4.1: Summary statistics for socio-demographics

Variables	Groups	N (n = 192)	%
Gender	Female	37	19
	Male	149	78
	Non-binary	6	3
Age	18 to 24 years	36	19
	25 to 29 years	62	32
	30 to 34 years	42	22
	35 to 39 years	26	14
	40 to 49 years	20	10
	50 to 65 years	6	3
Education	PhD	4	2
	Master	46	24
	Postgrad diploma	28	15
	Graduation	81	42
	Unfinished graduation	26	14
	High school, vocational or less	7	4
Location	The Netherlands	169	88
	Outside the Netherlands	23	12
VGD status	Yes	178	93
	No	14	7
Employment status	Permanent full-time employee	81	42
	Permanent part-time employee	10	5
	Temporary full-time employee	32	17
	Temporary part-time employee	4	2
	Self-employed	27	14
	Freelancer	18	9
	Other	20	10
Company Size	<10	61	32
	11-50	74	39
	51-100	15	8

	101-500	26	14
	>500	16	8
Company Type*	AAA PC and console games	59	31
	Indie games	97	51
	Middle-ware company	5	3
	Localisation	10	5
	Mobile games	46	24
	Hardware	3	1
	Other*	53	28
Job Role*	Designer	86	48
	Programmer	55	31
	Artists	41	23
	Other major occupation	39	22
	Other (uncategorized)	13	7
Experience - Industry	Less than 1 year	31	16
	1-3 years	54	28
	4-6 years	46	24
	7-10 years	23	12
	More than 10 years	38	20
Experience - Company	Less than 1 year	63	33
	1-3 years	78	41
	4-6 years	29	15
	7-10 years	9	5
	More than 10 years	13	7
Experience - Present Role	Less than 1 year	44	23
	1-3 years	84	44
	4-6 years	35	18
	7-10 years	13	7
	More than 10 years	16	8

Promotions	None	62	32
	1	34	18
	2	24	13
	3	10	5
	4 or more	12	6
	Not applicable	50	26
Work schedule	Regular or fixed hours	149	78
	Irregular	37	19
	Other	6	3
Work model	On-site	27	14
	Hybrid	111	58
	Remote	53	28
	Other	1	1
Compensation method	Fixed salary and benefits	124	65
	Hourly rate	20	10
	Project-based	11	6
	Self-generated revenue	26	14
	Others	11	6
Work hours per week	Less than 16 hours	13	7
	16 to 35 hours	34	18
	36 to 44 hours	120	63
	45 to 60 hours	21	11
	More than 60 hours	4	2
Annual Income	Less than 14,000 euros	33	17
	14,000-22,000 euros	13	7
	22,000-38,000 euros	60	31
	38,000-50,000 euros	27	14
	50,000-60,000 euros	15	8
	60,000-72,000 euros	16	8
	72,000-100,000 euros	9	5
	More than 100,000 euros	4	2
	Other	15	8

The data also showed that older and more experienced workers in the Dutch video game industry are more likely to be self-employed or freelancers than younger workers. So, while about 19% of under 30 respondents were self-employed or freelancers, for those over 40 years, the proportion increased to 45%. Only 36% of those with more than 10 years of industry experience were (permanent or temporary) full-time employees compared to 67% of those with less than 3 years of experience and 61% with 4-10 years of experience. In addition, most self-employed (93%) and freelancers (78%) worked in organisations with less than 10 employees, while the majority of permanent part-time employees (70%), temporary full-time employees (53%) and temporary part-time employees (75%) worked in companies with 11-50 employees. About 52% of full-time employees were in firms with less than 50 workers and 39.5% in organisations with over 100 workers.

In terms of work schedule, 19% of the respondents had an irregular work schedule, while about 13% worked more than 45 hours a week and 7% said they worked less than 16 hours. The number of people working more than 45 hours per week is significantly higher than the Netherlands' average of just 0.3% (OECD, n.d.). However, almost all of those working as temporary or part-time employees worked less than 45 hours a week, compared to about 16% of full-time employees, self-employed and freelancers working more than 45 hours a week. Meanwhile, only 14% had an onsite job role, while the remaining either worked remotely (28%) or in a hybrid manner (58%).

While about 65% of the respondents said that they received fixed salaries and benefits, the remaining were compensated through hourly rates, project-based and self-generated revenue or a mix of various sources. Notably, most employees had regular or fixed working schedules as well as fixed salaries and benefits, while more than half of self-employed/freelancers had irregular work schedules and made most of their income through compensation based on hourly or project rates or through self-generated revenues. Among those who indicated their annual income range, about 17% earned less than 14,000 euros, another 7% earned between 14,000 euros and 22,000 euros, and about 31% made between 22,000 euros to 38,000 euros. As per CBS (2023) household income distribution data for 2021, about 7% of households had income of less than 14,000 euros, 21% earned 14,000-22,000 euros, and another 43% made 22,000-38,000 euros. So even as the percentage of those making less than 14,000 euros is more than double the overall Dutch economy, incomes seem to be

better distributed across the range. For example, only about 6% of Dutch households had annual incomes higher than 60,000 euros, compared to 13% of the sample earning over 60,000 euros. The data also showed very few part-time or temporary employees earned more than 38,000 euros a year, compared to 45% of permanent full-time employees, 44% of self-employed and 33% of freelancers. While it may seem obvious, older and more experienced workers have a better income profile than younger workers, with about 80% of those below 24 years and 71% of 25 to 29-year-olds earning less than 38,000 euros. Meanwhile, 46% of those working in entities with less than 10 employees had income below 38,000 euros, 70% in companies with 11-50 employees, 67% in companies with 51-100 employees, 50% in companies with 101-500 employees but only 19% in large companies with over 500 workers. Among those who earned more than 60,000 euros, 55% belonged to companies with more than 100 workers, 24% to small firms with less than 10 people and the remaining 21% to companies with 11-100 employees. Detailed comparative analysis among various statistically significant sociodemographic variables can be found in Appendix E.

4.2 State of current working conditions of VGDs

In this section, H1 *(VGDs in the Dutch video game industry also face workplace problems that are associated with the global video game industry)* is tested. This was done by gauging if respondents identified with issues of low pay, excessive work, work pressure, retirement and health benefits, training, job security, discrimination, and harassment – problems that are commonly associated with poor working conditions in the video game industry (UNI Global Union, 2022; Weststar 2015; Mendes 2020). For this section, only those responses were considered where respondents had identified as being involved in the core video game development process and had completed all questions about working conditions, unionisation, representation and government support (n = 163). Table 4.2 presents the summary of responses to questions on working conditions.

Data shows that nearly a third of respondents said they were not adequately paid, 13% said they faced excessive hours (consistent with the number of people working over 45 hours a week), and 24% identified excessive workloads as an issue. Only 46% of respondents agreed that they were sufficiently paid. Regarding benefits, only 42% said they were provided adequate health benefits and 28% were provided adequate retirement benefits. Moreover, 22% of the respondents said they did not have a feeling of job security. While issues like microaggressions, discrimination and harassment were less prevalent, they too had a noticeable

presence with 9% identifying saying they faced micro-aggression/undue pressure or demands from their managers or supervisors. While only about 4% of respondents noted discrimination and/or harassment as a prevalent issue at their current workplace, almost 10% admitted having experienced discrimination or harassment based on disability, ethnicity, gender, race, or sexuality and 3% had experienced or witnessed sexual harassment. Overall, the results show that the workplace issues associated with the video game industry are also present in the Dutch market to varying degrees. Therefore, hypothesis H1 can be accepted and it can be said that workplace issues associated with the global video game industry as well as CCI industries are prevalent in the Dutch video game industry.

Table 4.2: Summary of Responses for working conditions

Description (n = 163)	Yes (N (%))	No	Not Sure
Whether paid adequately	75 (46%)	53 (33%)	35 (21%)
Whether worked excessive hours often	22 (13%)	131 (80%)	10 (5.4%)
Whether faced excessive workloads often	39 (24%)	105 (64%)	19 (12%)
Whether faced micro-aggression/undue pressure or demands	14 (9%)	134 (82%)	15 (9%)
Whether offered adequate health (including mental) benefits	69 (42%)	44 (27%)	50 (31%)
Whether provided adequate retirement benefits	45 (28%)	58 (36%)	60 (37%)
Whether faced lack of access to training and/or software	38 (23%)	102 (63%)	23 (14%)
Feeling of job security at current workplace	93 (57%)	36 (22%)	34 (21%)
Whether discrimination/harassment is a workplace issue	8 (5%)	140 (86%)	15 (9%)
Whether faced or witnessed discrimination and/or harassment	17 (10%)	140 (86%)	6 (4%)
Whether faced or witnessed sexual harassment	5 (3%)	154 (94%)	4 (2%)
Whether employer response to discrimination/harassment was adequate* (N = 16)	5 (29%)	6 (35%)	6 (35%)

Compared to the wider VGD market, low pay seems less prevalent as 61% of VGDs identified low pay as a workplace issue in the UNI Global Union (2022) survey. While the UNI Global survey said that 43% of VGDs faced excessive work, in this study 24% said they faced excessive workloads. In terms of benefits, 43% of global VGDs said they were inadequate. Compared to 22% of respondents in the Dutch game industry who said that there was low job security, 37% of global VGDs identified with the issue. However, workplace discrimination and/or sexual harassment seem a less prevalent issue in the Dutch game industry compared to 35% of global VGDs (UNI Global Union, 2022).

Using Qualtrics' Stats iQ feature, various sociodemographic variables for working conditions were correlated to determine statistically significant relations, which are summarised in Table 4.3. Among the most notable relations that emerged was that those who identified as women or non-binary felt that discrimination and/or harassment was a workplace issue and had higher instances of having witnessed workplace discrimination based on disability, ethnicity, gender, race or sexuality. Employment status also formed significant relations with several working condition variables, with a majority (57.8%) of the respondents who said they received adequate retirement benefits being permanent full-time employees, while freelancers, self-employed, temporary or other employees accounted for 60.4% of those with proper retirement benefits. At the same time, permanent and temporary full-time employees made up 75% of the respondents who said that discrimination and/or harassment was a workplace issue as well as 71% of the respondents who identified with a lack of access to training and/or software at their workplace. In terms of job security, permanent full-time employees accounted for 55% of the respondents who believed that there was job security at their workplace, while freelancers, temporary employees, self-employed and others made up 75% of the respondents without feelings of job security. The size of the company was a critical factor impacting access to training and/or software as organisations with more than 500 employees facing a lack of access to such facilities had much higher frequency than smaller companies. Work experience in the game industry was found to have statistically significant relations with variables for adequate pay and benefits. Nearly 75% of workers who were unsatisfied with their pay had worked less than four years in the industry; 70.5% of the similarly experienced workers were also unsatisfied with their health benefits and 64% with their retirement benefits. Those who had regular or fixed working hours and/or fixed salary and benefits were less likely to have feelings of job insecurity. Given the number of hours per week,

those who were unsatisfied with their wages were also likely to work for 36 hours to more than 60 hours a week.

Table 4.3: Summary of statistically significant correlations between working condition indicators and sociodemographic variables.

Working condition indicators	**Statistical significance**	***p***
Whether paid adequately	Income range Industry experience	0.00521** 0.0379*
Whether worked excessive hours often	Income range Hours per week	0.00198** < 0.00001***
Whether faced excessive workloads often	Hours per week	0.00144**
Whether faced micro-aggression/undue pressure or demands	Gender	0.0188*
Whether provided adequate retirement benefits	Employment status	0.0473*
Whether faced lack of access to training and/or software	Company size Employment status Compensation method	0.0120* 0.0121* 0.000858***
Feeling of job security at current workplace	Work schedule Experience - organisation Compensation method Employment status	0.00173** 0.0180* 0.00690** 0.00305**
Whether discrimination/harassment is a workplace issue	Gender Employment status	0.0256* 0.0262*
Whether faced or witnessed discrimination and/or harassment	Gender Compensation method	0.0209* 0.0473*

*p≤.050**p≤.010***p≤.001

The present study also sought personal experiences of discrimination and harassment in the Dutch video game industry that they might have faced. A thematic content analysis of the 27 relevant responses showed that diversity-related discrimination, especially based on ethnicity or nationality, and/or sexuality and gender identity are the most prevalent ones. Respondents noted experiences such as “not being hired or treated differently due to not-speaking Dutch” and “silent treatment by my immediate supervisor upon discovery of my

bisexuality". Continuing the overall theme of a male-oriented culture, gender discrimination experiences were also frequent, with respondents often noting low wages, patronising behaviour, improper conduct and differential treatment among key issues. Multiple respondents noted the commonality of sexist remarks in the wider video game industry. One respondent wrote about her experience at Gamescom video game trade fair, stating that even though "my job description was the same as my (male) colleagues…most investors/agents thought I was the hostess of the area or a boot babe. I didn't feel taken seriously!" Another respondent faced "intimidation for teaching about the benefits of intersectional feminism, occasional low-level biphobia from queer and straight communities, [and] threatening notes left on my desk by a very conservative student." Another respondent recollected sexist remarks "like did you model those boobs after your own?...or you would have gotten more traction if you had put your cute smiling face in the picture instead of just your work."

Two respondents also faced sexual harassment at their previous workplace. Behavioural issues of managers or senior employees were also a recurrent theme, including instances of bullying and narcissistic behaviour. One respondent said their personal experience included "gender bias, gaslighting, micro-aggressions, patronising behaviour, triangulation, lack of promotions in comparison to male colleagues (or slower promotions)."

The present study also captured VGDs' opinions about working conditions in the Dutch video game industry. A thematic content analysis of the 87 valid and relevant responses, showed that crunch or long work hours as well as low pay or unpaid work were among the most serious workplace issues faced by the VGDs. One respondent noted that "in many companies, it is widely accepted and indeed expected for employees to do structural overtime without compensation. In some companies this is the norm always, in other companies, it's for crunch time around deadlines only." Of the 87 comments, 24 comments mentioned the presence of crunch or long hours while 23 noted the prevalence of low-paid or unpaid work. Other issues emerging in the thematic analysis that indicate poor working conditions included a lack of job security, a lack of unions as well as major workplace disparities between companies.

Nonetheless, about a fifth of comments were also seemingly positive, with some noting notable improvement in working conditions over the past few years and that compared to other markets, "on whole working conditions in the Netherlands are pretty good." About half of the commentators also suggested measures to improve the working conditions, with the most

notable ones being unionisation, government intervention or regulation, standardisation of industry expectations and better health and retirement benefits. Several respondents said that either the practice of crunch should be abolished or the project schedule should be improved by organisations. The most common themes could probably be summarised by one response: "Crunch is brutal in most companies. And most workers are regarded as disposable. Unions would probably be able to deal with both."

4.3 Unionisation, representation and government support

In this section hypotheses H2a *(VGDs in the Dutch video game industry strongly support unionisation and collective bargaining)* and H2b *(VGDs in the Dutch video game industry show a strong desire for government support)* are tested. Table 4.3 presents the summary of responses on unionisation and representation.

Concerning unionisation, almost 96% of the respondents said they were not members of any union, and those who were union members were not based in the Netherlands. Only 15% of the respondents said they were members of any professional association representing video game developers. At the same time, while 61% of the respondents said that unions could benefit VGDs, only 44% supported forming one at their workplace. While only 18% were outright opposed to it, almost 28% indicated no preference. Similarly, 33% said that they were not sure about the benefits of unionisation. Furthermore, 56% of respondents said they supported collective bargaining rights but at the same time, 12% were against it and 32% were not sure. Therefore, overall while there is favourable support for unionisation and collective bargaining rights, a significant portion of respondents demonstrated a lack of firm opinion on the issues. So while the responses generally favour unionisation and collective bargaining, they cannot be considered strong support for the issues. As a result, hypothesis H2a is rejected.

What the results show is that while there is favourable support for unions in the industry, a significant number were not sure about unionisation, which could be due to a lack of understanding about collective labour rights among video game developers as well as reservations about potential implications of unionisation on their jobs.

Table 4.4: Summary of Responses on Unionisation and Representation

Variables	Group	N	%
Union membership	Yes	6	4%
	No	157	96%
Association membership	Yes	25	15%
	No	138	85%
Support unions at workplace	Yes	69	44%
	No	28	18%
	Not sure	60	28%
Preferred union type	A union at company/studio	10	6%
	A national industry union	91	56%
	Either	38	23%
	Neither	24	15%
Union perception as beneficial	Yes	99	61%
	No	10	6%
	Not sure	54	33%

Perceived Union drawbacks	Union fees and other costs	64	39%
	Negative impact on game development/release schedules	43	26%
	Lack of individuality	44	27%
	None	42	26%
	Other	32	20%
Support collective bargaining	Yes	91	56%
	No	20	12%
	Not sure	52	32%

In terms of government support, only 6% of the respondents believed that there was adequate government support from video game developers, while 67% said that the government should offer more support to video game developers. Additionally, given that only 8% of the respondents were outright opposed to additional government support, it can be concluded that there is a strong desire for government support and hypothesis H2b can be accepted. This is especially notable because there is little specific government support available for video game developers in the Netherlands (EDGF & ISFE, 2020). Demands for grants and subsidies for independent developers were the most frequent type of government support sought by developers, followed by income tax breaks or incentives and stronger intellectual property protection. Among other specific types of government support sought by VGDs, demand for the provision of collective labour agreements or collective bargaining policies was

most common, followed by increased startup funding support and union formation support. Table 4.5 presents the summary of responses on government support.

Table 4.5: Summary of Responses on Government support

Variable Name	Group (n = 145)	N	%
Government support availability	Yes	9	6%
	No	85	52%
	Not sure	69	42%
Government support expectation	Yes	110	67%
	No	13	8%
	Not sure	40	25%
Government support type	Income tax breaks or incentives	77	47%
	Grants or subsidies for independent VGDs	123	75%
	Stronger intellectual property protection	43	26%
	Other	33	20%

Testing of statistical significance of support for unions, government support and collective bargaining, yielded relationships with income range, industry experience, work schedule, and hours per week, as summarized in Table 4.5. Almost two-thirds of the respondents who supported collective bargaining rights earned less than 38,000 euros annually,

while 60% of those in opposition earned over 50,000 euros annually. Meanwhile, of those who worked between 36-44 hours, 55% supported unionisation, which was almost double the support of unions shown by other categories of work hours per week. The majority of workers (around 59%) with less than 10 years of industry experience were supportive of collective bargaining rights only 44% with more than 10 years of experience supported it and were twice as likely to oppose it. The support for government interventions was most visible among those who worked more than 36 hours a week, while about 53% of those who were against government support worked less than 36 hours a week.

Table 4.6: Summary of statistically significant correlations between unionisation, representation and government support indicators and sociodemographic variables.

Working condition indicators	**Statistical significance**	***p***
Support unions at workplace	Hours per week	0.00521**
	Industry experience	0.0379*
Support collective bargaining	Age	0.0354*
	Hours per week	0.0454*
	Work schedule	0.0366*
	Industry experience	0.0471*
	Income range	0.0263*
Government support expectation	Hours per week	0.00834**

*p≤.050**p≤.010***p≤.001

The most commonly perceived benefits of unionisation were the possibility of better pay and benefits, improved working conditions and increased job security. Only 8% of respondents said that unionisation would incur no benefits. But why might a video game developer oppose a union? About 39% said they were concerned about union fees and other costs, while 26% believed union activity could harm game development and release schedules and lead to a lack of individuality. Among the other drawbacks mentioned by VGDs, that were thematically analysed, fear of discrimination against unionised employees stood the most, with one respondent noting that "organisations [will be] targeting individuals that are part of [a] union, not hiring them, or blacklisting them in general." Concerns that unions might prove ineffective or hinder organisational flexibility were also mentioned, along with some noting that it could lead to over-regulation of the industry.

4.4 Quality of work life and burnout levels

In this section hypotheses H3a *(VGDs in the Dutch video game industry have low quality of work life)* and H3b *(VGDs in the Dutch video game industry show significant levels of disengagement and exhaustion)* are tested. Table 4.5 and Table 4.6 show summary statistics for QWLS and OLBI measures, respectively.

4.4.1 Quality of work life

To test H3a, only those respondents who had completed all 16 statements of QWLS were considered, yielding a sample of 147 respondents. The mean value score of QWLS value was calculated to be 5.3 (Table 4.7), which indicates that VGDs in the Dutch video game industry had a moderately good quality of work life. While this leads to the rejection of hypothesis H3a, there are caveats to the findings.

Table 4.7: Summary statistics for QWLS variables

Description (n = 147)	**Mean score**
Health and safety needs **(NShs)**	5.3
Economic and family needs **(NSef)**	4.5
Social needs **(NSs)**	5.4
Esteem needs **(NSt)**	5.6
Actualization needs **(NSa)**	5.0
Knowledge needs **(NSk)**	5.5
Aesthetic needs **(NScs)**	5.3
QWLS mean score	5.25

Statistical significance tests, as summarized in Table 4.8, showed that QWLS was correlated to gender, compensation method, employment status, promotions and company size.

The data shows that female and non-binary participants had lower quality of work-life compared to male peers. Those working in smaller organisations with less than 50 employees tend to have a better QWL than those in larger companies, with companies with 101-500 workers faring the worst. Those with fixed salaries and benefits showed poorer QWL than those depending on self-generated revenue. It was the same for employment status, wherein those working as self-employed individuals had the best quality of work life among peers, even as freelancers and temporary full-time employees reported lower than average quality of work life. When compared to working condition indicator variables, those who identified with issues of low pay, excessive workloads and work hours, microaggression/undue pressure, lack of health and retirement benefits, lack of access to training and/or software, lack of job security and discrimination and/or harassment as a workplace issue, also had noticeably lower QWLS score than those who didn't. Those who faced microaggression/undue pressure or demands at work and identified discrimination and/or harassment as workplace issues had the lowest QWLS scores. Among those who supported unionisation and collective bargaining rights, QWLS scores were noticeably lower than those who opposed them.

Table 4.8: Comparative analysis of QWLS score with variable groups

Sociodemographic characteristics			
Variable	**Characteristic**	**QWLS score**	***p***
Gender	Male	5.37	0.000216
	Female	4.90	***
	Non-binary	4.28	
Compensation Method	Fixed salary and benefits	5.13	0.0125*
	Hourly rate	5.37	
	Project-based	5.30	
	Self-generated revenue	5.83	
	Others (please specify)	4.91	
Employment Status	Permanent full-time employee	5.29	0.0156*
	Permanent part-time employee	4.98	
	Temporary full-time employee	4.70	
	Temporary part-time employee	5.84	
	Self-employed	5.75	
	Freelancer	4.92	
	Other (please specify)	5.42	
Promotions	None	5.02	0.0334*

	1	5.03	
	2	5.25	
	3	5.16	
	4 or more	5.62	
	Not applicable	5.65	
Company Size	<10	5.56	0.0188*
	11-50	5.21	
	51-100	4.98	
	101-500	4.89	
	>500	5.00	
Working condition indicators			
Whether paid adequately	Yes	5.65	<
	No	4.72	0.00001*
	Not Sure	5.16	**
Whether worked excessive hours often	Yes	4.53	0.0379*
	No	5.37	
	Not Sure	5.07	
Whether faced excessive workloads often	Yes	4.69	0.000243
	No	5.48	***
	Not Sure	5.12	
Whether faced micro-aggression/undue pressure or demands	Yes	3.97	0.00206*
	No	5.42	*
	Not Sure	4.76	
Whether offered adequate health (including mental) benefits	Yes	5.64	<
	No	4.55	0.00001*
	Not Sure	5.32	**

Whether provided adequate retirement benefits	Yes No Not Sure	5.54 4.89 5.43	0.00116* *
Whether faced lack of access to training and/or software	Yes No Not Sure	4.38 5.59 5.14	< 0.00001* **
Feeling of job security at current workplace	Yes No Not Sure	5.56 4.64 5.04	0.000166 ***
Whether discrimination/harassment is a workplace issue	Yes No Not Sure	3.87 5.39 4.79	0.00435* *
Whether faced or witnessed discrimination and/or harassment	Yes No Not Sure	4.81 5.34 4.72	0.213#
Whether faced or witnessed sexual harassment	Yes No Not Sure	4.58 5.29 4.86	0.331#
Unionisation, government support, collective bargaining indicators			

Union perception as beneficial	Yes No Not Sure	5.03 5.51 5.58	0.0114*
Union support at workplace	Yes No Not Sure	5.02 5.28 5.50	0.0256*
Support collective bargaining	Yes No Not Sure	5.13 5.69 5.31	0.0489*

*p≤.050**p≤.010***p≤.001#at least one group tends to have higher values than other groups

4.4.2 Disengagement and Exhaustion

For testing H3b, only those respondents who had completed all 16 statements of OLBI were considered, generating a sample of 144 respondents. As indicated in Table 4.9, burnout subscales of disengagement and exhaustion were calculated to be 1.9 and 2.6. So while this indicates moderate levels of disengagement, exhaustion levels were significant. Therefore H3b can be partially accepted as the data shows a notable presence of burnout, if not significantly high.

Table 4.9: Summary statistics for OLBI subscales

Subscale (n = 139)	**Mean**
Disengagement	1.9
Exhaustion	2.6

As shown in Table 4.10, disengagement formed statistically significant relationships with various demographic variables including gender, employment status, industry work experience and company size. Once again, women and non-binary respondents had higher levels of disengagement than male VGDs and it was the same for those with less than three years of experience, who were relatively more disengaged than their more experienced peers. Meanwhile, temporary full-time employees and permanent part-time employees were most disengaged, while self-employed recorded the lowest level of disengagement among VGDs. Similarly, there was notably lower disengagement among employees of smaller companies.

Table 4.10: Comparative analysis of disengagement sub-scale score with variable groups

Sociodemographic characteristics			
Variable	**Characteristic**	**Disengagement score**	***p***
Gender	Male	1.84	0.0140*
	Female	2.15	
	Non-binary	2.78	
Age	Under 40	1.97	0.0371*
	Over 40	1.67	
Employment Status	Permanent full-time employee	1.92	0.0547#
	Permanent part-time employee	2.16	
	Temporary full-time employee	2.24	
	Temporary part-time employee	1.72	
	Self-employed	1.51	
	Freelancer	1.97	
	Other (please specify)	1.92	
Company Size	<10	1.81	0.0424*
	11-50	1.86	
	51-100	2.26	
	101-500	2.02	
	>500	2.44	
Working condition indicators			
Whether paid adequately	Yes	1.70	0.00167
	No	2.21	**
	Not Sure	1.99	
Whether faced micro-aggression/undue pressure or demands	Yes	2.60	<
	No	1.83	0.00001
	Not Sure	2.25	***
Whether offered adequate health (including mental) benefits	Yes	1.78	0.00408
	No	2.30	**
	Not Sure	1.82	

Whether faced lack of access to training and/or software	Yes No Not Sure	2.44 1.71 2.03	0.00006 24***
Feeling of job security at current workplace	Yes No Not Sure	1.79 2.25 2.04	0.0295*
Whether discrimination/harassment is a workplace issue	Yes No Not Sure	2.48 1.85 2.37	0.0104*
Whether faced or witnessed discrimination and/or harassment	Yes No Not Sure	2.26 1.85 2.60	0.00548 **
Whether faced or witnessed sexual harassment	Yes No Not Sure	2.40 1.89 2.66	0.0874#

*p≤.050**p≤.010***p≤.001#while not significant, at least one group tends to have higher values for Disengagement than other groups

As summarized in Table 4.11, exhaustion not only seems to have a greater presence among VGDs in the Dutch video game industry but is also significantly related to gender and hours worked per week. In what may have become a recurring theme, women and non-binary participants had notably higher levels of exhaustion than the average for male respondents. Exhaustion levels also increased with the number of hours spent per week working.

Table 4.11: Comparative analysis of exhaustion sub-scale score with variable groups

Sociodemographic characteristics			
Variable	**Characteristic**	**QWLS score**	***p***
Gender	Male	2.59	0.0534#
	Female	2.94	
	Non-binary	2.90	
Hours per week	Less than 16 hours	2.46	0.0456*
	16 to 35 hours	2.52	
	36 to 44 hours	2.67	
	45 to 60 hours	2.88	
	More than 60 hours	3.13	
Working condition indicators			
Whether paid adequately	Yes	2.55	0.0114*
	No	2.86	**
	Not Sure	2.63	
Whether worked excessive hours often	Yes	3.20	0.00028
	No	2.57	6***
	Not Sure	2.86	
Whether faced excessive workloads often	Yes	2.95	0.00003
	No	2.51	19***
	Not Sure	2.97	
Whether faced micro-aggression/undue pressure or demands	Yes	3.20	0.00294
	No	2.58	**
	Not Sure	3.00	

Whether offered adequate health (including mental) benefits	Yes No Not Sure	2.48 3.01 2.64	0.00001 76***
Whether faced lack of access to training and/or software	Yes No Not Sure	2.88 2.58 2.70	0.0234*
Feeling of job security at current workplace	Yes No Not Sure	2.57 2.84 2.79	0.0408*
Whether discrimination/harassment is a workplace issue	Yes No Not Sure	3.17 2.59 3.13	0.00062 3**
Unionisation, government support, collective bargaining indicators			
Union perception as beneficial	Yes No Not Sure	2.76 2.77 2.49	0.0318*
Union support at workplace	Yes No Not Sure	5.02 5.28 5.50	0.0256*

Support collective bargaining	Yes	2.79	0.0146*
	No	2.44	
	Not Sure	2.54	

*p≤.050**p≤.010***p≤.001#At least one group tends to have higher values for '*Exhaustion'* than other groups

5. Discussions and conclusions

"Games, in the twenty-first century, will be a primary platform for enabling the future" (McGonigal, 2011, p. 13). However, in order to contextualise the future, it is necessary to disseminate the present and understand its implications. With this view, this study applied an occupational perspective to understand the current state of working conditions of video game developers and their desire for representation and government support. Given the lack of localised research perspectives about video game developers, the Dutch video game industry was chosen as a case study as it is a young and growing sector in the country and the Netherlands' labour market conditions provide a contrasting backdrop to analyse an industry notorious for its poor working conditions.

The findings of this study highlighted that video game developers in the Dutch video game industry also face various workplace issues often associated with the video game industry as well as wider creative and cultural industries.

While poor workplace conditions are somewhat less prevalent than in the overall video game industry, they still have a significant presence in the market, with issues like excessive workloads, inadequate payments, inadequate health and retirement benefits and job insecurity being the most prevalent ones. Gender discrimination in the Dutch game industry remains a concerning issue as male dominance in the workforce outpaces the wider video game industry as well as the general labour market in the Netherlands. While self-employment rates in the Dutch game industry were comparable to wider labour markets, they are seemingly lower from an artist market perspective. However, consistent with Weststar's (2015) assertion that the relatively low rate of self-employment hides the churn resulting from a project-based structure, which is evident by the significant portion of part-time or temporary workers in the Dutch game industry. Moreover, the study also discovered most VGDs in the Dutch video game industry make less than the median income and a significant percentage identify low pay and excessive workloads or work hours as a prevalent issue. While overall, harassment and discrimination have a lesser presence, those who identified as women or non-binary felt that discrimination and/or harassment was a workplace issue at a greater rate and had higher instances of having witnessed workplace discrimination based on disability, ethnicity, gender, race or sexuality. Moreover, the data shows that full-time employees had a better feeling of job security compared to their freelance or self-employed peers but fared worse on other parameters. While unionisation is generally seen favourably among the VGDs under study, there is a fair amount

of unclarity and concerns about collective representation. Nonetheless, views about unionisation and collective bargaining were more positive among those who earned less or had few years of experience in the industry.

To gain a better understanding of the findings, an informal interview with Martine Spaans, who is the general manager at the Dutch Gaming Association and a game publisher at FGL & Tamalaki). In the context of unionisation, the results make more sense when seen from the perspective of Spaans, who said that with solutions like unions, “it's kind of trying to, you know, fit a square peg into a round hole sometimes, like, it's not sort of the fitting solution, like not customised to…whoever, whatever job this person has.” She reiterated the game industry would need a “customised solution” before there is more interest from the industry to adopt something like unionisation.

The study also highlights a remarkable lack of government support and VGDs' expectations regarding it. Grants and subsidies for independent developers, income tax breaks or incentives, stronger intellectual property protection and collective labour agreements were the types of government support most sought after by developers. Spaans also notes that “Germany has a 70 million game fund Belgium has a 50 million game funds and the Netherlands currently has nothing,” adding that a government-backed game fund could make it “easier for developers to set up sort of newer, more innovative and challenging projects.”

QWLS measure and the burnout measure indicated a moderate presence of poor quality of work life and disengagement as well as notable levels of exhaustion. Two key themes emerged from QWL and burnout measures - the first was that women and non-binary VGDs face higher levels of occupational stressors. Notably, those working on fixed salaries and benefits showed the highest levels of exhaustion, with those earning self-generated revenues having the least amount of exhaustion.

A thematic content analysis of open questions showed that crunch or long work hours as well as low pay or unpaid work were among the most serious workplace issues faced by the VGDs. Other issues emerging in the thematic analysis that indicate poor working conditions included a lack of job security, a lack of unions as well as major workplace disparities between companies. Nonetheless, some views were seemingly positive, with some noting notable improvement in working conditions over the past few years and that compared to other markets, “on whole working conditions in the Netherlands are pretty good.” Among the several suggested measures to improve working conditions, the most notable ones are unionisation,

government intervention or regulation, standardisation of industry expectations and better health and retirement benefits. Several respondents said that either the practice of crunch should be abolished or projected scheduling should be improved by organisations.

5.1 Limitations and future research

Regardless of the findings, it is pertinent to note certain limitations of this study. While efforts were taken to cover the widest possible gamut of VGDs in the Dutch video game industry, the generability of the findings may be limited by the sample size and its specific focus on a localised market. In addition, the cross-sectional nature of the study can make it challenging to establish causal relationships between the variables.

For future research, longitudinal studies could be conducted to explore the changes in working conditions and unionisation in the Dutch video game market over time. In addition, future investigation into the impact of unionisation on the working conditions of video game developers could provide a richer understanding of the underlying factors. Exploring the potential for industry-wide collaboration and collective bargaining among VGDs is also a subject ripe for investigation.

This research has not only the potential to add to the existing knowledge base about VGDs but also has implications for practice as it can provide essential insights to policymakers and industry players regarding shortcomings in job conditions in the Dutch game industry as well as possible interventions to improve those conditions. The research can be used to draw inferences about the attractiveness of the Dutch game industry for a growing talent pool which can easily access more mature video game-producing markets through immigration and remote working.

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Appendix A: Outline of variables

A1: Outline of variables for socio-demographics and VGD overview

Variable Name	Description	Measure/Indicator
Gender	Gender	1: Male 2: Female 3: Non-binary 4: Others*
Age	Age range	1: Under 18 years 2: 18 to 24 years 3: 25 to 29 years 4: 30 to 34 years 5: 35 to 39 years 6: 40 to 49 years 7: 50 to 65 years 8: 66 years or older
Education	Education	1: PhD 2: Master 3: Postgrad diploma 4: Graduation 5: Unfinished graduation 6: High school, vocational or less 7: Other
Location*	Country of residence	Nominal
VGD status	Whether or not involved in the core video game development process	1: Yes 2: No
Employment status	Employment status	1: Permanent full-time employee 2: Permanent part-time employee 3: Temporary full-time employee 4: Temporary part-time employee 5: Self-employed 6: Freelancer 7: Other* (Nominal)
Company Size	Number of workers in the organization	1: <10 2: 11-50 3: 51-100 4: 101-500 5: >500

Company Type	Type of work done by the organisation	1: AAA PC and console games 2: Indie games 3: Middle-ware company 4: Localisation 5: Mobile games 6: Hardware 7: Other* (Nominal)
Job Role	Current designation or role	Nominal
Company Name	Name of the company	Nominal
Experience - Industry	Range of years in working the industry	1: Less than 1 year 2: 1-3 years 3: 4-6 years 4: 7-10 years 5: More than 10 years
Experience - Company	Range of years working in the current organisation	1: Less than 1 year 2: 1-3 years 3: 4-6 years 4: 7-10 years 5: More than 10 years
Experience - Role	Range of years working in the current role	1: Less than 1 year 2: 1-3 years 3: 4-6 years 4: 7-10 years 5: More than 10 years
Promotions	Number of promotions as a VGD	1: None 2: 1 3: 2 4: 3 5: 4 or more 6: Not applicable
Work schedule	Work schedule	1: Regular or fixed hours 2: Rotational shifts 3: Irregular 4: Other* (Nominal)
Work model	Work model	1: On-site 2: Hybrid 3: Remote 4: Other* (Nominal)
Compensation method	How is compensation determined	1: Fixed salary and benefits 2: Hourly rate

		3: Project-based 4: Self-generated revenue 5: Other* (Nominal)
Hours worked	Hours worked per week	1: Less than 16 hours 2: 16 to 35 hours 3: 36 to 44 hours 4: 45 to 60 hours 5: More than 60 hours
Annual income	Annual income range	1: less than 14,000 euros 2: 14,000-22,000 euros 3: 22,000-38,000 euros 4: 38,000-50,000 euros 5: 50,000-60,000 euros 6: 60,000-72,000 euros 7: 72,000-100,000 euros 8: More than 100,000 euros 9: Other* (Nominal)

A2.: Outline of the independent variable to measure working conditions.

Variable Name	**Description**	**Measure**
Low pay	Whether paid adequately	1: Yes 2: No 3: Not sure
Excessive hours	Whether worked excessive hours often	1: Yes 2: No 3: Not sure
Excessive workloads	Whether faced excessive workloads often	1: Yes 2: No 3: Not sure
Work environment	Whether faced micro-aggression/undue pressure or demands	1: Yes 2: No 3: Not sure
Health benefits	Whether offered adequate health (including mental) benefits	1: Yes 2: No 3: Not sure
Retirement benefits	Whether provided adequate retirement benefits	1: Yes 2: No 3: Not sure
Inadequate work support	Whether faced lack of access to training and/or software	1: Yes 2: No

		3: Not sure
Job security	Feeling of job security at current workplace	1: Yes 2: No 3: Not sure
Discrimination/Harrassment	Whether it is a workplace issue	1: Yes 2: No 3: Not sure
Discrimination/Harrassment experience	Whether faced or witnessed discrimination and/or harassment	1: Yes 2: No 3: Not sure
Sexual harassment experience	Whether faced or witnessed sexual harassment	1: Yes 2: No 3: Not sure
Employer response	Whether employer response to discrimination/harassment was adequate	1: Yes 2: No 3: Not sure

A3.: Outline of variables for unionisation

Variable Name	**Description**	**Measure/indicator**
Union membership	Whether member of a union	1: Yes 2: No
Union name	Union name (optional)*	Nominal
Association membership	Whether member of a professional association	1: Yes 2: No
Association name	Association name (optional)*	Nominal
Union support at workplace	Whether support forming union at workplace	1: Yes 2: No 3: Not sure
Preferred union type	Type of union preferred	1: A union at company/studio 2: A national industry union 3: Either 4: Neither
Union perception	Whether unionisation can be beneficial	1: Yes 2: No 3: Not sure

Union benefits	Perceived benefits of unionisation	1: Better pay and benefits 2: Improved working conditions 3: Increased job security 4: None 5: Other* (Nominal)
Union drawbacks	Perceived drawbacks of unionisation	1: Union fees and other costs 2: Negative impact on game development/release schedules 3: Lack of individuality 4: None 5: Other* (Nominal)

A4.: Outline of variables for government support

Variable Name	**Description**	**Measure/Indicator**
Govt_support_Availabilty	Whether adequate government support is available	1: Yes 2: No 3: Not sure
Govt_support_Expectation	Whether more government support is required	1: Yes 2: No 3: Not sure
Govt_support_Type	Form of government support required	1: Income tax breaks or incentives 2: Grants or subsidies for independent VGDs 3: Stronger intellectual property protection 4: Other* (Nominal)

A5.: Outline of independent variables for QWLS

Variable Name	**Description**	**Measure**
Q48_1 to Q48_3	Health and safety needs (**NShs)**	1:Very untrue 2: Untrue 3: Somewhat untrue 4: Neutral 5: Somewhat True 6: True 7: Very True
Q48_4 to Q48_6	Economic and family needs (**NSef)**	
Q48_7 & Q48_8	Social needs (**NSs)**	
Q48_9 & Q48_10	Esteem needs (**NSt)**	

Q48_11 & Q48_12	Actualization needs**(NSa)**	
Q48_13 & Q48_14	Knowledge needs **(NSk)**	
Q48_15 & Q48_16	Aesthetic needs **(NScs)**	

A6.: Outline of subscales and variables for OLBI

Subscale	Independent Variables	Measure
Disengagement	Q49_1, Q49_3, Q49_6, Q49_7, Q49_9, Q49_11, Q49_15	1: Strongly disagree 2: Disagree 3: Neither agree nor disagree 4: Agree 5: Strongly Agree
Exhaustion	Q49_2, Q49_4, Q49_5, Q49_8, Q49_10, Q49_12, Q49_14, Q49_16	

Appendix B: Survey Introduction messages

1. I am Swati Suman, a student at Erasmus University Rotterdam pursuing my master's degree in Cultural Economics and Entrepreneurship. As a part of my master's thesis, I am trying to understand the experiences and opinions of video game developers regarding their work and employment conditions.

   For this, I have prepared a survey questionnaire that should take around 10 minutes to complete. I am inviting you to please take part in this survey to provide your valuable insights. This is an independent academic research and your participation will help shed light on the working conditions of video game developers. I believe such studies are necessary to highlight the realities of creative professionals in today's world.

   I'd be really grateful if you could take a few minutes of your time and participate. Please find the link to the survey here:

   If you have any questions or concerns please feel free to contact me at 541271ss@eur.nl. Thanking you in advance,

   Swati Suman
   Student No. 541271
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2. Hello! I'm Swati Suman, a Master's student at Erasmus University Rotterdam. I'm conducting a research survey on video game developers. Kindly spare about 10 minutes to participate here: https://tinyurl.com/yv4wfxjs (Qualtrics link). For queries message or email me (541271ss@eur.nl). Thank you! :)

Appendix C: **Informal Discission – transcript**

Interviewer: Swati Suman
Interviewee: Martine Spaans (General manager at the Dutch Gaming Association and game publisher at FGL & Tamalaki)
Date of Interview: 17.05.2023
Location: Online Zoom meeting
Time: 11.02 AM

Interviewer: Okay. Let me give you a brief wrap-up of what I have discovered so far. So, I have had about 200 responses for now. But I think about 170 180 of them are usable or valid. But generally speaking, the results show that the video game developers working in the Dutch videogame industry are about 75% male, and under the age of 34, they are typically well educated and about 85% are based in the Netherlands. Rest are primarily located in Argentina, Iran, Turkey and other European countries. About 1/3 of them are working as freelancers, or self-employed in some form. Also, only about 30% have over seven years of experience in that industry. Moreover, only about 50% of VGDs are in more than the Dutch median income of 38000 euros per month. And just about 47% of the workers said that they were adequately paid. In terms of organisation, I see that around 70% of the companies have less than 50 employees, and most commonly make AAA, PC and console games in the games and mobile games. However, web three games and serious games towards organisation and education also have a notable presence. So there is the general overview of the Dutch video game industry as per my findings, so do you think it gives a correct picture as per your experience as an industry representative? And anything that surprises you? Or stands out from that?

Interviewee: I think sort of generally in, in sort of the great lines of it, it does. Yeah, it does sort of match the expectations. That's also because of the games monitor that's been coming out. It's basically every two years. And yeah, it's like the full report is also about to come out really soon over to 2022, sort of 20 to 21 numbers. And in that report, we also saw for similar similar numbers. So yeah, in that sense, good to hear. That's that that's all aligned.

Interviewer: Okay, good to know. So, um, you have also done some volunteering, and you have been an ambassador coordinator for women in games. So what has been your experience

working in a male-dominated industry? And also, what can be done to improve women's participation in the industry?

Interviewee: Um, I think for me, personally, luckily, I've never really had any issues. But you know, I think we've all read the stories of women who had unfortunately faced some discrimination in their jobs. And I think overall, when you look at sort of other IT industries, you know, the games industry is still a little behind in terms of the female workforce basically. Like there's, there's, I think that our percentage of women working in games is a little bit lower than the percentage of working in other parts of IT. So there, I think there's still some work to do there. On the other hand, I think it is also kind of a cultural thing that will over time, sort of solve. Well, I wouldn't say be solved, but you know, will get better. And what I mean by that is, you know, when I grew up, having a console or PC was still more of a boys thing. But nowadays, that's just you know, when you look at the generation growing up now, it's not really the case anymore. It's not like Minecraft or Roblox is a boy or girl thing. You know, it's like it's basically for any kid who really enjoys it, or any adult who enjoys it, by the way. But, um, so in that sense, there's also at sort of the foundation of like how people are growing up, there's already more groundwork for women as well to really get interested in games and game design and building games. So I do think that we're going to see more of that also, for the next generation in like, what kind of education they're going to choose and what proficient they want to end up in.

Interviewer: Yeah, I myself, enjoy playing video video games, so I can totally understand your point. So my next question is, as I said that only 47% of respondents said that they feel that they are adequately paid, other than the other major workplace issue identified are excessive workloads which 24 percent said that they faced excessive workload and lack of health and retirement benefits and lack of access to training. So in addition, nearly 45% said that they were not very confident about job security. So in your opinion, what is that? And why is that and what remedial measures can be taken to improve that?

Interviewee: I forgot the percentage that you mentioned, but you also mentioned like, what percentage are freelancers or self-employed? Can you repeat how much that was?

Interviewer: 30%

Interviewee: It is because I do think that many of the things mentioned here are also kind of in line with entrepreneurship. You know, not saying that the 47%, for example, who say that they're indicative of inaccurately paid, are all self-employed. But I do think that being self-employed in the games industry is a lot harder than being self-employed, as you know, for example, just a freelance programmer or IT consultant, things like that. And that's simply just because of the products that we make, you know, I mean, just making a game. Like, the chances of it being more profitable than doing a freelance job for a bank, for example, are very slim. But of course, that's, I guess, also, the thrill of working in the games industry, you know, you can score that hits, there's a chance that you do, and that's something that we go for. And I think it's also partly that we're working on fun products. That's why people generally do sort of get less, you know, accept lower wages, because, they do something that they really enjoy doing. And yeah, on the other hand, if people are really unhappy with the working conditions, then I don't think it's always in the power of the employer to immediately, help to improve those conditions. Because on that end, there's also funding issues. You know, that's to employ your employer to employ your staff better, of course, there has to be the right money for it, and the same for the benefits and for like to work pressure. So I do think that is yeah, just like parts off. So working in an entertainment industry. But I also do think that those working conditions can be improved quite a bit if we, for example, got more support for our industry from like tax break programmes or government funding programmes.

Interviewer: Okay. So the next question is, while a very small percentage of respondents said that the discrimination or harassment is an issue and their current workplace, nearly 10 to 15%, said that they have experienced or witnessed some form of discrimination or harassment, or sexual harassment in the industry, and around 8% Identify micro-aggression, or undue pressure at workplace. So I wanted to understand should we be happy that the numbers are seemingly low in Dutch companies? Or should we be more concerned about the presence of these issues? And from your past experience? Would you say that the situation has improved?

Interviewee: Well, since it's clearly still an issue for a minority, I wouldn't say that I'm happy with these numbers. I would be happy if they'd be zero. But, you know, I do think that generally speaking, it's gotten better. In the past, basically, yeah, maybe too fast, like five to seven years. Whereas things like the “me-too movement” have made a difference because they brought more awareness. I mean, you know, just to basically illustrate it, 15 years ago, whenever, as a woman, you had a bad day at work, it would be sort of normal to get, you know, things saying

like, Oh, are you having your periods, you know, and nowadays in 2023, you can no longer imagine that your coworkers say something like that. And if they do, then people around you who hear it also be like, that's not okay to say, you know, it sounds like it's, yeah. So things like that no longer are accepted. Whereas when I started, my career was still sort of part of the work floor culture basically. So I do think that things have gotten better, but I don't think that we're quite there yet. I do think that there's definitely still more room for improvement.

Interviewer: Okay, so let's talk about unionisation and representation the survey results show that only a few of the respondents are union members, but even they are not based in the Netherlands only 15% are members of associations like DGA, DGG. Game Baker etc. But when asked if they support unionisation 45% said yes. And 40% said that they were not so sure. Separately, more than 60% Believe unionisation and representation would benefit the industry. But again 32% said that they were not so sure. So it seems that there is a little opposition to the concept, but at the same time, there is a severe lack of awareness about these issues. And there are pros and cons. What is your perspective on that? Do you think that there is a need to educate VGD is more about unionisation and representation?

Interviewee: Um, I think there's sort of a natural reluctance when, when it comes to more, yeah, providing more structure to things like that. Also, for example, recently, it's been in the news that all you know, like everyone who is self-employed, even if you just have a one-person business that you should have, you know, like the risk of not being able to work anymore, and then insuring yourself against that, that risk, basically, I'm gonna look up the English word for that. But the problem, for example, with solutions like that, it's kind of trying to, you know, fit a square peg into a round hole sometimes, like, it's not sort of the, the fitting solution, like not customised to, you know, whoever, whatever job this person has. So for example, someone who is a freelance, let's say a painter, you know, someone who is like working on painting houses all day long, they probably have a much bigger risk at falling at their job and getting injured than someone who like me who's sitting behind their desk all day long, I could fall off my chair, but I'm probably not going to break something. You know, so I think there's sort of a reluctance in sort of solutions like that. Because it can also bring some downsides to it. But if this is explored more and in more detail, and sort of more fitting to the Dutch gaming industry, where, you know, it's not to forget that we're kind of at this crossroads of sort of it, but also the cultural sector. So, you know, for example, if we would fit under some union, would it be for artists? Or would it be for the computer industry, you know, things like that.

So, I do think that we would need as a game industry more of a sort of customised solution before there is more interest from the industry to really adopt something like it.

Interviewer: Okay, so do you think professional associations like DGA are an effective substitute for the absence of unions? How can professional associations gain more relevance for the VGDs?

Interviewee: Substitute I don't know. But you know, we try to do the best we can on all sorts of fronts. So you know, it can be very practical, for example, to set up a delegation representation at a conference like games comm where we have like a big Dutch pavilion. So really, sort of concrete examples like that. On the other hand, we as the DGA are also lobbying, we do some lobbying efforts for our governments to really set up a game fund, to kind of and that's not only to its kind of help, it helps to strengthen the position of the Dutch game industry when you look at countries around us. So for example, Germany has a 70 million game fund Belgium has a 50 million game funds and the Netherlands currently has nothing. So, you know, we as the DGA kind of see it as our role to stand up for that and make sure that we are heard and we are seen by the government and that they also see the benefits of setting up a Dutch game fund and how it can really help to not only grow the industry, but also grow the quality of the products of the games, and how that can sort of benefit society as well. I forgot your second question.

Interviewer: The second question was how can professional associations gain more relevance for the VGDs

Interviewee: Alright, um, I think also being more visible and also listening a lot to what your members want out of it. You know, like some members purely only join because they see direct benefits of for example, like some group discounts that we arrange, other benefits can other members kind of see more of these sort of big picture benefits. like, for example, the lobbying efforts that we do, and they understand that it's going to take years before we get where we want to be, but they just want to be in support for sort of that trajectory that we're going through. So that, I mean, it really depends also on what your members want. And I would really only advise anyone try to sort of set up a trade association like us to just listen.

Interviewer: Okay, that's very interesting to know. Since you talked about game funds in Germany, are there any other specific policies implemented in other countries, which could be beneficial for the Dutch market?

Interviewee: Yeah, it's, I mean, I'm not sort of well-versed in all the details of it. But for example, I do know that in the UK, there are some very interesting tax breaks, also for thinking mainly interesting and applicable for companies that are scaling up and really growing their workforce. And yeah, again currently in the Netherlands, there's nothing like that. But what we should remember is that, maybe not so much the UK. But when you look at other countries within the EU, it's just very easy for Dutch studios to say like, well, we don't like how it's arranged in the Netherlands right now. But let's have a look in Germany and Finland and Sweden wherever in where it's so easy to travel to, and then set up the company there, and then benefit from the programmes that are in place there.

Interviewer: Okay, so in terms of government support, only 7% believe there is adequate support available, and 68% said that the government should do more for industrial workers. So in your opinion, what additional role should the government play in support of supporting the working conditions of video game developers other than tax breaks, etc.

Interviewee: I think there's, there's a lot still to do. You know, like the game fund, for example, that I just mentioned, that could be something that really could make it easier for developers to set up sort of newer, more innovative and challenging projects. If, you know, we're for something like that we, for example, look at match funding from the governments, where we don't sort of expect the, to just like, you know, back, give the financial backing to do anything, but really, to projects that prove that they have sort of these commercial viability as well. There has been in the past, also more of a focus from the governments on applied games, like games that serve also a purpose in terms of like, training, or rehabilitation, or, you know, working with trauma and things like that. And that's great as well. But I think that usually underestimates also the importance of entertainment games, and especially for the next generations to come, where gaming is just like, it's such a part of just everyday life. And in that sense, might be more important to that generation than, for example, you know, sort of other other ways of screen entertainment.

Interviewer: Have you observed any efforts or initiative within the Dutch videogame industry to support unionisation or raise awareness about the collective bargaining? If yes, could you provide some example and discuss their impact?

Interviewee: We've never really sort of much talked about specifically unionisation, because there's already so many other sort of hurdles who want to take first. In that sense, there's still a lot to do. And we're saying we're taking it step by step.

Interviewer: Okay, so. So the final question is that this is a question in the context of post COVID working models. So the data shows that only about 15% of VGDs have a completely on site role. And the other 85% either have a remote or hybrid working model. Considering that there is a renewed focus on getting workers back to offices. Do you think we will see a return of VGDs to Office offices? Or is the current status quo expected to continue?

Interviewee: Working in the game industry. I expect this to continue. I also see it in job vacancies that are open right now when there is in the vacancy mentioned that hybrid work is possible. And I think the games industry is also a really sort of industry that fits that model very well. I mean, of course, there is always going to be a little bit of work that really requires people to be together in an office. But I mean, I think a majority of the work can also be done from home. Where Of course, it's also important to then make sure that the workplace at home is also very much suitable as a workplace. And that people don't feel like they sort of need to work from a kitchen table surrounded by all kinds of distractions. But you know, like, when, when speaking with manager of game studios, I kind of hear also that there's lots of initiatives to make sure that people can also really comfortably work from home, in the right setup, and with the right materials.