



Robert Gjestang

# Working as a Live Streamer

Effect of Audience Interaction on Psycho-Social  
Work Environment

May 2020





Norwegian University of  
Science and Technology

# Working as a Live Streamer

Effect of Audience Interaction on Psycho-Social Work Environment

**Robert Gjestang**

Work and organizational psychology

Submission date: May 2020

Supervisor: Marit Christensen

Co-supervisor: Anne Iversen

Norwegian University of Science and Technology  
Department of Psychology



## **Preface**

This master thesis started with an observation 2 years ago. After completing my bachelor thesis at NTNU about burnout and job insecurity, I found the subject of burnout interesting. I later identified a pattern of burnout in several microcelebrities within the digital media industry. This pattern of burnout seemed common among many different influencer careers where they had extensive amounts of digital interaction with followers. To me, it was highly intriguing that live streamers commonly experienced burnout. As they are autonomous and perform work tasks that closely match their interests, hobbies, and passions, they should experience the opposite. This suggests there is something about this industry worth exploring. When starting at my master's degree in work- and organizational psychology at NTNU, I started probing for answers. As there was no-one who knew much about this industry. I finally took it upon myself to explore what the unique characteristics of the live streaming career were, and how the interaction with their digital followers could affect their psychosocial work environment. I would like to extend a special acknowledgement and thanks to my supervisor Marit Christensen and assistant supervisor Anne Iversen. Without their support, and crucial feedback this research would have been hard to conduct or complete.

### **Abstract**

Live streaming is a recent media phenomenon that has promoted many new career possibilities. This study explores the live streamers work characteristics and how audience interaction affects their working conditions. Based on 4 in-depth interviews, I used a thematic analysis to examine what the unique work characteristics of this profession were. In conjunction with the interviews, I analyzed public quantitative data on broadcast schedules to get an extensive understanding of their workload. First, I used the job- demands resource theory as a conceptual framework for identifying the work conditions professional live streamers experience. Second, I used the results and relevant theory to explore how the viewers could influence the identified working conditions. The results suggest the audience demands promote extra workload, poor work-life balance and a complex loss of autonomy. The communities and viewers that aggregate around each live streamer, are also significant sources of meaning creation and social support, motivating the streamers to continue with their career.

### **Abstrakt**

Live-streaming er et nytt mediefenomen som har fremmet mange nye karrieremuligheter. Hensikten med denne studien er å utforske live-streamerenes arbeidsbetingelser og hvordan seerkravene påvirker deres arbeidsforhold. Basert på 4 dybdeintervjuer brukte jeg en tematisk analyse for å undersøke hva de unike arbeidsbetingelser til dette yrket var, og hvordan informantene ble påvirket av deres interaksjon og kommunikasjon med sitt publikum. I forbindelse med intervjuene ble offentlige tilgjengelig data relatert til streamerenes kringkastingsplaner analysert. Dette ble gjort for å få en mer omfattende innsikt i arbeidsmengden deres. For det første brukte jeg arbeidskrav-ressurs teorien som et konseptuelt rammeverk for å identifisere arbeidsforholdene deres. For det andre, brukte jeg relevant teori for å utforske hvordan seerne påvirket de identifiserte arbeidsforholdene. Resultatene antyder at seerkrav fremmer en stor arbeidsmengde, dårlig work-life balance og et komplekst tap av autonomi. Samfunnene og seerne som samles rundt hver enkelt streamer, er i tillegg betydelige kilder til meningsskaping og sosial støtte. Dette motiverer streamerne til å fortsette med karrieren sin i dette yrket.

## Introduction

Live streaming is a new digital entertainment profession that emerged as a more prevalent career in the mid-2010s. When new digitalized professions such as live streaming appear, it's an exceptional opportunity to explore unique aspects of it to gain insight into modern labour. Like most growing phenomena, live streaming has generated a field of research and literature, but the extent is limited and few perspectives have been explored. The research literature on live streaming focuses mainly on the audience or the technology-tools used in the industry (Claypool et al., 2015, 2015; Gros et al., 2017; Lu et al., 2018; Sjöblom & Hamari, 2017; N. T. Taylor, 2016). There is now some research starting to focus on the live streamers, but the research is limited to a media perspective or to the act of broadcasting (Johnson, 2019; Woodcock & Johnson, 2019) No research has so far focused on the psycho-social work environment of the professionals who view live streaming as a career.

In this master thesis, I took a qualitative approach to explore the key work characteristics of live streaming. I performed 4 in-depth interviews with professional live streamers. These interviews aimed to identify and explore the unique psycho-social work environment of the live streamers, and further understand how these working conditions could be under the influence of the audience. The interviews lasted between 2 and 3 hours each. In conjunction with the interviews, I analyzed publicly available data on the live streamers broadcasting schedule dating back to November 2017. This enabled me to get a more detailed and quantitative understanding of the live streamers' workload and their flexibility. To contextualize and analyze the data gathered from the informants, the theoretical framework of the job demands-resources (JD-R) theory was used (Bakker & Demerouti, 2017). The JD-R theory is often applied in quantitative research to explore the interplay between factors in the psychosocial work environment (Bakker & Demerouti, 2017). For this research, the JD-R theory was selected based on its widespread acknowledgement for accurately depicting and identifying unique work characteristics. I then applied other relevant theories related to interpreting the results, these theories will be introduced later.

I argue there is profound knowledge to gain from this thesis. My results are adding to the growing research literature on the emerging gig-market. Organizational research shows there are large changes to how workers are performing their jobs because of digitalization, increased autonomy, and distribution of labour (Brennen & Kreiss, 2016; Friedman, 2014; Greeven & Williams, 2017; Holford, 2019; Hustad, 2017; Julsrud et al., 2017; Moore, 2016; Smith & Telang, 2016). The live streamers work appear to embody the fringes of these work characteristics. Making the profession an ideal target for research to gain insight into the topic

of future work. Most importantly, if we are to promote healthy and sustainable working conditions for the current and future live streamers. It is important to define and understand what working as a live streamer entails. This thesis will focus on exploring these work characteristics, but also how the viewer interaction is impacting the psycho-social work environment of live streamers.

### **Live streaming and the digital gig-market**

Since live streaming is unique, we lack a good definition for them today. They could be defined as online platform workers, also referred to as gig-workers (Friedman, 2014). But influencers are also a popular term for them. To avoid confusion, the independent live-streamers will from now on be referred to as “*streamers*” and their audience/media consumers “*viewers*”. The streamers are often independent workers who produce live video content for anyone to watch on the Internet. The content live streamers create is thought to be of their own volition, most common is to film themselves doing leisure activities (E.g. gaming, social activities, and playing musical instruments). Thus, most of the entertainment streamers create are closely intertwined with their interests and values. As most streamers broadcast gaming related content, live streaming is by many considered an expression of video game culture and an expansion of online behaviour by the younger generations. Some of these live broadcasts can attract huge audiences, where the record for the highest amount of concurrent viewers by an individual is 628 000 (Spangler, 2018). Millions of people are watching different streamers daily on popular live-streaming platforms, and the numbers are growing.

These live streaming platforms serve as an intermediary between the media consumers and the live streamers (Sjöblom et al., 2019). The largest technology company involved in distributing live streaming services today is Amazon. They currently own Twitch.tv, which is the largest live streaming platform on the Internet today. They have 1 350 000 average concurrent viewers spread out over 52 800 average concurrent streamers, and the numbers are steadily increasing (*Twitch Statistics & Charts*, 2020). As increasing numbers of media-consumers are relying on information and entertainment from the Internet, new media as a consequence is steadily growing its influence and reach (Uddin & Naz, 2017). Some research is terming the drastic changes in the media industry to be a digital revolution (Rückriem et al., 2011). This revolution and transition of the market allow innovative new jobs such as live streaming to emerge and grow (Eichhorst et al., 2017).



As a result, the phenomenon is now gathering increasingly more revenue and attracting more investors. Allowing a growing number of streamers to make careers of live streaming (Perez, 2020). Live streamers on these platforms are however not fully independent. Amazon as a business is not created on philanthropic ideals and generosity. And the live streamers must give a share of their income for using their services. Amazon also keeps its executive powers by enforcing terms of services (ToS) for anyone who uses their platform. Granting them the authority to decide who can and can't live-stream on twitch. If the streamers do not violate the ToS, they can do as they see fit. Making the live streaming platform similar to other gig-work platforms such as Uber (taxi services) and Handy (house cleaning services) (Dunn, 2017). Meaning the streamers work conditions are something they can create on own terms. Allowing them to be more flexible and independent than their predecessors in the traditional entertainment industry (Hasan et al., 2018).

What makes live streaming unique compared to other media, are the several integrated features on the live streaming platform. These features allow instant communication between the streamers and their viewers. Making the viewer interaction often an integral part of a live stream. Examples of interactive features viewers have available are: chats, donation features with messages, monthly subscriptions, and paid cheering (Sjöblom et al., 2019). The audience being able to give feedback or interact with the entertainer is a familiar concept. However, live streaming is different in its instant and continuous digital interaction between the streamer and its viewers. Allowing media consumers to be closer to the media creators by having the option to ask questions, give feedback, and comment instantly. Features, such as text-to-speech donations, also allow viewers to be an asset and contribute to the entertainment. Technology also allows viewers to communicate with each other and the streamer outside the context of a broadcast. There are usually several social media groups created for the fan communities related to specific professional streamers. Allowing communities to gather, converse, and exchange ideas. This viewer interaction with each other, facilitate close-knit communities to take form. But it also allows deeper and more personal relationships to form between the streamer and their viewers.

Typically, the relationship and interaction between streamer and viewer are very one-sided, which can facilitate parasocial interaction (Horton & Wohl, 1956). This happens when the audience develops one-sided relationships with media personae that are not reciprocal. These types of relationships are strongly based on social attraction, and less of physical attraction. Specifically, are parasocial bonds often formed when background, attitudes, and appearances match (Rubin & McHugh, 1987). Knowing individuals are open to show

computer-mediated social support, it's highly likely the viewers will use these interactive opportunities to show support either socially or financially (Bresnahan & Murray-Johnson, 2002; Kassing & Sanderson, 2015). Zolides (2017) point out the more financial context of this interaction. The technological frameworks built by technology companies promote streamers to use their personalities to gather followers. They can then exploit these followers for commercial and professional gain (Zolides, 2017).

There are several innovative monetization features on twitch that help streamers earning revenue. Binkowski, (2018) categorizes live streaming revenue into four distinct groups: Donations, advertisements, subscriptions, and sponsorships. First, donations come directly from the viewers in variable sums, as an incentive the donator can attach short messages for the streamer and other viewers to see. Second, the streamers usually display advertisement as commercials from third parties. The streamers are often in control of when to show the advertisements and are rewarded for the frequency, length and amount of viewers who watch them. Advertisers can also pay for visibility on the streamers' social network profiles and through product placement (E.g., a product visible through the streamer's web camera). Third, the viewers have the option to pay for a subscription related to a specific live streamer. They commonly motivate the viewers by giving the subscribers certain perks or access that non-subscribers don't. But viewers also do this freely to show support of the streamer. Fourth, they could do sponsorships in several ways, regularly third parties sponsor streamers by influencing the content they generate (E.g., a video-game producer pay a streamer to play a certain game they produced). These monetization methods allow streamers to create lucrative careers from entertaining viewers with niche content they prefer to see.

Since these monetization methods need viewers to be in their channel watching them. They need the viewers to be enough in numbers for it to become a sustainable career. Viewer numbers and follower numbers function similarly to a reputation system in the gig-market (Benson et al., 2019), but it only gives numerical feedback on how popular a product is. It does not give the possibility of feedback directly related to the subjective quality of the creative product. From the streamers' perspective, viewer numbers represent how well they are doing in terms of revenue. Viewer numbers are also an important social currency to validate one's brand and product (Tuten & Solomon, 2017). There is also evidence that these numeric representations of following facilitate social comparison with other streamers (Rosenthal-von der Pütten et al., 2019). Thus, viewer numbers become a measurement of reputation, status, revenue, and ultimately job security. Making attracting and keeping viewers watching one of the most important entrepreneurial challenges streamers face. It's hard to

pinpoint exactly how many streamers who make a living through this profession. Many of the mentioned monetization methods remain undisclosed for each streamer. Because live streaming is a global phenomenon, it is hard to define what is enough to support a career as it varies with location. There are today 27 000 twitch partners (Iqbal, 2020). It is likely half of that or less who can make a sustainable career from live streaming.

Independent of specific numbers, there are no doubt many career opportunities within this new industry. And this digital entertainment profession is likely not an isolated phenomenon. Work with many similar characteristics is emerging in the online labour market. Because the gig-economy is both new and rapidly changing, we have an incomplete understanding of it to date (Healy et al., 2017). We can attribute some change to progress in automatization, artificial intelligence, and technology (Deleidi et al., 2019). Besides, economic growth is resulting in the transition of labour into the tertiary sector of the economy; resulting in lower demands for physical labour and higher demand for knowledge- and creative workers (Holford, 2019). Eichhorst et al.'s (2016) research suggest the digital transformations is a global phenomenon and will only grow. This does not have to lead to higher unemployment, but new creative jobs in all sectors of work-life will have to replace jobs that become deemed excessive or inefficient (Eichhorst et al., 2017). New media such as live streaming is successfully creating its niche and outcompete traditional media in certain areas. Forcing the older media to adapt or disappear (Moore, 2010). Live streaming emerged in the middle of this media revolution, and the work characteristics remain unexplored. Even though all jobs can have their specific job characteristics and conditions. The JD-R theory assumes that we can categorize all characteristics as job demands or job resources (Demerouti et al., 2001). Allowing the JD-R model to be applied in almost any occupational setting, making the model suitable for exploring a new profession such as live streaming.

### **Theoretical foundation**

One of the primary assumptions of JD-R theory is that independent of vocation, when specific job demands are high, it will lead to occupational stress. And when specific job resources are available, it will lead to job engagement and job motivation (Bakker & Demerouti, 2007). Further, it proposes the motivational and health impairing processes are parallel to each other, and both affect the outcome of employee well-being (Demerouti et al., 2001). The JD-R theory is largely applied in quantitative studies that try to identify the complex interplay between different job demands and job resources (Bakker & Demerouti, 2017). In this study, I

want to use its framework and current understanding of resources and demands to help identify the key aspects that define the working conditions of live streamers.

Job demands and job resources consist of psychological, physical, social, and organizational factors related to a job (Bakker & Demerouti, 2017). The job demands can be identified by requiring continued physical or psychological effort and/or skills (Hakanen et al., 2008). The demands promote the individual to use physical or psychological resources. In the live streamers case, this can be high workload, job insecurity, and viewer demands. Job resources are understood as something beneficial that promote goal achievements and stimulate individual learning and growth. Additionally, it can reduce the health impairing effects of job demands (Schaufeli et al., 2009). Examples of resources streamers can acquire in their profession are social support from viewers, feedback, and autonomy.

Live streamers being entrepreneurs and starting a venture from the bottom, it is highly likely they will accumulate a lot of different job resources over time. Hobfoll (1989) postulates that because resources are useful in the work setting, loss of resources become stressful. Hobfoll also states loss of resources, causes more harm to the individual than gaining them. Conservation of resources (COR) theory suggests that the strain of losing resources then motivates humans to try and maintain their job resources. (Hobfoll, 1989). As workers value job resources and would like to keep access to them; they are likely to invest resources to prevent future loss, or gain more of them (Hobfoll, 1989). The outcome of resource investment can sometimes lead to positive gain cycles, where access to resources grants access to more resources (Hobfoll, 1989). This outcome is similar to that of job crafting, which was proposed Wrzesniewski and Dutton (2001). Workers perform job crafting to align their work practices to better suit their personal needs, preferences, skills, and values (Wrzesniewski & Dutton, 2001). Job crafting differs from resource investment by its self-initiated behaviour to improve working conditions. Resource investment is often motivated by trying to protect oneself from future resource loss and stressors. This implies if live streamers have access to enough resources to perform job crafting behaviour and resource investments, they are likely to create positive gain cycles.

As a counterpart to positive gain spirals, there is evidence of a negative loss spiral related to job demands (Schaufeli et al., 2009). This is one of the important mechanisms that lead to more serious health impairment such as burnout (Zapf, Dormann, & Frese, 1996). Longitudinal research shows exhausted workers, are more likely to get a higher workload and more demands over time (Ter Hoeven, van Zoonen, & Fønner, 2016). High amounts of demands also increase the likelihood of self-undermining behaviour. Implying live streamers

who are exhausted and stressed, are more likely to make mistakes, create conflicts and fail to manage their own emotions. Considering the public nature of their work, this can cause a vicious loss spiral that only fuels further demands and negative job outcomes (Bakker & Demerouti, 2017).

Emotional labour is proven to have a part in negative loss spirals, and can be one of the demands leading to burnout (Jeung et al., 2018). Considering the amount of interaction and emotional display happening in the work streamers do. They might have to regulate emotions in a process where one displays other emotions than one is feeling (Martínez-Iñigo et al., 2007). Emotional labour is categorized into automatic regulation, surface acting and deep acting. Automatic regulation refers to the automatic display of the emotion that is naturally felt. This is an unconscious process and requires little effort on the workers part. If these emotions are positive it can improve workers well-being (Martínez-Iñigo et al., 2007). The surface- and deep acting however, do require more intrapersonal effort from the worker, as they now must display emotions they are not feeling. This type of emotional labour is strongly linked to reduced employee well-being and burnout. But it can improve performance in certain work settings (Lazányi, 2010).

Autonomy is a widely praised job resource that can reduce the chance of negative loss spirals taking place due to emotional labour or high workload. Considering live streamers self-employed status, they are likely to have an appreciable amount of autonomy (Donovan et al., 2016). Autonomy also has many positive effects on employee well-being and motivation (Kubicek et al., 2017). A small amount of research shows too much autonomy could be detrimental to workers and become a job demand (Warr, 1994). The JD-R theory's indicative categorization of autonomy as a resource, indicates it should be understood as something important in terms of dealing with demands, but also a source of growth and motivation. Warr (1994) challenges the JD-R Theory's assumption that high levels of autonomy are beneficial to well-being. Rather, he proposes autonomy are analogous to the effects of vitamin consumption. Where vitamin consumption only has a beneficial health outcome within certain levels. And excessive consumption of vitamins can lead to detrimental effects on our health (Warr, 1994). This is empirically supported by some studies finding an inverted U-shape relationship between job satisfaction and high levels of job autonomy (de Jonge & Schaufeli, 1998; Kubicek et al., 2017). Challenging the popular notion that there is a linear relationship between autonomy and employee well-being. This can suggest that the live streamers autonomy in combination with their many entrepreneurial duties, can become a passive demand rather than a resource understood to be beneficial.

Streamers with many entrepreneurial duties are also vulnerable to high workload and poor work-life balance (Todolí-Signes, 2017). Work-life balance could be understood as the state of equilibrium when an individual's resources are equally or fairly divided into work life, personal life, and family life (Crompton & Lyonette, 2006). An imbalance in this system is a cause for stress and strongly linked to burnout (Shanafelt et al., 2012). Nam (2014) concluded technological advances are increasing the number of workers who can work from home. It's common for streamers to perform work tasks at home or outside the confinements of an office space. This gives home workers more flexibility as to when and where to work, but also how much they want to work. Self-employed individuals are also under no regulation from the government when it comes to how much they can work (Donovan et al., 2016). This can increase the likelihood of them creating a poor work-life balance. If they have several job demands increasing their workload, it is easy for the job to consume a larger part of your life (Kinman & Jones, 2008).

Blustein et al. (2008) describe work as a core element of life for most adult people. When we chose our occupation, we often attach great importance and meaning to tasks we do in our job (Wrzesniewski et al., 2003). And the way people experience meaning in their work varies considerably (Wrzesniewski et al., 1997). It is reasonable to conclude the variation in meaning derived from the work is not only defined by the working conditions but also decided by the cognitions and actions of the individual doing the work (Wrzesniewski et al., 1997). Implying that the meaning streamers derive from their work, is predicated on their internal systems of value. Steger et al., (2012) attempted to clarify the construct of meaningfulness in the work environment. They identified three key aspects of the construct: psychological meaningfulness, meaningful work, and greater good motivation. First, psychological meaningfulness refers to the experience or feeling of doing work that is meaningful to the individual. Second, we relate meaningful work to the direct outcome and consequences of doing meaningful work, and these consequences have an impact on the individual's life outside of work. Last, greater good motivation implies the positive effect one's work could have on other people. Using these three factors to explain meaningfulness, Steger et al., (2012) found that the meaningfulness of work had a direct impact on job satisfaction, days absent from work, and life satisfaction. Other studies found individuals who experience meaningful work have more job engagement, productivity, loyalty, and individual fulfilment (Field & Buitendach, 2010; Geldenhuys et al., 2014). Fairlie (2016) highlights meaningful work characteristics are associated with the largest or second-largest effects

related to well-being variables. Giving an indicator of how important meaningful work could be to the live streamers.

Robertson (2013) lists several viable sources of meaningful work. Among them are individual characteristics, job design characteristics, social interaction on the job and person-job fit. In brief, individual personality traits might affect the experience of meaningfulness. Job design characteristics refer to the job tasks inherently being meaningful. Opportunities for social interactions with others also have an impact on the meaningfulness derived from the occupation. Lastly, person job-fit suggests when work matches with personal beliefs and values, they will perceive the job as meaningful (Rosso et al., 2010). Tims et al. (2016) suggest workers who have autonomy and can perform job-crafting behaviour, will do so to align their job characteristics better with their identity and personality increasing personality-job fit. The person-job fit theory assumes the higher level of merging between workers' personality and their workplace environment will cause higher efficacy, motivation and influence (Anderson et al., 2008). Indicating independent entrepreneurs such as live streamers must either take agency and influence their own job characteristics, or chose their occupation carefully if they are to derive meaningfulness from their job (Strauss & Parker, 2014).

Considering the theoretical framework now introduced. I've laid the foundation for what is going to be later discussed in this thesis. This master thesis carried out a qualitative study to better understand the context for both the psychosocial and techno-social work environments that have now been introduced. Firstly, I used the Job- Demands Resource theory as a conceptual framework for identifying the work conditions professional live streamers experienced. Secondly, based on the identified working conditions, I used the results and relevant theory to explore how the viewers impacted the working conditions of live streamers.

## **Methods**

### **Sample and procedures**

Following the ethical guidelines of the Norwegian Centre for Research Data (NSD) this study received ethical approval from NSD to gather and process the data needed for this research. The 4 participants were all males who spoke English, living in either America or England. I selected the informants in this project-based upon public data on live streamers, revealing average viewers, subscribers, and their number of hours streamed over a period. This was enough information to conclude all participants worked as full-time streamers and made enough revenue through their profession to cover all living expenses and more. Two

informants had close to a decade of experience as a live streamer, implying they had an essential insight into the evolution of this unique profession from its infancy. All participants were partners with Twitch.tv, where they streamed most of the time. All informants defined themselves as variety streamers who focused mainly on gaming content.

Table 1. *Informants included in analysis.*

Participant no.	Sex	Experience	Age range	Origin	Category
1	Male	18 Months	50-59	England	Gaming
2	Male	10 years	25-30	America	Gaming
3	Male	7 years	25-30	America	Gaming
4	Male	4 years	25-30	America	Gaming

In this study, I tried to choose only streamers who focused on gaming, as it is the largest entertainment category within live streaming. In the period between 03.10-19 and 21.11-2019, 137 live streamers who spoke English or Scandinavian were individually contacted and asked if they wanted to participate in the research project through e-mail, live stream chat or social media. Among the contacted, 24 claimed they were interested in doing an interview. Getting them to follow through on their stated intentions was challenging, and only 4 live- streamers ended up doing the interviews. There might be several reasons why the streamers were so reluctant to take part in the research project, this will be discussed later.

## **Interviews**

The in-depth interviews lasted between 2 and 3 hours each and were conducted over a 4-month period (October 2019–January 2019). The interviews were done over voice chat programs through the Internet, where the only information shared was sound. After ending the interviews, the MP3 recordings of the interviews were then stored separately on a USB device for later transcription and analysis.

As there is a limited amount of research done on this profession, there were many elements that needed clarification to understand what rationale was behind the different work-related tasks. To “get the ball rolling” the interviews first section started with uncovering how an average workday was set up for each individual informant, mainly focusing on the contextual and physical aspects of the work. This was an important part of understanding the unique occupational characteristics associated with live streaming.

The second section focused on uncovering specific job resources and demands. The purpose was to identify working conditions that could be characterized as beneficial or challenging for



the live streamer. Focusing mainly on the resources that mitigated the negative impacts of their demands, excluding their abilities to entertain.

Part three aimed specifically on uncovering what changes there was to motivation through their live streaming career, and what parts of their work they found meaningful (Interview guide).

## **Analysis**

Data consisting of written transcripts from the four in-depth interviews accumulated to approximately 40 000 words. This data was analyzed using thematic analysis guidelines described by Braun and Clarke (2006). Data analysis was carried out in conjunction with the data gathering, allowing concepts to be identified reproached with different probing and question at later times. The analysis consisted of repeated readings of the material to get an overview and understanding of the data gathered. The important features of material were coded into different themes and categories with the assistance of NVivo software (Woods et al., 2016). Analysis, interpretation, and preliminary coding of the themes from the data were based on empirical foundations related to job demands and job resources (Bakker & Demerouti, 2017). The coded data were refined in an ongoing process during the analytical procedure. The analysis was performed on both a purely descriptive level and from a deeper comprehensive perspective allowing me to seek patterns that could explain the different statements and perspectives of the informants. I then deemed themes and subthemes relevant to the aim of the study and then confirmed. Lastly, the findings in the study were considered from a theoretical perspective and compared with results from other studies to gain a broader understanding of the results. This understanding is described in the discussion section of the thesis.

## **Results**

As more of the informants explained their approach to their job during the interviews, it became increasingly clear that the streaming profession was difficult to disconnect from. Not only is the work closely related to the streamer's personality, identity, and interests. It is also heavily relying on constant digital interaction and communication with their community. Making it hard for the streamers to find a good balance between work life and personal life. It then became natural to view their occupation as more in line with a lifestyle, making workload and work-life balance one of the overarching themes.

*P4: I think about streaming all the time. For me personally, I always say to people it is not a job, it is a way of living.*

Streamers close interaction and dependency of the viewers seemed to promote a symbiotic relationship that created a work environment characterized by high job insecurity and low predictability. By the informants' statements, there were market demands that heavily impacted their ability to exercise their creative freedom. It was then reasonable to understand the streamers autonomy and viewer demands as closely interlinked with each other.

*P2: Live streaming is really stressful, because you never really know what's going to happen. It is not the physical workload; it is a mental battle where are you constantly trying to fight against your own head.*

*P4: You have to constantly add and change approaches based on the cultural climate, trends and what the viewers expects of you.*

The last distinguishing feature found in the data was the viewers' facilitation of meaningfulness, social support and motivation. It seemed the community and social support system they built around their career was one of the most important and positively impactful features of their job. Many of the streamers entered the career with motives of fame and money by performing a leisure activity. This often changed as they gained profound meaning from interacting with their communities and viewers.

*P1: I speak with my community every day, and some of these people I speak with privately through other social medias. I like my audience; I like my community. If it was not for the community, I would not be doing this.*

*P3: My community is not just a community, they are extended members of my family.*

Keep in mind these findings were initially based on my main templates of work characteristics and outcomes that can be defined by the JD-R theory. It was further developed through inductive reasoning related to data available to me. There will be some overlap between the overarching themes as resources and demands are closely interlinked with each other (Bakker & Demerouti, 2007). As the thesis wants to explore what the live streamers work characteristics are, and how the viewer interaction influences these. It became sensible to arrange the overarching themes by firstly, trying to describe the source of the job

characteristic. And then present how these characteristics were related to different outcomes. This resulted in three overarching themes that are strongly impacted by the viewers' influence (Table 2).

## **Workload and work-life balance**

### ***Workload***

Three out of the four informants reported 40-50 hours of weekly broadcasting. Public broadcasting schedules related to each specific informant dating back to November 2017, showed high work consistency throughout the entire period. Three out of four informants showed 8 hours broadcasting each day on average 5-6 days of the week. In the median month for most informants, they broadcasted  $160 \pm 20$  hours each month.

*P1: I do 8 hours each day, Monday to Friday, 40 hours total. No lunch breaks in there. I can't take 30 minutes break because if I go eat and come back, my viewers will be gone. My online hours will be 40 hours and my offline could be 10 to 20 hours each week.*

The offline hours streamers refer to, are job tasks unrelated to broadcasting content on the streaming platforms. Examples of these job tasks are managing communities, answering viewers who contact them directly, planning future podcasts, fundraisers, collaborations, or events. The patterns mentioned of no lunch breaks were not an isolated case. Taking short breaks, eating or doing something that's not inherently engaging to the audience, often led to an immediate decline in their viewing numbers. This motivated the streamers to be constantly present and engaged with the audience. Resulting in frequent and prolonged sessions of work without breaks.

*P2: I would say if anything, viewers may be indirectly or directly encouraging unhealthy habits or behavior in live streamers. They might encourage it directly by encouraging you to make it a 16 hours stream, or indirectly by you seeing the viewer numbers go down when taking breaks.*

Some of these informants mentioned sporadically doing 16-24 hours long streams, this was confirmed in the analysis of their streaming schedules. It was especially noticeable on days they had large peaks in their viewer numbers. Indicating surges of motivation or pressure to

stream when there were incentives of gaining more resources. If the streamers are to maintain the career and community they have built. Falling behind or not creating content daily/weekly when viewers are interested in it, might result in their viewing numbers declining in the long run. Pressuring the streamers to constantly be available as not to lose what they have gained.

*P4: There is an immense pressure to constantly be out there, to create high quality content every single day, and that is exhausting.*

*P1: If I'm sick and can't stream I earn nothing, I don't get paid holidays, I don't get paid leave, I don't get paid sick time.*

Streamers who are finding themselves in a less financially secure position might experience higher job insecurity. Causing them to be more focused on the aspect of viewer numbers, donations, and subscribers. Interestingly, one of the more experienced streamers mentioned different coping mechanisms he had developed in dealing with these stressors. He had purposefully started hiding this type of feedback, and as a result, experienced a reduced amount of stress that was earlier caused by monitoring the statistics related to job insecurity. This reduced stress gave him the ability to better focus and accommodate the current audience demands. Fully engaging in one element, without monitoring the audience. Can harm their ability to interact and adapt to the current viewer demands.

*P1: There is a lot of micromanaging going on, I can't ignore the game completely, and I can't ignore chat because I want to recognize people and interact with them.*

To the live streamers, creating engagement and interaction with the viewers is understood as an important job task. If a viewer asks a reasonable question or greets the streamer, they often feel obligated to answer. But they also need to focus on creating engaging entertainment for the rest of the audience. Making it hard for the streamers to focus on one specific conversation or job task without interruptions.

### ***Work-life balance***

Over the length of the interviews, it became apparent that the informants had a strong gaming interest prior to their live-streaming career.

*P1: I was playing games anyway, and I might just as well share that with other people.*

*P2: Even if I had to stop streaming professionally because of economic reasons, I would still be streaming part-time.*

Even though they created entertainment for viewers through their gaming, they could still play video games. The continuation of the preliminary hobby into their work life, created a lot of work engagement and motivation. One streamer described gaming as an addiction to him. But because adulthood required his time and resources elsewhere, he had to keep this addiction in check. That was until he started live-streaming and could do both simultaneously.

*P2: My first major addiction was a game back in the day in early childhood, and I've played it way too much. (///) When I turned 18, I had to actually live a life now. My addiction was still there, but I couldn't play games a lot, I had to be an adult.*

Many of the informants stated they only redirected the energy and time they would have spent on their gaming hobby into their live streaming career. Giving them a sentimental incentive to live stream their hobbies. When the streamers could make a living from their streaming career, they had in most cases invested a lot of resources and time in reaching this stage.

*P2: So, I'm not really motivated by improving myself. I'm motivated by continuing something I already established.*

Indicating motivation derives from preserving the resources they have accumulated, and can only do that by continuing to work. The informants felt fortunate to have gained a career opportunity in this highly competitive profession. They did not want to squander the position and influence they had attained within the streaming communities. During the interviews, it became apparent that the streamers high motivation and passion for what they did, in conjunction with the high demands and pressure to work. Led the job to consume large parts of their lives.

*P4: So, at that time my usual workflow was literally, waking up, having breakfast, streaming for 16 hours, having a burger for dinner, and then go to sleep. And I did that every single day.*

*P4: I know I said it gets very lonely, because it does. You need personal contact and go out and see human beings.*

Three out of the four informants described periods of occupational burnout, often because of poor work-life balance. In these periods they often prioritized work over friends and family, and became encompassed with their job. These periods could cause the streamers to experience a general lack of interest, depression, cynical attitude, and bad eating and sleeping habits. After recuperating from the immensely stressful periods, they attempted to disengage from their work more and create a better work-life balance.

*P2: I take time every day, maybe half an hour to an hour in total to make sure that I'm completely disconnected from streaming. Rather than, than not taking any time, and needing to take out a week or a full month later on.*

They then reported benefiting from their autonomy as a tool to create a more balanced lifestyle. Their ability to adapt was especially important when the work became fatiguing or was impacting their mental health negatively. Being able to change and shape the job content you entertain the viewers with, could be understood as a vital part of enduring the strenuous elements of the profession.

*P3: I saw I was doing well in terms of viewers with my prior game, but I was just not enjoying the game myself, which lead to me to realize if I carried on working with something I wasn't enjoying, then I shouldn't do it at all.*

With the experience gained from these episodes, they still had the passion and motivation to continue with the job. But realized they had to create a work environment that was sustainable for their well-being over longer periods of time. Making the decision to change the content type or the way they approached the work, was no easy task and included a lot of risks. Several of the informants still actively struggle with poor work-life balance, even with the experience they gained from these episodes. Alluding to the fact that the external pressure and passion for what they are doing is promoting them to constantly work.

## **Autonomy and Job Insecurity**

### ***Autonomy***

As self-employed entrepreneurs, the clearest aspect of autonomy the live streamers described, was the personal autonomy they had over one's own behaviour.

*P3: Its really strange, because it is an act to an extent, because I'm acting like myself, it's like I can let my hair down and truly be myself, there are no filter anymore. Whatever I think, I say it.*

As streamers are independent workers, they have no employer giving directions and orders. They can act, say, and do almost anything that is allowed by the streaming platforms ToS. Allowing them to create a working space where they can maintain personal integrity and set favourable boundaries for themselves in work situations.

*P1: I have control over my own workspace and don't have the behest of an employer that is going to push me anymore.*

They have some autonomy over their personal workspace and work hours. However, they must weigh their schedule time up against the community's expectations and at what time most of their common viewers can watch. The streamers depend on the viewers coming back to the stream. Requiring the streamer to satisfy their viewers' specific entertainment demands. Making it difficult for them to be flexible with schedules and work hours without it being a detriment to their revenue.

*P4: And there is pressure to play the same games over and over again, and that contributes to burnout. You feel like you're just going through the motions of playing a videogame, instead of getting an actual sense of enjoyment that you would otherwise get, if you just would do it for yourself.*

*P4: Innovation is exceedingly challenging, because we are at the whims of what the general public want to see sometimes, it goes back to giving what the people want.*

The streamers also faced challenges related to converting the creative product into something marketable. Even though they knew what the viewers wanted to see, they were not always able to create the content they desired. In many situations they also needed to set aside their own needs, to please the viewers. Broadcasting and creating entertainment they themselves enjoy, but not the audience, might put their career at risk. However, when the streamers passed a certain level of job security through a strong community, they could afford more

fluctuations in viewer numbers and make more changes without it becoming a great risk to their entire career.

*P3: I got to the point where I can change games and I still have a decent number watching me and enjoying the content. That is helpful, knowing I can branch out and do that. And if I wanted to, I can change my stream a couple hours here and there. In addition, I can take a day off, obviously that is going to lead to less revenue, but people are still coming back to the stream.*

Becoming less dependent on the viewers' monetary contribution gave the streamers more flexibility to job craft. But they still had to find a balance between creating something they enjoy and pleasing enough audience to maintain a career.

### ***Job insecurity***

Even though most of the streamers started out with live streaming as a hobby, at some point they made enough income through live streaming to replace the other jobs they had. They clearly stated money was not the deciding factor behind many of their career decisions. But, if they are going to continue with streaming professionally, it's a necessity to financially support themselves with it. For this reason, several of the streamers had experience with difficult career decisions, where they were forced to relinquish desirous job content in order to make ends meet.

*P3: I actually had to switch a game I streamed earlier in my career. I realized at some point it wasn't viable to stream that content anymore, because the viewership got so low. And I think ultimately as much as I love the game I stream now, and it is my favorite game of all time. If it got to a point where I could no longer provide for my family with that. And it meant either switching games or get another job, I would have to make that difficult decision to switch.*

And in the opposite situations, where the streamers want to change their job content to something they perceive as more enjoyable, they must address the strong competition. The competition makes it difficult to successfully adopt other categories of broadcast content. Pressuring the different streamers to continue with their original niches of content creation.



Consequently, if the viewer demands are changing, it can be challenging to restore one's influence and reach through job crafting or other means.

*P2: Re-establishing oneself is really difficult, because there is always someone else to watch. So you're somewhat tended to do something that you always done, and if you try to change, it can be good, and it can be bad.*

The viewer demands are one of the critical factors outside of the streamers control. And the strong ambiguity related to how popular their niche content would be in the foreseeable future. Reduced the streamers' faith in one's own ability to persist and continue with this job. As all informants had a niche type of content they had specialized in, they knew what they currently did could become more or less popular within weeks or months. And it is not uncommon for streamers to have severe fluctuations in viewers.

*P4: As time goes on, every streamer needs to have an exit strategy. Because your relevancy and your influence wanes over time, unless you are able to transcend what is and isn't considered awesome.*

This always evoked the question of what would happen to them if they were not able to adapt to some changes in the streaming industry. Either it is legislative or changing viewer interest. These ambiguous elements are out of their control and have little predictability. Causing the streamers to fear for their career.

### **Social support and viewer interaction**

Viewers and community was something integral to their job, they are so much more than just customers or consumers to the streamers. Viewers often gave social support and created a strong sense of social connection. One commonality for all the informants was the gratifying aspect of their job, where they could share their experiences with other people.

*P1: I want to do something I enjoy doing, and do it with people I enjoy. My audience and community are people I enjoy.*

Sharing experiences and their interests with viewers over extended periods, enabled the streamers to develop rapport and strong friendships with viewers, and establish professional networks.

*P4: Over the years I've gotten to know people in my community, and they've become my friends.*

Many of the viewers also showed compassion and consideration for the streamer's wellbeing, leading the viewers and the community to give monetary- and social support if the live streamer appeared in need of it.

*P3: When I got laid off from my community job, I was like of "this is a little bit of a rut". Because my wife just got pregnant, I was nervous and worried about things, and that was stressful. The community saw what was going on, and they have been incredibly supportive ever since and my channel has grown massively from there.*

Having viewers and a close community recognizing their struggles and give them the monetary and social support to continue with their profession. Was something they were very grateful for. But this help can go two ways. Since they attract a lot of people to their stream who want to interact with them personally. They are often put in situations where viewers also seek help and support from the streamers.

*P4: A particular viewer came up to me and gave me a hug and said: "Thank you, without you I wouldn't be here". I cried a little bit and hugged him, thanked him for still being here. It means the world that you influenced them in such a positive way.*

The ability to have a strong and significant impact on several lives at the same time, was an immensely meaningful aspect of their job. With large audiences and communities built around them, streamers' inherent social status and influence make them micro-celebrities. With this position, it becomes relevant for many streamers to display responsibility, kindness, and good leadership.

*P4: I try to hold myself to a higher standard as such, because as a public figure you should use your voice to inform, educate, and uplift people instead of knocking people down.*

And a couple of the streamers had also developed a passion for organizing fundraisers, claiming this was a way for them to be responsible and reciprocate what the viewers had given to them. There were however limits to how much social support the viewers could give the streamers. Considering the uniqueness of their working conditions. It was most often other streamers that could relate to their work experiences.

*P1: There are a number of streamers I chat with off air, I communicate with them about how I am, and how they are doing. And you get a lot of feedback from these people when you run into trouble or difficulties.*

Having a solid professional network that has experience and knowledge about the profession's intricacies, was in several cases a very valuable resource. Other streamers were seldomly viewed as competitors, but as important sources of support who were willing to help if difficulties arose. The informant's professional network was also one of the things that granted them early success. When other more successful streamers were done for the day, they had in some cases transferred their current viewers over to them; giving them an opportunity to reach many new viewers. Stating that without a network and community to support them, they could never achieve their career. It's worth noting that not all interaction and communication with viewers are positive. Live streamers are ideal targets of harassment, hateful conduct. Internet culture is often inclined to make snap judgments and stigmatize individuals based on sparse information, often devoid of context.

*P1: I've been doing this a year and a half now, and had some unpleasant things said to me. I had my first death threat 5 months ago. And do you take it seriously? You have to. Is it likely to happen? Probably not. But it is a case of severity versus likelihood.*

*P4: Without delving too deep into it, there are streamers experiencing harassment on daily basis. I think it typically happens more on the female side.*

Both superficial and private details about the streamer's life can often become public knowledge, and the viewers' inherent anonymity can make their feedback very direct. This

can give individuals with ill intentions leverage when harassing streamers. Thus, many live streamers are naturally finding themselves in an exposed social position, where it can be hard to repel the directed personal attacks from viewers and other communities. Finding a good balance when moderating can be difficult.

*P1: You got to take all the feedback whatever job; I'm trying to make sure I'm delivering the best that I can. That doesn't mean I have to change, I'm completely me, but I can make small adjustments.*

Viewer feedback could be a crucial form of communication to the streamers that aspire for betterment. So, the streamers don't want to limit the viewers too much in their expression of different views. This could potentially place the streamers in a position of constant criticism and support from the viewers.

## **Discussion**

My results reflect how the viewers' extensive amount of interaction with the streamers creates both job resources and job demands. The live streamers' fundamental passion in combination with the engagement created by the viewer support, pressures the streamers to put in many hours of work, often creating a poor work-life balance. Their autonomy and ability to job craft are also constantly challenged by the careers job insecurity that is promoted by changes in viewer demands. Viewers and communities also function as large support networks, that facilitate meaning creation and social support for the streamers. In this section, I will discuss these findings in light of relevant literature.

### **Live streaming, a way of life**

The description of a live streamer as digital media entertainer/influencer does not fully encapsulate all the skillsets, tasks, and activities they must master as a streamer. Vaag et al., (2014) research on freelance musicians, explore many of the same entrepreneurial challenges and benefits live streamers seem to have. Vaag refers to the artist's' career as a protean career (Hall, 2004) Where the person's identity and motives are guiding the career path, not an organization. Similarly, the live streamer must successfully perform several different jobs to fulfil requirements equal to that of a small business (Menger, 2001). A constant challenge all streamers face, is the need to transform the entertainment content they produce, into a marketable product. Markman and Baron (2003) state that entrepreneurs like streamers,

benefit from self-efficacy, ability to recognize opportunities, social skills, and personal perseverance in achieving and maintaining success. The streamers working hours based on my analysis of broadcasting schedules. In addition to the streamers statements of many hours of extra work, merits my attention. The meta-analysis done by Ford et al., (2007) highlights how more hours spent at work, is strongly correlated with poor work-life balance. Even though some streamers actively tried implementing more structure to improve work-life balance. They often found it challenging to implement, as the pressure to work was too high or they were unable mentally disconnect from their work. It seems the many entrepreneurial requirements for success present many work duties and responsibilities that become hard to avoid. Resulting in an increased investment of time and resources, increasing the streamers workload and their ability to separate work-time from leisure-time.

Based on the conservation of resources theory (Hobfoll, 1989), it would become important for the streamers to conserve access to the resources accumulated through their efforts. Viewers are a source of social support, revenue, financial stability and a symbol of social status. Leading them to be one of the most valuable resources a streamer could have. The primacy of loss principle indicates the harmful consequences related to losing viewers, are greater than the benefits of gaining viewers (Hobfoll, 1989). In accordance with the findings, streamers seem to invest a significant amount of resources to prevent the loss of viewers. Supporting the principle of resource investment (Halbesleben et al., 2014). One way streamers attempt to protect themselves from losing viewers, is by growing and maintaining a strong community. Another way could be through managing their brand, and focus on staying relevant to new viewers. These responsibilities and work duties pile on. Adding many extra layers of work they feel obligated to do, in addition to the entertainment they produce.

As they see it necessary to maintain the community and brand they have built (Hobfoll, 1989). A wish to satisfy the viewers could also motivate this extra-role performance. If their career success is dependent on the streamers ability to be socially active and responsive to the viewers, this could be understood as emotional labour (Ashforth & Humphrey, 1993; Woodcock & Johnson, 2019) The streamers however, stated that their viewer interaction, independent of frequency and duration. Was often genuine and something they looked forward to. With their community and viewers, they stated they were always able to be themselves and express true emotions. This indicates there are little surface-acting and deep-acting going on, as they have no need to regulate emotions (Totterdell & Holman, 2003). Their interaction can rather be considered a resource, as automatic regulation related to positive emotions is linked with employee well-being (Martínez-Iñigo et al., 2007). However,

all the interaction can require some attentional deployment. Emotional labour that shifts the streamers attentional focus away from other work tasks, such as gaming or creating entertainment. Are linked with negative outcome on employee well-being (Hesmondhalgh & Baker, 2008). All these factors put together, where they try to maintain a career by satisfying the viewers. Seem to overall put a strain on the live streamers and increase their workload.

According to the JD-R model, the outcome of experienced job strain such as high workload can be mitigated by the availability of job resources (Bakker & Demerouti, 2017). Considering the streamers' access to personal resources such as passion and interest for gaming, in combination with strong social support from viewers. It is plausible the job resources are mitigating parts of the health impairment processes induced by high workload and poor work-life balance. As independent entrepreneurs, live streamers have no management responsible for overseeing that they maintain healthy and sustainable working conditions. To date, there are no laws that regulate the working hours of gig-workers and self-employed individuals (Todolí-Signes, 2017). Meaning it is up to the live streamers themselves to maintain good working conditions. Job crafting can facilitate in this, but the streamers must exercise their autonomy to create favourable work conditions for themselves (Tims et al., 2016). Which some streamers seemed to struggle with. Interestingly, the more experienced live streamers, had taken responsibility for their own work conditions to a larger degree. They actively tried to create a better work-life balance by reducing hours worked and taking routinely breaks. They usually had to first experience symptoms of severe stress or burnout, before they were motivated enough to change their work environment. By anecdotal evidence, the informants knew of several live streaming careers ending because of burnout or mental struggles. It is probable high workload and poor work-life balance, in combination with other stressors, can lead to a negative loss spiral that's hard to escape (Demerouti et al., 2004). As the informants who had experience with work-life imbalance, changed the work conditions to something more sustainable. It's possible this inclined my group of informants, to a survivorship bias (Brown et al., 1992). Liao et al.'s (2008) paper suggest social and financial capital, has little to no influence on discontinuance in technology-based entrepreneurs. Another study done by Cardon et al., (2005), shows the importance of passion and its significant positive impact on well-being in entrepreneurs. Following this line of arguments, choosing to become a live streamer without enough personal resources (e.g. passion, motivation, interest, self-efficacy) to keep one motivated and structured over time, might introduce severe challenges to their entrepreneurship.

### **The mechanism behind audience demands and autonomy**

As live streamers are self-employed and can decide what, how, and when to conduct their work assignments, it should define them as workers with high autonomy (Breugh, 2016). The informants contradicted this in their statements, as they perceived a lack of freedom and self-governance in their job, even though they knew they should have it. These patterns of high autonomy, but expressions of it not being a viable source, is consistent with the vitamin model proposed by Warr, (1994). One of Warr's (1994) propositions is that too many responsibilities to manage and oversee can lead to passive pressure. As streamers have a lot of entrepreneurial duties and responsibilities to attend to in a rapidly changing environment (E.g., managing community, creating contemporary content, networking, finances). They must constantly arrange the job to fit these changes. The autonomy that inherently should give the streamers flexibility, could then become a burden and a stressor (Meyerding, 2015). This is confirmed by the live streamers' testimonies of never-ending creative cycles, and constant change to how to best present themselves and interact with the viewers, almost to a level of perfectionism. It seems the streamers out of necessity to keep up with the changing market environment, have complex job tasks that are hard to get familiar with.

Their lack of reported autonomy could also be a result of viewer demands promoting job insecurity. Research done by Sjöblom et al., (2017) show most viewers on live streaming platforms, prioritize content type over an individual streamer. This implies that if the streamers do not create a specific type of content that satisfies the demands of the viewers, it could be a detriment to their viewer numbers. Viewer numbers are just measurements of superficial quality, but it shares many similarities with a reputation system that rates gig-workers (Benson et al., 2019). In the live streamers case, this means viewer numbers and chats impose supervision that allows viewers to evaluate the streamers' product and leave direct or indirect feedback. The viewers can then indirectly provoke job demands and job insecurity through this feedback. This can then pressure the streamers to conform to the entertainment needs of contemporary Internet culture (Sjöblom et al., 2017). This pressure to conform, often led the streamers to be categorized as a certain type by the viewers and community. And felt they could only create the content viewers wanted to see. This uncertainty evoked fear of losing their ability to maintain a career with their current content over a period. Leading to further uncertainty around their ability to adapt if they had to change their approach. Qualitative and quantitative job insecurity is correlated with higher turnover intention and lower job satisfaction (Hellgren et al., 1999). Ultimately this job insecurity seems to stem from low predictability and low external control. Ambiguity is significantly

and negatively correlated to job crafting (Dierdorff & Jensen, 2018); reaffirming that the informants would become less interested in using their autonomy to change job tasks if they feel uncertain about the outcome. Promoting the streamers to stay with their current job tasks as there is a high risk related to change. Dierdorff and Jensen, (2018) confirms that job crafting behaviour is usually done when the individual sees clear benefits to the changes they make. Which makes sense as to why the streamers only changed their work-environment after experiencing burnout. Their lack of experience made it hard to weigh the benefits of job crafting until they knew the consequences of poor working conditions.

The ambiguity, lack of predictability, viewer demands, and high job insecurity can seem to immobilize the streamers autonomy (Ballou, 1998). It is a critical distinction between choosing how to best achieve a satisfying result, and being an agent of freedom acting on one's own accord (Ballou, 1998). If the streamers by financial reasons do not have the luxury of choice to change their schedule, content or other aspects of their work. It is possible the autonomy and flexibility granted as a self-employed streamer, does not allow their actions and decisions to be consistent with their own internal interests and values. Delaney and Royal, (2017) highlight that not all motivation is equal. Motivation deriving from external factors, such as viewer demands are critical for steering efforts towards certain goals, but not strongly linked to well-being. Motivation from internal systems that align with one's identity and value, are on the other hand strongly linked with personal well-being (Delaney & Royal, 2017). Implying that if streamers can easily become stuck in their entrepreneurial venture, where they are pigeonholed to a specific type of game or content. If this content is not aligned with their internal values and interest, they are at risk of losing personal resources they started out within this career, which can be understood as more harmful (Halbesleben et al., 2014).

One of the additional implications of being pigeonholed by the viewer demands, is highlighted by the Dodd and Ganster (1996). Where they found low-variety work with high autonomy had little to no impact on job satisfaction. As stated by the informants, interacting with the same video game in the same manner over extended periods of time becomes boring. The act of having to play the same game over time can become a low-variety task, resulting in fading satisfaction from a task that was initially interesting and enjoyable.

However, the statements also suggest the live streamers desired this job because they believed the job was suited for their interests, values, and personality. The streamers pursued the career of their own volition, with a rationale, clear goal, and a passion for the content they wanted to create. They did so without any preceding dependency of the profession. If the streamers are pressured to keep creating the same type of content over the duration of their



career, it is highly likely the content they started out with, and built niche community around, is strongly linked to their identity and personal values. This person-job fit is shown to be a helpful internal motivator and essential in meaning creation (Tims et al., 2016).

### **Viewers as social support and facilitator of meaning**

Despite the informants stating the live streaming industry promotes poor work-life balance, job insecurity, lack of foresight, and low task autonomy. They still considered the live streaming career as very engaging and attractive. According to JD-R Theory, the exposure to job demands, such as high workload and job insecurity does not need to be a detriment to the workers' well-being. If they have job resources available to mitigate the health impairing process (Bakker & Demerouti, 2017). By the informants' account, the social support and meaning deriving from the viewer interaction was the strongest motivator to continue with their career.

In contrast to many other media professions, there are few who can parallel the amount of interaction live streamers have with their fanbase and viewers (Kassing & Sanderson, 2010). Though much of the interaction is through digital mediums, computer-mediated communication is proven to elicit many social benefits (Hess & Warren, 2008; Steverink & Lindenberg, 2006). Based on the informants, the viewers' support, and empowerment is a source of increased self-esteem and meaningfulness from their work. This can facilitate improved self-esteem by empowering the live streamers with support and recognition of their efforts (Steverink & Lindenberg, 2006).

One of the basic ways to derive meaning from relationships is that by interacting with other people, we can get a feeling of belonging (Lavigne et al., 2011). According to Lavigne et al., (2011) sharing experiences with similar people and having supportive interaction could create a strong communion, and they expect this to strongly correlate with experiences of meaningfulness. The gaming culture, along with many other technological leisure activities, have traditionally been understood as lonely activities (Schiano et al., 2014). The live streamers use of interactive tools, has enabled digital communication with both collaborators and viewers at a uniquely high level. This has transformed these activities into something social they can share and experience with others who have similar passions and interests. Making the live streaming profession an efficient source of social and group identification (Leach et al., 2008). Resulting in the streamers achieving feelings of affection and belongingness, leading to meaningfulness deriving from their work (Compton, 2000). This is also reflected in the findings, where live streamers reported the interaction with their core

community and regular viewers was one of the most impactful and meaningful parts of their job.

Most viewers are not to be mistaken for peers in the work setting, live streamers must acknowledge that they are selling a service to a group of people, and not a single individual. Making most interactions with the audience shallow and trivial, making it difficult to form strong mutual social bonds (Rojek, 2015). This should not exclude the facilitation of communion (Robertson, 2013), but might reduce the feeling of social identification with many of the viewers. In addition, as most of the digital interaction they have with the audience is mostly responsive, it's not to be considered a substitute for real physical interaction (J. Taylor & Gibson, 2017). Thus, to improve the facilitation of more meaningful social support and relationships, it's important to find a balance between digital and physical interaction. Nevertheless, the streamers mentioned solid friendships, and in some cases, romantic relationships developing from the strong connections they could make with the viewers. Stephens et al., (2011) highlights the importance of high-quality human connection at work. High-quality connections are much more meaningful than weak connections, but also requires more energy and time to create and maintain (Stephens et al., 2011). Which might be a contributor to the high workload related to community management. The value of high-quality connections is also reflected in the informants' early career goals. Fame and recognition were often a motivator early on, but as this was achieved. The low-quality relationships pertaining to microcelebrity and parasocial relationships became insignificant. Stephens et al., (2011) suggested low-quality connections are not only less beneficial than high-quality connections, but it could also be a detriment to one's well-being and meaning creation as it can be a source of stress. Nevertheless, these low-quality relationships do not directly promote meaning, but can give recognition and social status to the streamers, which is correlated with well-being (Yeoman, 2014).

Kahn (1990) suggested people finding themselves in high-status roles, tend to feel valued and meaningful because they are in a position where they can influence others. Making social status often closely related to task significance. As with streamers, it is not inherently just the job that they do that brings meaning, it is also the identity and status the job carries. Predictably, within each streamer's community, they are viewed and understood as role models, leaders and celebrities. The informant's social status within the community is a source of meaningfulness itself (Robertson, 2013). But they can also acquire meaning from knowing people are there watching. Viewers willingly seeking out a streamer to be entertained, listen, and interact. Could make the job more significant because it has the

potential to positively affect many viewers (Kahn, 1990). Task significance in the literature on meaning creation; refers to the job causing improvements to the well-being of others, or having a significant impact upon others' lives (Hackman & Oldham, 1975). Hackman & Oldham, (1975) proposed task significance was an important part of creating meaning at work.

Pierce et al., (2009) suggest workers who experience task significance, are more likely to put effort into high-quality performance. This is to further apply their ability and skills to improve the wellbeing of others. In contrast to many other media businesses, the audience is normally just quantified into numbers (Hesmondhalgh & Baker, 2008). With the streamers' constant interaction and communication with the viewers, their influence and reach become very tangible and evident. Recognizing that their job has high task significance and can positively impact the lives of others, live streamers are in several creative ways trying to apply their position and skills to further improve the well-being of their audience. Signs of altruistic behaviour is common, and many live streamers are eager to use their own status and network connections to spread awareness, start fundraisers, or promote fundraisers they find meaningful (Di Pietro et al., 2019). This role model behaviour could also be externally motivated. As the display of a certain image could be understood beneficial to their brand. The viewers are also pressuring the streamers to conform to social norms, as any unacceptable behaviour could lead to negative feedback and loss of viewers. This is very similar to corporate social responsibility (CSR) where companies and businesses are expected by the consumers to take responsibility for their impact on communities, societies, environment and people (Henderson, 2007). This does not deprive the actions of their impact, but if the motivations are external, the meaningfulness gained are considered to be lower (Delaney & Royal, 2017).

When considering the outcome of all the different working conditions of a live streamer, it should be viewed as a dynamic relationship between job resources and job demands (Bakker & Demerouti, 2017). Considering the streamers many challenges with their occupation, but persistence to continue with it. Indicate they are driven by a strong motivational process. This does not necessarily eliminate the pressures and harmful effects of their demands. And the streamers themselves have to figure out how to navigate this challenging psycho-social environment.

## **Strengths and limitations**

This is the first study to investigate the unique working conditions of professional live streamers and how the audience impacts their psycho-social work environment. The informants were streamers with extensive experience and understanding of their profession and what it entails to be a professional in this industry. By using the job demands resource theory as a framework the results add unique insight about what it entails to be a live streamer.

This study has several limitations, especially related to the sample. Based on the 2.9% response rate, it could be my sample is highly biased, and my findings are only representative of a small portion of live streamers. The sample of four males shows a lack of both size and gender diversity. With the small sample size, it is hard to be certain if enough data were acquired (Sandelowski, 1995). However, the saturation point on almost all interview topics seemed to be achieved by the fourth in-depth interview.

Having a gender diverse sample would have allowed me to explore the difference in viewer interaction between the genders. Anecdotal evidence from the interviews indicate female streamers are more exposed to harassment, but also stronger viewer worship. This can strongly impact the way men and women perceive their community interaction. It would give me an opportunity to look at gender-specific differences such as work-life balance (Cinamon & Rich, 2002).

All informants focused on gaming as their main entertainment category. There are many other categories of professional live streamers to explore. Gaming has a strong tendency to limit the streamer to a specific work environment because of the heavy and stationary equipment required. This can suggest that streamers in other content categories experience a larger difference in environments between work- and personal life.

There are several reasons as to why the sampling was so difficult. Live streamers could be understood as microcelebrities, where third parties and audiences compete for their time and attention. Making the live streamers more selective and careful when managing whom to spend their time with. If they were contacted while live-streaming, some might have felt compelled to be polite and interested in front of the audience. When they in fact had no intentions of participating in an interview. In addition to this, several streamers expressed some scepticism towards the legitimacy of the project at first glance. With the anonymity of the Internet, it can be difficult for streamers to separate genuine research from viewers or fans who want a conversation with them under false pretence. Taken together, the results of this study should be considered with these limitations in mind. Making a reservation for the extent to how these results can be generalized.

## **Future research**

Given the rapid growth streamers and viewers in this industry, it becomes especially relevant to further chart this profession. The results imply streamers direly need help and regulation to navigate the challenges of the profession. More research from several perspectives related to the challenges and benefits of this work could be essential for achieving this. Research on live streamers is also an exemplary source to gain more insight into how young people navigate and survive in the emerging digital gig-market. Further understanding of what type of personalities, values and skills that are successful in live streaming. Could clarify where the labour force is heading.

## **Conclusion**

Live streamers are finding themselves in a market strongly driven by consumer demands that are rapidly changing. In this thesis, I have explored the unique psycho-social work environment of live streamers. The social nature of their work and interaction with their community, generate a dynamic psycho-social work environment. This environment consists of many challenges, but also unique benefits related to meaningfulness that has not been explored before in this context. Given the informants' balance between job demands and job resources, they all seem to end up on the positive side (Bakker & Demerouti, 2017). Stating the work is often more beneficial than harmful to them. This does not exclude the many challenges and pressures they face in their career, and this thesis has tried to explore both parts extensively. I believe the quote by P4 sums this balance up nicely *“We never want people to think what we are doing, is something we take for granted, cause it is not. I could lose everything tomorrow and go back to work for starbucks again. But when we do this, it makes us want to work that much harder, because we have a unique opportunity to influence the lives of people who watch us everyday for the better”*. The streamers dedicate large parts of their lives to something they are very passionate about. Despite the job insecurity, high workload, viewer demands, and the occasionally poor work-life balance. They are just glad they get to have this opportunity to do something they feel are so immensely meaningful to them.

## References

- Anderson, C., Spataro, S. E., & Flynn, F. J. (2008). Personality and organizational culture as determinants of influence. *The Journal of Applied Psychology, 93*(3), 702–710.  
<https://doi.org/10.1037/0021-9010.93.3.702>
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional Labor in Service Roles: The Influence of Identity. *Academy of Management Review, 18*(1), 88–115.  
<https://doi.org/10.5465/amr.1993.3997508>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328.  
<https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285.  
<https://doi.org/10.1037/ocp0000056>
- Ballou, K. A. (1998). A concept analysis of autonomy. *Journal of Professional Nursing, 14*(2), 102–110. [https://doi.org/10.1016/S8755-7223\(98\)80038-0](https://doi.org/10.1016/S8755-7223(98)80038-0)
- Benson, A., Sojourner, A., & Umyarov, A. (2019). Can Reputation Discipline the Gig Economy? Experimental Evidence from an Online Labor Market. *Management Science, 66*(5), 1802–1825. <https://doi.org/10.1287/mnsc.2019.3303>
- Blustein, D. L., Kenna, A. C., Gill, N., & DeVoy, J. E. (2008). The psychology of working: A new framework for counseling practice and public policy. *The Career Development Quarterly, 56*(4), 294–308. <https://doi.org/10.1002/j.2161-0045.2008.tb00095.x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Breaugh, J. A. (2016). The Measurement of Work Autonomy: *Human Relations*.  
<https://doi.org/10.1177/001872678503800604>

- Brennen, J. S., & Kreiss, D. (2016). Digitalization. In *The International Encyclopedia of Communication Theory and Philosophy* (pp. 1–11). American Cancer Society.  
<https://doi.org/10.1002/9781118766804.wbiect111>
- Bresnahan, M. J., & Murray-Johnson, L. (2002). The Healing Web. *Health Care for Women International*, 23(4), 398–407. <https://doi.org/10.1080/0739933029008964>
- Brown, S. J., Goetzmann, W., Ibbotson, R. G., & Ross, S. A. (1992). Survivorship Bias in Performance Studies. *The Review of Financial Studies*, 5(4), 553–580.  
<https://doi.org/10.1093/rfs/5.4.553>
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2005). Entrepreneurial passion: The nature of emotions in entrepreneurship. *Academy of Management Proceedings*, 2005(1), G1–G6. <https://doi.org/10.5465/ambpp.2005.18778641>
- Cinamon, R. G., & Rich, Y. (2002). Gender Differences in the Importance of Work and Family Roles: Implications for Work–Family Conflict. *Sex Roles*, 47(11), 531–541.  
<https://doi.org/10.1023/A:1022021804846>
- Claypool, M., Farrington, D., & Muesch, N. (2015). Measurement-based analysis of the video characteristics of Twitch.tv. *2015 IEEE Games Entertainment Media Conference (GEM)*, 1–4. <https://doi.org/10.1109/GEM.2015.7377227>
- Compton, W. C. (2000). Meaningfulness as a Mediator of Subjective Well-Being. *Psychological Reports*, 87(1), 156–160. <https://doi.org/10.2466/pr0.2000.87.1.156>
- Crompton, R., & Lyonette, C. (2006). Work-Life ‘Balance’ in Europe. *Acta Sociologica*, 49(4), 379–393. <https://doi.org/10.1177/0001699306071680>
- De Jonge, J., & Schaufeli, W. B. (1998). Job characteristics and employee well-being: A test of Warr’s Vitamin Model in health care workers using structural equation modelling. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 19(4), 387–407.

[https://doi.org/10.1002/\(SICI\)1099-1379\(199807\)19:4<387::AID-JOB851>3.0.CO;2-9](https://doi.org/10.1002/(SICI)1099-1379(199807)19:4<387::AID-JOB851>3.0.CO;2-9)

- Delaney, M. L., & Royal, M. A. (2017). Breaking Engagement Apart: The Role of Intrinsic and Extrinsic Motivation in Engagement Strategies. *Industrial and Organizational Psychology, 10*(1), 127–140. <https://doi.org/10.1017/iop.2017.2>
- Deleidi, M., Paternesi Meloni, W., & Stirati, A. (2019). Tertiarization, productivity and aggregate demand: Evidence-based policies for European countries. *Journal of Evolutionary Economics*. <https://doi.org/10.1007/s00191-019-00647-6>
- Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work–home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behavior, 64*(1), 131–149. [https://doi.org/10.1016/S0001-8791\(03\)00030-7](https://doi.org/10.1016/S0001-8791(03)00030-7)
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. <https://doi.org/10.1037//0021-9010.86.3.499>
- Di Pietro, F., Spagnoletti, P., & Prencipe, A. (2019). Fundraising Across Digital Divide: Evidences from Charity Crowdfunding. In A. Lazazzara, R. C. D. Nacamulli, C. Rossignoli, & S. Za (Eds.), *Organizing for Digital Innovation* (pp. 111–124). Springer International Publishing. [https://doi.org/10.1007/978-3-319-90500-6\\_9](https://doi.org/10.1007/978-3-319-90500-6_9)
- Dierdorff, E. C., & Jensen, J. M. (2018). Crafting in context: Exploring when job crafting is dysfunctional for performance effectiveness. *Journal of Applied Psychology, 103*(5), 463–477. <https://doi.org/10.1037/apl0000295>
- Dodd, N. G., & Ganster, D. C. (1996). The interactive effects of variety, autonomy, and feedback on attitudes and performance. *Journal of Organizational Behavior, 17*(4),



329–347. [https://doi.org/10.1002/\(SICI\)1099-1379\(199607\)17:4<329::AID-JOB754>3.0.CO;2-B](https://doi.org/10.1002/(SICI)1099-1379(199607)17:4<329::AID-JOB754>3.0.CO;2-B)

Donovan, S., Bradley, D., & Shimabukuru, J. (2016). What Does the Gig Economy Mean for Workers? *Federal Publications*. <https://doi.org/10.1287/mnsc.2019.3303>

Dunn, M. (2017). Digital Work: New Opportunities or Lost Wages? *American Journal of Management*, 17(4), Article 4. <https://doi.org/10.33423/ajm.v17i4.1733>

Eichhorst, W., Hinte, H., Rinne, U., & Tobsch, V. (2017). How big is the gig? Assessing the preliminary evidence on the effects of digitalization on the labor market. *Mrev Management Revue*, 28(3), 298–318. <https://doi.org/10.5771/0935-9915-2017-3-298>

Fairlie, P. (2016). Meaningful work is healthy work. In *The Fulfilling Workplace* (pp. 207–226). Routledge. <https://doi:10.13140/2.1.4825.4086>

Field, L., & Buitendach, J. (2010). Happiness, work engagement and organisational commitment of support staff at a tertiary education institution in South Africa. *SA Journal of Industrial Psychology*, 37, 01–10. <https://doi.org/10.4102/sajip.v37i1.946>

Friedman, G. (2014). Workers without employers: Shadow corporations and the rise of the gig economy. *Review of Keynesian Economics*, 2(2), 171–188. <https://doi.org/10.4337/roke.2014.02.03>

Geldenhuys, M., Laba, K., & Venter, C. M. (2014). Meaningful work, work engagement and organisational commitment. *SA Journal of Industrial Psychology*, 40(1), 01–10. <https://doi.org/10.4102/sajip.v40i1.1098>

Greeven, C. S., & Williams, S. P. (2017). Enterprise collaboration systems: Addressing adoption challenges and the shaping of sociotechnical systems. *International Journal of Information Systems and Project Management*, 5(1), 5–23. <https://doi.org/10.12821/ijispm050101>

- Gros, D., Wanner, B., Hackenholt, A., Zawadzki, P., & Knautz, K. (2017). World of Streaming. Motivation and Gratification on Twitch. In G. Meiselwitz (Ed.), *Social Computing and Social Media. Human Behavior* (pp. 44–57). Springer International Publishing. [https://doi.org/10.1007/978-3-319-58559-8\\_5](https://doi.org/10.1007/978-3-319-58559-8_5)
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, *60*(2), 159–170. <https://doi.org/10.1037/h0076546>
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, *22*(3), 224–241. <https://doi.org/10.1080/02678370802379432>
- Halbesleben, J. R. B., Neveu, J.-P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR”: Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management*. <https://doi.org/10.1177/0149206314527130>
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, *65*(1), 1–13. <https://doi.org/10.1016/j.jvb.2003.10.006>
- Hasan, M. R., Jha, A. K., & Liu, Y. (2018). Excessive use of online video streaming services: Impact of recommender system use, psychological factors, and motives. *Computers in Human Behavior*, *80*, 220–228. <https://doi.org/10.1016/j.chb.2017.11.020>
- Healy, J., Nicholson, D., & Pekarek, A. (2017). Should we take the gig economy seriously? *Labour & Industry: A Journal of the Social and Economic Relations of Work*, *27*(3), 232–248. <https://doi.org/10.1080/10301763.2017.1377048>
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A Two-dimensional Approach to Job Insecurity: Consequences for Employee Attitudes and Well-being. *European Journal*

- of Work and Organizational Psychology*, 8(2), 179–195.  
<https://doi.org/10.1080/135943299398311>
- Henderson, J. C. (2007). Corporate social responsibility and tourism: Hotel companies in Phuket, Thailand, after the Indian Ocean tsunami. *International Journal of Hospitality Management*, 26(1), 228–239. <https://doi.org/10.1016/j.ijhm.2006.02.001>
- Hesmondhalgh, D., & Baker, S. (2008). Creative Work and Emotional Labour in the Television Industry. *Theory, Culture & Society*, 25(7–8), 97–118.  
<https://doi.org/10.1177/0263276408097798>
- Hess, D., & Warren, D. E. (2008). The Meaning and Meaningfulness of Corporate Social Initiatives. *Business and Society Review*, 113(2), 163–197.  
<https://doi.org/10.1111/j.1467-8594.2008.00317.x>
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *The American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Holford, W. D. (2019). The future of human creative knowledge work within the digital economy. *Futures*, 105, 143–154. <https://doi.org/10.1016/j.futures.2018.10.002>
- Horton, D., & Wohl, R. R. (1956). Mass Communication and Para-Social Interaction. *Psychiatry*, 19(3), 215–229. <https://doi.org/10.1080/00332747.1956.11023049>
- Hustad, E. (2017). Knowledge Management in Distributed Work: Implications for Boundary Spanning and its Design. *Journal of Integrated Design and Process Science*, 21(1), 25–41. <https://doi.org/10.3233/jid-2017-0011>
- Iqbal, M. (2020). *Twitch Revenue and Usage Statistics (2020)*. Business of Apps.  
<https://www.businessofapps.com/data/twitch-statistics/>
- Jeung, D.-Y., Kim, C., & Chang, S.-J. (2018). Emotional Labor and Burnout: A Review of the Literature. *Yonsei Medical Journal*, 59(2), 187–193.  
<https://doi.org/10.3349/ymj.2018.59.2.187>

- Johnson, M. R. (2019). Inclusion and exclusion in the digital economy: Disability and mental health as a live streamer on Twitch.tv. *Information, Communication & Society*, 22(4), 506–520. <https://doi.org/10.1080/1369118X.2018.1476575>
- Julsrud, T. E., Bakke, J. W., & Bakke, J. W. (2017, July 28). *Trust, Friendship, and Expertise: The Use of Email, Mobile Dialogues, and SMS to Develop and Sustain Social Relations in a Distributed Work Group*. The Reconstruction of Space and Time; Routledge. <https://doi.org/10.4324/9781315134499-8>
- Kahn, W. A. (1990). PSYCHOLOGICAL CONDITIONS OF PERSONAL ENGAGEMENT AND DISENGAGEMENT AT WORK. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Kassing, J. W., & Sanderson, J. (2010). Fan–Athlete Interaction and Twitter Tweeting Through the Giro: A Case Study. *International Journal of Sport Communication*, 3(1), 113–128. <https://doi.org/10.1123/ijsc.3.1.113>
- Kassing, J. W., & Sanderson, J. (2015). Playing in the New Media Game or Riding the Virtual Bench: Confirming and Disconfirming Membership in the Community of Sport. *Journal of Sport and Social Issues*, 39(1), 3–18. <https://doi.org/10.1177/0193723512458931>
- Kinman, G., & Jones, F. (2008). A Life Beyond Work? Job Demands, Work-Life Balance, and Wellbeing in UK Academics. *Journal of Human Behavior in the Social Environment*, 17(1–2), 41–60. <https://doi.org/10.1080/10911350802165478>
- Kubicek, B., Paškvan, M., & Bunner, J. (2017). The Bright and Dark Sides of Job Autonomy. In C. Korunka & B. Kubicek (Eds.), *Job Demands in a Changing World of Work: Impact on Workers' Health and Performance and Implications for Research and Practice* (pp. 45–63). Springer International Publishing. [https://doi.org/10.1007/978-3-319-54678-0\\_4](https://doi.org/10.1007/978-3-319-54678-0_4)

- Lavigne, G. L., Vallerand, R. J., & Crevier-Braud, L. (2011). The Fundamental Need to Belong: On the Distinction Between Growth and Deficit-Reduction Orientations. *Personality and Social Psychology Bulletin*, 37(9), 1185–1201. <https://doi.org/10.1177/0146167211405995>
- Lazányi, K. (2010). WHO BENEFITS FROM EMOTIONAL LABOUR? *Applied Studies In Agribusiness And Commerce*, 4(3–4), 71–74. <https://doi.org/10.19041/Apstract/2010/3-4/11>
- Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, 95(1), 144–165. <https://doi.org/10.1037/0022-3514.95.1.144>
- Liao, J. (Jon), Welsch, H., & Moutray, C. (2008). Start-Up REsources and Entrepreneurial Discontinuance: The Case of Nascent Entrepreneurs. *Journal of Small Business Strategy*, 19(2), 1–16. <https://doi.org/10.4337/9781849806855.00009>
- Lu, Z., Xia, H., Heo, S., & Wigdor, D. (2018). You Watch, You Give, and You Engage: A Study of Live Streaming Practices in China. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–13. <https://doi.org/10.1145/3173574.3174040>
- Martínez-Iñigo, D., Totterdell, P., Alcover, C. M., & Holman, D. (2007). Emotional labour and emotional exhaustion: Interpersonal and intrapersonal mechanisms. *Work & Stress*, 21(1), 30–47. <https://doi.org/10.1080/02678370701234274>
- Menger, P.-M. (2001). Artists as workers: Theoretical and methodological challenges. *Poetics*, 28(4), 241–254. [https://doi.org/10.1016/S0304-422X\(01\)80002-4](https://doi.org/10.1016/S0304-422X(01)80002-4)

- Meyerding, S. G. H. (2015). Job characteristics and job satisfaction: A test of Warr's vitamin model in German horticulture. *The Psychologist-Manager Journal*, 18(2), 86–107.  
<https://doi.org/10.1037/mgr0000029>
- Moore, C. (2016). The Future of Work: What Google Shows Us About the Present and Future of Online Collaboration. *TechTrends*, 60(3), 233–244. <https://doi.org/10.1007/s11528-016-0044-5>
- Moore, M. R. (2010). Adaptation and New Media. *Adaptation*, 3(2), 179–192.  
<https://doi.org/10.1093/adaptation/apq010>
- Nam, T. (2014). Technology Use and Work-Life Balance. *Applied Research in Quality of Life*, 9(4), 1017–1040. <https://doi.org/10.1007/s11482-013-9283-1>
- Perez, M. (2020). *Report: Amazon's Twitch Not Meeting Ad Revenue Expectations*. Forbes.  
<https://www.forbes.com/sites/mattperez/2020/01/08/report-amazons-twitch-not-meeting-ad-revenue-expectations/>
- Pierce, J. L., Jussila, I., & Cummings, A. (2009). Psychological ownership within the job design context: Revision of the job characteristics model. *Journal of Organizational Behavior*, 30(4), 477–496. <https://doi.org/10.1002/job.550>
- Robertson, K. M.-P. (2013). *Doing meaning: A theoretical and grounded exploration of workplace relationships and meaningful work* [Thesis, Beedie School of Business Faculty: Segal Graduate School]. <http://summit.sfu.ca/item/13489>
- Rojek, C. (2015). *Presumed Intimacy: Parasocial Interaction in Media, Society and Celebrity Culture*. John Wiley & Sons.
- Rosenthal-von der Pütten, A. M., Hastall, M. R., Köcher, S., Meske, C., Heinrich, T., Labrenz, F., & Ocklenburg, S. (2019). “Likes” as social rewards: Their role in online social comparison and decisions to like other People's selfies. *Computers in Human Behavior*, 92, 76–86. <https://doi.org/10.1016/j.chb.2018.10.017>

- Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, 91–127. <https://doi.org/10.1016/j.riob.2010.09.001>
- Rubin, R. B., & McHugh, M. P. (1987). Development of parasocial interaction relationships. *Journal of Broadcasting & Electronic Media*, 31(3), 279–292. <https://doi.org/10.1080/08838158709386664>
- Rückriem, g, Ang-Stein, C., & Erdmann, J. w. (2011). *Understanding Media Revolution – How digitalization is to be considered*. Tätigkeitstheorie: E-Journal for Activity Theoretical Research in Germany. <https://pdfs.semanticscholar.org/e9cf/76990cebfc4d0340f8451ddb0f903de497a6.pdf>
- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health*, 18(2), 179–183. <https://doi.org/10.1002/nur.4770180211>
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893–917. <https://doi.org/10.1002/job.595>
- Schiano, D. J., Nardi, B., Debeauvais, T., Ducheneaut, N., & Yee, N. (2014). The “lonely gamer” revisited. *Entertainment Computing*, 5(1), 65–70. <https://doi.org/10.1016/j.entcom.2013.08.002>
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., West, C. P., Sloan, J., & Oreskovich, M. R. (2012). Burnout and Satisfaction With Work-Life Balance Among US Physicians Relative to the General US Population. *Archives of Internal Medicine*, 172(18), 1377–1385. <https://doi.org/10.1001/archinternmed.2012.3199>
- Sjöblom, M., & Hamari, J. (2017). Why do people watch others play video games? An empirical study on the motivations of Twitch users. *Computers in Human Behavior*, 75, 985–996. <https://doi.org/10.1016/j.chb.2016.10.019>

- Sjöblom, M., Törhönen, M., Hamari, J., & Macey, J. (2017). Content structure is king: An empirical study on gratifications, game genres and content type on Twitch. *Computers in Human Behavior*, *73*, 161–171. <https://doi.org/10.1016/j.chb.2017.03.036>
- Sjöblom, M., Törhönen, M., Hamari, J., & Macey, J. (2019). The ingredients of Twitch streaming: Affordances of game streams. *Computers in Human Behavior*, *92*, 20–28. <https://doi.org/10.1016/j.chb.2018.10.012>
- Smith, M. D., & Telang, R. (2016). *Streaming, Sharing, Stealing: Big Data and the Future of Entertainment*. MIT Press.
- Spangler, T. (2018, March 15). Drake Shows Up on Twitch, Breaks Live-Streaming Record. *Variety*. <https://variety.com/2018/digital/news/drake-shows-up-on-twitch-breaks-live-streaming-record-1202727867/>
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring Meaningful Work: The Work and Meaning Inventory (WAMI). *Journal of Career Assessment*, *20*(3), 322–337. <https://doi.org/10.1177/1069072711436160>
- Stephens, J. P., Heaphy, E., & Dutton, J. E. (2011, August 22). *High-quality Connections*. The Oxford Handbook of Positive Organizational Scholarship. <https://doi.org/10.1093/oxfordhb/9780199734610.013.0029>
- Steverink, N., & Lindenberg, S. (2006). Which social needs are important for subjective well-being? What happens to them with aging? *Psychology and Aging*, *21*(2), 281–290. <https://doi.org/10.1037/0882-7974.21.2.281>
- Strauss, K., & Parker, S. K. (2014). Effective and sustained proactivity in the workplace: A self-determination theory perspective. *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*, 50–71. <https://doi.org/10.1093/oxfordhb/9780199794911.013.007>



- Taylor, J., & Gibson, L. K. (2017). Digitisation, digital interaction and social media: Embedded barriers to democratic heritage. *International Journal of Heritage Studies*, 23(5), 408–420. <https://doi.org/10.1080/13527258.2016.1171245>
- Taylor, N. T. (2016). Now you're playing with audience power: The work of watching games. *Critical Studies in Media Communication*, 33(4), 293–307. <https://doi.org/10.1080/15295036.2016.1215481>
- Tims, M., Derks, D., & Bakker, A. B. (2016). Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior*, 92, 44–53. <https://doi.org/10.1016/j.jvb.2015.11.007>
- Todolí-Signes, A. (2017). The 'gig economy': Employee, self-employed or the need for a special employment regulation? *Transfer: European Review of Labour and Research*, 23(2), 193–205. <https://doi.org/10.1177/1024258917701381>
- Totterdell, P., & Holman, D. (2003). Emotion regulation in customer service roles: Testing a model of emotional labor. *Journal of Occupational Health Psychology*, 8(1), 55–73. <https://doi.org/10.1037/1076-8998.8.1.55>
- Tuten, T. L., & Solomon, M. R. (2017). *Social Media Marketing*. SAGE.
- Twitch Statistics & Charts*. (2020). TwitchTracker. <https://twitchtracker.com/statistics>
- Uddin, W. S., & Naz, F. (2017). Digital and Traditional Media: A Comparative Study of Two Podiums. *Journal of Mass Communication Department, Dept of Mass Communication, University of Karachi*, 17. <http://jmcd-uok.com/index.php/jmcd/article/view/80>
- Vaag, J., Giæver, F., & Bjerkeset, O. (2014). Specific demands and resources in the career of the Norwegian freelance musician. *Arts & Health*, 6(3), 205–222. <https://doi.org/10.1080/17533015.2013.863789>

- Warr, P. (1994). A conceptual framework for the study of work and mental health. *Work & Stress*, 8(2), 84–97. <https://doi.org/10.1080/02678379408259982>
- Woodcock, J., & Johnson, M. R. (2019). The Affective Labor and Performance of Live Streaming on Twitch.tv. *Television & New Media*, 20(8), 813–823. <https://doi.org/10.1177/1527476419851077>
- Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2016). Advancing Qualitative Research Using Qualitative Data Analysis Software (QDAS)? Reviewing Potential Versus Practice in Published Studies using ATLAS.ti and NVivo, 1994–2013. *Social Science Computer Review*, 34(5), 597–617. <https://doi.org/10.1177/0894439315596311>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a Job: Revisioning Employees as Active Crafters of Their Work. *Academy of Management Review*, 26(2), 179–201. <https://doi.org/10.5465/amr.2001.4378011>
- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2003). INTERPERSONAL SENSEMAKING AND THE MEANING OF WORK. *Research in Organizational Behavior*, 25, 93–135. [https://doi.org/10.1016/S0191-3085\(03\)25003-6](https://doi.org/10.1016/S0191-3085(03)25003-6)
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, Careers, and Callings: People’s Relations to Their Work. *Journal of Research in Personality*, 31(1), 21–33. <https://doi.org/10.1006/jrpe.1997.2162>
- Yeoman, R. (2014). Conceptualising Meaningful Work as a Fundamental Human Need. *Journal of Business Ethics*, 125(2), 235–251. <https://doi.org/10.1007/s10551-013-1894-9>
- Zolides, A. (2017). Cult of Personalities: The Influence Economy of Digital Culture [Ph.D., The University of Wisconsin - Madison]. In *ProQuest Dissertations and Theses*. <https://search.proquest.com/docview/1951788500/abstract/48C768BAE9A4F3EPQ/1>