

LUBS3345 Dissertation

The gig-economy and the impact on the millennial generation

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Abstract

The gig-economy's rapid growth and the development of this employment relationship has meant there is a lack of in-depth research in this area. Working in the gig-economy has both advantages and disadvantages. Recent research has been focused on the clear disadvantages of the gig-economy, concentrating on unfair workers' employment rights. Existing literature has yet to explore the relationship from a specific generational viewpoint. This paper seeks to fill this gap and has sought to examine the employment relationship from the millennials perspective, meaning individuals born between 1980 and 2000. This research identifies that advantages from the millennials viewpoint tend to outweigh the disadvantages. This has been investigated using a survey-based quantitative methodology. The advantages of the gig-economy, namely flexibility, the ability to pursue entrepreneurial activities and control over ones work, are examined to find associations with the perceived benefits. The disadvantages, namely uncertain salary, lack of sick pay, holiday allowance and lack of other legal benefits are also examined to find associations with the perceived disadvantages. Analysis of the motivations on why the millennials enter the gig-economy revealed that this was because of the perceived advantages, in particular flexibility, rather than the lack of alternatives. It is considered that based on the findings of a strong desire for regulation and prevalent disadvantages, implementation of regulation on this employment relationship should take place.

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1. Introduction

1.1 Context

In recent years, the gig-economy has experienced exponential growth, leading to a rise in the concern for employee rights (De Stefano, 2015). Technology has transformed the way in which companies operate (Todolí-Signes, 2017). This has led to some companies having the capability to run their entire core business through the use of workers on a self-employed or freelance basis (Todolí-Signes, 2017). The International Labour Organisation (ILO) supervisory bodies have expressed their concern of the gig-economy on multiple occasions, highlighting its exclusion from employment laws (ILO, 2017). It is clear the gig-economy allows and exacerbates the effects of unequal bargaining power (Silberman & Irani, 2016 and Bergvall-Kåreborn & Howcroft, 2014).

With the amount of change taking place and the current uncertainty in contractual arrangements, it has to be expected that legal issues will arise. The decline in the traditional employment relationship has been stretched over the decades, from the introduction of subcontracting, labour hire, franchising and other forms of disguised employment relationships (Weil, 2010). This structured classification and clear emergence of new forms of employment relationships has led to this intermediate category of worker being created (De Stefano, 2015). Many individuals who work in the gig-economy fall into this category of a worker. The recent Taylor Review on Modern Working Practices examined the gig-economy and acknowledged the opportunities and advantages it offers. It highlights that these individuals must be protected to give workers in the gig-economy fairness and that a clear distinction is needed for those who are genuine workers (Taylor, 2016). The precarious employment relationship has led to the rights of gig-workers being questioned.

1.2 Research aims

This research aims to establish the impact of the gig-economy on workers and their rights with a particular focus on the millennial generation. It examines what motivates the millennials to enter the gig-economy and whether these individuals perceive the

advantages and disadvantages from a different perspective to the general population. This will lead on to consider the need and desire for increased regulations.

In examining what millennials value in an employment relationship, it will help to establish the extent to which they are being treated unfairly and if the advantages gained potentially outweigh the disadvantages. The research will help to highlight the overarching problems that the gig-economy is facing by bringing to light the advantages and disadvantages. By examining the millennials it may suggest who is perceiving the advantages and whether as a group they are being negatively impacted more so than others. The aim is to examine the varying impact, perceptions and attitudes of the millennial generation towards the gig-economy, whether they view this from a different perspective and help to establish the need for future regulation.

The remaining part of this research paper is set out as follows. In Chapter 2, previous literature on the gig-economy and its impact on the millennial generation will be reviewed. In Chapter 3, the methodology for the research will be reported. Chapter 4, the results, highlight important findings on the study. In Chapter 5, the discussion chapter the findings will be compared to the literature and future research recommendations will be made. To conclude, in Chapter 6, the key outcomes will be summarised.

2. Literature review

2.1 Introduction

The gig-economy is increasingly making an appearance on the political agenda. It has been subject to criticism and mixed opinion in regard to the employment laws around the failing to protect workers' rights (European Parliament, 2017 and Odgers, 2017).

There is no an overall consensus on the definition of the gig-economy (CIPD, 2017). It has been described as the performing of work by connection to customers and clients through a platform (Brinkley, 2016). It is referred to as "crowdsourcing", the "sharing economy" and the "collaborative economy" (Stewart & Standford, 2017, p.421).

Characteristics of the gig-economy include: workers being subject to flexible working patterns based around the demand for the service; workers providing their own place of work; tasks being performed over an online platform and typically a triangular like relationship existing between the employee, the end-user and a digital intermediary (Stewart & Standford, 2017).

What should be included within the gig-economy is often ambiguous, but largely it includes the use of working via a digital platform (Smith & Leberstein, 2015 and De Stefano, 2015). This digital element is argued to be the primary distinction between the gig-economy and traditional working arrangements (Burtch *et al.*, 2016). There are currently four broad types of platform that have been identified: higher skilled creative and IT tasks that can be performed from anywhere; low-level repetitive work that can be performed from anywhere; manual service work performed on the customers' premises and lastly, work that involves driving or delivering (Huws *et al.*, 2016). There is a broad range of work that is included, from professional office jobs, IT work and the running of short-term errands (Huws & Joyce, 2016). Some well-established companies within the gig-economy include Uber, TaskRabbit, Amazon Mechanical Turk, Deliveroo, Sharing Academy, Crowdsourcing and Crowdfunder (De Stefano, 2017).

The classification of employees within the gig-economy is debated (Rogers, 2016). Companies often describe themselves as a database where clients and workers connect, therefore classifying workers as self-employed (Todolí-Signes, 2017). Due to this, the platforms can be used to bi-pass regulations by operating outside of the traditional employment structures (Aloisi, 2016). Workers, unlike individuals who are classified as self-employed, are entitled to different rights including national minimum wage, paid rest breaks, collective bargaining rights and statutory holiday pay (Emir & Selwyn, 2016).

In contrast, self-employed workers are not in any way protected by the Employment Rights Act 1996 (Kidner, 2017). The ambiguity of the legal definitions, which has often resulted in misclassification of the employment status of individuals, has led to the courts having to decide and classify the nature of the employment relationship using a multiple test (Emir & Selwyn, 2016). This states that there has to be an element of control which an employer has over an employee and some form of mutuality of obligations (De Stefano, 2015). There is no set number of indicators that will precisely confirm an individual's employment status (Stewart & Standford, 2017).

It is clear this emerging economy brings great opportunities and benefits such as the creation of new employment structures, increased productivity and improved access of goods and services but this is not without costs and implications (Huws *et al.*, 2016). However the advantages for the workers themselves varies to a great extent, which will be the focus of the following research.

2.2 The millennial generation

The focus of this research is on the millennial generation, meaning those born between 1980 and 2000. Current literature often targets gig-workers in general but does not focus specifically on the millennials, nor on the individual characteristics and preferences of gig-workers (Huws *et al.*, 2016). Academic literature highlights that some groups will have a preference for the gig-economy (Parker, 2017). An individual's work attitudes, values and satisfaction changes as they pass through career stages (Rhodes, 1983). The generational theory provides a theoretical framework, used to

predict attitudes and behaviours of different generations (Strauss & Howe, 1991). This derives from the idea that personality traits can be influenced by substantial events during the learning years of a generation (Linden, 2015; Smits *et al.*, 2011; Twenge *et al.*, 2012). In this case, the influence is that of the technological era on the millennials. This supports the assumptions that are made around the millennials work characteristics, desires and expectations (Linden, 2015). The millennials are thought to be a group with a preference for this form of employment relationship. This suggests that there is potentially a fit between the gig-economy and the preferences shown by the millennial generation, which may lead to them having a different perspective.

An issue highlighted in academic literature is the value that millennials place on flexibility. Work values have been defined as the worker's attitudes and expectations from the workplace (George & Jones, 1999). Flexibility is seen as increasingly important for them; being more likely to accept work with flexible working schedules and placing a much greater value on this than previous generations (Smola & Sutton, 2002 and McKinsey, 2016). They have a strong desire for higher salaries, contradicting motivations for entering the gig-economy; they desire more job security, entrepreneurship, to have entrepreneurial training and they typically change jobs more frequently (Kauffman, 2015, Smola & Sutton, 2002 and Hershatter & Epstein, 2010). These features are all associated, either positively or negatively, with the gig-economy. Millennials are digitally immersed, growing up in the beginning of the technological era. This means the gig-economy may often, due to its online platform element, provide the facility for millennials to use their talents and abilities (Hershatter & Epstein, 2010).

The literature review will discuss the gig-economy in terms of the general population. The research will be targeted at millennials, to build a greater understanding in regards to the different perspectives that they have, their motivation for this type of employment relationship, the advantages and disadvantages for them and whether there is a shared need for more regulation.

2.3 Desire for gig-work

There has been rapid growth in the gig-economy to date and the traditional employment relationship is changing (Horney, 2016). The gig-economy is expected to

grow further, making up a considerable proportion of the economy in years to come (Sundararajan, 2014 and Malhotra & Van Alstyne, 2014). It is part of a broader phenomenon of the casualization of employment whilst companies are entering the digital era (De Stefano, 2015). There is significant untapped potential for crowdsourcing companies across many industries, which will lead to an increase in the number of workers required (Massolutions, 2012). An accurate figure measuring the size of the economy is difficult to calculate (CIPD, 2017). Companies are not always willing to disclose this information and workers can be registered with several companies, making this difficult to calculate (Singer, 2014).

Technology advancements have facilitated the growth (Kalleberg, 2009). Although always existing to some extent, tech-enabled online platforms have transformed this market (Horney, 2016). For example, taxi companies traditionally had a booking system over the phone, but Uber have transformed this model through technology; this has proved to be more cost effective than traditional structures and therefore more price competitive (Collier *et al.*, 2017, Kalleberg, 2009). The gig-economy has experienced growth from both push and pull factors influencing people's decisions to be a part of this industry (Balaram *et al.*, 2017). Data provided by Deloitte (2017) has suggested that some individuals have a preference for non-traditional forms of work for three main reasons: the soft economy, the increasing number of alternative opportunities and increased freedom due to developing technology (Brown, 2017). This is particularly the case for millennials of whom one third have a preference for freelance type work compared to full-time employment (Deloitte, 2017).

The recession between 2007 and 2009 supposedly pushed people into the gig-economy, with the lack of choice and ability to work in traditional employment relationships (Brown, 2017). The rising level of unemployment led to increasing amount of attention to the industry (Schneider & Enste, 2013). Data has suggested that 14% of workers became engaged in such work as they were unable to find traditional full-time work (CIPD, 2017). However the literature when weighed up, often regards the push factors, such as the lack of alternatives, as a secondary reason why individuals choose to work in the gig-economy.

Controversially, it has been argued the millennials, in particular, have been pushed into the economy due to being unfit for the traditional workplace through a lack of interpersonal communication skills and lack of face-to-face communication (Sinek, 2016). But as discussed, this does not necessarily appear to be the case (Brown, 2017). Many people are continuously entering and staying in this economy and it is clear that it brings a huge number of advantages from the employee's perspective.

Evidence predicts that increasing numbers of people will hold more than one job (Adobe, 2016). Due to its flexibility, it is likely that it will provide a suitable environment for those people. However others question the long-term sustainability of the gig-economy (Farrell & Greig, 2017). Many workers may only use it for short-term employment. There is often found to be disconnect between the visual picture and the reality, which could be used to explain the high turnover rate in some industries (Tolentino, 2017 and Farrell & Greig, 2017). This could mean that alongside the regulations that may be introduced, the future for this type of work does not necessarily look sustainable.

Based upon the literature, it can be suggested that individuals are more likely to be motivated to enter the gig-economy due to the advantages which this offers and less likely to have been forced into enter the gig-economy.

2.4 Advantages of gig work

The way in which it is possible to work has been revolutionised, which has brought both opportunity and risk. Businesses have harnessed digital technology to create value and efficiencies (Dyal-Chand, 2015). This has the capability to increase economic growth and create welfare, by raising productivity of the workforce, stimulating consumption and enhancing innovation and entrepreneurship (Burtch *et al.*, 2016 and Sundararajan, 2014). This has provided opportunities for further work, suiting the needs and circumstances of many, in particular the millennial generation. This supports the idea that employees perceive substantial advantages.

Most gig work is highly flexible (Dobson, 2017). The level of flexibility created can be seen as beneficial to both employers and employees. This level of flexibility is highlighted by academics, with workers being able to allocate their time and resource at their discretion (Hall & Krueger, 2017 and Burtch, 2016). This is in line with employment law regulations, where self-employed workers have control to be able to accept and decline jobs as they please (Emir & Selwyn, 2016). This control aspect, as previously discussed, is important in the classification to the employment relationship.

Since the 1990s, the rise of this market has arguably contributed to the upturn in the world economy, and has given employment opportunity for those who otherwise might be unable to work. This provision of labour is especially important in areas that might not otherwise have opportunities to work (Greene & Mamic, 2015 and Narula *et al.*, 2011). However a large proportion of the gig-economy relies on a digital platform, so internet access is important and this may not be available in remote or developing regions (Kingsley *et al.*, 2014). It has been suggested that unemployed individuals should be helped into the gig-economy, as it could provide work which they otherwise would not have (Odgers, 2017). In some cases the use of these platforms can provide work for individuals and give them access to clients in comparably richer countries (Lyons *et al.*, 2013). Research shows that a large amount of work occurs in countries other than where the work is actually performed (CIPD, 2017).

Although not ideal, it could be argued that gig work is preferable to being unemployed (Odgers, 2017). This opportunity of labour is highlighted for the millennials who have had an increasing struggle to find work which previous generations did not necessarily have (Brown, 2017). The previous expectations of job security and the idea of remaining in a job for life no longer apply in today's environment (Kowske *et al.*, 2010). Millennials have adapted and have a different mind-set compared to previous generations and are often satisfied with a lower level of job security. The lack of company loyalty and openness to short-term work means the gig-economy is appealing (Adkins, 2016).

Evidence suggests that the gig-economy is used both as a means of providing supplementary income, at other times being the only source of income for workers (Huws *et al.*, 2016). The difference in the dependency of this income can play a

considerable factor in the perceived advantages. Survey results show 33-47% of non-gig-economy workers use general job searching sites at least once a week, in comparison to 78-91% of gig-economy workers who use job searching sites at least once week (Huws *et al.*, 2016). This supports the idea that the gig-economy provides an alternative form of work for the unemployed. This suggests potentially this is a means of employment out of desperation rather than out of choice. The majority of these workers engage in multiple platforms rather than specialising in one type of work; potentially due to a lack of career direction (Huws *et al.*, 2016). Other evidence suggests that many who participate have a desire to do so, not just due to a lack of commitment to alternative employment relationships (Brown, 2017).

The platform can be appealing due to its ability to enable entrepreneurship (CIPD, 2017). The flexibility and ability to work when and where they like together with the provision of a stable income gives workers the ability to pursue other activities at the same time (Shah & Tripsas, 2007 and Burtch *et al.*, 2016). This has attracted the millennials in particular, growing up during the age of disruptive start-ups (Brown, 2017). This could bring many to question why they would want to be part of traditional employment when the possibilities elsewhere are huge. Other sources argue that the gig-economy could actually discourage entrepreneurial activity could actually be discouraged, due to this acting as a substitute rather than as a complement for higher quality entrepreneurship (Burtch *et al.*, 2016).

Based upon the literature this suggests that there are advantages, which are potentially being overlooked with a significant focus upon the negatives of the gig-economy.

Hypothesis 1 - The desire to work within the gig-economy has been more heavily influenced by the perceived advantages rather than the lack of alternative employment options.

Hypothesis 2 - Individuals that value greater flexibility, control in their work and entrepreneurship in their employment relationships have a higher rating of the overall advantages of the gig-economy.

Hypothesis 3 - For the millennials the advantages of the gig-economy outweigh the disadvantages.

2.4 Disadvantages of gig work

The nature of the employment relationship within the gig-economy often leaves workers at risk. The workers are in this new middle group of employment relationship having less control and more obligations than self-employed workers but less protection than employees (Emir & Selwyn, 2016). This lack of employment status has led to many concerns about unequal bargaining power with workers suffering from domination (Rogers, 2016). The employers often have more power than the individuals, leading to workers suffering as a consequence. Many experience low salaries and poor working conditions, without a safety net of protective legislation (Taylor, 2016 and Kuhn, 2016).

Often these forms of employment relationship are created without full legal entitlement being considered (Rogers, 2016). Individuals are often seen to be mistreated due to the uncertainty of their legal status, with employers taking advantage of the situation (Rogers, 2016). In serious situations, this leaves workers unprotected for vast amounts of employment rights, with no health insurance, pension plans, statutory sick pay, maternity leave and other basic benefits that a standard employer-employee relationship provides (De Stefano, 2017). The contractual freedom for many has gradually shrunk away, hence the phrase “skimming economy” (Aloisi, 2016, p.670). Some of the most common employment issues are the unfair deduction of wages, unfair dismissal and the terms and conditions of the employment contracts often falsely misclassifying workers as self-employed (Taylor, 2016).

As discussed, one of the main advantages is flexibility. However this can be overestimated and unsustainable, with the fierce competition for work in some markets leading to workers having to work long-hours, taking away the flexibility that was sought (Aloisi, 2016; Cherry, 2009; Nicot, 2009 and Felstiner, 2011). This often means that night shifts and other unsocial hours are worked, without extra reward or recognition (Gupta *et al.*, 2014).

The gig-economy has experienced economic innovation, meaning that creative destruction has occurred, as described by economic theory, with technology creating new jobs and working environments (LexisNexis, 2017 and Schumpeter, 1976). Although proving beneficial, in particular for those individuals with weak attachments to work and the higher educated, the creative destruction has disadvantages, particularly for those on low-wage jobs (Burtch *et al.*, 2016).

For participants the income earned represents a varying proportion of their earnings. If this is a significant proportion of a worker's salary they tend to become over reliant (Huws & Joyce, 2016). Recent sources estimate that in the UK only 6% of gig-workers have their earnings as 100% proportion of all their income, showing that the majority are not solely financial dependent on this type of work (Mishel, 2015). So the lack of pay may not be as unjust as it seems, given few use it as a sole source of income. Some evidence suggests that the pay received is adequate for sustainable living, but this is without regard for working hours. Some critics have accused companies operating within the gig-economy of using algorithms to manipulate workers into working longer hours (Brown, 2017). These disadvantages are hard to avoid if the workers have a lack of choice from not being able to find alternative employment (Huws *et al.*, 2016). Therefore workers might feel trapped, becoming increasingly reliant upon the work.

A significant issue is the level of precariousness sustained (Huws *et al.*, 2016). This is often common with zero-hour contracts where workers will not know when they are next likely to work. Academic sources and media reports confirm the costs which gig-workers face in their struggle to find work, such as low-wages and lack of rights (DePillis, 2014 and Huws *et al.*, 2016). In 2016 approximately 3,500,000 people in the UK within the gig-economy desired to have more working hours (Taylor, 2016). This is directly linked with income insecurity, impacting on the personal and family life of individuals with the inability to predict working hours (Huws *et al.*, 2016). This difficulty is often enhanced by the lack of direct communication channels which the workers have with these companies. There is often a lack of ability to communicate with other workers in order to gain a collective voice and enhance their bargaining power. This leaves workers often having no influence on decisions regarding employment practices and rights of employees (Chesley, 2014 and Huws *et al.*, 2016).

It is common for a variety of other safeguarding measures to be breached (Huws *et al.*, 2016). Obligations can easily be externalised to the workers rather than taken on by the companies themselves. Employers are obliged to carry out risk assessments, provide training and have safety measures in place; for example, use of computer screens and seating at a computer (Huws *et al.*, 2016). Outside of this formal relationship this is unlikely to happen, putting workers at a disadvantage. Particular risks are high for employees of companies where driving is involved, such as Uber; unregulated long hours could result in fatigue and lead to an increase in accidents as a result (Huws *et al.*, 2016 and Gullo, 2014).

Although some of the concerns are focused on all categories of workers, some may be less prevalent in different age categories. Millennials are more likely to be in an employment relationship characterised by contractual flexibility, often being overqualified and underemployed, receiving less hours of work than desired (Thorley & Cook, 2017). This is due to the increasing number of millennials with degrees. Thorley and Cook (2017) expressed their concerns highlighting the issues that may arise from this, such as impact on mental health. This was linked to the association with low-pay work and job insecurity, which as discussed above, are factors often associated with the gig-economy. However gig workers themselves typically fall into the middle age category, with 52% of gig workers being between the ages of 31-52 (Balaram *et al.*, 2017). It is evident not just the millennials are affected by the disadvantages (Thorley & Cook, 2017).

Hypothesis 4 - Individuals that have a greater value for salary, sick pay and holiday allowance and other legal protection have a higher rating for the overall disadvantages of the gig-economy.

Hypothesis 5 - The more dependent on the income and the longer an individual has spent within the gig-economy the higher the rating of the overall disadvantages of the gig-economy.

2.5 The need for regulation

Current regulation clearly does not solve the issues which face workers. There is an ongoing debate about how to regulate this employment relationship and to define the workers within this market (Horney, 2016). The gig-economy at present seems to undermine the current theory of what constitutes employees' rights and evades regulation. It has been suggested that gig work is similar to other forms of precarious work and therefore regulations could be applied in a similar way (Lewchuk, 2017). So far the action taken has been relatively slow. Literature suggests that this is potentially because of the competitive nature of the gig-economy, workers are often unwilling to cooperate in order to make a collective claim to enforce their rights; speaking out could jeopardise an individual's career due to the ease of rating and high dependability on reputation (De Stefano, 2015).

There is a need for further regulation to protect the rights of such employees. The issues surrounding this ambiguous category of worker need to be resolved and increased rights established (De Stefano, 2015). The gig-economy is not entirely immune from regulation, which became clear with the recent Uber case, where the courts took action against the company to protect workers' rights (BBC, 2017). This concern has promoted the desire for increased regulation (European Parliament, 2017). Research across all age groups suggested that 63% of gig-workers believe that the government should regulate the gig-economy in order to ensure fairness and basic employment rights (CIPD, 2017). This research will look at the impact of the gig-economy on the millennial generation and their perspective on the legal regulations of these employment relationships.

There are mixed opinions whether regulation would be effective in preventing this idea of "humans-as-a-service" (Aloisi, 2016, p.653). It is evident this has created and enhanced confusion over employment rights and responsibilities (Silberman & Irani, 2016 and Bergvall-Kåreborn & Howcroft, 2014). It is suggested that policy makers should begin to look at the gig-economy with a fresh perspective and as a new form of capitalism (Dyal-Chand, 2015).

Hypothesis 6- The increased desire for regulation is more strongly associated with the disadvantages of the gig-economy.

2.6 Conclusion and gaps for further study

Despite there being a clear concern of public interest for workers within the gig-economy there is currently a gap in the academic literature surrounding this market (Healy *et al.*, 2017). Much of the current literature and the key research reports seek to create a picture of the gig-economy and the current labour conditions associated with this (Huws *et al.*, 2016).

The lack of clear conceptual framework and understanding of the gig-economy is due to the contemporary literature being sparse (Donovan *et al.*, 2016). This leaves the theory lacking depth and the pockets of data collected can be viewed as a snap shot of the gig workers but not necessary representative of all the individuals. Therefore the attitudes of millennials and the impact of gig work on them is yet to be explored in detail. The current literature will be linked together to analyse this perspective, as shown below in Figure 1.

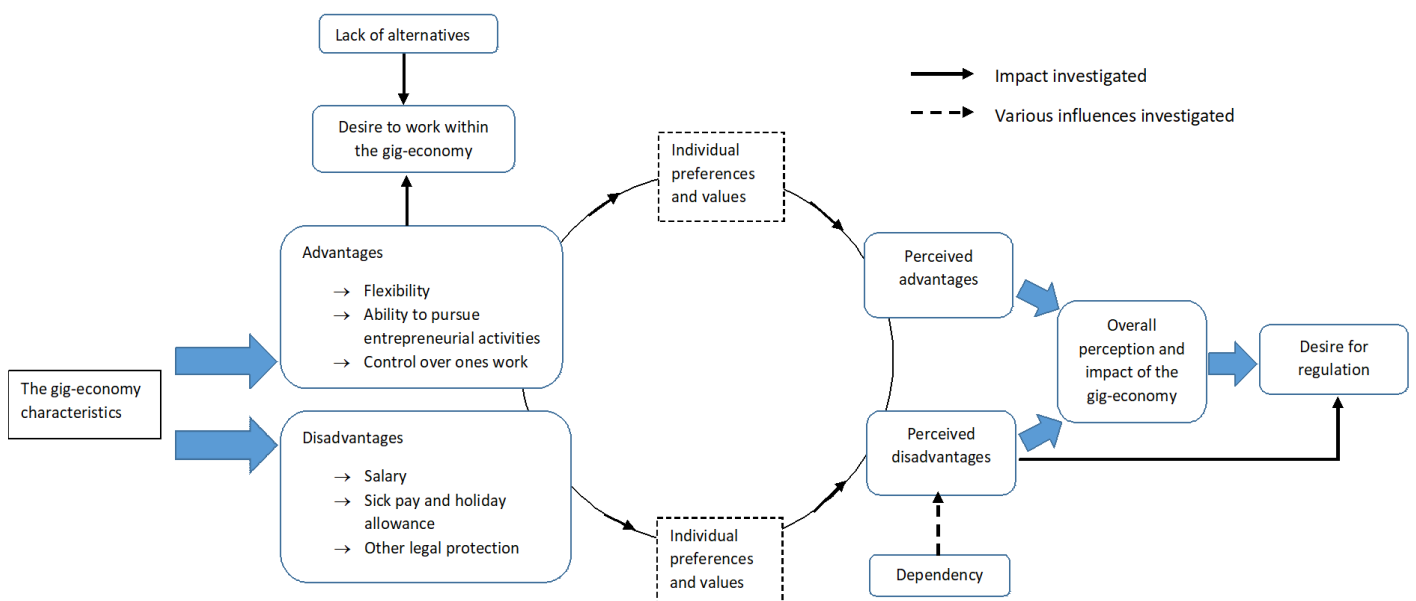


Figure 1: Conceptual framework of current literature

The gig-economy has attracted high amounts of national media focus due to the various issues arising and the regulation gaps that need to be addressed (Huws *et al.*, 2016). It is therefore surprising that this type of worker is understudied in industrial literature (Bergman & Jean, 2016 and Kuhn, 2016). So far there is little evidence on whether purely accepting and embracing the gig-economy will lead to a long-term positive impact for workers (Graham *et al.*, 2017). It is acknowledged that although it appears that workers' rights are being exploited, many are drawn in due to the advantages it offers. There is a strong focus on the negatives, potentially disregarding the advantages that exist. Although some literature highlights the particular reasons why millennials are drawn into the gig-economy, no overall distinction is made on the differences and to what extent millennials benefit and suffer compared to the general worker. Therefore in this research a dimension to the current literature will be added, with a particular focus on the millennials.

Previous research has influenced the intended methodology as discussed in the following chapter. This is to achieve the employees own opinions and to bring to light the motivation of the millennials for gig-work, the advantages and disadvantages for them and to ascertain if there is a widespread desire for more regulation within the gig-economy.

3. Methodology

The methodology will explain the nature of the study undertaken and describe and justify the research design. The research was designed to investigate the motivation for joining the gig-economy, the advantages, disadvantages and impact of this on the millennial generation. This will allow for aspects to be studied to a greater depth in order to find out why some individuals may have a different perspective. A deductive approach is used, involving empirical research for the data collection (Gill & Johnson, 2010).

3.1 Research strategy

Crewell (1994) suggests that the knowledge claims, strategies and methods used can control the tendency of the research. The study uses an empirical, quantitative methodology to collect primary data to address the research questions developed from a positive epistemological approach (Gill & Johnson, 2010). A quantitative approach was adopted to achieve clear, objective measures and to allow a rational analysis of the problems (Waters, 2011). Qualitative methods would not achieve the structured approach desired (Fisher, 2010). A primary approach had to be taken due to the lack of secondary data and so that the data would be specific to the research project, being consistent and accurate in achieving the research aims (Ghauri & Grønhaug, 2002 and Walliman, 2004).

3.2 Research design

The research design was fundamental to enable the most valid results (Vogt, 1993). The use of a survey was the chosen strategy due to its panoramic view, efficiency and effectiveness at collecting volumes of data and the approach lends itself to quantitative data (Denscombe, 2007). This was designed to be short, look attractive and the structure was carefully considered so that previous questions would not sway a respondent's answers later on (Fisher, 2010). Personal classification questions were limited to obtain relevant information (Hussey & Hussey, 1997). Age was not included due to this being specified in the survey brief. Similar to the approach of the CIPD survey (2017), the design consisted of a ranking scale and closed questions to create comparable, raw data (Denscombe, 2007). A Likert 5-point scale, treated the data as

interval data, allowing for a numerical value to be attached in order to code and analyse (Hussey & Hussey, 1997). However this limited the amount of flexibility and meant previous studies could not be directly compared (Wilson, 2010). A few open questions allowed for other responses; this was useful where answers could not always be anticipated, such as industry type (Fisher, 2010). To test the transitivity, the accuracy and honesty of responses given, a test re-test method was used with two alternative choice questions, with reverse answers expected (Regenwetter *et al.*, 2011 and Zikmund, 2003). One respondent was removed from the data and classed as an outlier, for responding with the same 'strongly agreed' value. This approach was taken to remove respondents that could have approached the survey too quickly, hence improving the quality and validity of the data (Žmuk, 2017).

As highlighted by Huws, Spencer and Joyce (2016), the survey criteria could not simply ask if one was involved with gig work. This would result in confusion with only 35% of workers having heard of the gig-economy (CIPD, 2017). The survey was therefore designed to capture those who fit this middle bracket between being an employee and self-employed, with a focus upon precarious employment relationships. This ensured those suspected to be in the gig-economy were included and a large enough response rate. This survey was aimed at participants whom fitted the specified criteria (Appendix 1).

3.3 Sampling

The sample size was 187, which was considered large enough to be a valid representation of the millennial category and to allow for a margin of error (Denscombe, 2007 and Fisher, 2010). In being a small-scale research project this was limited in size. A non-probability approach was used due to time constraints and ease of administering (Stanton and Rogelberg, 2001). The sample therefore might not be an accurate representation of the population. The data set could potentially be bias from non-respondents, an example of the 'mode effect' by using networks to administer survey responses (Denscombe, 2007, p.24).

3.4 Pre-test

The survey was piloted on similar individuals to establish ease of interpretation and understanding required, to limit mistakes and inconsistencies (Schwab, 2011 and Fisher, 2010). Changes were made accordingly to obtain more valid responses. The item sequence was adjusted due to impact if all positively or negatively associated items were placed consecutively (Schwab, 2011 and Blaxter *et al.*, 2006).

3.5 Data collection

The design, distribution and analysis of the survey was completed using Bristol Online Survey software. This was administered as a web-based questionnaire due the ease and limited cost and response rates tends to be higher than other methods (Couper, 2000 and Dillman, 2007 cited in Denscombe, 2007). Invitation and distribution was via email contact and the networks available, such as Facebook and WhatsApp. Data was collected during a three week period from the 7th February to the 28th February 2018. To maximise responses and to widen the range of networks, this was shared through personal contacts. A clear delimitation of this design was the distribution of the survey through primary contacts (Hussey & Hussey, 1997). The respondents are likely to be homogenous and have similar characteristics, so might not be a fair representation of the millennial generation.

3.6 Data analysis

To analyse the data the Statistical Package for Social Sciences (SPSS) is used. The categorical data collected consists of a variety of measures, both ordinal and nominal. The statistical methods used are the Z-test of proportions, allowing comparison of two proportions, the Chi-squared test of independence, to analyse the statistical associations between variables and the Fisher's exact test, where appropriate if the frequency count in multiple outcomes was >5 (Walliman, 2004). A conclusion regarding the direction of association is made from a comparison of the actual and expected frequencies. Throughout the study, the null hypothesis assumes that there is no association between two variables and the alternative hypothesis assumes that there is an association between two variables. The significant association is at the $p < 0.05$ level.

To further overcome issues of small frequency counts it was decided to combine scales where appropriate, for example 'very unimportant' and 'unimportant'. Concerns were also raised about the confusion and close proximity of industry types, hospitality and the food industry, so these were combined and referred to as hospitality throughout. The results chapter will be used to report the analysis and to aid in the interpretation of the results.

3.7 Ethics and risk

The data collection is in accordance to the University of Leeds ethical guidelines. Ethics approval was granted from the University of Leeds Research Ethics Committee, covering the scope of this research (Appendix 2). A purpose statement was given informing participants of the overall study aim (Hussey & Hussey, 1997). Participants were informed of their confidentiality and anonymity and that their participation was entirely voluntary and could be withdrawn at any time (Fisher, 2010). Data was collected online so no risk assessment was necessary.

4. Results

4.1 Introduction

This chapter covers the key findings of the survey results, collected as previously discussed in the methodology. Firstly the sample will be discussed, then the descriptive and inferential statistics will be noted in relation to the hypotheses.

The sample analysis consisted of 187 responses. This consisted of 27.6% male (51) and 71.9% female (133), of which 29.6% (55) referred to the role as their current job and 70.4% (131) referred to the role as their past job. The majority of the sample had achieved or were working towards an undergraduate degree (78%). The majority worked within hospitality (68%). A significant percentage of the work was performed on a regular basis, with 27% performing the work more than 4 times a week and 35% performing the work between 2-4 times a week. The distribution of key information from the samples is represented below:

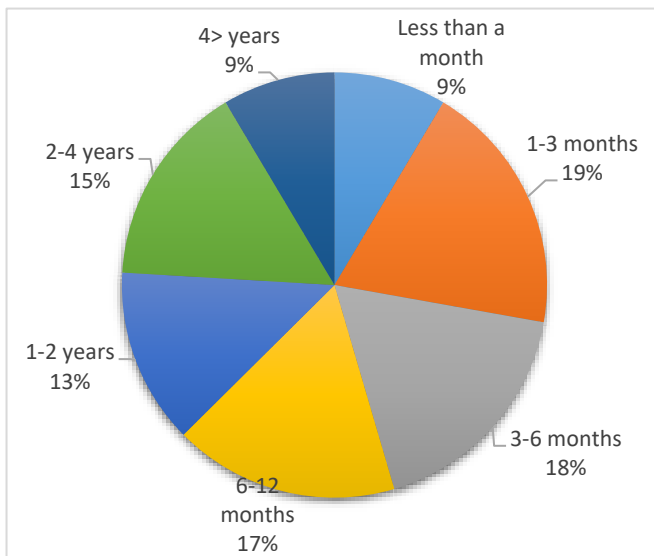


Figure 2: Time spent within the role

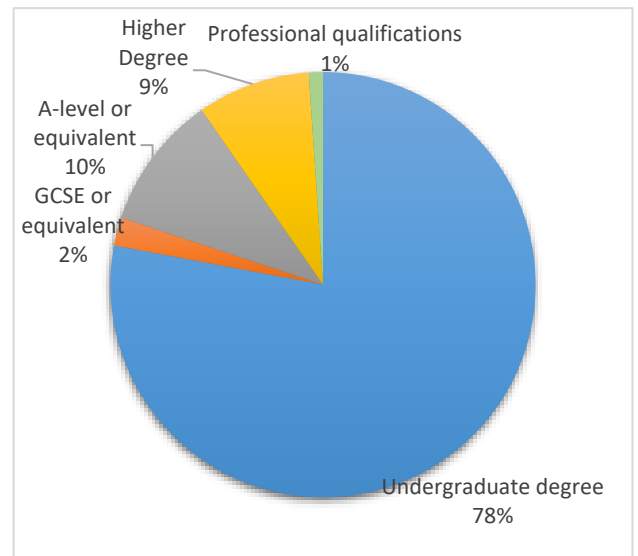


Figure 3: Education background

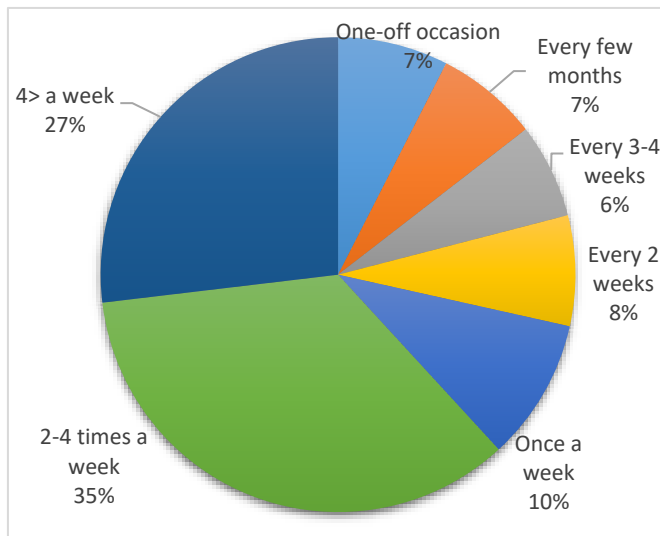


Figure 4: Regularity of the work

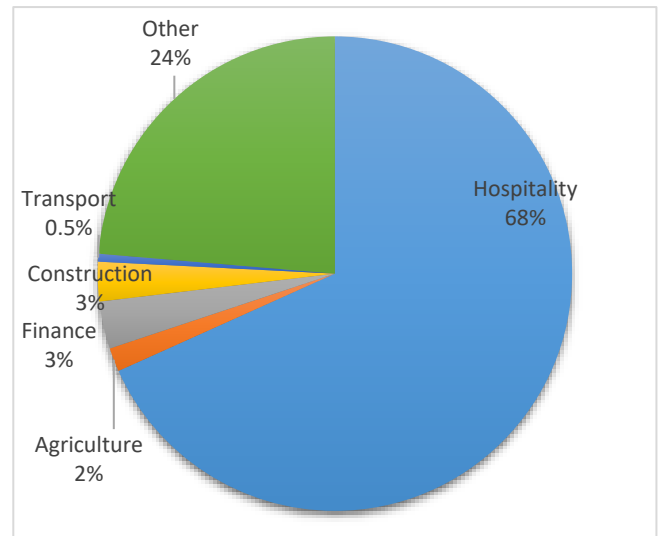


Figure 5: Industry

4.2 Desire to enter the gig-economy

Questions 9.1, 7, 11.1 and 11.2 of the survey explored the importance to work within the gig-economy and whether this desire came from the perceived advantages or due to the lack of alternatives, addressing Hypothesis 1.

Descriptive statistics for Q7 are shown in the bar chart in Figure 6, which supports H1. Flexibility had a substantially higher frequency than all the other responses, with 67.4% responding as this being their primary reason. In comparison, there was a 52.3% difference to the second highest frequency response, being unable to get an alternative job. The total pull responses (73.9%), including flexibility and ability to pursue entrepreneurial activities, is substantially higher than the push responses, including other alternatives unsuitable and unable to get another job (26.1%). Ability to pursue entrepreneurial activities alongside gig work was the lowest response (6.5%).

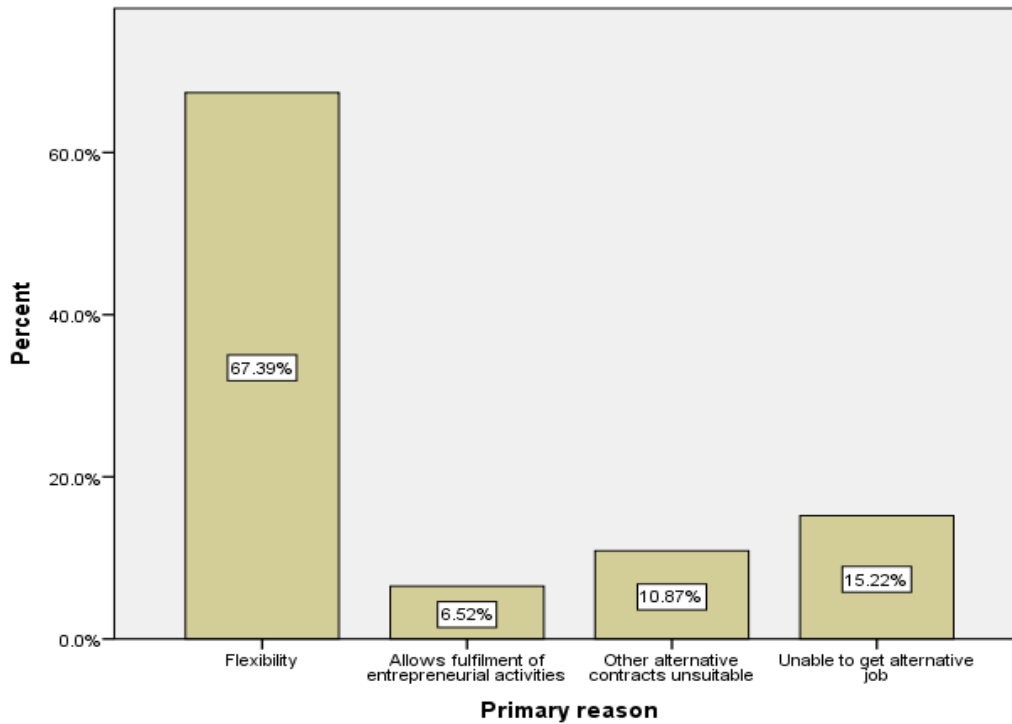


Figure 6: The primary reason for entering the gig-economy

The Chi-Squared Test of Independence, (Table 1), shows a statistically significant association between desire to work in the gig-economy and advantages rating ($p < 0.5$). Disadvantages rating falls just above the significant level, so is not significantly associated with the desire to enter the gig-economy ($p = 0.057$). Based on the findings, with significant associations found as expected, the null hypothesis is rejected. This supports H1 that the motivations for entering the gig-economy are not from push factors, but from pull factors.

Table 1: Chi-squared test between desire to work in the gig-economy (Q9.1) and perceived advantages and disadvantages

Variable	X^2 value	p value
Advantages Rating (Q11.1)	$X^2(6) = 13.123$	$p = 0.041$
Disadvantages Rating (Q8.1)	$X^2(8) = 15.105$	$p = 0.057$

4.3 Factors influencing the perceived advantages

Questions 11.1, 12.3, 12.5 and 12.6 investigate Hypothesis 2, relating to the positive influences on the overall advantages of the gig-economy. Figure 7 shows the frequency count of each of the factors that were drawn out from the literature review as being seen as positively associated with the gig-economy. All variables show a gradual rise in the value ratings followed by a slight fall. Control rating has a steeper increase in comparison to the other variables and has a significant peak rating of 'important' with 90 (40.9%) responses. Entrepreneurship has a much flatter gradient and peaks at 'neutral' rating with 50 (26.9%) responses, with the total different between the highest and lowest response ratings being a difference of 32 responses (17.2%). 91 respondents value flexibility as 'important', 'very often' or 'always' perceived advantages, which is greater than the expected frequency count (77.4).

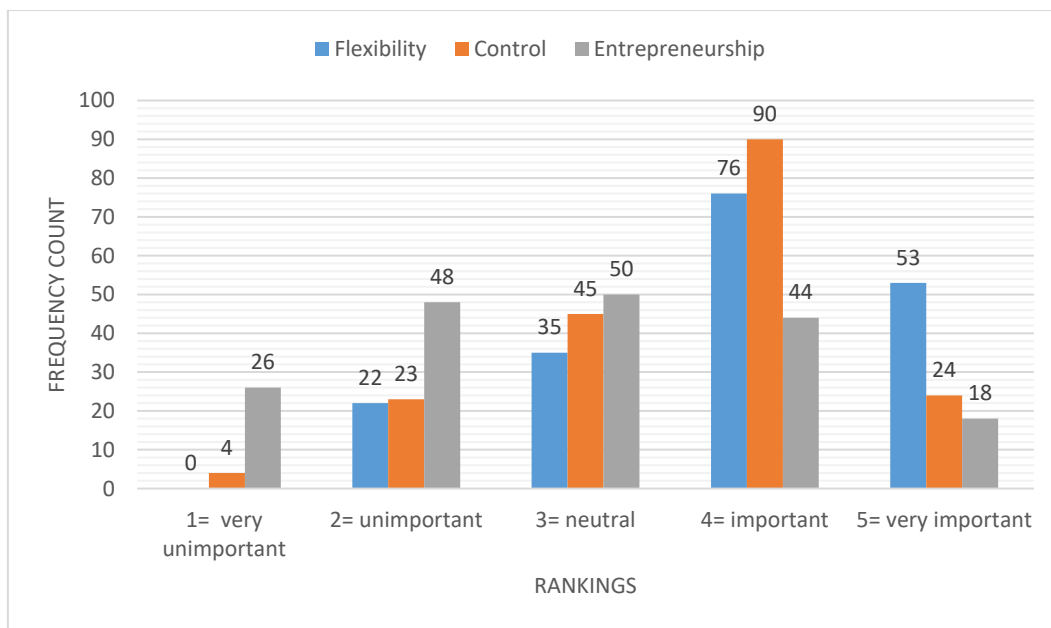


Figure 7: Value ratings for the advantages of the gig-economy

The Fisher's exact results shown in Table 2, show a significant association between advantages and the value for flexibility ($p=0.00$, $p<0.05$). Therefore we reject the null hypothesis for this case. No statistically significant association was found between advantages and value for control ($p=0.706$, $p>0.05$). Therefore we accept the null hypothesis for this case. There is no statistical significant association found between advantages and value for having the ability to pursue entrepreneurial activities

alongside ones work ($p=0.084$, $p>0.05$). The two tests have given relatively the same answers.

Table 2: Chi-squared test between the perceived advantages (Q11.1) and variables

Variable	χ^2	p value	χ^2	p value
Flexibility (Q12.6)	31.64	0.000	31.361	0.000
Control (Q12.3)	3.793	0.705	3.816	0.706
Entrepreneurship (Q12.5)	11.173	0.083	10.764	0.084

Based on the above, the null hypothesis is accepted. H2 is not supported.

4.4 Overall opinion of advantages and disadvantages

Questions 8.1 and 11.1, investigated the respondents perceived overall disadvantages and advantages of the gig-economy. Figure 8 shows the ranking of perceived advantages and disadvantages. Both ratings follow a similar pattern of an increase then decline. Perceived disadvantage ratings has a much steeper increase initially. The peaks vary, with the perceived advantages peak response being 'very often' with 86 responses (46.5%) compared to perceived advantages were the peak response falls on 'sometimes' with 90 responses (48.8%).

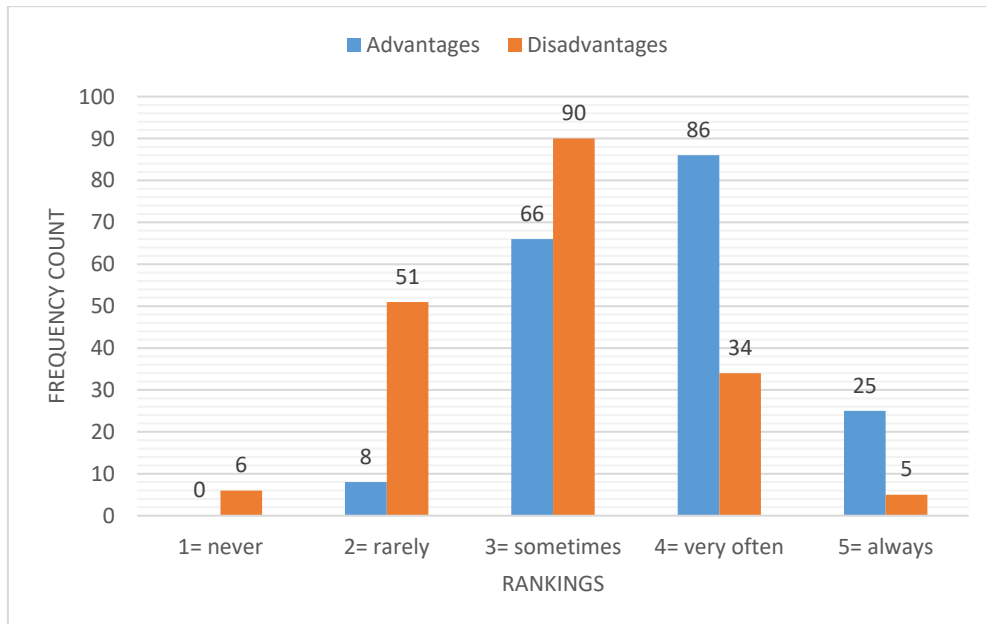


Figure 8: Rankings of the advantages and disadvantages

A Z-test of proportions showed that there was a statistically significantly proportion of millennials that ranked overall advantages (Q11.1) higher to the overall disadvantages (Q8.1), $z=45.372$, $p=0.000$, $p<0.05$. We reject the null hypothesis ($H_0; P_1=P_2$, $H_1; P_1 \neq P_2$), therefore this supports H3.

In addition, using the Chi-squared test, there was no statistically significant association between the overall disadvantages (Q8.1) and whether the job was current or a past role (Q4), $X^2(4)=5.693$, $p=0.223$, $p>0.05$. The research showed that there was a statistically significant association between the overall advantages (Q11.1) and whether the job was current or a past role (Q4), $X^2(3)=15.442$, $p=0.001$, $p<0.05$.

4.5 Factors influencing the perceived disadvantages

Questions 8.1, 12.1, 12.2 and 12.4 investigate Hypothesis 4, establishing whether there is significant association between individuals viewing the gig-economy as having significant disadvantages and the value which individuals place on salary, sick pay, holiday allowance and other legal protection. The frequency distributions of these are shown in Figure 9. All the value ratings follow a pattern of a gradual to steep increase to a mild decline at a peak of 'important'. Salary size ratings follow a considerable steeper gradient with 127 (83.6%) responses being 'important' or 'very important'. 27 respondents' value greater legal protection as 'important' and 'very often' perceive disadvantages compared to the expected frequency count of 20.6.

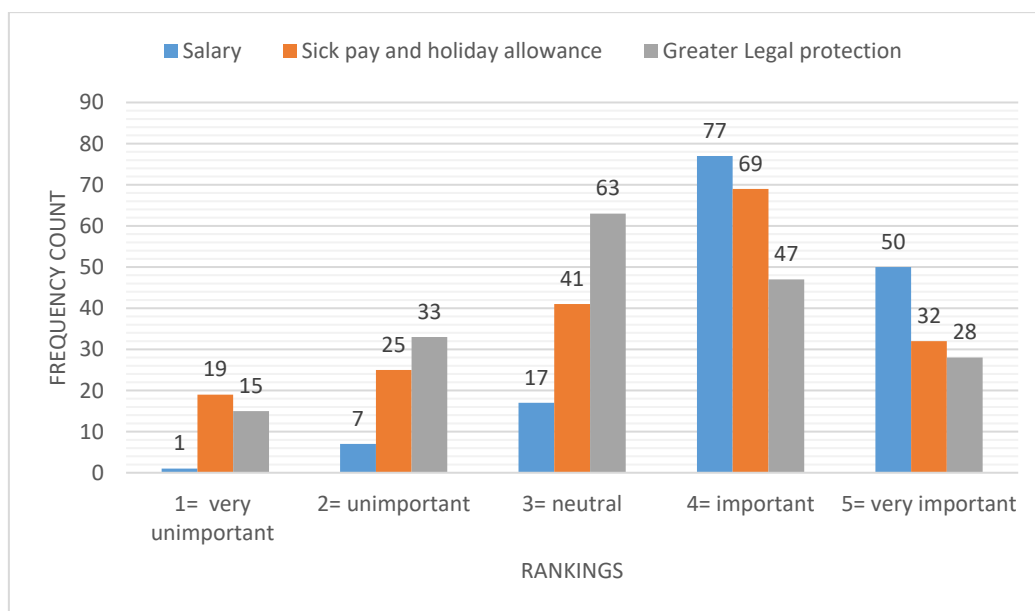


Figure 9: Value ratings for the disadvantages of the gig-economy

Based on the Fisher's exact test (Table 3), there is a statistically significant association between overall disadvantages and value for salary ($p=0.03$, $p<0.05$). Therefore we reject the null hypothesis based on this association. There is no significant association between overall advantages and value for sick pay and holiday allowance ($p=0.123$, $p>0.05$). Therefore we accept the null hypothesis based on this association. There is a statistically significant association between overall disadvantages and value for other legal protection ($p=0.023$, $p<0.05$). Based on this association we reject the null hypothesis. Although the Chi-squared test results were mostly similar, value for sick pay result varied in comparison to the equivalent Fisher's exact test performed.

Overall based on these results, the null hypothesis is rejected, with H4 being supported.

Table 3: Chi-squared test between perceived disadvantages (Q8.1) and variables

Variable	Chi-squared test		Fisher's exact test	
	X ² value	p value	X ² value	p value
Value for salary	18.697	0.017	14.955	0.03
Value for sick pay and holiday allowance	14.897	0.061	11.675	0.123
Value for other legal protection	17.945	0.022	16.195	0.023

4.6 Impact of dependency

Questions 8.1, 10.1 and 3 are used to explore Hypothesis 5 and question 4 will be discussed to identify potentially differences in views of current and past workers within the gig-economy.

Table 4: Chi-squared test between perceived disadvantages (Q8.1) and variables

Variable	X ² value	p value
Dependency on income (Q10.1)	13.589	0.06
Time spent within the gig-economy (Q3)	11.891	0.391
Frequency of the work performed (Q5)	10.85	0.476
Lack of alternatives (Q11.2)	7.105	0.52

As expected, dependency is significantly associated with the time spent within the role ($X^2(12)= 21.409$, $p=0.045$, $p<0.05$) and frequency of the work performed ($X^2(6)= 13.859$, $p=0.030$, $p<0.05$). Therefore it seemed suitable to also examine the association of these variables to the overall disadvantages.

From the Fisher’s exact test, no statistical significant association was found between overall disadvantages and the variables: dependency on income ($p=0.558$, $p>0.05$), time spent working within the gig-economy ($p=0.391$, $p>0.05$) and frequency of the work performed ($p=0.476$, $p>0.05$). Therefore the null hypothesis is accepted. The lack of alternatives ($p=0.52$, $p>0.05$) and level of education ($p=0.564$, $p>0.05$) was also examined, with no significant association found either.

Table 5: Chi-squared test between perceived advantages (Q11.1) and variables

Variable	X² value	p value
Dependency on income (Q10.1)	5.302	0.497
Time spent within the gig-economy (Q3)	14.899	0.071
Frequency of the work performed (Q5)	13.854	0.097
Lack of alternatives (Q11.2)	14.568	0.018

The Chi-squared test was also performed on variables and overall advantages, due to the lack of association with disadvantages. As shown in Table 5 no statistically significant association was found with any variable ($p>0.05$), apart from the lack of alternatives has a significant association with the overall benefits ($p=0.018$, $p<0.05$).

Based on the results the null hypothesis is accepted. H5 is not supported.

4.7 Desire for regulation

Questions 13.1, 13.2, 8.1 and 11.1 investigate the desire for regulation and its association with the perceived disadvantages and advantages. Table 10 shows a considerable increase of attitudes towards whether there should be an increase in legal regulation, with a 30.8% difference between ‘agree’ and ‘disagree’. There is a gradual decrease in attitude towards “there is already enough legal regulation”, with 25% difference between ‘agree’ and ‘disagree’. A large proportion, 88 participants (47.6%), of the sample agreed that there should be an increase in regulation, 66 participants

were undecided (35.7%), and 31 disagreed (16.8%). The test-retest, with expected reversed responded, had similar results with 80 disagreeing that there was already enough legal regulation within the gig-economy (43.3%), 71 being undecided (38.4%) and 34 agreed (18.3%). The bar chart illustrates the comparison of opinion that more participants desire more regulation, supporting hypothesis 6. 7 respondents agree there should be increased regulation and 'never' or 'rarely' perceiving disadvantages, which is less than the expected count (18.6).

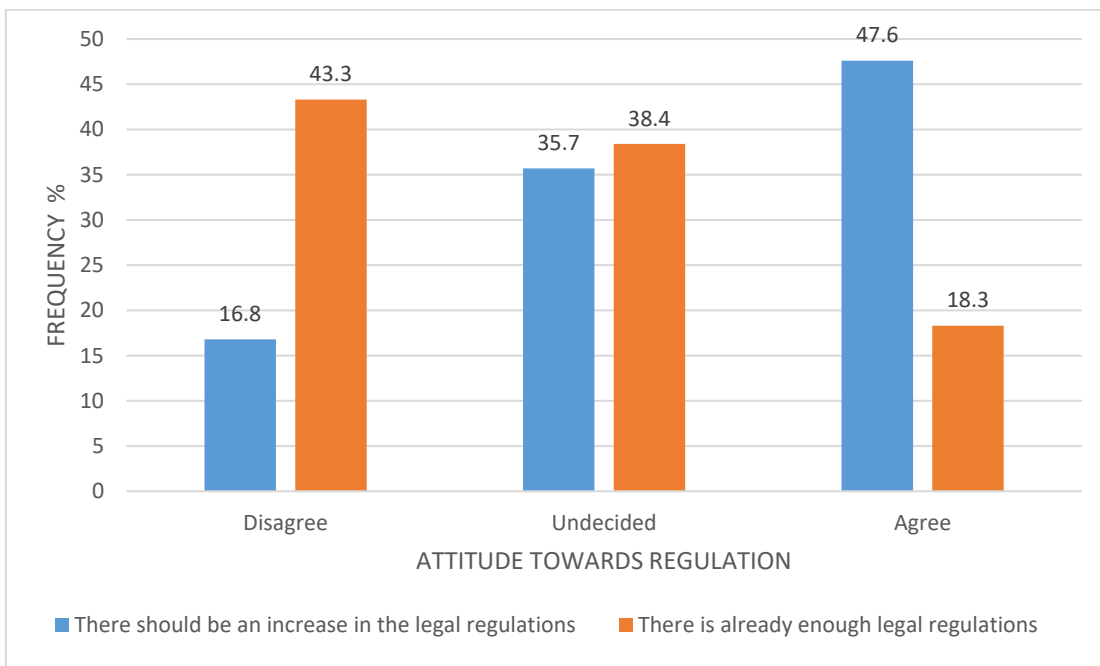


Figure 10: The desire for regulation within the gig-economy

The Chi-squared test results show that there is no statistically significant association between the perceived advantages and desire for an increase in regulation ($p=0.221$, $p>0.05$) (Table 6). There is a statistically significant association between the perceived disadvantages and an increase in the desire for regulation ($p=0.000$, $p=0.000$).

Based upon this, the perceived disadvantages have a greater association with the desire for regulation.

The test-retest question was examined to compare whether the advantages or disadvantages have greater association with regulations within the gig-economy (Table 7). Both advantages and disadvantages were statistically significantly associated with the gig-economy, $p=0.000$, $p<0.05$ and $p=0.000$, $p<0.05$ respectively). Due to the

identical p values this cannot be used to compare and address the hypothesis, but it is evident both are associated with the opinion that there is already enough legal regulation.

Overall, based on the evidence we accept the alternative hypothesis. Therefore H5 is supported.

Table 6: Chi-squared test between a desire for increased regulations (Q13.1) and perceived advantages and disadvantages

Variable	X² value	p value
Advantages (Q11.1)	7.966	0.221
Disadvantages (Q8.1)	28.213	0.000

Table 7: Chi-squared test between the opinion that there is enough legal regulation (Q13.2) and perceived advantages and disadvantages

Variable	X² value	p value
Advantages (Q11.1)	23.136	0.000
Disadvantages (Q8.1)	26.092	0.000

In addition, questions 4 and 2, investigated other points of interest. The Chi-squared test found a significant association between having a desire for increased legal regulations (Q13.1) and whether the role is current or a past job (Q4), $X^2(2)7.225$, $p=0.027$, $p<0.05$.

There was a significant association between an increase in the legal regulations (Q.13.1) and the level of education (Q2), $X^2 15.043$, $p= 0.024$, $p<0.05$.

5. Discussion

This research provides an analysis on the quantitative findings in regards to exploring the attitudes, varying impact and perceptions of the gig-economy on the millennial generation and to examine the need for regulation. The hypotheses formed the centre of the research and aimed to make a contribution to the research questions. Statistical analysis of the data supported Hypothesis 1, 3, 4 and 6, but failed to support Hypothesis 2 and 5. These results will be discussed in the context of theory and critically evaluated.

5.1 Desire to gig work and push and pull factors

Based on the evidence, the desire to work within the gig-economy has been more heavily influenced by the perceived advantages rather than the lack of alternatives (Figure 6 & Table 1). Flexibility appears to be the primary reason for the motivation for millennials to enter the gig-economy, which is also seen to be highly valued (Figure 7). Where the millennials have a strong desire to work in this precarious form of employment relationship, they perceive the advantages of the gig-economy highly. As expected, this is due to the overall benefits in which the gig-economy appears to have motivating individuals to work in this relationship.

This agrees with the literature highlighting the benefits of the gig-economy and its strong appeal to the millennials in particular, helping to fuel its growth (Burtch *et al.*, 2016). Supporting Smola & Sutton (2002), it is evident that millennials value flexibility highly; this research confirms this as a primary reason to enter this type of work. This extends upon the current literature by pinpointing flexibility as the most influential on the decision for the millennials.

However the literature suggests that both the lack of alternatives and the benefits have an association with the desire to enter the gig-economy, representing the push and pull factors (Balaram *et al.* 2017). Our results showed no association with the lack of alternatives, suggesting that millennials did not enter due to the lack of alternatives. In

contrast, Brown (2017) highlighted this push during a time of economic downturn and unemployment. This could suggest that perhaps when there is a downturn in the economy there is this desire to look for alternatives such as the gig-economy, with this push force not always being applicable. Deloitte (2017), suggested that there is an increasing number of alternatives, which could support this finding that currently it is unlikely for millennials to feel pushed by the lack of alternatives. Therefore the lack of association between the desire to work in the gig-economy and lack of alternatives may not contradict the literature altogether but adds an element for further consideration. This may create issues in the future, with the theory of creative destruction helping to understand these findings, with the potential accentuation of these destructive elements at times of economic downfall, pushing more individuals into the gig-economy (Schumpeter, 1976 & LexisNexis, 2017).

The research confirms H1 that individuals are motivated to work within the gig-economy due to its perceived advantages, with pull factors having a greater influence over the lack of alternative employment options. It should be noted that an individual's decision to enter may have been influenced by unconscious factors, presenting challenges about the associations that have arisen. This should be something to consider in future research.

5.2 Millennial values and the perceived advantages

Based on the evidence, the findings do not necessarily mean that individuals that value flexibility, control over their work and entrepreneurship will have a greater perception of the overall advantages of the gig-economy. Examining the findings in closer detail, some elements of the results do correspond with the previous literature. This will be discussed.

The findings highlight that flexibility is highly valued by the millennials (Figure 7), and those that highly value flexibility perceive the advantages of the gig-economy highly (Table 2). This agrees with the majority of the literature that states that flexibility is one of the main advantages, complementing and bringing together the work of Dobson,

Smola and Sutton (2017 & 2002). Millennials perceive the flexibility that the gig-economy provides, confirming the literature, but extending this from the millennials viewpoint. This might suggest an extension of the findings from H1. If most individuals are motivated to join the gig-economy due to its flexibility and they perceive this highly, it is supporting the idea that they are receiving this flexibility as promised- this is not just an unrealistic picture as Cherry (2009) proposes. For the future this implies long-term sustainability through delivering on its perceptions, contradicting the views of Farrell and Greig (2017).

The findings show that despite control being highly valued, being the most highly rated 'important' value (Figure 7), gig-workers that value having control do not perceive the advantages highly (Table 2). This contradicts legal literature that suggests workers are meant to have a certain element of control within their work, in comparison to being an employee (De Stefano, 2015 and Emir & Selwyn, 2016). This may mean that although this control element is meant to be an important part of the classification of an employment relationship, this is not as expected. This perhaps supports Taylor (2016) and Rogers (2016), that too often there is misclassification of workers. Therefore the level of control would not be as expected or as it should be in regards to the employment law surrounding this, giving workers their full legal entitlements (Rogers, 2016). This was also raised in the case of Uber; this element of control was not actually present to the extent it should be (BBC, 2017). These findings build a practical extension upon the Taylor Report (2016) and raise further questions that if this is the case, there is an argument for further regulation, which will be discussed later on.

The findings reported that the value for entrepreneurship was fairly mixed, with millennials not particularly valuing this as highly as expected (Figure 7). The lack of significant association with the value for entrepreneurship and perceived advantage led to H2 being unsupported: the idea that those who highly value entrepreneurship perceive the advantages of the gig-economy highly (Table 2).

The findings were not similar to that of CIPD (2017). Through Kauffman's work it is evident that the millennials value entrepreneurship (2016), this brings us to question if our sample was an exception. Figure 6, can be drawn upon here, showing only 6.5% stating the ability to pursue entrepreneurial activity was the primary reason for entering

the gig-economy. In examining our sample, 78% has received or working towards an undergraduate degree, indicating the sample is not representative of the general population compared to the CIPD survey (2017), which established 42% of workers had a degree of some sort (Figure 3). It should be mentioned that perhaps the creative destruction theory could be brought in here (Schumpeter, 1976 and LexixNexis, 2017). This highlights that although benefits arise, these may only apply to a certain group. Therefore due to a large proportion of undergraduates in the sample, there is not enough evidence from a variety of education backgrounds to make a valid assumption if the value for entrepreneurship is highly valued throughout the millennials. It could be beneficial for future research to investigate the ability to pursue other activities alongside the gig-work, such as studying, rather than specifically focused on the entrepreneurial aspect.

It might be the case that as Tolentino has suggested, the findings appeared differently due to the variation in appearance and reality of gig work (2017). This could have led to entrepreneurial activities not being possible to pursue due to the unexpected disadvantages preventing this. The research has not confirmed previous findings that entrepreneurial ability is a significant advantage for those that value this.

It should be noted that for this hypothesis, there was variation in the Chi-squared and Fisher's exact results. This suggests that the accuracy of this result is limited and this should be taken with caution, with it expected that the results should be somewhat consistent.

5.3 Overall perceptions

The findings show that the millennials typically perceive the advantages to outweigh the disadvantages in the gig-economy, supporting H3. The millennials tend to have a higher rating for the advantages and tend to rate the disadvantages less favourably in comparison (Figure 8). The Z-test of proportions showed significant evidence that there is a systematic effect in the likelihood of respondents holding an attitude that there are greater advantages, which differs significantly from the proportion of respondents that perceive greater disadvantages. The literature generally supports this, due to the value

and attitudes in which the millennials place on characteristics that are associated with the gig-economy. The generational theory (Strauss & Howe, 1991) can be used to support Parker's research (2017), that some groups have a preference for the gig-economy. This confirms predictions that some groups have a less negative perception of the gig-economy and are impacted to a lesser extent. These findings highlight the preferences of the millennials in particular for positive association with the gig-economy.

However this challenges large volumes of literature that focus on the disruption and unfair rights of workers; in particular the Taylor Review (2016), which brings to light the suffering experienced by workers and the need for increased regulation. Previous research tends to focus on the general population, not on the millennials, which further adds to the conclusion that the millennials in comparison perceive more advantages than disadvantages.

This finding might not be applicable in all situations and should be considered carefully, given that 68% of the sample work in hospitality, which might impact on the findings (Figure 5). Further investigation could consider how the advantages and disadvantages outweigh each other and whether this varies across industries.

5.4 Millennial values and perceived disadvantages

Based on the evidence, millennials tend to highly value sick pay, holiday allowance and greater legal protection in their employment contract; in particular placing a high value on salary (Figure 9). The findings report that those that highly value salary and legal protection, greatly perceive the disadvantages of the gig-economy (Table 3). This association is as expected, supporting the generational theory and the work values of the millennials in regards to their salary expectations (Strauss & Howe, 1998). However it is important to note there was no significant association between those who value sick pay and holiday allowance and the disadvantages in the gig-economy (Table 3).

Opposing research from Aloisi (2016) and CIPD (2017) suggested that sick pay and holiday allowance was a significant disadvantage of the gig-economy, but this research looked at the general population. Due to this contrast it could suggest that perhaps the millennial generation do not perceive the disadvantages in regards to the lack of sick pay and holiday allowance as greatly as other generations. Our findings offer a practical extension to previous research by offering this perspective from the millennial viewpoint.

Due to 78% of the research population being undergraduates, it might be possible that the survey only captured holiday work of students (Figure 3). Therefore the findings might not be applicable in this situation; if this work is used as a holiday job then it is possible that holiday allowance or sick pay has less association with the disadvantages. The survey is limited in this sense with the time frame not indicating the true length of continuous work. Future research should clarify to what extent the gig work is used as holiday work.

5.5 Dependency and the disadvantages

From the findings, those that are more dependent on the gig-economy do not perceive there to be significantly greater disadvantages (Table 4). It was noted that those who have worked in the role longer, perform the work more often and perceive there to be a lack of alternatives do not significantly perceive there to be greater disadvantages. The findings reported that there was no significant association between dependency, time spent within the role and regularity of the work performed with the perceived advantages (Table 5).

The results were not as expected and contradicts research by Huws *et al.*, (2016). The survey sample consisted of 9.7% who were extremely dependent on the income that this provides, very close to Mishel (2015) survey results, whom 6% were solely dependent on the income that this provided. This in itself is concerning, with our sample being specifically focused on the millennial generation, unlike Mishel's research, so greater variation is expected leading us to question accuracy of responses. Previous literature discusses dependency in the context of family life (Huws

et al., 2016). To some extent, due to the sample being 87% undergraduates this is naturally less likely to be applicable (Figure 3).

As discussed, limitations may have created misleading findings regarding the time-frame of work, with holiday jobs being a possibility that is unaccounted for (Figure 2 & 4). The amount of time which an individual has worked in the employment relationship and the regularity of the work performed might be misleading. Our findings may suggest the millennials offer differing perspective regarding dependency and its association with perceived disadvantages. Hershatter and Epstein (2010) highlight millennials change jobs more often, therefore in having this preference for movement, this could result in this lack of associating dependency with the disadvantages.

The one finding that did report a statistical significant association was the lack of alternatives with the perceived advantages. This compliments Odgers (2017), for individuals who would otherwise be unemployed the gig-economy is seen from a positive perspective. This ties in with Brown (2017), that the millennials face a struggle for job opportunities unlike that of other generations. Therefore this research builds upon previous literature by clarifying the idea that especially for the millennials, those that perceive there to be a lack of alternative, highly perceive the advantages.

5.6 Desire for regulation and the disadvantages

Based on the evidence, there is a greater desire for increased regulation within the gig-economy (Figure 10). The Chi-squared test showed the desire for regulation has a stronger association with the disadvantages rather than the advantages (Table 6 & 7).

This confirms H6 and agrees with a wide spread of current literature, in particular with Taylor (2016). It is evident that there is concern regarding the current by-passing of regulation, with the disadvantages shrinking contractual rights, naturally leading to a greater desire for regulation (Aloisi, 2016). This research establishes that the millennials share this attitude with the general population.

However our findings reported that 35% of the respondents were undecided whether there should be an increase in regulation. This suggests a lack of awareness and confusion surrounding the gig-economy. This extends Rogers (2016) research, which highlights the uncertainty and confusion surrounding employment relationships, by adding this element of uncertainty to the regulations themselves.

Additional points of interests were also noted. The findings reported that there was an association between the desire for regulation and whether the role was current or past. There is also a significant relationship between desire for regulation and educational background. These associations were not drawn out from the literature. Future research should seek to investigate these relationships further.

6. Conclusion

This chapter will summarise the findings and enable conclusions to be drawn from the research. The limitations of the study will then be discussed and recommended areas of future research will be proposed.

6.1 Conclusions

This study extends existing literature by exploring the millennials' attitudes towards the gig-economy and the impact of this on their generation. To do this the various advantages and disadvantages from their perspective have been examined; the motivations for entering this employment relationship, the dependency on the gig-economy and the impact of this and the desire for regulation have been explored. The literature is fairly new; therefore a conceptual framework underpinning the gig-economy is under established. The current literature has given us a general descriptive perspective; this research has considered arguments addressing whether the millennials view the issues from a different perspective.

The six hypotheses formed the centre of this research. The first hypothesis concerns the desire for individuals to enter the gig-economy, arguing that this is due to pull-factors rather than the push factors such as the lack of alternatives. The second hypothesis failed to fully support the literature by the CIPD (2017) on all aspects: individuals that value flexibility, entrepreneurship and control over work perceive the advantages highly. The third hypothesis concerns the millennials perceiving there to be more advantages than disadvantages, which is in line with what literature regarding the millennials values would suggest from the generation theory (Strauss & Howe, 1991). The fourth hypothesis supports literature on the whole by Strauss & Howe (1991) and De Stefano (2015) that those who highly value salary, greater legal protection, sick pay and holiday allowance, perceive there to be greater disadvantages. The fifth hypothesis did not support the current literature (Huws *et al.*, 2016). Our results did not show that those who are more dependent on the gig-economy perceive greater disadvantages, based around the idea that individuals in this precarious employment relationship start to feel progressively trapped and unfairly treated. Hypothesis six examines the desire

for increased regulation and its stronger association with the disadvantages of the gig-economy. Quantitative data methods were used in the methodology. The Chi-squared test of independent tested investigated whether there was a significant relationship between our variables and the Z-Test of proportions was used for Hypothesis 3, to test the difference in proportions of the sample. These findings have provided a useful insight into the gig-economy from the millennials' perspective.

6.2 Implications for theory and practice

It is important to discuss the implications of these findings on the millennials, employers and the government. This dissertation has confirmed that there are both significant advantages and disadvantages of the gig-economy. Based on the evidence, individuals should consider their values and the impact of working in this type of employment relationship. The results highlight that there is confusion, so being aware of and understanding the issues before entering a contract could mitigate negative feelings, therefore reducing the perception of being at a greater disadvantage. It is also recommended that due to the association between advantages and the lack of alternatives, those who would otherwise be unemployed should be recommended to consider the gig-economy.

Due to increase in desire for regulation and the recent negative media attention, with the likes of Uber coming under much scrutiny, companies operating in the gig-economy should be cautious in continuing to place disadvantages on workers (BBC, 2017). The increased desire for regulation, brings risk of regulation that has the potential to disrupt and put an end to their business models. Therefore organisations should look instead to offer a greater array of pull factors as greater motivation for entering the gig-economy.

As discussed in the government-backed Taylor Review (2016), action should be taken to find ways to protect workers within such precarious employment relationships and adapt employment regulation to modern working practices. This would ensure greater protection for workers from some of the disadvantages. Future research should seek to address the underlying problems of this precarious employment relationship; the legal

status of the gig-workers. In future, it is likely that greater legal protection will be provided in order to minimise the legal disadvantages.

6.3 Limitations and directions for future research

Likewise to all such studies, this research contains limitations. First, given the scope and timeframe of this research, the sample size was limited (187). In future, a larger sample size would be preferable in order to generalise the findings and ensure that the responses are more representative of the general millennial population.

This research is also limited due to the fact that survey was distributed through personal networks; this could lead to indirectly targeting a certain type of millennial, not being representative of the general population. It is likely that the research had limited distribution, so would not have a global dimension. Given large volumes of work are performed across borders in the gig-economy, this could reflect in the findings (CIPD, 2017). Future research would allow a more thorough in-depth analysis to explore this international aspect along with a focus on variation across industries. It would be interesting to ascertain the extent to which advantages and disadvantages are perceived differently across industries; the sample size in this research meant that no real comparison could be made across industries.

A substantial limitation of this study is the use of self-report data and opinion variables (Podsakoff & Organi, 1986). This means the validity and accuracy of the responses given is potentially questionable, with respondents potentially having a bias for certain answers (Arnold & Feldman, 1981). This could lead to individuals being influenced by other factors; recent publicity and negative media could lead individuals giving a bias response rather than answering from a genuine perspective (BBC, 2017). This could exaggerate the distinction between advantages and disadvantages.

The survey being distributed online meant this relied upon millennials having some basic knowledge of their employment relationship in order to fit the survey criteria and complete the questionnaire. This focused upon precarious employment contracts in

order not to miss individuals who were part of the gig-economy but were unaware and to achieve a suitable sample size. Therefore some individuals whom may have believed they fitted the criteria, may not actually be part of the gig-economy. It was noted that some millennials had confusion over their employment rights and regulations, it would be useful to establish the extent of this by using a qualitative approach to explore this new research area. The main advantages and disadvantages that were drawn from the current literature were investigated in this research with other factors potentially impacting. Qualitative methods could be used to explore more variables, which are positively or negatively associated with the gig-economy that might determine the millennials perceptions and impact of the gig-work.

Current literature suggests that a sense of dependency leads to a feeling of being trapped, which can develop through length of time within the role and how regularly one works (Huws & Joyce, 2016). Despite this research not reaching any valid conclusions, it would be useful to look at this in greater depth to gain more insight into the factors that makes an individual more dependent on the gig-economy.

Due to the literature being relatively new, with the gig-economy continuing to develop and lacking theoretical underpinning, there is a wide range of future research that would be useful. An important element for future review would be the regulatory aspect and the necessary approach that should be taken. As discussed in Chapter 2 by Horney (2016) this would be a challenging but necessary area to develop.

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Survey

Page 1: Page 1

This survey is for anyone born between 1980-2000 that has ever been employed in a situation where the following terms apply:-

- (i) there has been no guarantee of any work becoming available; and/or
- (ii) the position involves agency work, a zero-hours contract, a temporary contract or is within the gig-economy;
- (iii) such as casual work doing shifts, bar work contracted through somebody other than the employer or self-employed work through a business, app or middle-man.

PLEASE ANSWER THE FOLLOWING QUESTIONS IN RELATION TO THE SPECIFIED CRITERIA, USING YOUR MOST RECENT EMPLOYER IF APPLICABLE.

This survey is for the purpose of my research for my undergraduate dissertation. This is to investigate the millennial generation's attitudes towards certain employment relationships and the varying impact of these employment contracts. All the responses will be used in confidence and your answers will remain anonymous. Your participation in this study is entirely voluntary and you can withdraw at any time.

Thank you in advance for taking the time to complete this survey.

Page 2

1.1. Gender:

- Male
- Female
- Other
- Prefer Not to say

2.2. Highest level of education received or working towards:

- No schooling background
- GCSE or equivalent
- A level or equivalent
- Undergraduate degree (e.g. BA, BSc)
- Higher degree (e.g. MA, PhD, PGCE)
- Professional qualifications
- Other

PLEASE ANSWER THE FOLLOWING QUESTIONS IN RELATION TO THE SPECIFIED CRITERIA AS STATED BELOW, USING YOUR MOST RECENT EMPLOYER IF APPLICABLE.

Employment in a situation where the following terms apply:-

- (i) there has been no guarantee of any work becoming available; and/or
- (ii) the position involves agency work, a zero-hours contract, a temporary contract or is within the gig-economy;
- (iii) such as casual work doing shifts, bar work contracted through somebody other than the employer or self-employed work through a business, app or middle-man.

3.3. Please select the amount of time which you spent working within the role:

- Less than a month
- 1-3 months
- 3-6 months
- 6-12 months
- 1-2 years
- 2-4 years
- 4+ years

4.4. Please select if this role which you are referring to is your:

- Current job
- Past job

5.5. How regularly do you/ did you work?

- On a one-off occasion
- Once every few months
- Once every 3-4 weeks

- Once every 2 weeks
- Once a week
- 2-4 times a week
- More than four times a week

6.6. Please select the industry type which you worked in:

- Hospitality
- Food industry
- Agriculture
- Financial services
- Construction
- Transport
- Other

a.6.a. If you selected Other, please specify:

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7.7. From the given options, what was your primary reason for entering this type of employment contract? (please only select the most influential reason)

- Other alternative employment contracts were unsuitable for your situation
- Flexibility
- Unable to get an alternative job
- Allows fulfilment of entrepreneurial activities at the same time

8.8. On a scale of 1-5, please answer the following question: (1= never, 2= rarely, 3= sometimes, 4= very often, 5= always)

Please don't select more than 1 answer(s) per row.

1	2	3	4	5
---	---	---	---	---

Do you feel there are negatives to working within this type of employment relationship?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

9.9. On a scale of 1-5, please answer the following question: (1= very unimportant, 2= unimportant, 3= neutral, 4= important, 5= very important)

1	2	3	4	5
---	---	---	---	---

For you, how important was it to work within this type of employment relationship? (i.e. to work in a contract that involved agency work, a zero-hours contract, within the gig-economy or a temporary contract)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

10.10. On a scale of 1-5, please answer the following question: (1= not at all dependent, 2= slightly dependent, 3= moderately dependent, 4= very dependent, 5= extremely dependent)

Please don't select more than 1 answer(s) per row.

1	2	3	4	5
---	---	---	---	---

How dependent are you on the income that this work provides/ provided you with?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

11.11. On a scale of 1-5, please answer the following questions: (1= never, 2= rarely, 3= sometimes, 4= very often, 5= always)

Please don't select more than 1 answer(s) per row.

1	2	3	4	5
---	---	---	---	---

Do you feel there are benefits to working within this type of employment relationship?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Do you feel there is a lack of alternative employment options that would be suitable for you?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

12.12. On a scale of 1-5, how do you value the following in a job: (1= very unimportant, 2= unimportant, 3= neutral, 4= important, 5= very important)

Please don't select more than 1 answer(s) per row.

1	2	3	4	5
---	---	---	---	---

Salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Entitlement to sick pay and holiday allowance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To have control over your work i.e. not constantly supervised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To have greater legal protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to pursue entrepreneurial activities alongside this	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility i.e. you choose when you work, how often you work, where you work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13.13. To what extent do you agree with the following statements: (1= strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree)

Please don't select more than 1 answer(s) per row.

	1	2	3	4	5
There should be an increase in the legal regulations in this type of employment relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is already enough legal regulations in this type of employment relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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INTERNAL RESEARCH ETHICS APPLICATION

Part A: Compliance with the module's block ethical approval

Ethical review is required for all research involving human participants, including research undertaken by students within a taught student module. Further details of the University of Leeds ethical review requirements are provided in the *Research Ethics Policy* available at: <http://ris.leeds.ac.uk/ResearchEthicsPolicies> and at www.leeds.ac.uk/ethics.

1. Will your dissertation involve any of the following?	Yes	No
New data collected by administering questionnaires/interviews for quantitative analysis	✓	
New data collected by qualitative methods	✓	
New data collected from observing individuals or populations	✓	
Working with aggregated or population data	✓	
Using already published data or data in the public domain	✓	
Any other research methodology, please specify:		✓

2. Will any of the participants be from any of the following groups? (Tick as appropriate)	Yes	No
Children under 16		✓
Adults with learning disabilities		✓
Adults with other forms of mental incapacity or mental illness		✓
Adults in emergency situations		✓
Prisoners or young offenders		✓
Those who could be considered to have a particularly dependent relationship with the investigator, e.g. members of staff, students		✓
Other vulnerable groups, please specify:		✓

3. Will the project/dissertation/fieldwork involve any of the following: (You may select more than one)	Yes	No
Patients and users of the NHS (including NHS patients treated under contracts with private sector)		✓
Individuals identified as potential participants because of their status as relatives or carers of patients and users of the NHS		✓
The use of, or potential access to, NHS premises or facilities		✓
NHS staff - recruited as potential research participants by virtue of their professional role		✓
A prison or a young offender institution in England and Wales (and is health related)		✓

If you have answered 'yes' to ANY of the above questions in 2 or 3 then you will need to apply for full ethical review, a faculty committee level process. This can take up to 6-8 weeks, so it is important that you consult further with your supervisor for guidance with this application as soon as possible. Please now complete and sign the final page of this document. The application form for full ethical review and further information about the process are available at <http://ris.leeds.ac.uk/uolethicsapplication>.

If you answered 'no' to ALL of the questions in sections 2 and 3 please continue to part B.

INTERNAL RESEARCH ETHICS APPLICATION

Part B: Ethical considerations within block ethical approval

4. Will the research touch on sensitive topics or raise other challenges?	Yes	No
Will the study require the cooperation of a gatekeeper for initial access to groups or individuals who are taking part in the study (eg students at school, members of self-help groups, residents of a nursing home)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will participants be taking part in the research without their knowledge and consent (eg covert observation of people in non-public places)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the study involve discussion of sensitive topics (eg sexual activity, drug use)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Could the study induce psychological stress or anxiety or cause harm or have negative consequences beyond the risks encountered in normal life?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any potential conflicts of interest?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does any relationship exist between the researcher(s) and the participant(s), other than that required by the activities associated with the project (e.g., fellow students, staff, etc)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the research involve any risks to the researchers themselves, or individuals not directly involved in the research?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you have answered 'yes' to any of the questions in (4), please describe the ethical issues raised and your plans to resolve them on a separate page. Agree this with your supervisor and submit it with this form. Again, you MAY be referred for light touch or full ethical review.

5. International Research	Yes	No
Does your research involve participants outside of the UK?	<input type="checkbox"/>	<input type="checkbox"/>
Are any of your research participants located outside of the UK, e.g., will you be gathering data through Skype interviews with participants located overseas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will any of the fieldwork or research require you to travel outside of the UK to collect data?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you have answered 'yes' to either part of question (5), please describe the ethical issues raised with: gaining consent and gathering data from participants located overseas, securely storing and transferring data from the field back to the UK, any cultural issues that may be relevant. Please outline your plans to resolve this on a separate page and ensure that you have completed a risk assessment form. Agree this with your supervisor and submit it with this form.

You MAY be referred for light touch or full ethical review if you are unable to demonstrate that you have resolved the ethical issues relating to international research.

6. Personal safety

Where will any fieldwork/ interviews/ focus groups take place?

	Yes	No
At the university or other public place (please specify below).	✓	
At my home address		/
At the research subject's home address		/
Some other location (please specify below).		✓

If you conduct fieldwork anywhere except at the university or other public place you need to review security issues with your supervisor and have them confirmed by the Module Leader who may refer you for light touch or full ethical review. Write a brief statement indicating any security/personal safety issues arising for you and/or for your participants, explaining how these will be managed. Agree this with your supervisor and submit it with this form.

Please note that conducting fieldwork at the research subject's home address will require strong justification and is generally not encouraged.

A risk assessment is required before any data is gathered for any dissertation project, please view the Health and Safety advice on the module's VLE pages.

7. Anonymity

	Yes	No
Is there any potential for data to be traced back to individuals or organisations, for instance because it has been anonymised in such a way that there remains risk (eg highlighting people's positions within an organisation, which may reveal them).		/

If you have answered 'yes' to question 7, please discuss this further with your supervisor. You need to provide a strong justification for this decision on a separate sheet. **This application will need to be reviewed by the dissertation Module Leader and may require a full ethical review.**

8. Data management issues

Will the research involve any of the following activities at any stage (including identification of potential research participants)?

	Yes	No
a. Examination of personal records by those who would not normally have access		✓
b. Sharing data with other organisations		✓
c. Use of personal addresses, postcodes, faxes, e-mails or telephone numbers		✓
d. Publication of direct quotations from respondents		✓
e. Publication of data that might allow identification of individuals to be identified		✓
f. Use of audio/visual recording devices		✓
g. Storage of personal data on any of the following:		✓
FLASH memory or other portable storage devices	✓	
Home or other personal computers	✓	
Private company computers		✓
Laptop computers	✓	

If you have answered 'yes' to any of the questions under 8, you must ensure that you follow the University of Leeds Information Protection Policy:

<http://www.leeds.ac.uk/informationsecurity> and the Research Data Management Policy:

<http://library.leeds.ac.uk/research-data-policies#activate-tab1> university research data policy.

You are obliged to provide a copy of your anonymised data to your supervisor for their records and to destroy other copies of your data when your degree has been confirmed.