# Flexible working: Its Impacts on Health and Happiness in the UK and the Netherlands

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#### <u>Abstract</u>

This research involves the impact of different levels of autonomy in various flexible working practices, comparing the effects on both happiness and health of workers in the UK and the Netherlands. There has generally been some research in the two effects, but little in happiness of employees, which today is finding an added importance in how our new world of working is structured, along with new policy implementation. Further, there has been little research in comparing effects cross-region/border, investigating if autonomous flexible working policies can be replicated successfully in another location. Through ordinal logistic regression, there are little results showing great significant impacts, however there are some significant results for the Netherlands showing negative impacts especially on health when having more autonomy in flexible working arrangements. Further, it is shown that the UK and the Netherlands, in most cases, can have an adverse effect on happiness and health, highlighting the importance of location-based research before implementation of flexible working policies.

#### <u>Keywords</u>

Flexible working, autonomy, happiness, health, employee-oriented.

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#### Introduction

Research into the topic of flexible working was, until recently, at a slower pace. Since the beginning of this study in 2019, the COVID-19 pandemic hit globally. This forced alterations to work arrangements, therefore increasing interest into the impacts flexible working arrangements could have on employees' health and happiness, and further to what degrees of autonomy have certain impacts (Peters et al., 2022). However, this is rarely a study concept that combines the two, let alone on a regional level. Given vast differences between even neighbouring regions (Kaldor, 1970), the question began of what the differences between two countries' impacts of flexible working arrangements on health and happiness are. Further, as more flexible working policies are being implemented at various levels, how much can one draw from a study conducted in a different location and successfully apply to their own (Werner, 1999)? And finally, what are the effects on both happiness and health of an individual with the implementation of autonomous flexible working arrangements, and is there a positive effect on both; does one benefit at the cost of another; or is there a positive impact at all?

Given the current mixed results in degrees of positive and/or negative impacts on differing autonomous flexible working arrangements, there is opportunity for policy makers to negate flexible working's potential. This exploratory study aims to show the potential differences in the same autonomous policies implemented in different regions, to highlight the importance of relevancy in this domain. In addition, this study aims to show that good intention may not always harness positive results, showing why it is important to consider both health and happiness when balancing autonomy in flexible working.

The main research question to answer is – what are the impacts of flexible working on health and happiness for both the UK and the Netherlands. Through multiple ordinal logistic regressions using the European Social Survey: Wave 5 dataset (ESS, 2010), it is found that there is a highly varied outcome across three different flexible working arrangements, as well as adverse effects comparing the UK and the Netherlands. What is gathered further is that it is not possible to implement the same level of autonomy across all flexible working policies, nor across different regions, as results will nearly always differ. Therefore, specific studies are recommended to be carried out per implementation suggestion, assuming best interest in terms of wellbeing outcomes. This research helps to cover the range of adverse results in happiness and health outcomes of flexible working and autonomy research, helping account for differences and offering insight to policy makers into more strategic approaches. Limitations of the study do include some missing data, lower response rates, and assumptions regarding knowledge of flexible working before signing into employment, which may skew results of happiness. Further, modern recommendations may be outdated by the older dataset, given being from 2010. Finally, the study does not account for contract type or job title, which can skew results for both health and happiness given income levels, job hygiene, and status within an organisation.

The structure of this thesis will follow through to background research into flexible working and autonomy, as well as touching on additional elements such as employer versus employee-oriented flexible working, income, and job satisfaction. After a methodology

outlining the course of the research and the further results are examined, discussions and recommendations towards policy makers at both micro and macro levels are made.

#### Literature review

The purpose of the study is to explore the impacts of autonomy in flexible working on happiness and health of employees. Given the broad nature of flexible working, in not only its definitions, focus, and key indicators, additional background research such as income and job satisfaction, and employee versus employer-oriented flexible working practices are also discussed. As this study aims to find potential differences between locations, a critical analysis is also applied to find potential gaps in current research. Largely, the results of autonomy in flexible working are varied not only within health and/or happiness, but also between the two. In addition, greater context regarding family status, gender, income, and orientation of flexible working practices plays integral roles into the findings. When scaling back and asking the question of why there are such differences between studies, it is found that there is little consistency across industry or location. Given the differences in political situations, cultural frames of thought, and costs of living per region, these can be missing indicators as to the impact autonomy may have on health and happiness in flexible working analysis. Further recommendations form the basis for the purpose of this research.

#### What is the definition of flexible working?

The definition of flexible working is still a debated topic. There is no one true suitable definition of flexible working, where offered definitions of flexible working have quite some variation (Janssen & Nachreiner, 2004). Issues with this variation come from a number of focuses surrounding flexible working: whether the flexible working focuses on company-oriented flexibility or employee-oriented flexibility; the sort of flexible working practices involved such as job sharing, flexible working times, telecommuting or shift work; how "normal" working hours are defined; or the physical versus contractual side of working, e.g. Role, time and location of work versus policy regulation and contractual agreements between employer and employee (Costa & Satori, 2005; Idris, 2014; Janssen & Friedhelm, 2004; Uglanova & Dettmers, 2018; Litchfield et al., 2016).

#### Autonomy and flexible working:

Autonomy is regarded as one of the core forms of flexible working practices, traditionally allowing employees to have more freedom and independence in the decision-making process over their working hours (Shagvaliyeva & Yazdanifard, 2014). At its root, it is argued to be one of the most basic human needs, affecting our abilities to feel fulfilled and happy and have positive impacts on job satisfaction (Okulicz-Kozaryn & Golden, 2018; Ali et al., 2014). With increased employee autonomy, overall job satisfaction and happiness can be positively influenced creating a healthier work environment, healthier members of staff through the increased ability to engage in better self-care, and better work-life balance (Shagvaliyeva & Yazdanifard, 2014; Kossek et al., 2012; Kinman, 2014). However, autonomy and its ability to flexibly change working hours then assumes it to be applicable to both employees and employers as it can be influenced by either side. It is also dependable on whether the employer adopts employee or employer-oriented flexibility practices (Janssen & Nachreiner, 2004; Ulganova & Dettmers, 2018).

In its ability to strongly affect employee's job satisfaction and happiness, autonomy is recognised as one of the five core job characteristics, a model developed by Hackman and Oldham (1974). The model's purpose is to provide insight into organisational opinions and feelings to offer directions for job development and redesign, taking all five factors into consideration. Finding that employees cannot experience responsibility for the outcomes of their work (one of the three critical psychological states) without autonomy as its causal link, one of the key components towards job satisfaction would be missing. Ali et al. (2014) conducted further research using the Job Characteristics model, finding that autonomy had the highest positive significant impact on job satisfaction. Job satisfaction shall be addressed later in this work, where its impact and spill over effects on employee happiness and life satisfaction are significant. Furthermore, the extent to which employees experienced job satisfaction also depended on their functional role within the workplace. It is found that managers' satisfaction variance is explained less by autonomy and more so by skill significance, compared to their lesser senior colleagues. Notably, Wall et al. (1978) found that experiencing responsibility was relatively insignificant in what was originally relatively equally pronounced statuses within the model. Continuing on, they found that whilst not being originally included in the model, the factors of lateness and absence to be highly significant. With Hackman and Oldham's definition of autonomy to be based on the personal responsibility of when and how the work is done, it could have then covered factors of lateness/absence within. Wall et al.'s contribution here notes the importance of true autonomy in the workplace and its significance on experienced responsibility and further job satisfaction and happiness.

When individual autonomy is inclusive of control over working hours, it lends itself as a tool that employees can use to simultaneously improve their happiness and health. As people have the ability to control when, where and how they work, more time can be allocated to better self-care such as attending medical appointments and allowing more time for exercise (Kossek et al., 2012). Finding that those who autonomously control their working days have less impairments compared to those that don't have autonomy over their work schedule, the argument for autonomy in the workplace as it can contribute to improved employee health is strong (Janssen and Friedhelm, 2004).

In addition to health benefits of individual autonomy in flexible working, happiness benefits are also prevalent. The value on own time is increasing, not only on personal time but time with others. More recent generations, from Gen Y onwards, are found to value family time more than their older colleagues, aiming to seek work that allows for family time to be incorporated into their daily lives (Holumyong & Punpuing, 2015). This increased value in family time has also seen an increase in employers incorporating more flexible working and autonomous work designs into the workplace in order to build and improve trust culture. This ultimately benefits the employer through improved employee motivation and productivity and lowering costs through lower staff turnover and less absenteeism. This further has positive impacts on employee job satisfaction and work commitment, as the employee feels seen and acknowledged in their needs, which further has positive effects on their happiness levels (Shagvaliyeva & Yazdanifard, 2014).

However, total individual autonomy over flexible working practices is rare, and when occurs can have negative impacts on the health and happiness of employees, which too can lead to negative effects on happiness. Findings show that individual autonomous flexibility does not compensate for self-imposed variability in hours, nor does autonomous flexibility compensate for company-oriented flexible working practices (Janssen & Friedhelm, 2004; Costa et al., 2004). There is also a distinct difference of effects of autonomous flexible working between men and women. Where women tend to benefit from the ability to control their work/life balance and improve their happiness and health, men are found to be more likely to revert to the "ideal worker" ideology. Whilst women can seemingly strike their individual balances, men are shown to not improve their work/life balances, instead increasing work-intensification and work-family conflict (Uglanova & Dettmers, 2018). Studies conducted in Ireland found that men may use autonomous flexible working practices to work longer hours, worsening any currently existing work/life conflicts and therefore their happiness, and potentially leading to worsening health through stress, overworking, and poorer self-care (Russel et al., 2007). These negative impacts may go unnoticed or unrecognised as to their root problems. In 2008, UK academics reported some of the lowest wellbeing scores compared to the average UK employee, however such employees were generally content with their flexible working practices in place and the amount of control one has over their workday (Kinman, 2014). However, both men and women are not aware that through a "paradox of happiness" they can reduce their working hours without reducing their happiness levels. They can further underestimate the opportunity costs that are incurred in working for additional income, saving for time later rather than allocating their current time now effectively for their wellbeing (Binswager, 2003; Golden & Wiens-Tuers, 2006).

In recent years, recommendations have been to reduce variability in workdays, as this is found to be one of the largest negative impacting factors on employee's health and happiness. However, the line between employer guidance and control and individual autonomy is fragile, as it is not so much the working time hours that matters in terms of employee happiness but rather autonomy (Friedhelm & Janssen, 2004; Uglanova & Dettmers, 2018). Arguably, limitations on employee-oriented autonomy over their flexible working practices from their employers could ensure a healthier work/life balance, but potentially at the cost of employee happiness (Shagvaliyeva & Yazdanifard, 2014). Furthermore, whilst working times in itself is heavily regulated, there is little regulation in place over flexible working times and practices (Costa et al., 2004). This lack of regulation fails to set a pillar on which employers can set a baseline model for their employees, where an employer could allow for more total individual employee autonomy over their flexible working hours without the employee feeling imposed upon by the employer, ensuring healthier work practices and happier employees. There is also little room for application for those in shift work, as workers' schedules are dependent on one another. As autonomy and flexible working-based research seem to be mostly surrounding full time contracts in typical work week patterns, little can be applied to those outside of this (such as those in medicine, construction, or hospitality).

Company and employee-oriented flexible working:

Rises in changes towards the thinking, implementation and focus of flexible working practices are attributed to the changing demographics, developing socio-cultural values,

technological advances, and the globalised economy (Idris, 2014). The decision for either employee or company-oriented flexible working implementation and direction is essentially dependent on one's company strategy. It is essential to distinguish the differences between the two terms, given it either meets the changing needs of the employees, or meets the needs of the employers (Costa et al., 2004; Uglanova & Dettmers, 2018). Focusing primarily on its own operations, company-oriented flexibility can typically lead to an increase in the number of hours demanded of employees to lengthen the possible production day. Opposite to this, employee-oriented flexibility focuses on the aim of reducing individual working hours and/or increasing one's autonomy on the subject (Costa & Sartori, 2005). Flexible working practices are often used to compete with other firms, not only in production levels but alternatively also in the hiring process to compete for the best workers (Idris, 2014). The question of who benefits where, or if it is a mutual benefit, is to be answered.

Employee-oriented flexibility has positive effects to both the company and the employee themselves. Summarised as giving the employee the ability to control their work time duration as well as location, employee-oriented flexible working practices are increasingly becoming a highly marketed item in talent acquisition in order to gain the best workers from competitors (Atkinson & Hall, 2011; Idris, 2014). However, it is heavily argued that this should be standard in the workplace rather than used as a marketing tool in recruitment (Shagvaliyeva & Yazdanifard, 2014). By facilitating employee-oriented flexibility, and offering support and recognising work, employers can create a healthy workplace that in turn can create and encourage a healthier lifestyle for its employees (Amabile & Kramer, 2011; Kossek et al., 2012). The Health and Safety Executive (HSE) in the UK has developed processes through which employers can manage work-related wellbeing, and further independent worker wellness programmes have been proven to significantly reduce health care costs for both employers and employees (Kinman, 2014; Keller et al., 2009). Whilst flexible working practices that are in mind of the employee reduce absenteeism, they also contribute to higher levels of productivity and additionally employee engagement (Shagvaliyeva & Yadanifard, 2014; Uglanova & Dettmers, 2018). However, a failure in research so far is not acknowledging the fact that because firms are using such practices to encourage more applications in order to be able to select the best candidates for their open positions, it can be argued that productivity is more likely to increase due to the high level of talent in the teams that was able to be selected, rather than the sole motivation behind the employees. Rather, firms that have employee-oriented flexible working practices in place and use them as effective marketing tools in their onboarding operations have a better pick of the labour market, which then has the effects of increased employee engagement, loyalty and productivity.

Failures to name in employee-oriented flexible working practice research can also count the lack of overall research on this side compared to employer-oriented flexible working practices and its effects on employee wellbeing (Shagvaliyeva & Yadanifard, 2014; Russel et al., 2007). Not thoroughly knowing the partly self-imposed effects of employee-oriented flexible working practices means that further comparisons for potential recommendations and policies are negligible. Also not disclosed in research is the actual amount of overtime an employee works in addition to their contracted working hours. More so, whether this is agreed upon and matches their actual wanted working hours or not, and what effects this

can have on their health and happiness. By calculating an employee's preferred work hours and comparing it to their actual worked hours it can give further insight as to the effects of overtime on individuals. This can be used for both employee-opted overtime and overtime imposed by employers, to be able to tell if workers are working more or less than they would prefer and can greater help understand health and happiness levels.

#### Life Balance:

The importance of recognising a healthy work/life balance is key not only for workers' individual happiness and health, but also wider impacts on their personal and work lives. Flexible working practices can help to achieve such a balance, but as previously discussed ineffectively utilising flexible working practices can also have damaging effects. A healthy work/life balance is an essential part of CSR, where organisations are responsible for ensuring that employees have adequate personal time away from work, or that they have their desired working hours per given time frame, whether this be in weeks or months, or personal life events such as having children (Welford, 2008; Golden et al., 2013). This is not only in the best interest of the employee but also of the employer. Where employees have a better ability to engage in their personal lives, create a separation between their work and personal lives and therefore improve their subjective happiness and health with particular reference to their stress levels, employers can benefit from reduced absenteeism, higher productivity and employee trust and loyalty (Kossek et al., 2012; Shagvaliyeva & Yazdanifard, 2014).

However, in practice there are mixed results on happiness and increasingly negative effects on health. Flexible working practices (such as schedule flexibility) with intentions to creating a healthy work/life balance allows workers to create a schedule that balances their needs, with workers feeling supported, committed and motivated in their work lives (Kossek et al., 2012; Kinman, 2014; Shagvaliyeva & Yazdanifard, 2014). This can be beneficial for both men and women in the ever-changing family gender roles, where it can help encourage women to enter the work force and drive forward female employment, and help men engage more with their personal lives (Uglanova & Dettmers, 2018; Shagvaliyeva & Yazdanifard, 2014). Increased commitment and motivation in the workplace, and receiving adequate rest away from work, can lead to greater levels of productivity for the employer and lower levels of employee turnover (Kossek et al., 2012; Shagvaliyeva & Yazdanifard, 2014). However, as previously discussed, the "ideal worker" ideology can be prominent amongst men, where when women's own work/life balance conflicts tend to be resolved, that of men's tend to worsen.

When a healthy work/life balance is not a concern for employers, or to some degree employees, and where flexible working is used in an employer-oriented approach, we can observe increased conflicts with work/life balance, where employees over-work and have reduced personal time. Depending on contract type (full time, part time, etc.) And location of work, this can increase pressure on employees to work more than their desired working hours, subjectively unsociable hours, and even longer hours than agreed to per day (Russel et al., 2007). In addition, the ever-globalising economy can increase pressure to work unsociable hours and/or during personal time. Previous research finds that those who engage or feel pressured into working longer hours or more days as pre-unarranged overtime experience higher levels of stress, fatigue and further risks to physical and mental health, ranging from increased risks of injury due to fatigue to a mental burnout (Golden & Wiens-Tuers, 2006). However, those that have pre-arranged overtime on average are found to experience higher levels of stress, fatigue and increased risks to health, as well as increased risks of negative impacts on personal and family lives (Golden & Wiens-Tuers, 2006). Those that have their work based at home, rather than a separate working environment, exhibit higher levels of work pressure and work/life conflicts than those who work away from home (Russel et al., 2007). This could be attributed to the inability to "switch-off" from work, potential pressure from employers or peers to continue working, or the pressure to continue working when unwell, which would have otherwise been counted as a sick day had they worked away from home.

With research finding that working overtime increases the negative impacts on employee's health, which then has follow-on effects to their happiness, the argument for the serious reduction of overtime has a strong argument. However, those that depend on overtime hours for additional income and/or for their job and life satisfaction would immediately lose out. Such workers may be more aware of their desired working hours than others, where individuals who are not being aware of personal and work life limits can create a mismatch between actual and preferred worked hours, which has a greater effect on wellbeing than the general number of hours worked (Golden et al., 2013). Those that have pre-arranged overtime hours are found to gain their main satisfaction in life from their work, which supports the theory from Hochshchild (1997) that time spent in the workplace is increasingly becoming more rewarding whilst time at home is not. The juxtaposition of workers with pre-arranged overtime experiencing higher levels of work/life conflict and finding most value in their work is surprising, however this is not initially considering those in the individual workers' personal circles, such as family and friends, who may not find value in the additional hours worked. There is currently little research into this topic, with research focusing primarily on life satisfaction rather than effects on work/life balance and conflicts. The balance between work and personal lives is apparent to be a tailored practice for each employee, however although flexible working practices are being implemented for this particular purpose there is currently little research on the employee capability to be able to balance work and life. Therefore, there is currently little knowledge as to the positive and negative effects of these practices on health and happiness of employees, or to the extent to which these are prominent.

#### Income:

Income alone has long been understood to not have long-lasting effects on happiness of individuals, where its continual growth does not trend with happiness, dissipating at a certain level (Easterlin, 1974; Golden et al., 2013). Whilst it has a strong impact on happiness, it singularly is not sufficient by means of promoting happiness in individuals; much like other individual factors of work to improve morale and happiness such as fringe benefits, enhanced working environments, etc., these singularly are not effective unless matched with other factors (Golden & Wiens-Tuers, 2006; Holumyong & Punpuing, 2015). With regard to its individual effect on health, increases in income has been found to improve mental and physical health, albeit by small amounts, but however simultaneously to also increase alcohol consumption which can lead to decreases in mental and physical health later in life if not managed (Ettner, 1996; Frijters et al., 2005).

The singularly little effects individual aspects of the work environment have on improving worker health and happiness contrast greatly to when such are combined. Having fair wages, good working environments and sufficient fringe benefits together can add to job satisfaction and improving workers' overall wellbeing (Holumyong & Punpuing, 2015; Shagvaliyeva & Yazdanifard, 2014). Additionally, employees working their ideal hours in order to retain their desired leisure time can increase happiness, whilst also taking into account their income level and role within the workplace (Golden & Wiens-Tuers, 2006). However, a knowledge gap exists for individuals and choosing their ideal work/leisure balance. Individuals tend to overestimate prospective gained happiness from increases in income by choosing additional work hours over ideal leisure time. Simultaneously, they underestimate the costs of working more than their preferred hours (Golden & Wiens-Tuers, 2006). The differences existing between men and women with regards to general opinions towards choosing work hours find that majority men believe a more flexible work schedule leads to decreases in income and increases in job insecurity, which may generally lead to a larger work/leisure imbalance for men leading to greater decreases in wellbeing for the sake of a higher income (Shagvaliyeva & Yazdanifard, 2014). Referring back to the previously mentioned "paradox of happiness", individuals could choose to work less hours in order to gain more leisure time and maximise happiness more than income theoretically could (Binswager, 2003). This is assuming that an individual has great personal value however in their subjective wellbeing above material gains and is independently consciously aware of their own abilities and limitations (Konchak & Pascual, 2005).

To summarise, income has a great impact on worker's happiness, however a higher income to an extent does not gain net happiness. Furthermore, pure satisfaction within the workplace through the environment, job title, or fringe benefits (such as the ability to choose one's work hours) also does not solely improve happiness. A balance between a proper income and a healthy working environment may be a better generator of happiness.

#### Job and life satisfaction:

Job satisfaction is widely defined as the growing affection one has with their own workplace, covering aspects such as colleagues, supervisors, compensation, the work, and the growth opportunities (Locke, 1976; Churchill et al., 1974). Job satisfaction plays a large role in daily lives as it can significantly contribute to life satisfaction in the form of a spill over (Judge & Watanabe, 1994; Saari & Judge, 2004), however it is not enough on its own to promote happiness (Holumyong & Punpuing, 2015). Subjective wellbeing may be defined as "judging life positively and feeling good" (Diener, Suh, & Oishi, 1997; Uglanova & Dettmers, 2018), where recent findings on subjective wellbeing can be broken down into three main parts: positive, negative, and over satisfaction with work life and leisure time. A significant factor that plays into work life and job satisfaction is the impact health has on the work. One can assume that is a one-way perspective that job satisfaction can only have an impact on health, however the other is also true. This can appear differently for men and women, especially for women who are more impacted by work hours than men, to their wellbeing (Booth & van Ours, 2007). Women in good health are generally more satisfied with their working hours than those who are not, and in general men in good health are also satisfied with their working hours. For men, the improvement in health also then improves the satisfaction in their working hours. In terms of job and life satisfaction for men and women, it is generally reported that women prefer to not exceed working around thirty hours per

week, where men prefer to not exceed their contracted hours (Booth & van Ours, 2007; Golden & Wiens-Tuers, 2006). This statement is however countered by different research, agreeing that whilst wellbeing may not necessarily decrease as hours increase, job satisfaction may decrease, especially in respect to workers with families (Gray et al., 2004).

Healthy work environments are summarised as spaces within workers experience fair treatment and communication, with rules and procedures that match the general expectations of the role (Pitaloka & Paramita Sofia, 2014; Raziq & Maulabakhsh, 2015; Lowe et al., 2004). In addition, key indicators for a healthy work environment include job and life satisfaction, which are measurable through time being able to spend with friends or family, engagement at work, and work-life or work-family conflicts (Kossek, Kalliath, Kalliath, 2012). Given the two-way relationship job satisfaction particularly has with health and happiness, where does flexible working come into this? Firstly, in relation to working hours, those that have more control of their working hours are more likely to report higher job satisfaction (Shagvaliyeva & Yazdanifard, 2014). However, increased flexibility in working time can have a diminishing effect, where overtime this positive effect on satisfaction decreases (Hanglberger, 2011). Aspects of flexibility that may have a negative impact on health and wellbeing is variability in hours and in structure, where we see workers not adding an element of structure to how they plan their working days. This can result in stress, fatigue, and less social interaction further leading to a general decline in health and happiness (Costa & Sartori, 2005). By lettings employees decide their workdays and schedules, employers give them a certain level of empowerment and empathy that can lead to higher job satisfaction and happiness levels, however only if managed well (Shagvaliyeva & Yazdanifard, 2014).

Satisfaction is a midway bridge between health and happiness when considering a work/life balance. Flexible working has shown to have some positive impacts on health and happiness, even just for the short term. We see more positive results in employee-oriented flexible working practices, rather than employer-oriented (Uglanova & Dettmers, 2018), however there is also evidence of employees experiencing negative impacts also, when not managing their work/life balance effectively and working beyond their capacity. Another key aspect of life satisfaction and happiness is a healthy work environment, however a granular study into the individual work environments and the respective incomes would have to be conducted before being able to assess the true effects on individual happiness.

#### General discussion and conclusions:

Impacts of various flexible working employments with variations between no and total degrees of autonomy have equally varying results, given specific contexts, for example that between Kossek et al., Friedhelm & Janssen, and Costa et al. Overall, the literature for flexible working was conducted in the authors' one country of choice, normally within the framework of a chosen industry. Throughout this research, there are comparative differences in outcomes between studies over similar topics. Differences in the research results lie a lot in industry and further the locations of the study when trying to compare similar flexible working practices, some taking job title/status into consideration. Differences also include vast variations in flexible working types, and levels in autonomy. Scaling back and looking at a broader view of this field, it is found that when wanting to learn more about optimal recommendations of flexible working practices, it does not seem

possible to successfully translate them. A high-level exploratory investigation is missing to aid giving context to where results may differ cross-borders and between industries within the same flexible working arrangements and measures of autonomy. This absence expresses limitations in applicability on a broad scale and further, its lack in consistency. One such study conducted in 2014 (Haar et al., 2014) aimed to show the impact of work/life balance on life satisfaction and mental health showing there to be a range of impacts between results over the seven included cultures. However, what is not investigated is the effect of autonomy in the work/life balance, with the distinction between health and happiness but encompassing wellbeing.

Whilst both happiness and health are individually examined, research of both simultaneously is limited. The relevance of using a consistent dataset to measure the effects of both in the same flexible working arrangements offers equal insight into the broad range of effects implementing one policy may have, rather than drawing from various differing sources. The ideal here, in introducing policy to improve positive impacts on health and happiness, it is to avoid achieving the positive impact of one dependent at the cost of another. There is also little commentary on the differences between working hours and contracts, bringing in the importance of calculating the difference between ideal versus actual working hours (Golden at al., 2013). In addition to this, the study of the difference between ideal versus actual working practices and income being taken into consideration is an area that in today's high demands could be beneficial to a wider audience.

The following research will draw upon three variables of flexible working, following the differences in results across studies, and the amount to which different degrees of autonomy can impact health and happiness. Keeping the two within the same study allows for a direct analysis of potential costs of implementing a policy on one dependent at the expense of another. Previous studies comment on total autonomy, however the granular effect of autonomy is generally missing. In addition, a comparison between the United Kingdom and the Netherlands, two countries with similar economies and population make-up within close proximity to one another, will be made. Here the aim is to find the extent to which differences lie within the same research, to add commentary on the extent to which cross-border/regional comparisons can be made.

# <u>Methodology</u>

The purpose of this section is to explain the reasoning and implementation of research methods to explore the research question "what are the effects of flexible working on health and happiness, comparing the United Kingdom and the Netherlands?". The research question is developed to address the gap in research surrounding flexible working practices and autonomy, which when comparing to previous studies an appropriate research method is chosen. Due to the scale of the research, quantitative research methods were chosen as the best means of approach to help answer the research question. This chapter will go on to discuss further data preparation methods, for both the research dataset and the comparison dataset.

#### Research question and reasoning:

The main research question that this paper aims to explore is "what are the effects of flexible working on health and happiness, comparing the United Kingdom and the Netherlands?" The overall aim of this research is to investigate the impacts of various levels of autonomy in flexible working practices between regions and countries, specifically schedule flexibility, on employee health and happiness in the United Kingdom and the Netherlands. Whilst there is the more extensive research into flexible working scheme's impacts on health than on happiness, there are no studies thus far combining these two aspects, instead intensely researching the levels of application between countries and its relationships with increasing female employment and new-norm gender roles within families, or a combination of the two. In addition to this, the studies more often focus on employee's physical health, rather than mental wellbeing or reported subjective health. Furthermore, there is little to no research on a geographical scale, comparing differences between both regions and countries and to what extent these differences may be and whether a universal or tailored approach per country or region is more beneficial for both employees and employers. In order to conduct this research, employee wellbeing data was required for both the United Kingdom and the Netherlands. Thus, the further hypotheses were drawn:

- 1. There will be positive impacts on health and happiness with increased autonomy in flexible working for the UK and the Netherlands.
- 2. There will be diminishing returns in health and happiness with increases in autonomy for the UK and the Netherlands.

#### The dataset:

Due to the scale of the research of cross-country comparisons, a quantitative approach was deemed as a more appropriate and effective method for representation of the nations, rather than a qualitative method. Furthermore, to use existing datasets was of primary concern, as conducting individual interviews and questionnaires would be too costly both in terms of time and money, given the nature of this dissertation. A dataset was required, therefore, that had enough observations to be representative of the population of the countries involved in the study in order to make an informed comparison, and including variables that define the various aspects schedule flexibility: being able to choose one's starting and finishing times; ability to choose one's daily work organisation, ability to control one's daily work pace; and regularity of working evenings, weekends and overtime. The dataset also needed to include variables regarding subjective health and subjective happiness, and job satisfaction. Therefore, the European Social Survey was decided on being the most suitable dataset for this study, due to its inclusion of all vital variables including regional variables for country and regional comparison and inspired through its previous use in cross country comparisons (Turunen and Nätti, 2017; Mysíková and Večerník, 2013).

Data was drawn from wave 5, 2010 data where the survey focused on and was titled "Work, Family and Well-Being", given it being the most recent rotation of this survey title (to-date). Considerations were made towards the SILC dataset, however, due to restrictions given the COVID-19 climate the SILC dataset was less accessible. The European Social Survey conducts all data collection through face-to-face interviews to be representative of the whole population, throughout the 5 months between September and January of the following year over at least a 6-week period (ESS, no date). The data collected from the 2010 ESS5 survey was selected to include variables controlling for demographics, schedule flexibility characteristics, industry, countries and regions, satisfaction variables and finally the dependent variables in the study subjective health and subjective happiness. For the full variable selection table, see Appendix G. Response rates for the UK and for the Netherlands were 56.5% and 60% respectively (ESS, 2012).

#### Method:

In order to aid answering the research question, multiple different ordered logistic regressions were conducted for both health and happiness as the dependent variables, for both countries and for Europe as a whole. These dependent variables were each measured on a subjective basis, where respondents were asked to rank themselves on scales ranging from very unhappy (=0) to extremely happy (=10); and very good health (=1) to very bad health (=5). Subjective happiness, once considered a study by psychologists, can be measured reliably as considered reasonable proxies for utility, which can further give economists insight into employment and unemployment patterns, and better understanding when building economic policies, being particularly relevant for this branch of research (Frey and Stutzer, 2002; Golden and Wiens-Tuers, 2006; Holumyong and Punpuing, S, 2015). For the purposes of this study, the statistical software programme used was Stata. Given the dependent variables were categorical, the most fitting regression model was an ordered logit model (McCullagh, 1980).

The control variables included in this study were: age, gender, education level and net household income level. The variables for the purposes of answering the research question that were included were: allowed to choose pace of work, allowed to decide how daily work is organised, allowed to decide start and finishing times of work, satisfaction with main job, satisfied with work/life balance, involves working evenings (how often), involves working short notice overtime (how often), involves working weekends (how often), total contracted hours excluding overtime, total contracted hours including overtime, how many hours would you choose to work weekly, region, and country, as per previous studies (Turunen and Nätti, 2017; Kossek, Kalliath and Kalliath, 2012; Golden and Wiens-Tuers, 2006; Golden, Henly and Lambert, 2012; Booth and Van Ours, 2008).

#### Data preparation:

As analysis required country and region variables, encoding these string variables as to their country and regional codes from the ESS codebook was taken as a first measure to include in the regressions (ESS, 2010). The chosen data selection included a large number of categorical variables, of which the reference category for comparison set to the "worst case scenario", so that results would be compared to having, for example: no autonomy, complete dissatisfaction, or working outside the typical working week hours - here defined as working during the daytime hours during weekdays. For regions variable, the reference category was made in both the UK and the Netherlands to be the region hosting the capital city: London and Noord-Holland. The industry categories were condensed down from just under 100 categories to 33 overarching categories, such as agriculture and manufacturing. The base category for industry was set to 23=office and administration following the ESS5 survey coding guidelines (ESS, 2010). Education was also condensed down into 8 categories from less than primary education (the reference category) to Ph.D. For the full list of reference categories, see Appendices H through J.

A final variable needed to be constructed in order to conduct the research to help give context to the differences between actual working hours and hours individuals wish to work. This continuous variable, titled "whours", was calculated by subtracting total work hours including overtime (wkhtot) from how many hours individuals would choose to work (wkhsch). If the number represented in whours is positive, the individual is reporting to be working more hours than they would otherwise desire, if whours is a negative number then the individual reports to be working less hours than they would otherwise want.

The data set was checked for missing data through tabulation. Any missing data from the data had already been given the corresponding expanded missing values: .a not applicable, .b refusal, .c don't know, and .d no answer. The only variable to have missing data was "whours". To test what sort of missing data it could be classed as, a new binary variable "whoursmiss" was created, with missing data equalling 1 and non-missing equalling 0. By summarising the data to be used in the regression under the if commands for the countries and for the "whoursmiss" values, the means were then compared. It is apparent for both countries, that missing data occurs most frequently for women, those with higher levels of self-reported happiness, moderate self-reported health levels, lower education levels, and lower income groups. As the means differ, the missing at random (MCAR) assumption cannot hold. Assuming the data is missing at random (MAR), multiple imputation is used to restore statistical power and reduce the likelihood of biased coefficients, as can happen using listwise deletion. After running multiple imputation, the new regression model shows an increase in observations for the UK of 420 from 798 to 1218, and for the Netherlands an increase of 200 from 627 to 827 observations.

Multicollinearity was tested for by two methods, firstly by running correlation matrices, and then by running an OLS regression and requesting for collinearity diagnostics (DeMaris, 1995). The Variance Inflation Factor (VIF) test showed high collinearity for the country and region variables, however removing them from the model showed to have little impact on the other variables. Furthermore, as these variables are important for the purposes of this study, they cannot be removed. Through the correlation matrices it can also be seen that correlations between daily work pace and daily work organisation, and total work hours excluding overtime and total work hours including overtime were both highly correlated to 0.7947 and 0.7958 respectively. Whilst it is not higher than >0.8 for evidence of severe collinearity, it is borderline. Removing these two variables from the test regression as well as "whours" created an increase in observations from 827 to 883 for the Netherlands, and from 1218 to 1354 for the UK. However, as working hours is important for the model it is still important to include; furthermore, the impact on differences in coefficients between the regressions is minimal, making little difference on the outcome whether they are included or not.

#### Limitations:

Limitations encountered in this study with some missing data (primarily for the Netherlands) and lower response rates for the key countries were considered, and therefore may not be considered fully representative of said countries. On the other hand, as the average response rate over the whole survey was 60% this does not pose a threat to the legitimacy of the data gathered for research purposes (ESS, 2012). Given the alternative methods for

conducting the research, and the nevertheless high number of observations, this was considered still to be the best practice. In addition, it can be assumed also that workers who are generally happier are attracted to work that has flexible practices, rather than those flexible practices impacting their happiness (Golden, Henly and Lambert, 2012). Finally, whilst subjective data is means tested as reliable data, objective data may hold truer since subjective perceptions do not hold to the exact same levels as one another.

# <u>Results</u>

Following from the background research and building of the data, we can move to the results. Serving as a reminder for the hypotheses:

- 1. There will be positive impacts on health and happiness with increased autonomy in flexible working for the UK and the Netherlands.
- 2. There will be diminishing returns in health and happiness with increases in autonomy for the UK and the Netherlands.

There are four regressions per country per happiness and health analysis, creating sixteen in total. There are additional regressions for the entirety of the EU, as well as total analyses combining all three flexible working variables in one regression, out of curiosity of potential interactions. These can be viewed, along with the rest of the results, in the Appendices A through F. Given the extent of results only the significant results, and insignificant but notable results – those that test the null hypotheses – will be outlined. It is recognised that there is the possibility to create combined variables for this study, thus reducing the number of individual analyses, however given the time restraint to apply additional learning resources, this current method was settled upon. This, however, is a highlighted recommendation for future studies. Additional limitations to the study will be addressed later, as well as key themes that can be drawn overall.

variable name	variable label	Туре	Description				
happy	How happy are you?	Categorical	Base set at 0=				
			extremely unhappy				
nhealth	Subjective general	Categorical	Recoding health for				
	health, recoded		new variable				
			nhealth to be able				
			to include it as a				
			dependent variable				
			in logistic				
			regression. (1 to 0, 2				
			to 1, 3 to 2, 4 to 3,				
			and 5 to 4).				
			Base set at 4=very				
			bad				
wkdcpce	Allowed to choose	Categorical	Base set at				
	pace of work		0=Have/had no				
			control				

Table 1: List of key variables for the results

wkdcorga	Allowed to decide	Categorical	Base set at
	how daily work is		0=Have/had no
	organised		control
dcsfwrk	Allowed to decide	Categorical	Base set at 0=not at
	start/finish times		all true
wrkengt	Involves working	Categorical	Base set at
	evenings, how often		7=everyday
wkovrtm	Involves short notice	Categorical	Base set at
	over time, how		7=everyday
	often		
wrkwe	Involves working	Categorical	Base set at 5=every
	weekends, how		week
	often		
wkhct	Total contracted	Continuous	
	hours, excluding		
	overtime		
wkhtot	Total hours,	Continuous	
	including overtime		
whours	Difference in hours	Continuous	wkhtot-wkhsch =
	wishing to work		the difference in
	versus actually		hours currently
	working		working and
			wanting to work

Results for happiness in the Netherlands:

Looking at the impact of flexible working on happiness in the Netherlands, the results are broken down into four analyses. The first, being the "all or nothing" approach, of having all flexible working variables (allowed to choose pace of work, allowed to decide how daily work is organised, and allowed to decide start/finish times of the workday), examining the total effect. Next, with the separation of the three, assuming a worker may only have one of these options available to them and seeing their individual impacts on happiness.

Considering the analysis of all variables for the Netherlands and the consequential impact on happiness, compared to the base value of 0 of having no autonomy in choice, it is visible that autonomy of choice in deciding how daily work is organised can have some statistically significant impacts on happiness. Next, being able to decide how daily work is organised has no statistical significance on happiness. Finally, being able to decide start/finish times of the workday also has no statistical significance on happiness.

When considering the analysis for only the variable displaying autonomy in being able to decide how daily work is organised in the Netherlands, compared to the base level 0 of not being able to decide at all, there is some statistical significance. On a scale of 0-10, with 10 being total autonomy, it is apparent that those that have an 8 out of 10 or 10 out of 10 score have a statistically positive impact on their happiness. Those that have an 8<sup>th</sup> level of autonomy have a coefficient of 0.653 and a p-value of p<0.1, whereas those that have a 10<sup>th</sup> level (or total autonomy) have a coefficient of 1.238 and a p-value of p<0.01. Here, those

that report an autonomy of 8 out of 10, the log odds of reporting to be extremely unhappy (versus a point scale of 1-10 to extremely happy) is 0.653 points lower than those that report 0 autonomy on a scale of 1-10. For those who report total autonomy, the log odds of reporting to be extremely unhappy (on a scale up to 10 extremely happy) is 1.238 points lower than those that report 0 autonomy on a scale of a little true, quite true, or very true.

Considering the analysis over the ability to decide how the daily work is organised, only one level of the categorised ranking is statistically significant: level 9. This is one level below having total autonomy, at level 10. Compared to the base level 0 of having no decision-making power in how daily work is organised in the Netherlands, those that rank at the 9<sup>th</sup> level have a statistically positive effect on their happiness, with a coefficient of 0.881 and a p-value of p<0.1. Therefore, those reporting near total autonomy at level 9, the log odds of reporting to be extremely unhappy (versus a point scale of 1-10 to extremely happy) is 0.881 points lower than those that report 0 autonomy on a scale of up to 10 extremely autonomous.

Finally, analysing the impact of being able to decide start/finish times of the workday show, compared to the base value of not being able to choose at all, no statistically significant results can be shown. It is noted here however, that those that have some control over their start/finish times display an insignificant negative impact on their happiness when compared to the base value. Only those that have total autonomy display an insignificant, positive impact on happiness.

Conclusions of results from impacts of flexible working on happiness in the Netherlands: In summary, the analyses highlight the small positive impacts of near total/total autonomy in flexible working arrangements on happiness in the Netherlands. Specifically, having control over how daily work is organised contributes significantly to happiness, with higher autonomy levels having some significant, positive impacts on happiness. However, the ability to choose start/finish times of the workday did not collect significant results. These findings emphasise the importance of (near) total autonomy in shaping work arrangements for enhancing Dutch employee happiness and wellbeing.

#### Results for health in the Netherlands:

Looking at the impact of flexible working on health in the Netherlands, the results are again broken down into four analyses as previous. First, we examine the impact on health of all variables of flexible working. Compared to the base level of 0 of no decision-making power in deciding the pace of the workday, there is little statistical significance outside of the 7<sup>th</sup> level, with 10 being total autonomy, where the 7<sup>th</sup> level displays a negatively significant impact on health to the p<0.1. The ability to decide the how daily work is organised has no significant impacts on health overall, albeit positive. Finally, the ability to decide the start/finish time of the workday has a significantly negative impact on health at the level of total autonomy to the p<0.01, compared to the base of 0 no autonomy.

Compared to the base value 0 of no decision-making power in the pace of work, there are some statistically significant negative impacts on health. These are at the 7<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> (total autonomy) levels of decision-making power; the 7<sup>th</sup> and 8<sup>th</sup> levels had statistically significant results to p<0.1, and the 10<sup>th</sup> level of p<0.5, with coefficients -0.742, -0.666, and -

0.940 respectively. Thus, the log odds of reporting to be extremely unhealthy (versus a point scale of 0-4 starting extremely healthy) are 0.742, 0.666, and 0.940 points higher than those that report 0 autonomy on a scale of up to 10 extremely autonomous.

Next, comparing to the decision-power in the structure of the workday, we examine no statistically significant impacts on the health of workers in the Netherlands, but can observe fluctuating negative coefficients at all levels of decision-making power.

Last, the ability to decide the start/finish times of the workday for Dutch workers shows an overall negative impact on health, compared to the based line of not being able to choose the start/finish time. However, only those with total autonomy have a significant impact on health, to the level p<0.01 and the coefficient -0.844. Results of total autonomy at level 4, the log odds of reporting to be extremely unhealthy (versus a point scale of 0 to 4 to extremely unhealthy) is 0.844 points higher than those that report 0 autonomy on a scale of up to 4 "very true".

Conclusions of results from impacts of flexible working on health in the Netherlands: The impact on flexible working on health in the Netherlands reveals little significant results. While autonomy in deciding the pace of work shows limited significance except at the 7<sup>th</sup> level, autonomy in structuring the workday displays no significant impact. However, autonomy in start/finish times has some negative impact on health, with regards to total autonomy. Whilst insignificant, the majority of results had a negative impact on health especially with every unit increase in decision-making power and autonomy of flexible working. This is quite the juxtaposition when looking at both health and happiness of Dutch workers, offering extremely opposite outcomes.

#### Results for additional variables in the Netherlands:

Included in the regressions are additional variables explaining working hours. These variables consider evenings, weekends, contracted hours both excluding and including overtime, and the newly created variable the difference between actual versus ideal working hours. For the analyses of all variables, and the breakdown analyses of both happiness and health, it is visible that there is a significant impact on health versus an insignificant impact on happiness.

When focussing on the impacts on happiness, there are no significant impacts from any of the additional variables. In general, compared to the base of working evenings/weekends/overtime every day, there is an overall more positive impact on workers' happiness. There is a small pattern amongst those working evenings, that for every increase in the number of evenings worked there is an increasingly negative effect, rather than working every evening. There is also a pattern when observing working weekends, that compared to working every weekend, working no weekends has a negative impact on happiness. At the next categorical increases in the number of worked weekends, these have a positive impact on happiness. Finally, for every additional hour worked there is a small and insignificant positive impact on happiness, except in the case when the variable of deciding start/finish times of the workday is included in the analysis. The same pattern can be observed for the difference in hours worked – for every increase in the difference of actual versus ideal hours worked.

Next, focussing on health, we start to see significant impacts of these variables on the workers' health, when looking at the actual hours. Observing each variable for working evenings, weekends and overtime, there are no significant impacts on health. There are, however, almost all negative impacts on health, when comparing to working every evening, weekend, or day with overtime, at each categorical increase in the amount of each worked. However, looking at the variables of hours worked, we start to witness significant impacts on health. Firstly, for every additional contracted hour worked excluding overtime, there are significant positive impacts on health to the p<0.1. This applies to analyses including the variables allowing workers to decide their start and finish times, and how their daily work is organised. For the analysis of workers being able to decide their workday start/finish times, this has an insignificant positive impact. Next, considering the total hours worked, including overtime, we observe a significant negative impact on health across the board. For every additional hour worked including overtime, there are similar negative impacts for analyses including variables deciding work pace, how daily work is organised, and deciding start/finish times of the workday (-0.0301; -0.0300; -0.0323, respectively), to the p<0.1. A similar pattern can be observed for the final hours variable set, comparing the total hours worked versus the ideal number of hours. For every hour increase in the difference between actual versus ideal, there are similar negative impacts across the board (-0.0240; -0.0246; -0.0248, respectively), to the p<0.1.

When considering the overall results, including all variables in the analyses, the same pattern can be observed for both happiness and health given the insignificant impacts on both health and happiness across these additional variables. However, for happiness there becomes a significant negative impact for every additional hour worked including overtime, to the p<0.1. For health, the result remains comparable, however when considering the variable accounting for the difference in ideal versus actual work hours, there is a higher significance to the p<0.05, for every hour difference there being a negative impact of - 0.0282 on health.

Conclusions of results for additional variables in the Netherlands: The inclusion of variables related to working hours in the analysis reveals a noticeable pattern in their impacts on health and happiness. While these variables have some significant impacts on health, their impact on happiness remains largely insignificant.

Regarding happiness, none of the additional variables show a statistically significant impact. However, some patterns emerged: working fewer evenings or weekends generally correlates with increased happiness, compared to working every evening or weekend. Conversely, those working more evenings experience a negative impact on happiness. Similarly, working no weekends tends to show a decrease in happiness, while working some weekends increases it. Additionally, every extra hour worked slightly boosts happiness, except when considering the autonomy over start/finish times. A similar trend is observed for the difference between actual and ideal working hours.

In contrast, the impact on health is more noticeable. Though working evenings, weekends, and overtime doesn't significantly affect health, the overall trend is negative compared to

working these hours regularly. Significant health impacts arise with contracted hours, excluding overtime, showing positive effects on health. This positive impact is consistent across analyses involving variables for start/finish time autonomy and daily work organisation. However, when including overtime, every additional hour worked has a small but significantly negative impact on health. This negative trend is also evident when considering the difference between actual and ideal hours worked.

Overall, while flexible working hours seem to have a generally insignificant effects on happiness, they notably significantly affect health, highlighting the importance of balancing actual working hours with ideal preferences for maintaining workers' well-being.

#### Results for happiness in the United Kingdom:

As the same analysis structure of the analysis of the Netherlands, looking at the impact of flexible working on happiness of workers in the UK will be broken down into four categories. First, we can see the impact on happiness of all variables of flexible working. The impact of being able to decide the pace of work has a majority statistically insignificant negative impact on happiness in the UK, except for at the 5<sup>th</sup> and 6<sup>th</sup> levels of decision-making power. When observing the results of autonomy over the workday organisation, the same as the Netherlands, there is an insignificant impact on happiness. Lastly, also comparable to the Netherlands, there is an insignificant impact on happiness when being able to decide the workday start/finish times.

When observing only the impact of the ability to decide the pace of work, there is a statistically insignificant negative fluctuating impact on happiness, except for the 5<sup>th</sup> and 6<sup>th</sup> levels of decision-making power. Those with more or less "some" decision-making power in the pace of their workdays have significantly negative impacts on their happiness, to the p<0.05 and p<0.01 respectively. Compared to the other results, despite their insignificance, these significant results have the greatest negative impacts on happiness of workers in the UK.

Next, observing the ability to decide how daily work is organised, there is no statistically significant impacts on happiness of workers in the UK. Regardless of significant results, there is a fluctuating pattern for every unit increase in autonomy, between both positive and negative results.

Finally, when observing the impacts of autonomy over being able to decide the start/finish times of the workday, there are no significant impacts on happiness – the same as for the Netherlands. However, compared to the base value of 1 no autonomy, there is at first a dip towards a negative impact on happiness (comparable to the Netherlands), which becomes increasingly positive the more autonomy granted.

Conclusions of results from impacts of flexible working on happiness in the United Kingdom: Analysing flexible working's impact on happiness among UK workers, it is found that autonomy in deciding the pace of work displays a fluctuating yet statistically insignificant negative impact on happiness, with exceptions at the 5<sup>th</sup> and 6<sup>th</sup> levels. Again, autonomy in workday organisation presents no statistically significant impacts on happiness, also with fluctuating results. Finally, autonomy in start/finish times also shows no significant effects on happiness. We can see in these results some mirroring somewhat towards the patterns observed in the Netherlands, however to the opposite effect.

# Results for health in the United Kingdom:

When observing all variables for flexible working on health for workers in the UK, it is apparent there is a slight opposite effect than that of on happiness. Firstly, when looking at deciding the daily pace of work, there are no significant results on health. Secondly, when observing the impacts of choice on daily organisation of work, there are some positively significant impacts on health at the 4<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> levels. Finally, when observing the impact of being able to decide when to start/finish the workday, there are no significant impacts on health.

Individually focusing on the ability to decide the pace of work for the day, there is visibly some negatively statistically significant impacts on health to the 4<sup>th</sup> level, observing a negative impact on health of -1.004 to the p<0.05 per this unit increase in autonomy. Therefore, those reporting some autonomy at level 4, the log odds of reporting to be extremely unhealthy (versus a point scale of 0 - 4 to extremely unhealthy) is 1.004 points higher than those that report 0 autonomy on a scale of up to 10 extremely autonomous. Similarly, as with happiness, the insignificant impacts of the levels of autonomy fluctuates however here between positive and negative effects.

Next, observing the results for the ability to decide how the daily work is organised, there are two statistically significant results at the 4<sup>th</sup> and 8<sup>th</sup> levels of autonomy. There is a general, fluctuating, insignificantly positive impact on health, with these two significant unit increases in autonomy observing a 1.301 to the p<0.05 and 0.741 to the p<0.1, respectively. Thus, results of some and near total autonomy at levels 4 and 8, the log odds of reporting to be extremely unhealthy (versus a point scale of 0-4 to extremely unhealthy) are 1.301 and 0.741 points lower than those that report 0 autonomy on a scale of up to 10 extremely autonomous.

This is, again, displaying a juxtaposition to the impacts of health and happiness on workers', this time in the UK.

Finally, analysing the impacts of levels of autonomy on health in the UK regarding start/finish times, there are no significant results. Similar, to health, when disregarding the significance, there is a certain level of negative impact on health when some (but not total) autonomy over the ability to decide is given.

Conclusions of results from impacts of flexible working on health in the United Kingdom: In conclusion, the impact of flexible working on health among UK workers reveals some statistically significant impacts on health, and contrasting effects compared to those on happiness. While deciding the daily pace of work shows no significant impact, there are positive impacts on health observed at specific levels of autonomy in organising daily work. Once again, autonomy in deciding start/finish times shows no significant impacts on health. Overall, these findings highlight an interestingly varied relationship between flexible working arrangements and health outcomes amongst UK workers.

Results for additional variables in the United Kingdom:

As per the analyses for the Netherlands, additional variables are included in the regressions explaining working hours. For the analyses of all variables and the breakdown analyses of both happiness and health, it is visible that there are, conversely, significant impacts on both health and happiness.

Firstly, focussing on happiness, there are comparable impacts as to the impacts on health, both in level of significance and patterns of varying effects across the different applications of the flexible working variables in the analyses. There are slightly more varying effects of each categorical increase in working evenings, weekends, and overtime, fluctuating between positive and negative effects on happiness compared to the base. However, when next looking at the variables considering the hours worked, we start to observe significant impacts on happiness. Firstly, observing the impact of each hour worked excluding overtime, there are no significance impacts on happiness, where the result has a negative impact. Next, observing hours worked including overtime, there are significant negative impacts on health considering analyses including flexible working variables deciding workday pace and how the daily work is organised, but an insignificant negative impact considering the ability to decide start/finish work times. The significant negative impacts are to the p<0.1 and p<0.05 respectively, showing a -0.0324 and -0.0369 on happiness for every additional hour worked including overtime. Finally, for the variable observing the difference in actual versus ideal work hours, there are significant negative impacts across the board. Each shows a significance to the p<0.01, -0.0324; -0.0369; -0.0371 respectively, for every hour increase in the difference between ideal versus actual hours worked.

Next, focussing on impacts on health for the UK, we start to observe more significant impacts. Firstly, looking at the variable considering working evenings, there are a mixture of insignificant and significant impacts on health at every categorical level. Compared to the base of working every evening, those working no evenings have a positive impact on health to the p<0.05 for all three flexible working variables, with comparable results of 0.717; 0.715; 0.740 respectively. Working an evening once a week equally has positive impacts on health across the board to the p<0.05, p<0.01, and p<0.05 respectively. The impact on health at this level has a greater level than not working any evenings, with 1.052; 1.155; 1.140 respectively. This is the "peak" level, decreasing slightly but still having a positive impact on health when working in the evening several times a week compared to the base. Secondly, looking at the impacts of working overtime on health, there is only one significant impact on health. Compared to working overtime every day, including the variable for having the ability to decide their start/finish times, those that work overtime several times a week have a positive impact on their health to p<0.1, increasing by 0.913. Generally, impacts on health working different levels of overtime are fluctuating, but can be considered to become more positive the more overtime worked, compared to working overtime every day. Next, working weekends has some significant negative impacts on health. Like the Netherlands, the UK has a negative impact on health to working no weekends compared to working every weekend, but also at every level beyond this. At the level of working one weekend per month, there is a significant negative impact on health across the board to the p<0.1 -0.552, and then p<0.05, -0.636; -0.699 respectively. Finally, observing the variables covering working hours, the only significant impact on health occurs considering the variable of total working hours including overtime. Here, there is a negative impact on health for analyses including the variables the ability to decide the pace of work

and deciding how daily work is organised to the p<0.1. However, when looking at the variable of hours worked excluding overtime, whilst insignificant there are positive impacts on health, except for the analysis including the variable of being able to decide start/finish times of the workday. Additionally, there are positive, albeit insignificant, impacts on health for every hour difference in ideal versus actual hours worked – the opposite to the Netherlands.

When considering the overall results, including all variables in the analyses, opposite impacts can be observed for happiness and health, where there are some significant impacts on health compared to all but one significant impact on happiness. However, for happiness there becomes a significant negative impact for every hour difference in the hours worked versus ideal to the p<0.01, -0.0411. The opposite, although insignificant, effect is shown here for health.

Conclusions of results for additional variables in the United Kingdom: In summary, the analysis of flexible working and its impact on health and happiness in the UK shows some significant effects on both.

For happiness, working evenings, weekends, and overtime fluctuates between positive and negative impacts. However, the number of hours worked, particularly including overtime, has a significant negative impact on happiness. Specifically, for every additional hour worked including overtime, happiness decreases significantly. Similarly, increases in the difference between actual and ideal working hours also significantly negatively impacts happiness.

In terms of health, working any variation of evenings compared to every evening generally has a positive impact, but especially working once a week significantly improves health compared to working every evening. Working overtime several times a week also positively impacts health, but only significantly in one specific analysis. Conversely, working any variation of weekends has a negative impact on health, with the significant effects seen in those working one weekend per month. Total working hours, including overtime, negatively impact health significantly. However, excluding overtime, the hours worked show a positive but insignificant effect on health, like the insignificant positive impacts of the difference between actual and ideal hours worked.

Overall, while flexible working hours have mixed effects on happiness, they more consistently and significantly impact health of workers in the UK.

#### **Overall Conclusion of Results:**

The impact of flexible working on happiness presents a varied and often opposite result between the UK and the Netherlands. In both countries, autonomy in deciding the pace of work and organising daily tasks generally shows no significant effect on happiness. In the UK, the ability to choose the start and finish times also fails to show significant impacts on happiness. Meanwhile, in the Netherlands, the ability to choose the start and finish times shows a slightly significant negative impact on happiness, indicating that flexibility alone does not enhance employee happiness and may sometimes detract from it. In comparison, flexible working arrangements have more significant, albeit still mixed impacts on health for both countries. In the UK, specific levels of autonomy in deciding the pace of work and organising daily tasks show significant positive impacts on health, though not universally. In the Netherlands, no significant health impacts are observed from the ability to choose the start and finish times. In the UK, working certain evenings and overtime shows significant positive effects on health. Consistently, for both the UK and the Netherlands, weekend work negatively impacts health, with a more significant effect in the UK.

The total number of hours worked including overtime, consistently shows a majority negative impact on both health and happiness. This effect is observed strongly in the UK, where discrepancies between actual and ideal working hours significantly negatively impact happiness. In the Netherland the overarching trend of negative impacts from excessive hours is mirrored in the impacts on health.

# Three key insights can be drawn so far:

 Flexible working arrangements, such as choosing start and finish times or having task autonomy, generally do not significantly positively impact happiness. In some cases, like in the Netherlands, these arrangements can even slightly negatively impact happiness.
Specific aspects of flexible working, such as controlled evening work and limited overtime, can positively impact health in the UK. Consistent negative health impacts from weekend work and excessive total working hours are evident in both countries.
Effective management of working hours is crucial. Reducing discrepancies between actual and ideal working hours, and avoiding excessive total hours, especially overtime, is essential for maintaining both health and happiness.

Flexible working arrangements in the UK and the Netherlands have a mixed and limited significant impact on health and happiness. While these arrangements may not significantly positively impact happiness, and can sometimes detract from it, their impact on health is greater. Properly managed, flexible working can have positive health effects, but caution must be taken to avoid negative outcomes associated with excessive working hours and weekend work. These insights highlight the importance of balanced and carefully structured flexible working policies to optimize employee well-being. These points begin the following analysis stage of this research.

# **Discussion**

This section develops the findings of the study further, giving context to the data and further practical implications, recommendations, and suggestions for future research. To note here, there are arguments made with the context of 2024-post pandemic, denoted (\*2024), which should be considered seeing as the study began pre pandemic in 2019-2020. Given the depth of the study, the following are the hypotheses for the research topic "Flexible working: Its impacts on health and happiness in the United Kingdom and the Netherlands":

1. There will be positive impacts on health and happiness with increased autonomy in flexible working for the UK and the Netherlands.

2. There will be diminishing returns in health and happiness with increases in autonomy for the UK and the Netherlands.

The main objectives of this study are to find the impact of flexible working on health and happiness in the UK and the Netherlands and given the initial inspiration as to compare the two countries – what differences (if any) do they exhibit. Key findings from the study show a striking difference in results for the UK and the Netherlands, and that impacts on health and happiness may be more negative than first expected. Findings also confirm that there is no one-size-fits-all approach to flexible working arrangements. Taking everything into consideration, when wanting to implement policies, a specific focused study would need to be undertaken to achieve the most beneficial results.

#### Discussion:

Going through the findings for each of the hypotheses and further results, firstly starting with the UK and the impacts on happiness, we see a very mixed outcome across the three flexible working arrangements. To start, the ability to decide start/finish times of the workday does credit to an extent the alternative of hypothesis one, that there is a positive impact on happiness the greater autonomy increases in ability, albeit to no significance. There is a small dip towards a negative impact on happiness when escalating to "a little true" on the full scale, when comparing to the reference on "not true", however increasing gradually to positive impacts at each categorical level. Whilst this is not a full match to hypothesis one, there is merit and an obvious relationship between the increase in autonomy and the increasing positive impacts on happiness that can warrant a support of the alternative of hypothesis one and a rejection of the null of hypothesis one, that there is not an increasingly positive impact on happiness as autonomy increases in each level. In this, the alternative of hypothesis two can also be rejected and the null accepted. Here we see support for previous research from Ali et al. (2014), building upon job satisfaction and its lean into effects on happiness. Building upon the research from Janssen & Friedhelm (2004) however, on to the ability to decide how daily work is organised, there is a volatile result of both positive and negative impacts on happiness as autonomy increases, but to no significance. Only in the final three increase stages of autonomy to full autonomy is there the pattern of increase in happiness, making way to rejecting the alternatives of both hypotheses one and two, and supporting the null hypotheses of both, of there not being an increasingly positive impact on happiness or a diminishing return. One could assume in this example there to be no real relationship between the two factors, that the relationship between the two is highly granular, or that another piece of information, such as job status within the organisation, is missing from the study. Finally, for impacts on happiness for residents of the UK, we see an almost U-shaped curve towards total negative impacts on happiness given the increasing autonomy in being able to decide the daily pace of work. There is some statistical significance in the middle range of the autonomy levels, where the negative impacts on happiness are at the most prominent, to 5% and 1%. However, given there being no positive impacts on health, the null of hypotheses one and two must be accepted, and the alternatives of both hypotheses rejected. Both this and the previous result of deciding how daily work is organised could be impacted by not only the status level of the job within the organisation (dictating the freedom within which the employee may have), but also in the job/industry itself. For example, one that works in a more administrative role may have more general flexibility in their work than those in education or hospitality, but their work is more dictated by others. Therefore, it could become more

frustrating for individuals to have more autonomy, but not be able to exercise it or manage their workdays better, thus contributing negatively to their impacts on their happiness.

Moving further to impacts on health, again starting with the ability to decide the start/finish times of the workday, there is a slightly fluctuating impact of both positive and negative impacts with no obvious trend. Whilst comparing to the reference of not being able to choose the times, those that have some autonomy (or report to the statement as "quite true") would experience a negative impact on their health. However, there are no statistically significant results in this study. Therefore, both hypotheses' alternatives are rejected, and the nulls are accepted. This study's result suggests that having a little or total autonomy can be beneficial to health rather than having no autonomy, but to be able to find that balance between little to a lot of autonomy to find the tipping point between positive and negative impacts on health may be difficult to establish. Arguably in this scenario, an all-or-nothing approach would guarantee positive results on health, but this would be dependent on the general role and industry's ability to offer this as a flexible working arrangement. Next, reviewing the impact of being able to decide how daily work is organised, there is an initial increase in impacts on health towards positive, however decreasing around the middle ground of autonomy levels. There are two statistically significant results at categories 4 and 8 to the 5% and 10% respectively. The alternative of hypothesis one is rejected, and the null is accepted; however, the second hypothesis may have some merit in this scenario. Whilst not precisely fitting to a typical diminishing returns model, the general trend can be noted here. Therefore, we accept the alternative for the second hypothesis, and reject the null. These results suggest there is a relationship between the two variables, where there is a peak early in the impacts on health. This suggests that a little autonomy is more beneficial than none or some, however as with the previous study it would be more guaranteed to offer near total autonomy in this area. The positive impacts may come down to better stress management or general mental health, or even due to being able to spread out manual labour into an order that better suits their physical capabilities. A further look into the job type and industry here could be an interesting scope of study to see potential differences between industry and job titles impacts on health when looking at the impacts of flexible working on health. Finally, focusing on the ability to choose the pace of work we observe a negative impact on health bar one categorical level, with the highest negative impact on health reporting significance to the 5%. The highest negative impacts are in the lesser levels of autonomy, however overall choosing the pace of work is arguably an arrangement that at a high level should not be implemented as an autonomous practice. For this study, the alternative hypothesis is rejected for both versions, and the null is accepted for both. To note here, given the high-level nature of this study once again a granular focus may offer different results. However (\*2024), given this data set was from 2010, and that since 2020 there has been a large labour shift towards employees being able to choose their pace of work given the increase in hybrid work settings (Vyas, 2022), this now may pose different outcomes given the new level of experience workers may have in being able to balance their workdays effectively. This comment can be made over this entire study, and one that would encourage a longitudinal study to see the differences pre and post pandemic of flexible working on health of employees (as well as happiness). The overall negative impact on health could come from the increased stress or physical toll a worker may feel, trying to take on more than their capacity, where industry here would again play an interesting factor into the question.

Following the results for the UK, the Netherlands can now be evaluated. With the same order, beginning with impacts of being able to decide start/finish times on happiness, there is a similar pattern as to the UK. There is initially a negative impact on happiness, then increasing towards positive impacts on happiness, however only occurring to the full degree of autonomy. In this instance, whilst following the same pattern as the UK increasing to a positive impact on happiness, it is difficult to accept either alternative hypothesis given the majority negative impacts, thus rejecting, and accepting instead the null hypotheses for both. These results bring back the previous idea of the all-or-nothing approach; that total autonomy or no autonomy is better than some autonomy. Interestingly, the impact on happiness for the Netherlands is lower than that of the impacts of the UK, starting to bring in now the question of geographic location and its importance. As also with the UK, the results report no real significance. Moving on to the ability to decide how daily work is organised and its impact on happiness, such as with the UK, which has a volatile outcome in the results. There is one significant outcome to the 10% for those that have nearly total autonomy (category 9 out of 10). A little or total autonomy has a positive impact compared to no autonomy. However, revisiting the idea again, those in the "middle-ground" of autonomy have little to negative impacts on happiness. Also in this case the alternative hypotheses for both are rejected, and for both hypotheses the null is accepted. Rounding off happiness results for the Netherlands, there is an instance where we can start to accept the alternative of hypothesis one and reject the null. Here, we observe that whilst there is one instance of negative impacts on happiness compared to the reference, in general we see an upward trend of positive impacts on happiness given the increase in autonomy. Here, results of near or total autonomy (categories, 8 and 10) are significance to the 10% and 1% respectively. We therefore rejected the alternative of hypothesis two and accept the null. The comparison with the UK is quite drastic, having almost opposite results between the two countries. This brings back the question further of cross-border comparisons, and how much we can draw from one country's results to be able to apply it to another's.

Generally, for the Netherlands, there are more positive impacts on happiness with autonomy compared to none, reporting more than in the UK. However, moving the focus towards health, there is a drastically opposite effect. In the same manner, looking at the impact of being able to decide the start/finish times of the workday on health, there is an obvious increasingly negative trend on health with more autonomy, with the result for total autonomy reporting a significance to the 1%. Compared to happiness and to the UK, where total autonomy had a positive impact, this calls for an acceptance of the null of hypotheses one and two, rejecting the alternatives, and asking the question of why there is the opposite outcome. It could also be assumed that the negative impact on health could have contributed to the lower positive impacts on happiness of the Netherlands than of the UK, given the direct relationship health has on happiness. Next, observing the results of being able to decide how daily work is organised, there is a relatively steady negative impact on health across the board. At the lower levels of autonomy there are a couple of instances of positive impacts on health, however generally the negative impacts are almost unwavering. There are no significant results, unlike the UK, and again posing opposite results on health as the UK. Whilst there is a small peak in the beginning of positive impacts moving then towards negative, given the majority negative impact it is difficult to accept the alternative of hypothesis two. Therefore, both hypotheses' alternatives are rejected, and the nulls are

accepted. The steady negative impact could suggest that anything above a small amount or no autonomy will always have a negative impact on health regardless of amount of autonomy. However, given that this negative result is not increasing with autonomy, the overall effects are minimal and could be argued to be relatively less given the increase in autonomy compared to the lower categories of autonomy. This also, again, poses an opposite result to happiness for the Netherlands, bringing the question of having too much of a good thing, or employees not understanding their health limitations with increased freedom of decision making. This over (2024\*) would call for a longitudinal study between 2010 and post 2020 data to see differences in impacts on health and happiness, seeing if indeed employees have learned boundaries of their own health with increasing autonomy in decision making regarding flexible working. Finally, the impact on health for the Dutch and being able to choose the pace of work shows a slow but increasingly negative result, with three categories reporting significant results at the 7<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> categories to the 10% and 5%. As for the UK, here the alternative hypotheses for both are rejected and the null hypotheses are accepted. Following the same previous two results for the Netherlands, the discussion comes again surrounding health boundaries with increasing levels of autonomy and managing work effectively. Unlike the UK, where it can be observed that a small retraction in negative impacts occurs given more autonomy, the opposite happens for the Netherlands as more autonomy leads towards greater negative health impacts. Given this general pattern, but also comparatively the general pattern of increased happiness at levels of near total autonomy, a further discussion point rises whether health is being so negatively impacted, could levels of happiness be higher if health was better managed in flexible working arrangements, or whether the two are non-mutual.

Overall, for the United Kingdom, when posing the first hypothesis that there will be a positive increase in both happiness and health as autonomy in flexible working practices increase, in these results this is only represented in one instance. For the second hypothesis there was also only acceptance to the alternative hypothesis. For the Netherlands, there are arguable two instances of the first hypothesis being accepted, however no instances for the second hypothesis. In all other instances the null is accepted, and the alternative is rejected. One common theme arising is the high-level nature of the study, and the option to potentially explore a granular study taking further consideration for specific industries and job titles. Another theme is the all-or-nothing idea, that in many instances it is more guaranteed to have a likely positive or likely negative impact on health and/or happiness by opting for a near-all autonomous arrangement for the given flexible working practice. Those that have some, or are in the "middle-ground" of, autonomy can experience less or negative impacts on their wellbeing than those that have either a lot/total autonomy, or vice versa no autonomy at all. Considerations to take for this could be comparisons with peers, job titles, industry, and general work culture build. However, another consideration is the geographic location, bringing to question the ability to compare flexible working arrangements imposed in one location and being able to replicate the results in another location. Another theme that can be broadly applied (\*2024) is the comparison pre and post pandemic of this study, bringing into question whether it is a matter of practice or experience that can help flexible working practices bring benefits to health and happiness, or if the results would be comparable. If the results were not shifted in favour of positive outcomes on health as well as happiness, but rather to have stayed with similar outcomes, the instance could occur of a pay-off between a happier workforce or a healthier workforce.

#### Practicality & Recommendations:

In these results there is a mixed outcome in terms of comparison. Looking first at the general relationship between autonomy and flexible working, there is a broad view of results of impacts that autonomy with flexible working can have on workers. There are many studies that argue increasing autonomy affects job satisfaction and happiness and gives more space for workers to practice self-care thus improving health (Kossek et al., 2012; Kinman, 2014). Time spent socially with friends or family can also improve, improving happiness and mental wellbeing (Holumyong & Punpuing, 2015). Reflecting with this study's findings, it can be said that having more control over the workday leads to increased happiness for both workers of the UK and the Netherlands. However, this is only generally true toward total autonomy, and for health this is a mixed result, especially considering the Netherlands. Here, and in general for results in health, there is more support for previous research stating that total autonomy can impact health negatively, ringing especially true for the Netherlands, whilst only a little for the UK (Janssen & Friedhelm, 2004; Costa et al., 2004).

Linking this back to the general argument surrounding employer versus employee-oriented flexible working, employee-oriented flexible working arrangements such as being able to decide the start/finish times of the workday or how the workday pace is organised, versus arguable more employer-oriented flexible working practice of deciding how the workday is organised, there is a difference in the pattern in results. Whilst it isn't possible in this study to see the impact on productivity for the employer, it is evident for the employee there are some benefits to happiness, however not so many to health. For employee-oriented arrangements there is an evident trend towards either positive or negative impacts on both health and happiness, however for employer-oriented there is less so, being more volatile in impacts. These results show that a slight variability in autonomy can have drastically different impacts that could be unpredictable for both happiness and health. Whilst this can make sense in that an employer-oriented flexible working arrangement does not inherently benefit the employee but rather the organisation (Costa & Sartori, 2005), with a flexible working arrangement that is crucial for job satisfaction (and further employee retention), this should be a highly considered and researched further before implementing.

The next question is, how much autonomy should an employee have? Previous studies show that too much autonomy can cause additional stress and negatively impact health (Russel et al., 2007), especially for men, due to not knowing how to effectively manage their freedom of autonomy (Uglanova & Dettmers, 2018). This could explain for the increased negative impacts in health, especially for the Netherlands. There is argument therefore that there needs to be an employer-oriented goal within the employee-oriented flexible working arrangement, to balance the two and give limits that do not go above capacity for either. For example, a business goal that is to be achieved in a certain time frame, with interval check in points of smaller goals, within the framework of a totally autonomous freedom of a decided flexible working arrangement could garner more positive results.

Bringing all this together for an actual application, there is first the separation between employers and higher-level policy makers, at a regional or national level. Firstly, at a micro-

level for employers looking to implement or improve upon flexible working practices, there are three main points to consider.

To begin, elating back to previous research, one must consider the industry they stand in, and to what extent a flexible working policy would be possible to roll out to a mass, diverse, workforce. Industries with more fixed hours or shift work, or a combination between shift work and more regular working hours within the same organisation, may want to consider more carefully implementing practices than an organisation that does not. This could create inequality within the workforce and could contribute towards further negative impacts on the level of happiness of workers. It could also create friction in communications if different departments were to have different flexible working arrangements, potentially causing tensions and therefore increases in stress, contributing towards negative impacts on health and further reduction of happiness. A second point to consider is the geographical build-up of the workforce, or, how international the team may be. For smaller, or locally based companies, this may be less of a concern especially if the workforce is from the same geographical background. For organisations that have a more international workforce, either location-wise or general make-up of the staff, one would have to consider the differences those from different countries or regions would express in reaction to the policies being implemented. Taking the example of this study, a company with bases in the Netherlands and the UK looking to roll out cross-border flexible working policies for their staff would have to consider the difference impacts this could have. They may not want to, for example, roll out the ability to choose the pace of work, but may more seriously consider being able to choose the start/finish times of the workday, given the similar positive outcomes for both countries. In short, an international company would have to research their specific regions well towards the outcomes of policies they would like to introduce given the evident difficulty to translate the success of one arrangement in one geographical location, to another. The final point an organisation would have to consider is that a onesize-fits-all approach does not apply to all flexible working policies. Whilst some show to have increasing positive impacts on wellbeing, others have a peak early on in levels of autonomy, or even an all-or-nothing approach where either full or no autonomy is the best fit. This would have to be carefully considered, to find a balance between having more autonomy in some policies than others, to not discourage employees and negatively contribute towards their happiness.

At a macro-level for policy makers, the same three considerations would need to be taken, but in a slightly different approach. Firstly, regarding the industry and best-fit, one would have to consider on which industries an economy is majority based. For example, countries such as Croatia, or the smaller South-East Asian islands (Statista, 2019;2022), where tourism is a large contributor to the national economy, may not be able to implement flexible working policies as effectively as countries that have a less dependency in such an industry and rather in a less seasonal, typical 9-5 workday approach. This is due to the potential that most of the workforce in an economy such as being dependent on tourism (or a similar industry) would not be able to utilize the policy to its advantage, thus not gaining much positive outcome on the implementation. This takes tourism into account, but industries such as manufacturing or financial services may also fall under this bracket. Secondly, the consideration. For example, countries such as the Netherlands or the UK that have an

immigrant make up of their population of around 15% (CBS.nl, 2022; commonslibrary.parliament.uk, 2024), could report different outcomes than a country with lower immigration levels, for example Slovakia at 1% (Eurostat, 2022). The outcomes from the two countries in this study may be more influenced by cultural differences than of a country such as Slovakia, but alternatively may serve as a wider umbrella of generalised results. A comparison of the same nature with another country would help determine this statement, as well as to guide the importance of researching the impacts of the "home" residents. Finally, considering the general implementation of policies, space must be given to allow for manipulation of policies to best suit industry and job title for employers. It must also allow for a balance between employer and employee governance, in that whilst the employee can establish how best to utilise the available policy, the employer still can exercise reasonable limitations that still benefit their teams. For example, encouraging autonomy within limits decided by the employer, however giving power to the employee in exercising their rights to utilise the policy to their full advantage. For example, as of 2024, the UK has introduced the Flexible Working Act. This act allows employees to submit reasonable requests to their employers for certain amendments to their working conditions, such as their start or finish times of the workday, mandating employers must respond to the request in an equally reasonable manner (gov.uk, 2024).

#### Limitations:

As this study is a high-level approach it cannot be without limitations. Firstly, the dataset used was chosen for its availability, comparable waves, the ability to conduct cross-country analysis, and that it included flexible working variables. However, the dataset also missed data (mostly in reference here to the Netherlands) and had lower response rates than would be ideal for a country-wide representation. Another limitation is playing into the assumption that workers do not have the choice of jobs that offer flexible working, whereas the assumption is that workers who are generally happy often opt for jobs that already offer flexible working arrangements as part of their recruitment tactics (Golden, Henly and Lambert, 2012; Atkinson & Hall, 2011). Therefore, the impact on happiness could be construed in the sense that those who are happier are in work that has more to total autonomy, effectively reversing the causal effect of the results. Another consideration to make is the potential impact extraneous variables such as job title and work contract could have on the results. Especially regarding those who have no contract, or a low-level role, these variables could have better accounted for potential missing data (for example not answering a question as it may not apply to them), or to better explain potential high levels of negative impacts on health and happiness. It would also help to underline different impacts variations in these variables have on health and happiness, and further would give the option to limit those not currently in work's contribution to the study, as those who are unemployed are more likely to report higher levels of unhappiness than employed individuals. Another interesting variable to add to the study would be how important flexible working practices and the level of autonomy is to the individual when applying for the role. This would add an additional insight if conducting a longitudinal study pre and post 2020 pandemic, as well as assisting in controlling for the assumption of happier employees more often opting for roles that already include flexible working arrangements. The study itself could have been on a more granular level, taking a closer look into one specific region or industry, or contract type, however given the high-level nature of an exploratory study, this further gives direction towards new, specialised paths of research. A final limitation of

this research is the time over which this was written. Over the course of five years, a lot of changes have occurred to flexible ways of working that could skew an argument that would have been otherwise made previously. However, this could also be seen as a benefit, giving a new and different perspective in the same study through experience and opening to new potential paths of future research.

#### Further Research:

As mentioned throughout, and given the exploratory nature of this research, there are many suggestions one could make regarding direction for future research. Following on from previously mentioned, a longitudinal study of pre and post pandemic would give a new perspective on the impact of flexible working on employee's health and happiness given more relative experience with the concept (Janssen & Friedhelm, 2004). Assuming there may be more flexible working variables added into new waves of the European Social Survey, this would signify the growing importance flexible working has in our everyday working arrangements. A recommendation for this study would be to utilise data (when available) with pandemic restrictions having been lifted for the relevant countries being researched, given the wider negative impacts the COVID-19 pandemic had on health as well as happiness. It would however be unlikely to have the same participants contributing to the dataset again, so would rather be a comparative snapshot overtime rather than a true longitudinal study.

Another recommendation for future research would be to conduct the study once more with the exogenous variables previously mentioned, accounting for any bias in the results. In addition to this, conducting the study at a more granular level in terms of industry, or in job title or status in an organisation. These studies could help define which arrangements are more beneficial in a tailored manner, rather than in a one-size-fits-all approach, avoiding the risk of potential negative impacts rather than the intended positive.

Given the amount of null hypothesis acceptations in this study, it brings to question the level of cross-border comparisons one can make when researching flexible working practices, especially in terms of implementation. A branch of study here could be to test successful flexible working arrangements from one country, or region, and apply them to another, looking for differences and giving answers to the additional question of why two (similar) locations could have such adverse results.

A final question to consider is the extent to when there is "too much of a good thing" and why there are adverse patterns in some flexible working variables impacts comparing happiness and health. Developing this idea further, where would the balance be to try achieving optimal positive impacts on both health and happiness of employees in levels of autonomy. However, real world applications for this question are little to warrant a full study, until such solutions are required.

#### Conclusion:

Throughout the results of this study, there has been little positive findings from the hypotheses. However, this brings to light new questions and interesting comparisons that can be made, especially in terms of comparing different geographical locations. The approach for this study was to support the idea that increasing autonomy in flexible working

would have positive impacts on happiness, following the general previous research results, considering some potential negative impacts through the second hypothesis acknowledging potential diminishing returns. However, given a large share of the results has the opposite outcome, supporting the other countering arguments from the study. Highlighted results come particularly from the highly negative impact on health, especially for the Netherlands, and further the interestingly adverse impacts the two countries experience. This brings about the first theme of cross-border comparisons, and the question of how much one could use studies from another region to apply to their own when looking into implementing autonomous flexible working practices. Another theme is the all-or-nothing approach, seeing that the "middle-ground" of "some" autonomy can be less beneficial and somewhat unpredictable than none or total autonomy. A final theme is that no policy is a one-size-fits-all, across both flexible working types, countries, and potentially industries. Linking these together, those that want to implement autonomous flexible working arrangements at any level would have to take these three points into consideration. Future research could include longitudinal studies, more granular analysis in specific areas such as industry or job role, further cross-border comparisons, and balancing autonomy between employee and employer. In short, a contextual study before implementation is recommended to be carried out, to ensure the level of autonomy granted is of best fit, and not inflicting unwanted, negative outcomes. Whilst this may not have been the initial results the study was predicted to take, the outcome in wanting to discover the balance between flexible working, autonomy, and its hopeful positive impact on health and happiness has resulted in a reflective outcome of previous research. With a new angle, and somewhat confirmation, it shows that cross-country comparisons in this area would be difficult to draw relevant, implementable results.

# **Overall conclusions and discussion**

The purpose of this study was to find the impact of autonomy in flexible working practices, comparing the Netherlands and the United Kingdom to show potential differences of implementations of the same policy. Background research showed little in the way of a combined study between health and happiness in studying flexible working and autonomy, as well as a lack of context surrounding applicability on a wider scale. It was also found there to be a variation in outcome for both health and happiness, depending on a large range of features. This signified the importance of context regarding not only income, employer or employee-oriented flexible working, or job satisfaction, but also of geographical location, industry, and job title/status within an organisation. Given there is little research into comparative regions of study, and building off of the assumption before beginning the study based off the author's lived experience, the basis of the research began. In addition, there is little comparison between health and happiness within the same study. Whilst there is a causal factor that could limit researchers from wanting to combine the study, without having both there is reason to argue that there would be limitations in finding the true impact on both variables.

The research method for the study took data from the European Social Survey Wave 5 (2010), given the availability of cross-country analysis of the two sought-after countries, and of flexible working variables. Ordinal logistic regressions in Stata were run given the
categorical type of happiness and health, after encoding and testing for multicollinearity. Given the exploratory position of the research, the hypotheses built for this study were as follows:

- 3. There will be positive impacts on health and happiness with increased autonomy in flexible working for the UK and the Netherlands.
- 4. There will be diminishing returns in health and happiness with increases in autonomy for the UK and the Netherlands.

The results showed a limited number of significant results, with few acceptations of the alternative hypotheses. However, this brought to question the transferability of results between levels within an organisation and job titles, industry, and region. Backing up previous questioning by confirming that direct comparisons cannot be made, especially when looking to implement flexible working policies, three main themes were drawn:

- 1. There is no one-size-fits-all approach: this applies across differences in region, direct work-related aspects, and flexible working arrangements.
- 2. Independent research is required when looking to implement flexible working policies: this is both at a micro and macro-level
- 3. Autonomy within bounds: having full autonomy within certain reasonable boundaries set by the employer can help off-set any potential negative outcomes from the employee's actions (for example: over-working).

Limitations from this study included missing data and low response rates; the assumption of a lack of free will in choosing employment and the unavailability of information regarding flexible working; and extraneous variables. Here, these are discussed as a starting point for future research, as well as (\*2024) conducting a longitudinal study to determine whether such impacts found on health and happiness in this study are a result of a lack of experience, depending if the data becomes available. This could be explained by comparing data pre and post 2020 COVID-19 pandemic, given the flexible working shifts made from necessity for a large proportion of the global population.

Overall, the impact of flexible working on health and happiness for the United Kingdom and the Netherlands is varied. This is depending on multiple factors, showing that one study of one flexible working arrangement cannot necessarily be translated to another - likewise with industry or geographic location. Therefore, those looking to implement flexible working policies, as becoming increasingly popular, for the benefit of reducing negative impacts on health and happiness should take a granular research approach to their specific environment. Without which, the desired outcome may be likely to be the opposite.

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## <u>Appendix</u>

- Appendix A, Pages 1-5: Ordinal Logistic Regression results for the Netherlands based on health and happiness as dependent variables all three flexible working practices included.
- Appendix B, Pages 5-10: Ordinal Logistic Regression results for the United Kingdom based on health and happiness as dependent variables all three flexible working practices included.
- Appendix C, Pages 10-14: Ordinal Logistic Regression results for the United Kingdom based on health as a dependent variable, with the three flexible working variables in separate studies:
- Appendix D, Pages 14-18: Ordinal Logistic Regression results for the United Kingdom based on happiness as a dependent variable, with the three flexible working variables in separate studies:
- Appendix E, Pages 18-22: Ordinal Logistic Regression results for the Netherlands based on health as a dependent variable, with the three flexible working variables in separate studies:
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Appendix A: Ordinal Logistic Regression results for the Netherlands based on health and happiness as dependent variables – all three flexible working practices included.

(1)	(2)
happy	nhealth
-	-
0.00963	-0.0540
(0.197)	(0.221)
0	0
(0)	(0)
-0.0164**	0.0219**
(0.00802)	(0.00871)
0.849*	-0.149
(0.469)	(0.507)
0.459	-0.152
(0.474)	(0.509)
0.624	-0.125
(0.515)	(0.556)
0.375	-0.484
	(1) happy - 0.00963 (0.197) 0 (0) -0.0164** (0.00802) 0.849* (0.469) 0.459 (0.474) 0.624 (0.515) 0.375

	(0.497)	(0.538)
1.hinctnt	30.10	-0.227
	(191,498)	(2.183)
2.hinctnt	0.615	-0.944
	(0.850)	(0.884)
3.hinctnt	1.044	-1.828
	(1.083)	(1.124)
4.hinctnt	0.0123	0.505
	(0.582)	(0.620)
6.hinctnt	0.190	-0.289
	(0.299)	(0.328)
7.hinctnt	0.857***	-0.227
	(0.313)	(0.336)
8.hinctnt	1.327***	-0.362
	(0.325)	(0.355)
9.hinctnt	1.415***	-0.374
	(0.304)	(0.329)
10.hinctnt	1.280***	0.133
	(0.400)	(0.426)
11.hinctnt	1.321*	-0.285
	(0.700)	(0.725)
12.hinctnt	2.920***	-0.358
	(0.777)	(0.875)
0.nhealth	2.567***	× ,
	(0.617)	
1.nhealth	2.048***	
	(0.593)	
2.nhealth	1.415**	
	(0.616)	
30.nhealth	0	
	(0)	
1.wkdcpce	-0.122	-0.727
Ĩ	(0.669)	(0.758)
2.wkdcpce	0.289	-1.004
Ĩ	(0.554)	(0.634)
3.wkdcpce	-0.445	-0.618
Ĩ	(0.604)	(0.646)
4.wkdcpce	-0.645	-0.540
L.	(0.603)	(0.681)
5.wkdcpce	0.241	-0.725
L.	(0.464)	(0.511)
6.wkdcpce	0.742	-0.391
L.	(0.466)	(0.512)
7.wkdcpce	0.283	-0.781*
-	(0.420)	(0.454)
8.wkdcpce	0.738*	-0.755
-	(0.425)	(0.460)
9.wkdcpce	0.515	-0.572
-	(0.468)	(0.510)
10.wkdcpce	1.296***	-0.801

	(0.475)	(0.515)
1.wkdcorga	0.434	1.107
-	(0.770)	(0.841)
2.wkdcorga	0.984	0.563
U U	(0.703)	(0.786)
3.wkdcorga	0.425	0.0229
U U	(0.739)	(0.818)
4.wkdcorga	-0.382	0.0505
U	(0.682)	(0.739)
5.wkdcorga	0.355	0.766
e	(0.585)	(0.641)
6.wkdcorga	-0.178	0.197
e	(0.555)	(0.621)
7.wkdcorga	-0.0313	0.216
U	(0.531)	(0.590)
8.wkdcorga	0.117	0.197
U	(0.522)	(0.579)
9.wkdcorga	0.577	0.507
8	(0.556)	(0.613)
10.wkdcorga	-0.127	0.260
100001000180	(0.563)	(0.624)
2.dcsfwrk	-0.190	-0.110
	(0.225)	(0.247)
3.dcsfwrk	-0.231	-0.0852
	(0.233)	(0.262)
4 desfwrk	-0.288	-0.837***
1.debi WIR	(0.292)	(0.322)
1 wrkengt	0.465	-0.318
inningi	(0.631)	(0.764)
2 wrkengt	0 338	0.00354
2. Wilkengt	(0.657)	(0.787)
3 wrkengt	0.133	-0.605
Stuffienge	(0.707)	(0.832)
4 wrkengt	0.0199	-0.170
invinenge	(0.647)	(0.778)
5 wrkengt	-0 558	0.00546
ettillengt	(0.705)	(0.831)
6 wrkengt	0.185	-0.583
00000000	(0.649)	(0.781)
1.wkovrtm	-0.567	-0.540
1. WKO VILIII	(1.198)	(1 139)
2 wkovrtm	-0 774	-0.551
2. WKO VIUII	(1, 201)	(1 143)
3 wkovrtm	-0.668	-0.861
5. WKOVIUII	(1, 208)	(1.158)
1 wkovrtm	-0.526	_0.002
	(1 102)	(1 1/1)
5 wkovrtm	(1.192)	(1.141)
J.WKUVIUII	(1.230)	-0.330
6 wkowtm	(1.230) 1 054	(1.103)
0.WKUVIUII	-1.034	-0.113

	(1.199)	(1.141)
1.wrkwe	-0.179	-0.129
	(0.457)	(0.483)
2.wrkwe	0.218	-0.0528
	(0.474)	(0.500)
3.wrkwe	0.530	-0.530
	(0.506)	(0.534)
4.wrkwe	0.548	-0.252
	(0.458)	(0.486)
wkhct	0.0206	0.0282
	(0.0171)	(0.0191)
wkhtot	-0.0292*	-0.0362*
	(0.0177)	(0.0194)
whours	-0.00201	-0.0282**
	(0.0136)	(0.0144)
1.nindustry	-0.584	0.787
	(0.732)	(0.788)
2.nindustry	-1.090	0.0440
	(1.768)	(2.109)
3.nindustry	-0.227	-0.213
	(0.357)	(0.402)
5.nindustry	-0.204	0.937
	(0.751)	(0.834)
6.nindustry	-0.960**	0.290
	(0.457)	(0.504)
7.nindustry	-0.958***	0.251
	(0.361)	(0.410)
8.nindustry	-0.294	0.158
	(0.516)	(0.542)
9.nindustry	-0.870	-0.397
	(0.592)	(0.704)
11.nindustry	-1.527**	-0.393
	(0.724)	(0.811)
13.nindustry	-0.0757	0.210
	(0.571)	(0.629)
14.nindustry	-0.249	0.313
	(0.510)	(0.573)
15.nindustry	-0.869	0.638
	(0.860)	(0.967)
17.nindustry	-0.657*	-0.423
	(0.361)	(0.407)
20.nindustry	-1.859**	0.236
	(0.926)	(1.074)
24.nindustry	0.0259	0.0862
	(0.427)	(0.482)
25.nindustry	-0.535	0.176
	(0.342)	(0.385)
28.nindustry	-0.274	-0.366
	(0.566)	(0.603)
31.nindustry	2.359	-0.495

*** p<0.01, ** p<0.05, * p<0.1			
Observations	661	661	
	( )		
, cato	(1.664)		
/cut8	5.784***		
/ ut /	(1.656)		
/cut7	3 701**		
/000	(1.653)		
/cut6	1 292		
, cuto	(1.649)		
/cut5	-0.466		
	(1.650)		
/cut4	-1 269	(1.07)	
, cuis	(1.659)	(1.649)	
/cut3	-2.226	2.608	
	(1.687)	(1.627)	
/cut2	-3 200*	-0 115	
	$(1 \ 917)$	(1.635)	
/cut1	-5 014***	-3 511**	
212.1110g101111	(0.364)	(0.402)	
212 nregional	(0.293)	-0 332	
	-0.0752	-0.430	
211 pregional	(0.241)	(1.047)	
	(0.041)	-0.120	
210 pregional	(0.209) 0.541	(0.297) 0.126	
209.Integionin	-0.232	-0.392	
200 progional	(0.303)	(0.403)	
207.megionni	-0.0140	-0.0098	
207 program1	(0.488)	(0.333)	
206.nregionni	-0.638	-0.737	
207 : 1	(0.314)	(0.339)	
205.nregionnl	0.261	-0.312	
	(0.352)	(0.375)	
204.nregionnl	-0.108	0.0628	
	(0.468)	(0.490)	
203.nregionnl	0.709	-0.122	
	(0.452)	(0.481)	
202.nregionnl	0.137	-0.673	
	(0.453)	(0.508)	
201.nregionnl	-0.199	-0.466	
	(1.798)	(1.470)	

Appendix B: Ordinal Logistic Regression results for the United Kingdom based on health and happiness as dependent variables – all three flexible working practices included.

	(1)	(2)
VARIABLES	happy	nhealth

agea	-0.0161**	0.00662
	(0.00810)	(0.00864)
1.gndr	-0.0435	0.525**
	(0.201)	(0.222)
20.gndr	0	0
-	(0)	(0)
2.edulvla	-0.253	-0.250
	(0.260)	(0.268)
3.edulvla	-0.300	-0.624*
	(0.310)	(0.323)
5.edulvla	-0.216	-0.733**
	(0.313)	(0.329)
55.edulvla	0.588	-0.514
	(0.411)	(0.445)
1.hinctnt	-1.840	-16.38
	(1.596)	(1,832)
2.hinctnt	-1.165	2.782**
	(1.031)	(1.204)
3.hinctnt	-1.030	-0.256
	(0.634)	(0.702)
4.hinctnt	-0.174	-0.207
	(0.449)	(0.454)
6.hinctnt	0.169	-0.362
	(0.364)	(0.378)
7.hinctnt	0.300	-0.207
	(0.354)	(0.379)
8.hinctnt	0.148	-0.482
	(0.353)	(0.373)
9.hinctnt	0.418	-0.953***
	(0.314)	(0.343)
10.hinctnt	0.505	-0.597
	(0.359)	(0.391)
11.hinctnt	0.842*	-1.191**
	(0.477)	(0.521)
12.hinctnt	1.082**	-0.509
	(0.518)	(0.610)
0.nhealth	-15.06	
	(554.0)	
1.nhealth	-15.58	
	(554.0)	
2.nhealth	-15.93	
	(554.0)	
3.nhealth	-15.02	
	(554.0)	
1.wkdcpce	-0.150	0.0640
	(0.505)	(0.549)
2.wkdcpce	-0.200	-0.419
	(0.420)	(0.441)
3.wkdcpce	0.0266	-0.325
	(0.442)	(0.491)

4.wkdcpce	0.0541	-0.872
	(0.494)	(0.540)
5.wkdcpce	-0.717**	-0.163
	(0.365)	(0.382)
6.wkdcpce	-1.156***	-0.0206
•	(0.427)	(0.447)
7.wkdcpce	-0.356	-0.338
-	(0.376)	(0.406)
8.wkdcpce	-0.492	-0.458
•	(0.370)	(0.390)
9.wkdcpce	-0.156	-0.316
•	(0.448)	(0.473)
10.wkdcpce	-0.591	-0.523
	(0.423)	(0.428)
1.wkdcorga	0.939	-0.327
C	(0.743)	(0.760)
2.wkdcorga	-0.00159	0.409
C	(0.548)	(0.609)
3.wkdcorga	-0.542	1.021
C	(0.616)	(0.673)
4.wkdcorga	0.185	1.777***
U	(0.602)	(0.647)
5.wkdcorga	0.499	0.709
C	(0.514)	(0.547)
6.wkdcorga	0.0690	0.441
C	(0.555)	(0.618)
7.wkdcorga	0.283	0.927*
C	(0.493)	(0.539)
8.wkdcorga	0.292	1.185**
C	(0.475)	(0.522)
9.wkdcorga	0.300	0.902*
C	(0.490)	(0.535)
10.wkdcorga	0.798	0.797
C	(0.501)	(0.536)
2.dcsfwrk	-0.0824	0.0123
	(0.222)	(0.243)
3.dcsfwrk	0.165	-0.0566
	(0.276)	(0.307)
4.dcsfwrk	0.123	0.479
	(0.300)	(0.313)
1.wrkengt	-0.184	0.815**
C	(0.328)	(0.364)
2.wrkengt	-0.314	0.703
C	(0.391)	(0.433)
3.wrkengt	0.169	0.677
C	(0.526)	(0.571)
4.wrkengt	-0.167	0.852**
<u> </u>	(0.375)	(0.415)
5.wrkengt	-0.559	1.196**
-	(0.449)	(0.489)

6.wrkengt	-0.120	0.587
	(0.352)	(0.384)
1.wkovrtm	0.781	0.142
	(0.494)	(0.520)
2.wkovrtm	0.927*	0.263
	(0.514)	(0.530)
3.wkovrtm	0.455	0.464
	(0.532)	(0.563)
4.wkovrtm	0.529	0.0907
	(0.507)	(0.538)
5.wkovrtm	0.974*	0.472
	(0.566)	(0.588)
6.wkovrtm	0.191	0.820
	(0.519)	(0.549)
1.wrkwe	-0.194	-0.430
1	(0.276)	(0.302)
2 wrkwe	-0.0879	-0 740**
2.0011000	(0.316)	(0.344)
3 wrkwe	-0.356	-0.0672
J.WIKWC	(0.342)	(0.368)
1 wrkwa	(0.3+2)	(0.308)
4.WIKWC	(0.281)	(0.205)
witchot	(0.201)	(0.290)
WKIICI	-0.0203	-0.0119
	(0.0143)	(0.0147)
WKIIIOU	-0.0190	-0.0114
1	(0.0138)	(0.0147)
whours	-0.0411***	0.00586
	(0.0115)	(0.0120)
1.nindustry	0.581	-1.98/*
<b>a i i i</b>	(0.852)	(1.132)
2.nindustry	-1.886	-15.81
	(1.227)	(1,054)
3.nindustry	0.471	-0.159
	(0.359)	(0.393)
5.nindustry	0.654	-0.545
	(0.836)	(0.971)
6.nindustry	0.471	-0.353
	(0.506)	(0.560)
7.nindustry	0.591	-0.594
	(0.376)	(0.410)
8.nindustry	0.241	0.242
	(0.563)	(0.606)
9.nindustry	0.0169	-1.316*
	(0.641)	(0.715)
11.nindustry	-0.345	0.0587
	(0.506)	(0.548)
13.nindustry	0.188	-1.417*
-	(0.678)	(0.854)
14.nindustry	0.535	-0.132
-	(0.464)	(0.487)

15.nindustry	0.444	-0.535
	(0.543)	(0.635)
17.nindustry	0.392	-0.403
	(0.395)	(0.426)
20.nindustry	0.215	0.611
	(0.938)	(1.136)
24.nindustry	0.468	0.0833
-	(0.375)	(0.409)
25.nindustry	0.367	-0.242
	(0.342)	(0.373)
28.nindustry	-0.0305	-0.883
-	(0.650)	(0.703)
31.nindustry	-0.271	-16.34
-	(1.631)	(1,832)
1.nregiongb	-0.183	0.0101
	(0.432)	(0.464)
2.nregiongb	-0.0389	0.288
	(0.405)	(0.426)
3.nregiongb	0.160	0.442
	(0.420)	(0.451)
4.nregiongb	0.254	-0.335
	(0.441)	(0.475)
5.nregiongb	0.396	0.338
	(0.393)	(0.426)
6.nregiongb	0.715*	-0.0751
	(0.426)	(0.457)
7.nregiongb	0.310	0.476
	(0.389)	(0.421)
9.nregiongb	-0.0166	0.0361
	(0.387)	(0.415)
10.nregiongb	0.416	1.591***
	(0.504)	(0.595)
11.nregiongb	0.446	0.206
	(0.423)	(0.450)
12.nregiongb	1.431**	-1.259
	(0.706)	(0.798)
/cut1	-23.10	-0.808
	(554.1)	(1.021)
/cut2	-21.30	1.713*
	(554.1)	(1.024)
/cut3	-20.41	4.653***
	(554.1)	(1.081)
/cut4	-19.27	6.765***
	(554.1)	(1.429)
/cut5	-18.29	
	(554.1)	
/cut6	-17.64	
	(554.1)	
/cut7	-16.50	
	(554.1)	

/cut8	-15.10	
	(554.1)	
/cut9	-13.60	
	(554.1)	
o.ncntry		-

Observations583583Standard errors in parentheses<br/>\*\*\* p<0.01, \*\* p<0.05, \* p<0.1</td>

Appendix C: Ordinal Logistic Regression results for the United Kingdom based on health as	а
dependent variable, with the three flexible working variables in separate studies:	

	(1)	(2)	(3)
VARIABLES	nhealth	nhealth	nhealth
o.ncntry	-	-	-
1 and	0 226*	0.240*	0 462**
1.gliui	(0.320)	(0.100)	(0.214)
20 andr	(0.198)	(0.199)	(0.214)
20.gnui	(0)	(0)	(0)
2022	(0)	(0)	(0)
uzea	(0.003+0)	(0.00782)	(0.002+3)
2 edulyla	-0 196	-0 227	-0 302
2.0001110	(0.238)	(0.227)	(0.259)
3.edulvla	-0.763***	-0.694**	-0.703**
	(0.287)	(0.289)	(0.313)
5.edulvla	-0.490*	-0.532*	-0.695**
	(0.281)	(0.283)	(0.317)
55.edulvla	-0.725*	-0.808**	-0.511
	(0.388)	(0.387)	(0.424)
1.hinctnt	-1.240	-0.946	-16.19
	(1.439)	(1.428)	(1,614)
2.hinctnt	1.139	1.734	1.986*
	(1.078)	(1.108)	(1.147)
3.hinctnt	-0.356	-0.104	-0.572
	(0.591)	(0.597)	(0.680)
4.hinctnt	-0.0860	-0.0466	-0.187
	(0.422)	(0.420)	(0.448)
5.hinctnt	-0.154	-0.142	-0.424
	(0.345)	(0.340)	(0.363)
7.hinctnt	0.188	0.204	-0.208
	(0.342)	(0.339)	(0.367)
8.hinctnt	-0.119	-0.122	-0.467
	(0.333)	(0.327)	(0.361)
9.hinctnt	-0.533*	-0.560*	-0.872***
	(0.305)	(0.305)	(0.334)
10.hinctnt	-0.332	-0.319	-0.529

	(0.351)	(0.351)	(0.378)
11.hinctnt	-1.022**	-0.964**	-1.143**
	(0.457)	(0.457)	(0.504)
12.hinctnt	-0.678	-0.641	-0.455
	(0.523)	(0.526)	(0.589)
1.wkdcpce	-0.288	(0.00 = 0)	(0.00)
F	(0.469)		
2.wkdcpce	-0.296		
F * *	(0.407)		
3.wkdcnce	-0.390		
Stirkdepee	(0.429)		
4 wkdcnce	-1.004**		
n.w.kaepee	(0.480)		
5 wkdcnce	-0.0437		
5.wkdepee	(0.336)		
6 wkdcpce	0.175		
0. wkdepee	(0.394)		
7 wkdence	-0.128		
/.wkdepee	(0.356)		
8 wkdence	0.336		
o.wkucpee	(0.230)		
0 wkdoneo	(0.332)		
9.wkucpce	-0.133		
10 wkdoneo	(0.401)		
10.wkucpce	-0.303		
1 webonat	(0.322) 0.717**	0 715**	0 740**
1.wikeligt	(0.717)	$(0.713^{++})$	$(0.740^{11})$
2 werkongt	(0.320)	(0.523) 0.770**	(0.534)
2.wrkengt	$(0.782^{33})$	$(0.779^{++})$	(0.420)
2 multiser of	(0.393)	(0.390)	(0.420)
5.wrkengt	$0.914^{*}$	(0.721)	(0.667)
1	(0.489)	(0.493)	(0.550)
4.wrkengt	$(0.740^{***})$	$0.724^{***}$	0.744
5 mml an at	(0.371)	(0.307)	(0.403)
5.wrkengt	$1.052^{**}$	$1.155^{***}$	$1.140^{**}$
C1	(0.434)	(0.431)	(0.4/1)
6.wrkengt	0.581*	$0.032^{*}$	0.557
1	(0.538)	(0.339)	(0.3/1)
1.WKOVITIM	-0.182	-0.168	0.292
0 1 /	(0.446)	(0.447)	(0.503)
2.wkovrtm	-0.125	-0.0/03	0.368
2 1	(0.458)	(0.461)	(0.513)
3.wkovrtm	0.119	0.130	0.558
	(0.480)	(0.483)	(0.544)
4.wkovrtm	-0.112	-0.112	0.269
	(0.471)	(0.471)	(0.522)
5.wkovrtm	0.161	0.0868	0.602
	(0.499)	(0.504)	(0.570)
6.wkovrtm	0.411	0.371	0.913*
	(0.468)	(0.472)	(0.534)
1.wrkwe	-0.293	-0.314	-0.454

	(0.267)	(0.266)	(0.296)
2.wrkwe	-0.552*	-0.636**	-0.699**
	(0.302)	(0.304)	(0.335)
3.wrkwe	-0.113	-0.172	-0.0938
	(0.311)	(0.312)	(0.358)
4.wrkwe	-0.0720	-0.141	-0.191
	(0.263)	(0.263)	(0.290)
wkhct	0.00792	0.00649	-0.00951
	(0.0112)	(0.0112)	(0.0146)
wkhtot	-0.0226*	-0.0207*	-0.0140
	(0.0124)	(0.0125)	(0.0143)
whours	0.00413	0.00603	0.00249
	(0.0105)	(0.0106)	(0.0118)
1.nindustry	-0.196	-0.285	-2.108*
Ĵ	(0.650)	(0.654)	(1.091)
2.nindustry	-1.238	-1.424	-15.00
2	(1.296)	(1.368)	(1,077)
3.nindustry	-0.0408	-0.119	-0.121
2	(0.352)	(0.351)	(0.378)
5.nindustry	-0.305	-0.637	-0.525
2	(0.909)	(0.905)	(0.933)
6.nindustry	-0.270	-0.407	-0.317
•	(0.435)	(0.435)	(0.538)
7.nindustry	-0.527	-0.629*	-0.513
•	(0.362)	(0.363)	(0.392)
8.nindustry	0.480	0.591	0.391
•	(0.486)	(0.496)	(0.570)
9.nindustry	-0.843	-1.078	-0.964
-	(0.687)	(0.686)	(0.693)
11.nindustry	0.394	0.253	0.149
-	(0.498)	(0.497)	(0.538)
13.nindustry	-1.348*	-1.338*	-1.546*
	(0.725)	(0.717)	(0.840)
14.nindustry	-0.425	-0.560	-0.0630
	(0.424)	(0.429)	(0.472)
15.nindustry	-0.0755	-0.240	-0.209
	(0.581)	(0.586)	(0.613)
17.nindustry	-0.163	-0.265	-0.270
	(0.390)	(0.392)	(0.415)
20.nindustry	0.259	0.00839	0.563
	(0.965)	(0.988)	(1.123)
24.nindustry	0.0945	0.101	0.0660
	(0.364)	(0.369)	(0.396)
25.nindustry	-0.145	-0.187	-0.222
	(0.335)	(0.333)	(0.362)
28.nindustry	-0.862	-1.005	-0.884
	(0.613)	(0.617)	(0.682)
31.nindustry	-14.97	-15.11	-16.09
	(1,033)	(1,033)	(1,614)
1.nregiongb	-0.139	-0.152	0.0467

	(0.418)	(0.416)	(0.447)
2.nregiongb	0.199	0.182	0.366
	(0.385)	(0.381)	(0.411)
3.nregiongb	0.0912	0.0956	0.584
0 0	(0.403)	(0.403)	(0.432)
4.nregiongb	-0.462	-0.513	-0.215
	(0.428)	(0.426)	(0.457)
5.nregiongb	0.0882	-0.0117	0.344
	(0.380)	(0.375)	(0.412)
6.nregiongb	-0.0909	-0.215	0.0265
	(0.401)	(0.403)	(0.440)
7.nregiongb	0.350	0.232	0.571
	(0.370)	(0.368)	(0.404)
9.nregiongb	-0.0477	-0.150	0.110
	(0.372)	(0.370)	(0.398)
10.nregiongb	0.975*	1.030**	1.438***
	(0.519)	(0.525)	(0.554)
11.nregiongb	-0.132	-0.201	0.260
	(0.409)	(0.405)	(0.438)
12.nregiongb	-0.346	-0.397	-1.202
	(0.665)	(0.671)	(0.766)
/cut1	-1.412	-0.767	-1.356
	(0.893)	(0.943)	(0.931)
/cut2	0.952	1.623*	1.104
	(0.892)	(0.945)	(0.931)
/cut3	3.967***	4.639***	4.008***
	(0.955)	(1.007)	(0.992)
/cut4	6.068***	6.739***	6.116***
	(1.336)	(1.374)	(1.363)
1.wkdcorga		-0.364	
		(0.668)	
2.wkdcorga		0.141	
		(0.550)	
3.wkdcorga		0.783	
		(0.602)	
4.wkdcorga		1.301**	
		(0.595)	
5.wkdcorga		0.233	
		(0.480)	
6.wkdcorga		0.0144	
		(0.543)	
7.wkdcorga		0.624	
0 1 1		(0.457)	
8.wkdcorga		0.741*	
~ • • •		(0.440)	
9.wkdcorga		0.454	
10 1 1		(0.453)	
10.wkdcorga		0.359	
		(0.432)	0.0000
2.dcstwrk			0.0238

			(0.231)
3.dcsfwrk			-0.0504
			(0.288)
4.dcsfwrk			0.423
			(0.281)
Observations	676	676	586
	Standard errors in *** p<0.01, ** p<	parentheses 0.05, * p<0.1	

Appendix D: Ordinal Logistic Regression results for the United Kingdom based on happines	S
as a dependent variable, with the three flexible working variables in separate studies:	

	(1)	(2)	(3)
VARIABLES	happy	happy	happy
	0.0127*	0.0125*	0.0107*
agea	-0.0137*	-0.0136*	-0.0137*
	(0.00733)	(0.00738)	(0.00'/8')
l.gndr	0.00605	0.0862	-0.124
	(0.183)	(0.184)	(0.196)
20.gndr	0	0	0
	(0)	(0)	(0)
2.edulvla	-0.240	-0.261	-0.285
	(0.231)	(0.234)	(0.253)
3.edulvla	-0.462*	-0.483*	-0.341
	(0.276)	(0.279)	(0.302)
5.edulvla	-0.209	-0.251	-0.291
	(0.271)	(0.271)	(0.301)
55.edulvla	0.499	0.417	0.526
	(0.361)	(0.356)	(0.400)
1.hinctnt	-0.924	-1.295	-1.794
	(1.174)	(1.180)	(1.564)
2.hinctnt	-1.106	-1.372	-1.362
	(0.852)	(0.876)	(0.958)
3.hinctnt	-0.671	-0.726	-0.896
	(0.559)	(0.556)	(0.628)
4.hinctnt	-0.436	-0.328	-0.128
	(0.411)	(0.414)	(0.438)
6.hinctnt	0.160	0.233	0.157
	(0.333)	(0.332)	(0.350)
7.hinctnt	0.313	0.269	0.320
	(0.321)	(0.321)	(0.344)
8.hinctnt	0.0975	0.0295	0.125
	(0.312)	(0.312)	(0.344)
9.hinctnt	0.417	0.411	0.438
	(0.284)	(0.286)	(0.307)
10.hinctnt	0.573*	0.556*	0.568
	(0.326)	(0.326)	(0.346)
11.hinctnt	0.748*	0.675	0.900**
/////	(0.418)	(0.420)	(0.457)
	(0.110)	(0.1-0)	(0.107)

12.hinctnt	0.739	0.650	1.082**
	(0.455)	(0.455)	(0.503)
0.nhealth	-19.37	-18.59	-14.02 (521.9)
1.nhealth	-19.85	-19.07	-14.59
	(3,909)	(3,551)	(521.9)
2.nhealth	-20.28	-19.50	-14.94
	(3,909)	(3,551)	(521.9)
3.nhealth	-19.43	-18.61	-13.90
	(3,909)	(3,551)	(521.9)
1.wkdcpce	-0.267 (0.445)		
2.wkdcpce	-0.447 (0.391)		
3.wkdcpce	-0.237 (0.395)		
4.wkdcpce	-0.181 (0.449)		
5.wkdcpce	-0.667** (0.329)		
6.wkdcpce	-1.154*** (0.383)		
7.wkdcpce	-0.359 (0.336)		
8.wkdcpce	-0.394 (0.320)		
9.wkdcpce	-0.162 (0.387)		
10.wkdcpce	-0.0320 (0.314)		
1.wrkengt	-0.266	-0.255	-0.157
	(0.295)	(0.293)	(0.321)
2.wrkengt	-0.269	-0.350	-0.335
	(0.356)	(0.353)	(0.381)
3.wrkengt	0.392	0.489	0.362
	(0.453)	(0.455)	(0.506)
4.wrkengt	-0.150	-0.105	-0.0315
	(0.336)	(0.329)	(0.362)
5.wrkengt	-0.328	-0.425	-0.408
	(0.397)	(0.394)	(0.432)
6.wrkengt	0.0337	-0.0283	-0.00513
	(0.306)	(0.304)	(0.341)
1.wkovrtm	0.226	0.217	0.670
	(0.422)	(0.422)	(0.473)
2.wkovrtm	0.416	0.398	0.782
	(0.435)	(0.439)	(0.490)
3.wkovrtm	-0.148	-0.191	0.427
	(0.457)	(0.457)	(0.510)
4.wkovrtm	0.133	0.172	0.444
	(0.439)	(0.438)	(0.486)

5.wkovrtm	0.497	0.566	0.863
	(0.475)	(0.479)	(0.541)
6.wkovrtm	-0.174	-0.170	0.160
	(0.439)	(0.440)	(0.500)
1.wrkwe	-0.0691	-0.0825	-0.114
	(0.245)	(0.243)	(0.270)
2.wrkwe	-0.0598	-0.0982	0.0334
	(0.280)	(0.280)	(0.308)
3.wrkwe	-0.120	-0.0438	-0.208
	(0.294)	(0.292)	(0.335)
4.wrkwe	0.0572	0.0498	0.00878
	(0.247)	(0.248)	(0.273)
wkhct	-0.0162	-0.0146	-0.0217
	(0.0108)	(0.0108)	(0.0141)
wkhtot	-0.0217*	-0.0284**	-0.0169
	(0.0118)	(0.0118)	(0.0136)
whours	-0.0324***	-0.0369***	-0.0371***
	(0.0101)	(0.0101)	(0.0112)
1.nindustry	0.437	0.427	0.621
5	(0.567)	(0.554)	(0.806)
2.nindustry	-1.313	-1.461	-1.516
j	(0.984)	(0.997)	(1.141)
3.nindustry	0.257	0.280	0.563
5	(0.327)	(0.328)	(0.347)
5.nindustry	0.0990	0.391	0.639
J	(0.815)	(0.786)	(0.838)
6.nindustry	0.434	0.543	0.377
•	(0.404)	(0.399)	(0.495)
7.nindustry	0.525	0.572*	0.625*
•	(0.338)	(0.341)	(0.361)
8.nindustry	0.220	0.223	0.222
•	(0.449)	(0.459)	(0.525)
9.nindustry	-0.191	0.124	0.111
·	(0.642)	(0.620)	(0.630)
11.nindustry	-0.362	-0.251	-0.251
-	(0.446)	(0.453)	(0.490)
13.nindustry	-0.344	-0.126	0.184
	(0.572)	(0.582)	(0.653)
14.nindustry	0.174	0.293	0.505
	(0.408)	(0.408)	(0.454)
15.nindustry	0.0991	0.114	0.409
	(0.509)	(0.519)	(0.530)
17.nindustry	0.253	0.321	0.370
	(0.363)	(0.366)	(0.390)
20.nindustry	-0.299	-0.226	0.250
	(0.784)	(0.818)	(0.875)
24.nindustry	0.424	0.580*	0.462
	(0.340)	(0.344)	(0.366)
25.nindustry	0.159	0.270	0.399
	(0.309)	(0.308)	(0.331)

28.nindustry	-0.318	-0.0212	0.0146
21 ninductor	(0.578)	(0.391)	(0.028)
51.IIIIdusu y	-0.300	-0.377	-0.104
1 progionab	(1.390)	(1.364)	(1.397)
1.megioligo	-0.129	-0.107	-0.220
2 provingh	(0.394)	(0.392)	(0.419)
2.megiongo	(0.244)	(0.199)	-0.0913
2 progional	(0.309)	(0.303)	(0.390)
5.megioligo	(0.200)	(0.243)	(0.0200)
1 progionab	(0.376)	(0.385)	0.00000
4.megiongo	(0.331)	(0.300)	(0.420)
5 progionab	(0.403)	(0.397)	(0.420)
5.megiongo	(0.356)	(0.350)	(0.318)
6 progional	(0.330)	(0.332)	(0.381)
0.megiongo	$(0.780^{+1})$	(0.376)	(0.071)
7 pregionab	(0.378)	(0.370)	(0.410)
7.megiongo	(0.337)	(0.233)	(0.109)
0 progional	(0.349)	(0.340)	(0.374)
9.megiongo	(0.149)	(0.125)	-0.0987
10 providence	(0.334)	(0.555)	(0.372)
10.megioligb	(0.029)	(0.342)	(0.333)
11 progional	(0.432)	(0.434)	(0.469)
11.megioligb	(0.020)	(0.375)	0.439
12 masicash	(0.385)	(0.382)	(0.409)
12.nregiongb	1.594***	1.450**	$1.108^{*}$
/out1	(0.380)	(0.584)	(0.009)
/cut1	-28.08	-27.02	-21.00
/aut)	(3,909)	(3,551)	(521.9)
/cut2	-20.27	-25.21	-20.07
142	(3,909)	(3,351)	(521.9)
/cuts	-25.55	-24.27	-19.20
/aut 1	(3,909)	(3,331)	(521.9)
/Cul4	-24.17	-23.12	-18.07
/au <b>45</b>	(3,909)	(3,331)	(521.9)
/cut5	-23.18	-22.14	-1/.10
1	(3,909)	(3,551)	(521.9)
/cuto	-22.53	-21.49	-10.4/
/ <b>47</b>	(3,909)	(3,551)	(521.9)
/cut/	-21.43	-20.39	-15.57
/40	(3,909)	(3,331)	(521.9)
/cut8	-20.09	-19.05	-14.02
/aut0	(3,909)	(3,551)	(521.9)
/cut9	-18.55	-17.52	-12.59
111	(3,909)	(3,331)	(321.9)
1.wkdcorga		0.483	
2 wirdsses		(0.075)	
2.wkacorga		-0.425	
2 wirdsses		(0.516)	
э.wкucorga		-0.745	
		(0.5/0)	

4.wkdcorga		0.0993	
		(0.569)	
5.wkdcorga		0.140	
		(0.467)	
6.wkdcorga		-0.163	
		(0.502)	
7.wkdcorga		-0.129	
-		(0.434)	
8.wkdcorga		-0.0819	
C		(0.420)	
9.wkdcorga		0.0490	
C		(0.434)	
10.wkdcorga		0.526	
C		(0.412)	
2.dcsfwrk			-0.109
			(0.214)
3.dcsfwrk			0.134
			(0.257)
4.dcsfwrk			0.239
			(0.265)
Observations	676	676	586
	Standard errors i	in parentheses	
	*** p<0.01. ** p	<0.05. * p<0.1	

Appendix E: Ordinal Logistic Regression results for the Netherlands based on health as a dependent variable, with the three flexible working variables in separate studies:

	(1)	(2)	(3)
VARIABLES	nhealth	nhealth	nhealth
o.ncntry	-	-	-
1.gndr	-0.0805	-0.0558	-0.0719
	(0.208)	(0.208)	(0.218)
20.gndr	0	0	0
	(0)	(0)	(0)
agea	0.0241***	0.0245***	0.0213**
	(0.00809)	(0.00814)	(0.00850)
2.edulvla	-0.110	-0.0793	-0.179
	(0.477)	(0.480)	(0.496)
3.edulvla	-0.147	-0.118	-0.236
	(0.480)	(0.482)	(0.502)
4.edulvla	-0.131	-0.139	-0.255
	(0.527)	(0.528)	(0.549)
5.edulvla	-0.432	-0.387	-0.588
	(0.501)	(0.502)	(0.529)
1.hinctnt	-0.195	-0.175	-0.340
	(2.118)	(2.128)	(2.138)

2.hinctnt	-1.012	-0.957	-0.978
	(0.855)	(0.861)	(0.862)
3.hinctnt	-1.886*	-1.870*	-1.560
	(1.080)	(1.099)	(1.099)
4.hinctnt	0.187	0.338	0.558
	(0.562)	(0.570)	(0.594)
6.hinctnt	-0.330	-0.329	-0.265
	(0.310)	(0.313)	(0.320)
7.hinctnt	-0.211	-0.146	-0.260
	(0.317)	(0.320)	(0.323)
8.hinctnt	-0.427	-0.386	-0.297
	(0.331)	(0.331)	(0.339)
9.hinctnt	-0.544*	-0.521*	-0.370
	(0.302)	(0.306)	(0.313)
10.hinctnt	0.0403	-0.0246	0.149
	(0.383)	(0.382)	(0.410)
11.hinctnt	-0.679	-0.600	-0.355
	(0.649)	(0.669)	(0.674)
12.hinctnt	-0.124	-0.197	-0.343
	(0.772)	(0.765)	(0.856)
1.wkdcpce	-0.486	× /	× /
I	(0.698)		
2.wkdcpce	-0.754		
I	(0.583)		
3.wkdcpce	-0.487		
1	(0.584)		
4.wkdcpce	-0.472		
1	(0.648)		
5.wkdcpce	-0.598		
1	(0.468)		
6.wkdcpce	-0.438		
1	(0.461)		
7.wkdcpce	-0.742*		
1	(0.399)		
8.wkdcpce	-0.666*		
1	(0.404)		
9.wkdcpce	-0.650		
I	(0.442)		
10.wkdcpce	-0.940**		
1	(0.417)		
1.wrkengt	-0.391	-0.310	-0.330
U	(0.698)	(0.703)	(0.751)
2.wrkengt	-0.102	-0.0337	0.0212
8	(0.721)	(0.727)	(0.773)
3.wrkengt	-0.521	-0.428	-0.635
- 0-	(0.755)	(0.762)	(0.822)
4.wrkengt	-0.199	-0.176	-0.197
0-	(0.709)	(0.717)	(0.767)
5.wrkengt	-0.140	-0.104	-0.0177
	(0.759)	(0.767)	(0.817)
	()	( )	( )

6.wrkengt	-0.693	-0.632	-0.613
	(0.710)	(0.717)	(0.769)
1.wkovrtm	-0.175	-0.198	-0.224
	(0.982)	(0.981)	(1.110)
2.wkovrtm	-0.0438	-0.0624	-0.251
	(0.989)	(0.984)	(1.113)
3.wkovrtm	-0.426	-0.435	-0.519
	(1.002)	(1.001)	(1.127)
4.wkovrtm	-0.475	-0.513	-0.691
	(0.991)	(0.984)	(1.108)
5.wkovrtm	0.0959	0.0758	-0.246
	(1.028)	(1.028)	(1.152)
6.wkovrtm	0.153	0.128	0.120
	(0.988)	(0.986)	(1.108)
1.wrkwe	-0.120	-0.173	-0.138
	(0.414)	(0.415)	(0.474)
2.wrkwe	-0.106	-0.161	-0.0619
	(0.431)	(0.431)	(0.489)
3.wrkwe	-0.535	-0.510	-0.419
	(0.472)	(0.472)	(0.522)
4.wrkwe	-0.247	-0.268	-0.231
	(0.422)	(0.420)	(0.478)
wkhct	0.0260*	0.0256*	0.0258
	(0.0149)	(0.0148)	(0.0186)
wkhtot	-0.0301*	-0.0300*	-0.0323*
	(0.0159)	(0.0158)	(0.0189)
whours	-0.0240*	-0.0246*	-0.0248*
	(0.0129)	(0.0130)	(0.0139)
1.nindustry	0.180	0.106	0.608
5	(0.669)	(0.700)	(0.735)
2.nindustry	0.476	0.225	0.150
j	(1.448)	(1.458)	(2.062)
3.nindustry	-0.0607	-0.121	-0.114
j	(0.381)	(0.381)	(0.394)
5.nindustry	0.739	0.415	0.783
j	(0.800)	(0.757)	(0.777)
6.nindustry	0.606	0.527	0.353
j	(0.466)	(0.463)	(0.496)
7.nindustry	0.406	0.360	0.319
,	(0.388)	(0.387)	(0.403)
8.nindustry	0.367	0.255	0.296
omineese j	(0.508)	(0.519)	(0.517)
9.nindustry	-0.291	-0.348	-0.383
> ••••••••••••••••••••••••••••••••••••	(0.691)	(0.690)	(0.704)
11 nindustry	0.0383	-0.179	-0.295
	(0.783)	(0.786)	(0.789)
13 nindustry	0 195	0 170	0.739
i Similaasti y	(0.616)	(0.619)	(0.609)
14 nindustry	0 295	0.217	0.473
	(0.555)	(0.553)	(0.566)
	(0.555)	(0.333)	(0.000)

15.nindustry	0.167	0.0903	0.657
	(0.819)	(0.810)	(0.964)
17.nindustry	-0.330	-0.393	-0.377
	(0.389)	(0.388)	(0.403)
20.nindustry	0.415	0.450	0.581
	(1.062)	(1.038)	(1.062)
24.nindustry	0.251	0.238	0.205
	(0.458)	(0.458)	(0.476)
25.nindustry	0.318	0.271	0.214
	(0.364)	(0.366)	(0.378)
28.nindustry	-0.0757	-0.127	-0.330
	(0.569)	(0.573)	(0.595)
31.nindustry	-0.0918	-0.0435	-0.141
	(1.437)	(1.432)	(1.444)
201.nregionnl	-0.250	-0.137	-0.346
	(0.470)	(0.470)	(0.488)
202.nregionnl	-0.512	-0.516	-0.620
-	(0.446)	(0.446)	(0.471)
203.nregionnl	-0.204	-0.163	-0.0521
C	(0.468)	(0.469)	(0.482)
204.nregionnl	0.0378	0.0773	0.115
e	(0.356)	(0.358)	(0.369)
205.nregionnl	-0.206	-0.213	-0.226
0	(0.313)	(0.315)	(0.325)
206.nregionnl	-0.596	-0.617	-0.620
0	(0.516)	(0.508)	(0.518)
207.nregionnl	-0.359	-0.350	-0.0577
8	(0.369)	(0.368)	(0.392)
209.nregionnl	-0.236	-0.200	-0.295
20,	(0.282)	(0.281)	(0.290)
210 nregionnl	-0.262	-0.291	-0.0253
2100510	(1.027)	(1.028)	(1.027)
211 nregionnl	-0.388	-0.378	-0.401
211.1105101111	(0.299)	(0.300)	(0.314)
212 pregional	-0.256	-0.275	-0 324
212.1105101111	(0.374)	(0.378)	(0.321)
/cut1	_2 897**	-2 522*	-2 761*
/Cut1	$(1\ 452)$	(1.490)	(1.493)
/cut2	(1.+32) 0.425	0 795	0 599
/Cut2	(1.447)	(1.486)	(1.487)
/out2	(1.447)	(1.400) 2 $162**$	(1.407) 2 206**
/cuts	(1,472)	(1.500)	(1.512)
1 wkdoorgo	(1.472)	(1.309)	(1.515)
1.wkucorga		(0.321)	
2 withdoor		(0.741)	
2.wkucorga		(0.740)	
2		(0.749)	
э.wкacorga		-0.509	
411		(0./49)	
4.wkdcorga		-0.419	
		(0.697)	

5.wkdcorga		0.243			
		(0.593)			
6.wkdcorga		-0.318			
		(0.565)			
7.wkdcorga		-0.420			
		(0.517)			
8.wkdcorga		-0.369			
-		(0.509)			
9.wkdcorga		-0.199			
U		(0.528)			
10.wkdcorga		-0.569			
U U		(0.519)			
2.dcsfwrk			-0.183		
			(0.237)		
3.dcsfwrk			-0.0904		
			(0.246)		
4.dcsfwrk			-0.844***		
			(0.294)		
Observations	709	707	665		
	Standard errors i	n parentheses			

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Appendix F: Ordinal Logistic Regression results for the Netherlands based on happiness as a dependent variable, with the three flexible working variables in separate studies:

	(1)	(2)	(3)
VARIABLES	happy	happy	happy
o.ncntry	-	-	-
1.gndr	-0.0492	0.0155	0.0933
	(0.186)	(0.186)	(0.194)
20.gndr	0	0	0
	(0)	(0)	(0)
agea	-0.0137*	-0.0128*	-0.0129*
	(0.00741)	(0.00742)	(0.00784)
2.edulvla	0.983**	0.904**	0.760
	(0.443)	(0.450)	(0.466)
3.edulvla	0.582	0.516	0.466
	(0.448)	(0.455)	(0.473)
4.edulvla	0.785	0.735	0.680
	(0.491)	(0.496)	(0.515)
5.edulvla	0.541	0.479	0.390
	(0.466)	(0.471)	(0.494)
1.hinctnt	26.80	26.82	29.41
	(45,169)	(44,523)	(201,961)
2.hinctnt	0.685	0.274	0.501
	(0.839)	(0.862)	(0.841)
3.hinctnt	1.252	1.145	1.589

	(1.050)	(1.060)	(1.111)
4.hinctnt	-0.239	-0.223	-0.110
	(0.535)	(0.538)	(0.549)
6.hinctnt	0.137	0.144	0.219
	(0.284)	(0.284)	(0.292)
7.hinctnt	0.713**	0.781***	0.751**
	(0.295)	(0.297)	(0.299)
8.hinctnt	1.182***	1.077***	1.199***
	(0.304)	(0.302)	(0.311)
9.hinctnt	1.154***	1.207***	1.326***
	(0.281)	(0.281)	(0.290)
10.hinctnt	1.317***	1.439***	1.234***
	(0.365)	(0.362)	(0.388)
11.hinctnt	1.225**	1.025*	1.459**
	(0.609)	(0.620)	(0.645)
12.hinctnt	2.771***	2.763***	2.578***
	(0.672)	(0.660)	(0.754)
0.nhealth	2.457***	2.345***	2.343***
0	(0.580)	(0.575)	(0.597)
1.nhealth	1.933***	1.810***	1.813***
	(0.560)	(0.555)	(0.576)
2.nhealth	1.494***	1.288**	1.288**
	(0.580)	(0.573)	(0.594)
30.nhealth	0	0	0
	(0)	(0)	(0)
1.wkdcpce	-0.0827	(0)	
1	(0.611)		
2.wkdcpce	0.369		
	(0.512)		
3.wkdcpce	0.00715		
F	(0.547)		
4.wkdcpce	-0.516		
	(0.577)		
5.wkdcpce	0.124		
F	(0.430)		
6.wkdcpce	0.569		
	(0.426)		
7.wkdcpce	0.0945		
	(0.377)		
8.wkdcpce	0.653*		
· · · · · · · · · · · · · · · · · · ·	(0.377)		
9.wkdcpce	0.433		
· · · · · · · · · · · · · · · · · · ·	(0.410)		
10.wkdcpce	1.238***		
	(0.400)		
1.wrkengt	0.120	0.226	0.621
	(0.586)	(0.596)	(0.605)
2.wrkengt	-0.0577	0.0133	0.408
	(0.614)	(0.625)	(0.631)
3.wrkengt	-0.0546	-0.0533	0.267
0-			

	(0.642)	(0.656)	(0.682)
4.wrkengt	-0.426	-0.336	0.270
C	(0.602)	(0.614)	(0.620)
5.wrkengt	-1.063	-0.866	-0.279
C	(0.656)	(0.668)	(0.674)
6.wrkengt	-0.273	-0.0781	0.246
C	(0.601)	(0.615)	(0.621)
1.wkovrtm	0.547	0.165	-0.405
	(0.954)	(0.977)	(1.205)
2.wkovrtm	0.475	0.133	-0.549
	(0.960)	(0.979)	(1.208)
3.wkovrtm	0.402	-0.0301	-0.610
	(0.966)	(0.989)	(1.212)
4.wkovrtm	0.498	0.184	-0.308
	(0.958)	(0.976)	(1.198)
5.wkovrtm	1.044	0.594	0.134
	(0.991)	(1.015)	(1.234)
6.wkovrtm	0.0246	-0.324	-0.812
	(0.961)	(0.982)	(1.201)
1.wrkwe	-0.188	-0.313	-0.238
	(0.387)	(0.388)	(0.443)
2.wrkwe	0.193	0.0363	0.178
	(0.405)	(0.403)	(0.460)
3.wrkwe	0.665	0.412	0.476
	(0.445)	(0.446)	(0.490)
4.wrkwe	0.483	0.343	0.354
	(0.394)	(0.393)	(0.445)
wkhct	-0.00667	-0.00798	0.0115
	(0.0136)	(0.0136)	(0.0167)
wkhtot	0.000655	0.00357	-0.0206
	(0.0150)	(0.0149)	(0.0174)
whours	0.00584	0.00982	-0.00223
	(0.0121)	(0.0124)	(0.0133)
1.nindustry	-0.320	-0.315	-0.551
-	(0.616)	(0.630)	(0.708)
2.nindustry	-1.866	-1.850	0.594
-	(1.359)	(1.417)	(1.723)
3.nindustry	-0.0108	-0.116	-0.0898
-	(0.337)	(0.339)	(0.350)
5.nindustry	0.286	-0.0305	-0.340
-	(0.727)	(0.675)	(0.700)
6.nindustry	-0.731*	-0.743*	-0.757*
-	(0.427)	(0.425)	(0.450)
7.nindustry	-0.799**	-0.826**	-0.760**
-	(0.344)	(0.344)	(0.354)
8.nindustry	0.00162	-0.291	-0.0857
-	(0.483)	(0.492)	(0.489)
9.nindustry	-0.653	-0.690	-0.597
-	(0.574)	(0.578)	(0.576)
11.nindustry	-1.165*	-1.187*	-0.993

	(0.687)	(0.716)	(0.701)
13 nindustry	0.0105	-0.183	(0.701)
15.iiiidusu y	(0.553)	(0.551)	(0.552)
14 nindustry	(0.555)	(0.331)	(0.332)
14.iiiidusu y	(0.488)	(0.484)	(0.405)
15 nindustry	(0.400)	(0.484)	(0.493)
15.iiiidusu y	(0.726)	(0.711)	(0.852)
17 ninductor	(0.720)	(0.711)	(0.852)
17.iiiiidusu y	-0.439	-0.461	-0.409
20 min des stars	(0.540)	(0.545)	(0.334)
20.mindustry	-1.2//	$-1.525^{*}$	$-1.048^{\circ}$
24	(0.881)	(0.876)	(0.883)
24.nindustry	0.155	0.0402	0.100
05 1 1	(0.407)	(0.406)	(0.419)
25.nindustry	-0.307	-0.353	-0.352
<b>2</b> 0 <b>1 1</b>	(0.327)	(0.327)	(0.334)
28.nindustry	0.136	-0.0904	-0.0678
	(0.537)	(0.535)	(0.554)
31.nindustry	2.729*	2.454	2.776*
	(1.567)	(1.688)	(1.643)
201.nregionnl	-0.307	-0.181	-0.439
	(0.432)	(0.429)	(0.440)
202.nregionnl	0.0652	0.0854	0.0324
	(0.425)	(0.421)	(0.438)
203.nregionnl	0.574	0.604	0.530
	(0.445)	(0.439)	(0.453)
204.nregionnl	-0.353	-0.231	-0.260
	(0.329)	(0.331)	(0.343)
205.nregionnl	0.152	0.147	0.0905
	(0.290)	(0.290)	(0.299)
206.nregionnl	-0.832*	-0.989**	-0.915*
	(0.470)	(0.464)	(0.478)
207.nregionnl	-0.490	-0.240	-0.131
	(0.334)	(0.335)	(0.359)
209.nregionnl	-0.429*	-0.411	-0.423
	(0.256)	(0.255)	(0.261)
210.nregionnl	0.334	0.176	0.326
	(0.915)	(0.915)	(0.917)
211.nregionnl	-0.336	-0.241	-0.145
	(0.274)	(0.275)	(0.288)
212.nregionnl	-0.119	-0.0517	0.00382
C	(0.339)	(0.342)	(0.348)
/cut1	-4.140**	-4.676***	-5.210***
	(1.757)	(1.771)	(1.819)
/cut2	-2.333	-2.870*	-3.404**
	(1.503)	(1.518)	(1.573)
/cut3	-1.368	-1.897	-2.441
	(1.471)	(1.486)	(1.544)
/cut4	-0.357	-0.886	-1.502
	(1.461)	(1.476)	(1.536)
/cut5	0.439	-0.0961	-0.725
· · · · · · · · · · · · · · · · · · ·			

2.165 (1.464) .438*** (1.469) .470*** (1.479)	$\begin{array}{c} 1.627 \\ (1.479) \\ 3.886^{***} \\ (1.483) \\ 5.871^{***} \\ (1.491) \\ 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499 \end{array}$	0.980 (1.538) 3.285** (1.540) 5.320*** (1.550)
(1.464) .438*** (1.469) .470*** (1.479)	$(1.479) \\ 3.886^{***} \\ (1.483) \\ 5.871^{***} \\ (1.491) \\ 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499 \\ (0.499) \\ (0.491) \\ (0.681) \\ 0.499 \\ (0.681) \\ 0.49$	(1.538) 3.285** (1.540) 5.320*** (1.550)
.438*** (1.469) .470*** (1.479)	$\begin{array}{c} 3.886^{***} \\ (1.483) \\ 5.871^{***} \\ (1.491) \\ 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499 \end{array}$	3.285** (1.540) 5.320*** (1.550)
(1.469) .470*** (1.479)	$(1.483) \\ 5.871^{***} \\ (1.491) \\ 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499 $	(1.540) 5.320*** (1.550)
.470*** (1.479)	$5.871^{***}$ (1.491) 0.408 (0.683) 0.619 (0.664) 0.499	5.320*** (1.550)
(1.479)	$(1.491) \\ 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499$	(1.550)
	$\begin{array}{c} 0.408 \\ (0.683) \\ 0.619 \\ (0.664) \\ 0.499 \end{array}$	
	$(0.683) \\ 0.619 \\ (0.664) \\ 0.499$	
	0.619 (0.664) 0.499	
	(0.664) 0.499	
	0.499	
	(0.671)	
	-0.260	
	(0.649)	
	0.311	
	(0.542)	
	-0.0757	
	(0.508)	
	0.100	
	(0.472)	
	0.331	
	(0.462)	
	0.881*	
	(0.482)	
	0.682	
	(0.480)	
		-0.153
		(0.216)
		-0.0246
		(0.220)
		0.0856
		(0.267)
	707	
708	/ /	664
708	/U/ n narentheses	664
	708	$\begin{array}{c} 0.311\\ (0.542)\\ -0.0757\\ (0.508)\\ 0.100\\ (0.472)\\ 0.331\\ (0.462)\\ 0.881*\\ (0.482)\\ 0.682\\ (0.480)\end{array}$

Appendix G: Variable selection table

Variable table				
Variable name	Variable label	Туре	Description	
happy	How happy are you?	Categorical	Base set at 0=	
			extremely unhappy	
health	Subjective general	Categorical		
	health			
nhealth	Subjective general	Categorical	Recoding health for	
	health, recoded		new variable	

			nhealth to be able to include it as a dependent variable in logistic regression. (1 to 0, 2 to 1, 3 to 2, 4 to 3, and 5 to 4). Base set at 4=very bad
cntry	Country	String	
ncntry	Country, encoded	Categorical	Encoded from string to include in model
region	Region	String	
nregion	Region, encoded	Categorical	Encoded from string to include in model. See below for region categories. Bases set within individual regressions 321=London 208=Noord-Holland.
gndr	Gender	Binary	Base set at 0=female
agea	Age (calculated)	Continuous	
edulvlb	Highest education level	Categorical	See below for education categories. Base set at 0=less than primary education
nacer2	Industry	Categorical	See below for industry categories. Base set at 23=Office and administration
hinctnta	Net household income (all sources) UK income is weekly NL income is annual	Categorical	See below for income categories. Base set at 5=F (following EES median income reference point)
wkdcpce	Allowed to choose pace of work	Categorical	Base set at 0=Have/had no control
wkdcorga	Allowed to decide how daily work is organised	Categorical	Base set at 0=Have/had no control

dcsfwrk	Allowed to decide	Categorical	Base set at 0=not at
	start/finish times		all true
stfmjob	Satisfaction with	Categorical	Base set at
	main job		0=extremely
			dissatisfied
stfjbot	Satisfied with	Categorical	Base set at
	work/life balance		0=extremely
			dissatisfied
wrkengt	Involves working	Categorical	Base set at
	evenings, how often		7=everyday
wkovrtm	Involves short notice	Categorical	Base set at
	over time, how		7=everyday
	often		
wrkwe	Involves working	Categorical	Base set at 5=every
	weekends, how		week
	often		
wkhct	Total contracted	Continuous	
	hours, excluding		
	overtime		
wkhtot	Total hours,	Continuous	
	including overtime		
wkhsch	How many hours	Continuous	
	would choose to		
	work weekly		
whours	Difference in hours	Continuous	wkhtot-wkhsch =
	wishing to work		the difference in
	versus actually		hours currently
	working		working and
			wanting to work
			<u> </u>

## Appendix H: Variable reference categories – region

Region table					
Region	Original	New category			
	category	code			
North East	UKC	315			
England					
North West	UKD	316			
England					
Yorkshire and	UKE	317			
the Humber					
East Midlands	UKF	318			
West Midlands	UKG	319			
East of England	UKH	320			
London	UKI	321 (Ref.)			

South East	UKJ	322	
England			
South West	UKK	323	
England			
Wales	UKL	324	
Scotland	UKM	325	
Northern	UKN	326	
Ireland			
Groningen	NL11	201	
Friesland	NL12	202	
Drenthe	NL13	203	
Overijssel	NL21	204	
Gelderland	NL22	205	
Flevoland	NL23	206	
Utrecht	NL31	207	
Noord-Holland	NL32	208 (Ref.)	
Zuid-Holland	NL33	209	
Zeeland	NL34	210	
Noord-Brabant	NL41	211	
Limburg	NL42	212	

Appendix I: Variable reference categories – education

Education table					
Original category	Category number	New category	New category		
Not completed ISCED level 1	0	Less than primary education	0 (Ref.)		
ISCED 1, completed primary education	113	Primary education	1		
Vocational ISCED 2C<2 years, no access ISCED 3	129				
General/pre-vocational ISCED 2A/2B, access ISCED 3 vocational	212	Lower Secondary	2		
General ISCED 2A, access ISCED 3A general/all	213				
Vocational ISCED 2C>=2 years, no access ISCED 3	221				
Vocational ISCED 2A/2B. access ISCED 3 vocational	222				
Vocational ISCED 2, access ISCED 3 general/all	223				
Vocational ISCED 3C, <2 years, no access ISCED 5	229				
General ISCED 3>=2 years, no	311	Upper secondary	3		
---	------	-----------------------	------		
access ISCED 5		education			
General ISCED 3A/3B access, ISCED 5B/lower tier 5A	312				
General ISCED 3A, access upper tier ISCED 5A/all 5	313				
Vocational ISCED 3C>=2 years,	321				
no access ISCED 5					
Vocational ISCED 3A, access	322				
Vecational ISCED 24 access	222				
upper tier ISCED 5A/all 5	525				
General ISCED 4A/4B, access	412	Post-secondary non-	4		
ISCED 5B/lower tier 5A		tertiary education			
General ISCED 4A, access upper	413				
tier ISCED 5A/all 5					
ISCED 4 programmes without	421				
access ISCED 5					
Vocational ISCED 4A/4B, access	422				
ISCED 5B/lower tier 5A					
Vocational ISCED 4A, access	423				
upper tier ISCED 5A/all 5					
ISCED 5A short,	510	Short-cycle tertiary	5		
intermediate/academic/general		education			
tertiary below bachelor	520				
ISCED 5B short, advanced	520				
	C10	Dechalerer	6		
ISCED 5A medium,	010		O		
lower tier tertiary					
ISCED 54 medium	620				
hachelor/equivalent from	020				
upper/single tier tertiary					
ISCED 5A long.	710	Master or equivalent	7		
master/equivalent form lower					
tier tertiary					
ISCED 5A long,	720				
master/equivalent from					
upper/single tertiary					
ISCED 6, doctoral degree	800	Ph.D. Second stage	8		
		of tertiary education			
Other	5555	Other	5555		
Refusal	7777	Refusal	7777		
Don't know	8888	Don't know	8888		
No answer	9999	No answer	9999		

Appendix J: Variable reference categories – industry

Industry table					
Original Category	Category number	New Category	New Category		
			number		
Crop and animal production,	1	Agriculture	1		
hunting and related activities					
Forestry and logging	2				
Fishing and aquaculture	3				
Mining of coal and lignite	5	Mining and Fuel extraction	2		
Extraction of crude petroleum and natural gas	6				
Mining of metal ores	7				
Other mining and quarrying	8				
Mining support service activities	9				
Manufacture of food products	10	Manufacturing	3		
Manufacture of beverages	11				
Manufacture of tobacco products	12				
Manufacture of textiles	13				
Manufacture of wearing	14				
apparel					
Manufacture of leather and related products	15				
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting ma	16				
Manufacture of paper and paper products	17				
Printing and reproduction of recorded media	18				
Manufacture of coke and refined petroleum products	19				
Manufacture of chemicals and chemical products	20				
Manufacture of basic pharmaceutical products and pharmaceutical preparations	21				

Manufacture of rubber and plastic products	22		
Manufacture of other non-	23		
Manufacture of basis motals	24		
Manufacture of fabricated	24		
matal products, except	25		
machinery and equipment			
Manufacture of computer	26		
electronic and ontical products	20		
Manufacture of electrical	27		
equipment			
Manufacture of machinery and	28		
equipment n.e.c.			
Manufacture of motor vehicles,	29		
trailers and semi-trailers			
Manufacture of other transport	30		
equipment			
Manufacture of furniture	31		
Other manufacturing	32		
Repair and installation of	33	Repair and	4
machinery and equipment		installation of	
		machinery and	
		equipment	
Electricity, gas, steam and air	35	Energy, water,	5
conditioning supply		waste supply	
Water collection, treatment	36		
and supply			
Sewerage	37		
Waste collection, treatment	38		
and disposal activities;			
materials recovery	20		
Remediation activities and	39		
other waste management			
Services	41	Construction	C
Civil ongineering	41	Construction	0
Specialized construction	42		
activities	45		
Wholesale and retail trade and	45	Motor vehicle	7
renair of motor vehicles and		trade	,
motorcycles			
Wholesale trade, except of	46		
motor vehicles and motorcycles			

Retail trade, except of motor vehicles and motorcycles	47		
Land transport and transport via pipelines	49	Transport	8
Water transport	50		
Air transport	51		
Warehousing and support	52		
activities for transportation			
Postal and courier activities	53	Postal and courier activities	9
Accommodation	55	Accommodation	10
Food and beverage service activities	56	Food and beverage service activities	11
Publishing activities	58	Media, broadcasting and publishing activities	12
Motion picture, video and television programme production, sound recording and music publishing activities	59		
Programming and broadcasting activities	60		
Telecommunications	61		
Computer programming, consultancy and related activities	62	Computer programming and information services	13
Information service activities	63		
Financial service activities, except insurance and pension funding	64	Financial services	14
Insurance, reinsurance and pension funding, except compulsory social security	65		
Activities auxiliary to financial services and insurance activities	66		
Real estate activities	68	Real estate activities	15
Legal and accounting activities	69	Legal and accounting activities	16

Activities of head offices; management consultancy activities	70	Professional, scientific and technical activities and research	17
Architectural and engineering activities; technical testing and analysis	71		
Scientific research and development	72		
Advertising and market research	73		
Other professional, scientific and technical activities	74		
Veterinary activities	75	Veterinary activities	18
Rental and leasing activities	77		15
Employment activities	78	Employment activities	19
Travel agency, tour operator and other related services	79	Travel agency, tour operator and other related services	20
Security and investigation activities	80	Security and investigation activities	21
Services to buildings and landscape activities	81	Services to buildings and landscape activities	22
Office administrative, office support and other business support activities	82	Office and administration	23 (Ref.)
Public administration and defence; compulsory social security	84		
Education	85	Education	24
Human health activities	86	Human health activities	25
Residential care activities	87	Residential care activities	26
Social work activities without accommodation	88	Social work activities without accommodation	27
Creative, arts and entertainment activities	90	Recreation and cultural activities	28

Libraries, archives, museums and other cultural activities	91		
Gambling and betting activities	92		
Sports activities and amusement and recreation activities	93		
Activities of membership organisations	94	Activities of membership organisations	29
Repair of computers and personal and household goods	95	Personal services and repairs	30
Other personal service activities	96		
Activities of households as employers of domestic personnel	97	Activities of households as employers of domestic personnel	31
Undifferentiated goods- and services-producing activities of private households for own use	98	Undifferentiated goods- and services-producing activities of private households for own use	32
Activities of extraterritorial organisations and bodies	99	Activities of extraterritorial organisations and bodies	33

## Appendix K: Variable reference categories – household net income

Household Net Income table					
Income	Percentile	Code	UK weekly	UK annual	NL annual
Code			household net	household net	household net
			income	income (*52)	income
J	01	1	Less than	>£9,360	>13.200
			£180		
R	02	2	£180 to under	£9,360 to	13200-17000
			£240	under	
				£12,480	
С	03	3	£240 to under	£12,480 to	17001-20500
			£300	under	
				£15,600	

М	04	4	£300 to under	£15,600 to	20501-24200
			£360	under	
				£18,720	
F (Ref.)	05	5	£360 to under	£18,720 to	24201-28600
			£440	under	
				£22,880	
S	06	6	£440 to under	£22,880 to	28601-33500
			£530	under	
				£27,560	
К	07	7	£530 to under	£27,560 to	33501-39100
			£630	under	
				£32,760	
Р	08	8	£630 to under	£32,760 to	39101-46400
			£790	under	
				£41,080	
D	09	9	£790 to under	£41,080 to	46401-52800
			£1030	under	
				£53,560	
Н	10	10	£1030 or	£53,560 or	<52801
			more	more	
			Average		
			exchange rate		
			Sep-Jan 2010		
			0.8547 GBP =		
			1 Euro		