

How commuting affects employees' Wellbeing and Work-Life Balance: The perspective of full-time employees commuting within the greater Dublin area

MSc in Management

Abstract

A recent poll stated that Ireland's transport infrastructure competitiveness ranking has improved although per the World Economic Forum (WEF) competitiveness report, it remains poor compared to well-developed economies with whom the State competes for investment. As cities become more lucrative, urban mobility occurs, therefore, if the State's lack of capital investment in land transport continues, the resulting congestion and bottlenecks begin to impact on the daily lives of people. Commuting distances are becoming shorter but the journey duration is lasting on average 24.8 minutes considering the average distance travelled around the capital is at 9.8km

Considering this public information, this paper explores current research in relation to commuting, the variables of commuting stress and the relationship they have upon those employees' wellbeing and work-life balance when travelling within the greater Dublin area.

The method of analysis used was that of qualitative research in the form of focus group settings. The aim was to explore the daily commuting experiences of three focus groups varying by distance to which they travelled from home to the workplace. Although, the norm of qualitative research is not to compare, it was important to understand by varying the distance would the variables differ or relate across all three focus groups

The findings from each of the focus groups were coded using thematic analysis, allowing interesting themes to emerged from the analysis. Findings such that commuting and its effects have an impact on employee wellbeing. Different modes of transport show to have an impact when considering feelings of employees. Finally, the relationship of commuting and work-life balance of the employee show the need for further investigation upon work-time flexibility.

Declaration

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TABLE OF CONTENTS

Abstracti
Declarationii
Acknowledgements iv
Table of Contents
List of Tables viii
List of Diagramsix
List of Appendicesx
List of Abbreviationsxi
Chapter 1: Introduction1
1.1. Background to the Study1
1.2. Purpose of the Study3
1.3. Structure of the Study5
Chapter 2: Literature Review6
2.1. Introduction
2.2. The Historical view of Commuting6
2.3. The relationship between Urban Living, Economic Factors and Commuting 8
2.4. Commuting and Wellbeing9
2.4.1 Distance and Duration of a Journey and the impact on the Commuter 10
2.4.2 Using the Commute as a source of Recovery Time11
2.4.3 Different modes of Transport13
2.5. Commuting and Work-Life Balance15
2.6. Conclusion to the Literature Review16
Chapter 3: Research Question and Objectives17
3.1. Introduction
3.2. Research Question and Objectives17
3.2.1 Research Question17
3.2.2 Research Objectives

Chapter 4: Methodology 19
4.1. Research Philosophy21
4.2. Research Design21
4.2.1 Methodological Choice and Research Strategy21
4.2.2 Time Horizon/ Constraints to Data22
4.2.3 Ethical Considerations22
4.3. Sampling23
4.3.1 Participant Profiles24
4.4. Collecting Data
4.4.1 Pilot Studies28
4.4.2 Focus Groups
4.4.3 Venue used to collect the data29
4.4.4 Technology used to collect the data29
4.5. Data Analysis
4.6. Limitations of Methodology
4.7. Methodology Conclusion
Chapter 5: Findings
5.1. Introduction
5.2. Examining the effects commuting within the GDA has on the employee and their wellbeing
5.2.1 Perception of Wellbeing34
5.2.2 Isolation of Business Parks
5.2.3 Lack of Control when Commuting37
5.2.4 Seasonality
5.2.5 Expense to consider when Commuting40
5.3. Understand if different modes of transport have an impact on the feelings experienced by the employee during the daily commute
5.3.1 Feelings associated with Public Transport44
5.3.2 Feelings associated with Active Transport45

5.3.3 Comparisons associated between different modes of transport45
5.3.4 Comparison associated between travelling within other countries46
5.3.5 Comparisons among people travelling within the GDA47
5.4. Understand the relationship between commuting and the work-life balance of employee
5.4.1 Recovery between Work and Home Life48
5.4.2 Flexibility49
5.5. Distance as a Factor across the Three Focus Groups
Chapter 6: Discussion 51
6.1 Restatement of the Research Questions51
6.2 The effects commuting within the GDA has on the employee and wellbeing51
6.3 If different modes of transport have an impact on the feelings experienced by the employee during the daily commute
6.4 The relationship of commuting and the work-life balance of employees
6.5 Limitations and implications for further Research58
Chapter 7: Conclusion 60
Chapter 7: Conclusion607.1. Conclusion to the Study60
-
7.1. Conclusion to the Study60

List of Tables

Table 1:

Table 2:

Table 3:

List of Diagrams

List of Appendices

Appendix 1: Pilot Study	66
Appendix 2: Study	67
Appendix 2: Consent forms	68
Appendix 4: Questions for the Focus Group Sessions	69

List of Abbreviations

Central Business District	CBD
Department of Transport, Tourism and Sport	DTTS
Greater Dublin Area	GDA
National Travel Survey	NTS
Transport Infrastructure Ireland	TII
Work – Life Balance	WLB

Chapter 1

Introduction

1.1 Background of the Study

Commuting to work has often become part of an employee's daily routine, becoming a mundane routine on the individual. This activity institutes such a large part of everyday life that it is not surprising that the concept of commuting wouldn't have an impact on people's overall life satisfaction and well-being (Olsson, Gärling, Ettema, Friman and Fujii, 2013, p. 256). The journey from home to work and back is therefore an important aspect of modern life. Where it affects people's wellbeing and life demands, are in the difficult decisions about movement on the labour (building a career) and housing market (wanting to live in the desired location) (Stutzer and Frey, 2008, p. 363). People may compensate with a larger commute to live in and affordable area or accept a shorter commute where the cost of living is higher but the desired job is effective. Work commutes are in this context a neglected aspect of everyday life, when considering the affects it may have on the individual's work to life balance (WLB) and wellbeing.

Up until the last decade relatively little effort has been devoted to studying the impact of the daily journey on the employees' wellbeing and WLB. Existing research on commuting stress has shown that it is affected by variables such as control, predictability, the duration and distance of the commute and commute impedance (Sposato, Röderer and Cervinka, 2012). This concept of commuting stress is relatively new, dating back to the late 70's, to which most authors guided their studies in relation to the commute impedance model (Kluger, 1998; Novaco, Stokols, Campbell and Stokols, 1979; Stokols, Novaco, Stokols and Campbell, 1978). The model set the standard and has evolved to demonstrate that traffic congestion and travel impedance can negatively affect mood, behaviour and health of commuters. Several studies have analysed these variables of commuting stress by mostly survey methods, of large sample sizes. These studies however are mainly conducted in the United Kingdom (Lyons and Chatterjee, 2007; McLennan and Bennetts, 2003), the United States (Kluger, 1998; Novaco and Gonzalez, 2009), and across mainland

Europe (Olsson et al, 2013; Rouwendal and Nijkamp, 2004), apart from one study carried out in Dublin The study was conducted on the Dublin commute in relation to psychological effects of commuting found that different modes of commute had different impact on commuter stress and mood (Buckley and O' Regan, 2004). A similar study looked at the use of public transport in the UK together with the health and wellbeing implications of commuting. The findings suggesting, that those surveyed mainly used the mode of a car as transport and reported this journey to be stressful (McLennan and Bennetts, 2003). In contrast, not all modes of transport have been found to create these negative feelings, researchers have found the positive emotions with active transport such as those cycling or walking on their daily commute or simply using commutes as a buffer between work and private spheres, regardless of the distance travelled (Olsson et al, 2013).

Building upon the factor of using the commute as a buffer between work and home life, other studies have related this concept, that the work demands, commuting demands and work at home are impeding the fact of recovery (Sonnentag, 2001; Van Hooff, 2015). The recovery that is needed for the disconnection between work and home and to ensure subjective wellbeing is maintained. As stated further by Van Hooff (2015), recovery can be hindered if the commute poses unforeseen demands on the employee. Reverting to the variables and characteristic of commuting stress, that delays experienced during the commute are a main determinant of commuter stress (Lyons & Chatterjee, 2007). In addition, Koslowsky (2000), has brought the element effects of commuting problems can have on the work organization. Including the factors if lateness, absenteeism, increased turnover, lower employee performance, and increased costs due to employees absent from work.

The literature above demonstrates the key variables and commuting characteristics evident across the research of commuting, such that, control, predictability, the duration and distance of the commute and commute impedance have been related to both positive and negative relationships between commuting, wellbeing and WLB. This study will relate the variables and characteristics of commuting stress to the effects the phenomenon has on the employee travelling within the greater Dublin area. On whether the effects have a negative or positive relationship between commuting and the wellbeing and WLB of the employee.

1.2 Purpose of the Study

The greater Dublin area (GDA), a region comprising Dublin and the counties of Meath, Kildare and Wicklow, accounts for 39% of the State's population (Dublin Chamber, 2017) with a figure standing at 1.8 million residents for both the capital and the GDA combined. The most recent statement by the Dublin Chamber (2017), this figure is set to grow to 2.2 million by 2031. If these population figures are set to grow and the state is currently experiencing a decline in capital investment on Irish transport infrastructure, particularly land transport, the problem is in need for immediate address (Engineers Ireland.ie, 2017), as congestion and bottlenecks are beginning to impact on the day-to-day lives of people. This national issue doesn't come as a surprise, as Melia (2016), reported that commuters are now leaving an hour earlier, to join the 159 thousand commuters using the M50 ring road transporting those from the GDA in and out of Dublin city. These commuters are now subjected to rush hour on the M50 that last eight hours a day.

Hence, the motivation behind the study has been linked to the desire to understand first, commuting at the national level and how the increasing congestion problems and increasing commuter time impacts on the daily commuter to and from their place of work. Maintaining a work-life balance, regardless if single, married or family dependent, it is key for every individual to maintain a stress free and balanced life. As defined by the Healthy Ireland framework (Department of Health, 2013), wellbeing is an integral part to a good quality of life, therefore, the commute and the impact to the employees' wellbeing is not to be ignored. People are starting their days earlier than their actual working day and end later due to the distance of travel, length of time they are spending on the choice of transport and all with dealing before the stress of work and life demands. It is evident that the problem has been highlighted for many years, as evidence of national frameworks i.e. *National Planning Framework, Ireland 2040* and national strategies i.e. *Transport, Tourism and Sport three-year strategy 2016-2019* are out in the public realm. Where objectives and goals are investigating the movement of land transport for the better. In contrast, as stated in the opening statement of the research, the current grading system devised by Engineers Ireland has resulted in Irelands' transport system to sit at the mediocre level. In the report, the mediocre level is defined as 'a system that is inadequately maintained, and unable to meet peak demand, and requiring significant investment' (Engineers Ireland.ie, 2017, p 7). A truth lies in this statement as the decrease in transport investment by the State since 2008 has been very significant. Capital investment in transport peaked at €3.5 billion in 2008 or 1.9% of GDP falling to €1 billion in 2016. These frameworks and strategies will only become effective if capital investment is returned into the correct sources of land transport.

When considering the extent of commuting literature and where Irish land transport currently stands at National level, the researcher understands there is a gap from an Irish context and through this exploratory study intends to provide understanding in this area, looking specifically at those employees travelling within the greater Dublin area and the effects related to these working and commuting individuals.

1.3 Structure of the Study

The structure of this thesis is presented in seven chapters. Chapter one begins with a brief background to the literature and provides an overview of the entire study.

The chapter to follow, chapter 2, will define the literature emphasised in chapter 1 with a more in-depth view of the commuting variables and commuting characteristics; commuting and urban living, commuting in relation to the wellbeing of the employee, followed by commuting and work-life balance of employees

Chapter three will outline the research question and objectives grounded by the researcher, with chapter four describing the research methodology. The methodology chosen for the research will include three focus groups using semistructured interviews to collect the data. Although previous studies have used quantitative and mixed methods to highlight how commuting and the employee combine, the researcher decided to take an exploratory approach to understand the personal views of employees' experiences of the daily commute and the affects it may have on their wellbeing and work-life balance, if any.

Once the data was collected, thematic analysis was used to consider the findings which are described in chapter five. Chapter six will lead on to discuss the findings and link to the literature review researched in early moment of the dissertation.

The final chapter, chapter seven, consists of the overall conclusion of the dissertation, and a summary in relation to the research question and the objectives. Then finally the researcher presents the recommendations for future research that should be considered.

Chapter 2

Literature Review

2.1 Introduction

The literature review will begin by exploring the historical journey the phenomenon of commuting has begun, which is recent in terms of literature studies. This information will guide the subsequent sections where the relationship between commuting, economic factors and urban living are considered through information at national level on the current commuting situation of Dublin and the Greater Dublin Area (GDA). The remaining sections will link research gathered by previous academics on the subject matter of commuting and its relationship to employee wellbeing. Finally, we will look at the relationship between commuting and a work-life balance of the employee. Everything considering, as described in the introductory section the variables emphasied by Sposato et al, (2012) from the past decades of research, will be explored and related to an Irish context.

2.2 The historical view in relation to the variables of commuting

Commuting to and from work has often become part of an employee's daily routine. Where in the field of transport studies, travel is treated as a consequent demand and commuting is derived from the need to get to and from work (Lyons and Chatterjee, 2007, p. 190). Despite this, up until the last decade relatively little effort had been devoted to studying the impact of the daily commute on the employees' wellbeing and work-life balance. Early studies conducted theory based research in relation to this area which was based on one model – the commute impedance model (Novaco, Stokols, Campbell and Stokols, 1979; Stokols, Novaco, Stokols and Campbell, 1978 cited in Kluger, 1998, p. 148). A model centred around two suggestions. The first, suggesting that commuting induces stress brought upon by a factor stopping the end goal of arriving at a destination. These factors including distance, slow speed and congestion. Therefore, increasing people's negative attitudes towards the experience of commuting. The second element to the model is that negative effects are reduced by perceived control. When people are in high control and their prediction of the journey is not halted for any unknown reason, the strain to the commuter is not felt. Kluger (1998) evaluates the propositions of the commute impedance model (Novaco et al, 1979) with the aim to proposing refinements to the model. Upon conclusion, the study found a positive relationship between commute length and strain leading to negative reactions. The study encountered a new factor of a positive reaction to commuting, for those commuters driving along non-congested roads experiencing a constant flow. They stated that driving to work was their only opportunity to have 'quiet time' for themselves (Kluger, 1998, p. 160). This 'quiet time' concept found during the commute has further evolved to be the buffer or disconnection the employee experiences between the workplace and home life. A factor to which was analysed by Van Hooff (2015) where such work-related thoughts will allow employees to reach closure with respect to their work issues by the time they arrive home, or vice versa when reaching the place of work.

Furthering from this information, variables and characteristics of commuting have evolved from these theories and models. The model set the standard and has evolved to demonstrate that control, predictability, the duration and distance of the commute and commute impedance can negatively affect mood, behaviour and health of commuters (Sposato et al, 2012). Allowing these historical concepts to link to the following sections, will further couple the literature between commuting and the effects it has upon an employees' wellbeing and WLB.

2.3 The relationship between Urban Living, Economic Factors and Commuting

Many studies have included the relationship of national economic factors in relation to commuting (Lyons and Chatterjee, 2007; Ory, Mokhtarian, Redmond, Salomon, Collantes and Choo, 2003). Leading on from past research, it is important to consider the relationship of commuting in the GDA to urban and economic factors of the State. Larger cities bring large populations, migration away from the central business district (CBD) and the inevitable, congestion. Increasing demand without matching the supply, leaves Ireland's transport network inadequately maintained and unable to meet peak demand at times (Engineers Ireland.ie, 2017, p.5). After a period of economic stagnation, Ireland's transport infrastructure is not growing fast enough, and cannot keep up with the ever-increasing demand for urban mobility (Engineers Ireland.ie, 2017, p.3).

As stated in the introductory, section 1.2, the GDA region currently has a population of 1.8 million with a continuing increase to 2.2 million by 2020. A region which is already reaching capacity limits. Therefore, living in or surrounding a densely populated urban area, the natural effects of urban expansion explained through the monocentric city model (Alonso, 1964; Mills, 1981; Muth, 1961; Wheaton, 1974 cited in Oueslati, Alvanides, and Garrod, 2015, p. 1587), is effective for this trend. The model assumes that all employment in the city takes place within a single Central Business District (CBD). The pattern of urban development is then shaped by the trade-off between affordable housing further away from the CBD and the associated commuting costs (Oueslati, Alvanides, and Garrod, 2015, p. 1587). Similarly stated by Stutzer and Frey (2008). Thus, to offset higher commuting costs, housing prices decline with distance away from the CBD. Therefore, stating as urban development moves away from the CBD those working in the major city must compensate further travel to live an affordable life. Inevitably the commute to work becomes the main factor of everyday life.

Equally important, if business continue to relocate outwards from the city to Dublin's industrial and businesses parks, the private car and public transport commuters are instantly subjected to congestion and isolation.

Therefore, increasing cost of an employee and an organisation's time *(Ernst and Young, 1996 cited in McLennan and Bennetts 2003, p 181)*. The authors also suggest to relocate business on the outskirts of urban regions to allow for access by private car. In contrast, reports emphasise the reality of congestion of the major ring road, linking Dublin and the GDA. Transport Infrastructure Ireland (TII) (2017) reported that incidents are a major contributor to commuter delays with about 120 incidents occurring in a typical month on the M50, over half of them during rush hour traffic. A recent report by *The Journal.ie* (Brennen, 2017), highlighted figures, released to the reporting body through the Freedom of Information by the TII. Brennen, (2017) reported from the data dating back to 2013, that over the M50 46km route, 1950 accidents have occurred bringing the total to 39 per month, or more than one per day. Both highlighting that it is not an effective way to move away from the CBD, without the infrastructure read to hold capacity.

The aspect of urban mobility coupled with insufficient transport system of the State, it comes as no surprise that congestion, constant incidents leading to heavy, dense traffic can influence employees travelling to and from the workplace, to later affect personal Wellbeing.

2.4 Commuting and Wellbeing

Wellbeing is evident throughout numerous studies, creating and identifying different concepts of the phenomenon. The interesting aspect found from the literature was the correlation between subjective wellbeing and the daily commute. Previous authors have highlighted the relationship between the daily commute and the wellbeing of individuals but have not embellished the concept together with commuting, wellbeing and daily work activities, to later effect work-life balance.

Firstly, the concept of wellbeing is established were studies have reported wellbeing and defined as a concept that is a crucial component of a good-quality, happy life (Diener, 2000). That wellbeing is associated with happiness, satisfaction, vitality, optimism and passion (Seligman, 2002). All aspects relate to positive effects on the individual with the absence of negative effects, which in turn, relates to subjective wellbeing. Subjective wellbeing focuses in positive effects and the absence of negative effects (Ryan & Deci, 2001). Additionally, Fredrickson (2004, p. 1367) has further identified by broadening an individual's range of positive emotions, the discovery of novel and creative actions, ideas and social bonds, can be achieved through play and exploration which in turn builds on that individual's personal resources; ranging from physical and intellectual resources, to social resources.

Having a sense of positive emotions upon arriving to the workplace should create and improve the creative thought process and engagement of individuals, and therefore have a positive effect on the employer and the organisation the individual may reside. A process which is beneficial to both the employee from a personal level and the employer from a productive level. Moreover, studies have taken the employer and productive level and analysed the effects of commuting problems. Where the effects of commuting problems on the work organisation include lateness, absenteeism, increased turnover, lower employee performance, and increased costs due to employees absent from work (Kowslowsky, 2000). Thus, given that factor of the potential to increase the stress level rate or motivation of employee upon reaching and leaving the workplace.

In the case of this research subjective wellbeing will be the focus. The literature, although mainly links this concept of wellbeing and commuting variables together in relation to negative effects, positive effects have also been reported. A concept to highlight in the furthering sections through the duration of the commute, the effects from different modes of transport on an individual and the way of dealing with impedance to the commute.

2.4.1 Distance and Duration of a Journey and the impact on the Commuter

Distance and duration of commutes being one of the variables associated with commuter stress has had a place in research studies in recent years. The research showed negative effects occurring after a point in time was reached when commuting. Stutzer and Frey (2008) found a large negative effect of commuting time on people's satisfaction with life. People to whom commuted 22 minutes, known at the time as the mean commuting time in Germany, reported, a lower satisfaction with life.

The authors concluding by stating those travelling large distances had lower subjective well-being. These findings coupled with the findings from the *National Travel Survey 2016* (CSO, 2017) saw the average journey distance for Dubliners was 9.8 kilometres, while the average journey duration was 24.8 minutes. Essentially commuters now travelling today across the major roads of the GDA (M50, N4, N7 and N11) are above the average of 22 minutes and are immediately subjected to the potential of having a lower satisfaction, a lower sense of mood and wellbeing. The trend of short-distance commuting with longer durations are more concrete and a factor that is not just a passing trend. It is certain in Dublin and surrounding areas; the distance of the commute is continuing to shorten but the average duration is increasing.

Similarly, although not in the scope of this research, it is important to mention is how research has emphasised the duration of a commute and measuring the elevated biological effects of commuters to understand the effects to their health and wellbeing. Reports by Kluger (1998) suggested that longer car commutes were positively correlated with the effects of stress, such as high blood pressure, reduced task performance, negative mood in the evening hours after work, and the following with: tiredness, a difficulty in focusing attention, and anger.

Another factor that may not be to the fault of the commuter/employee, is that of the cost of commuting and having to migrated away from the CBD, due to desire to live elsewhere or due to rising house prices. Many workers choose a house in a location they can afford, despite long and costly journeys to the work needed to pay for it (Darcy et al, 2005, p. 11). It is then thereafter the convenience of the workplace is considered. The main reason for the choice of location and transport costs, was heavily influenced by the needs to access schools and social associations of life.

2.4.2 Using the Commute as a source of Recovery Time

Several studies have taken inspiration from the Meijman and Mulder (1998) effort recovery model (cited in Sonnentag 2001), and in relation to commuting and wellbeing, researchers suggest that recovery and unwinding processes, between house and home, play an important role in predicting individual wellbeing. Subsequently, Novaco and Gonzalez (2009, p. 13) explained the 'inter-domain transfer effects' as a concept of commuter stress. That the 'inter-domain transfer effect' allow certain environmental conditions i.e. home, commuting and work to act upon a person's wellbeing and that they can transfer to one another, either positively or negatively.

The effort recovery model describes that spending effort during working hours leads to specific load reactions in the individual (Sonnentag, 2001, p.196). These reactions include physiological, behavioural and subjective responses (Sonnentag, 2001, p. 196). Normally these conditions are not subjected to pro-long, if high work demands are not experienced. However, when demands continue, no recovery can occur. Essentially, as a time of transition is experienced during the commute between work and home life, it is possible that the recovery process can begin during this time. If the recovery is not experienced, these load-reactions can accumulate resulting in longer term negative effects, such as impaired wellbeing and health problems.

In a recent study the assumptions from the effort recovery theory in line with the suggested of Sonnentag (2001), it was found that relaxation during the commute from work to home was positively related to calmness after returning home from work, after taking commuting time into account (Van Hooff, 2015, p. 133). Of course, also considered is the daily work routine. When job demands were low, the method of relaxation during the commute was not needed, but when job demands were high, detachment during the commute occurred to begin the recovery process.

In contrast, to the study the negative emotion experienced was during stressful delays, when the commute was reduced to low speed (Schaeffer et al, cited in Novaco 2009), or completely halted. As explained by Lyon and Chatterjee (2007), that the main determinant of commuter stress is when delays are experienced during the commute. Coupled with this notion, the stress experienced during the commute is largely due to exposure to high volumes of traffic (Kuennen and College, 2012, p. 56). The only time when strain was not effective, in the experience of constant flow of traffic. The speed of travel is reported to reduce the stress from congested commutes (McLennan and Bennetts, 2003, p. 183).

Other studies have made the factor of control as the subject to also relate the negative emotions felt during the stop or experience of congestion to a journey. When the lack of control is experienced, a heightened sense of stress occurs. Kluger (1998), had mainly analysed this aspect when a blockage occurred to a journey this was positively correlated with strain. When the lack of choice to the employee or the commuter in this instance was experienced, strain was also prevailing.

Furthering on from the concept of control, what was particularly interesting, from the most recent study conducted using app technology to capture a three-week field study. The data of the research showed mood was related to the prediction of frustration and that commuters had in fact predicted their upcoming anger or frustration in a traffic congestion, prior to the occurrence. However, when the commuter was asked to recall the event their experienced frustration was lowered (Wurhofer, Krischkowsky, Obrist, Karapanos, Niforatos and Tscheligi, 2015). Moreover, unexpected traffic congestions, in contrast to expected ones were prone to higher levels of anger.

2.4.3 Different Modes of Transport

An aspect of commuting that can create both positive and negative emotion is that of different modes of transport. Commuting is the key to travel to and from the workplace but by what mode of transport are commuters replying on most? In 2016 the findings from the *National Travel Survey 2016* (CSO, 2017), identified that the most common reason for making a journey was to travel to work and by what mode of transport was explained. Is was obvious from the findings of the National Travel Survey 2016 (CSO, 2017), the most common trend was the affinity to the car, where almost three quarters of journeys at 74.3% were by car. Walking was highlighted as the next mode of travelling after the car with public transport then proceeding. The evidence from these results are suggesting that the car is certainly the most reliable form to travel within the GDA. Therefore, how is this impacting on the individuals subjected to this mode of transport. Gatersleben and Uzzell (cited in Novaco and Gonzalez, 2009, p. 20) compared the affective responses to commuting of car users, public transport users, cyclists and walkers. Car users were found to perceive their journeys as most stressful and public transport users as most boring. Cyclists were found to perceive their journeys as most interesting and exciting, and walkers as most relaxing. Comparative results were achieved in the study conducted on the Dublin commute in relation to psychological effects of commuting found that different modes of commute had different impact on commuter stress and mood. The study indicating that nearly 80% of respondents reported their daily commute as a stressful experience, those who travelled by train-Dart experienced highest levels of stress and most negative moods on reaching their workplace (Buckley and O' Regan, 2004, p. 2). Even though conducted over a decade ago, this research project aims to analyse the perspective from employees travelling within Dublin and the greater Dublin area (GDA).

Disassociating from the negative feelings of daily hassles allows people happiness in being able to make the routines of everyday life work. On this account, Olsson et al (2013) have analysed the commute moving from the negative way of thinking about the commute to a positive way of thought, as wellbeing (subjective wellbeing) is the concept of positive emotion over negative. The study found, from the aspect of active transport, i.e. walking and cycling, that feelings during the commutes are predominantly positive or neutral. Allowing physical exercise to take place with adding the element of extra hours for example, in the gym, after the daily commute has taken place. The researchers also found, for longer work commutes, social and entertainment activities either increase positive effects or counteract stress and boredom (Olsson et al, 2013, p. 256).

2.5 Commuting and Work-Life Balance

Work-life balance as a phenomenon in research literature is a grounded in theory and concepts and by no means a trend of the past. Work-life balance is understood by organisations world-wide. It may have achieved the status of a defining employment issue and some progress has undoubtedly been made toward the introduction of flexible work arrangements (Hyman and Summers, 2005, p. 418), i.e. flexible working hours. What is lacking and not utilised to the most effective way are the ability teleworking and working from home can bring to the individual employee. These elements could reduce the level if congestion, if less commuters are out on our roads. In a like manner, flexibility would be greater due to time otherwise spent commute could be used effectively in other daily tasks outside the work realm. It has been defined, commuters with flexi-time availability had lower driver stress and time urgency than the commuters without flexi-time (Lucas and Heady, 2002, p. 569).

As researchers before have analysed the effect commuting has on the employee when comparing work-life balance and the flexibility available. Especially those to whom are subjected to a strict routine, due to family commitments. Studies in Sydney found difficulties associated with dropping off and picking up children, childcare arrangements and sufficient time to spend with children for those workers with long commute journeys (Darcy, Stubbs, Perry and Blunden, 2005). Similarly, the growth in dual growth in dual career households has been led by increasing female labour market participation (Wheatley et al., 2008, p. 814). Equally observed from an Irish context, were findings from the July Monthly Unemployment Central Statistics Office results (CSO, 2017), a 2.8% decrease from July 2015 of unemployment has occurred in males working and a decrease of 1.7% seen for females. Suggesting that the "work-rich, time-poor", and "work-poor, time-rich" households are present in society today (Wheatley et al., 2008, p. 814).

2.6 Conclusion to the Literature Review

The aim was to explore the current research in line with evidence currently available on the daily aspect of the commute. What was evident from the literature, that the study is only recent in terms of research studies and the effects commuting stress has evolved through variables; control, predictability, hindrances to commutes and the duration and distance of the commute. These variables are undoubtedly evident and have somewhat of a correlation to one another through the said literature. When control or lack of control was experienced the level of stress increased for the individual as a hindrance to the commute or unexpected delay occurred. Regardless of the mode of transport chosen. It was clear to one study that the strain occurring during the unexpected event, the exact emotions could not be recalled. Similarly, prediction of the commute before the activity occurred resulted in moods of anger.

Duration and distance of the commute emphasised both positive and negative aspects. It was evident from the literature that it was the choice of individuals to live in affordable areas to compensate with the long commute. This can only leave individuals with serene, happy life if the ease of the commute and time was available. Urban mobility takes effect with population increases occurring in suburban areas around the CBD and therefore, enviably leading to over populated, congested zones.

Most of these studies were conducted using and measuring the elevated biological effects of commuters, using quantitative methods and self-administered surveys. In the case of this study an exploratory study was conducted to understand the experiences of the employees commute and relate back to the commuting variables and characteristics highlighted from the literature

There is extensive knowledge on the effects of commuting to the employee but lacking in the relevance commuting has on the Irish employee and what effects it has upon their wellbeing and WLB. Hence, the concept of commuting has come to the forefront of many studies over the past decades, with the use of the commute from the workplace to home in a positive manner, but the main consensus being of the negative effect commuting has on WLB and the well-being of employee's. This dissertation aims to explore these areas further.

Chapter 3

Research Question and Objectives

3.1 Introduction

The chapter will highlight the research question and the objectives set by the researcher to understand if the daily commute affects the wellbeing and work-life balance of full-time employees commuting within the Greater Dublin Area.

3.2 Research Question and Objects

The research question is a specific question that the research is designed to investigate and provides focus to the research (Collis and Hussey, 2014, p2). The objectives enable the research question to be achieved and are a set of closely specified statements which are likely to be the milestones of the research (Horn, 2009). The research has one research question, with the aim to build on the existing research relating to the daily commute and its effects on employee wellbeing and work-life balance and has broken the question down into three objectives to be achieved.

3.2.1 Research Question

The researcher's aim was to understand the data behind the relationship between commuting and the effects this phenomenon has on the employees' wellbeing and work-life balance. The main lead to the statement and title of the dissertation;

How does daily commuting affect employees' wellbeing and work-life balance: The perspective of full-time employees from a new product development facility commuting within the Greater Dublin Area?

Raising the research question: *Does the daily commute within the greater Dublin area affect employees' wellbeing and work-life balance?*

3.2.2 Research Objectives

As the research question aims to explore the effects the daily commute within the greater Dublin area has on those travelling to and from the work place, the following objectives were set to aid in the collection of data.

Through the objectives the researcher wants:

Objective 1: to explore the different impacts and factors that commuting has on the employee commuting within the Greater Dublin Area.

Objective 2: To understand better if different modes of transport have an impact on the feelings experienced by the employee during the daily commute

Objective 3: To understand if there is a relationship between commuting and the wellbeing of employees on a negative or positive manner

Objective 4: To understand if there is a positive or negative relationship between commuting and the work-life balance of employees

Chapter 4

Research Methodology

This chapter will outline the research methodology used to collect the subjective and 'rich data' required to understand if the daily commute affects the wellbeing and work-life balance of full-time employees commuting within the Greater Dublin Area. The research philosophies and research design will be guided by the subjects of Saunders, Lewis and Thornhill, (2016). The research design and plan of the methodology section should focus on a methodological approach, research strategy and the time horizon of the research itself. The sampling procedure used was that of non-probability sampling, and collecting data from the use of the qualitative method of focus groups. The collected data was analysed using thematic analysis.

4.1 Research Philosophy

The research philosophy as stated in Saunders, Lewis and Thornhill, (2016), refers to a system of beliefs and assumptions about the development of knowledge. Collis and Hussey, (2014) state further that the research paradigm is a framework that guides how research should be conducted, based on people's philosophies and their assumptions about the world and the nature of knowledge. These statements both build upon assumptions and the frameworks which guide research within a world of unanswered questions and problems within the nature of scientific practice, including the natural science and the social world.

Assumptions inevitably shape how you understand your research questions, the methods you use and how you interpret your findings (Crotty, 1998 as cited in Saunders et al, 2016). The assumptions are those of an epistemological and ontological position. The epistemology assumption being regarded as appropriate knowledge about the social world, and whether a natural science model of research is suitable for studying the social world (Bryman & Bell, 2015, p19). The ontology approach and the social world is regarded as something external to social actors or as something that people are in the process of constructing (Bryman & Bell, 2015, p19).

The philosophical frameworks, Positivism and Interpretivism, bring the nature of scientific practice to a more concrete form. These are philosophical frameworks in which the researcher must decide as to what fits the premise of this study best. The study requires a more in-depth understanding of how the employees situated in a business park and commuting within the GDA, feelings, emotions and thoughts are portrayed. Having that said, positivism holds that an accurate and value-free knowledge of things is possible and that the possibility that human beings, their actions and institutions can be studied as objectively as the natural world (Fischer, 2007, p. 17). As the premise, stated previously, is to understand subjectively thoughts, feelings and emotions of human participants an interpretivist framework is the focus of this research. Interpretivism is concerned with the empathic understanding of human actions rather than with the forces that act on it Bryman and Bell, (2015, p. 28), this framework sitting under the epistemology assumption will guide the research to narrow the methodological choice of qualitative research methods with an inductive approach.

Qualitative research using an inductive approach researches the general and the focuses down to the specific. The outcomes of qualitative research are therefore often not generalizable to larger populations (Horn, 2009, p. 124). Smaller populations are more apt to the inductive approach, as deduction does not depend on observation or experience; it is simply a matter of logic (Fischer, 2007, p. 95). Deduction methods would allow for the analysis of larger populations as a more mathematical approach is needed. The inductive approach, for this research project, fits to a smaller sample group. The perceptions of what it means to commute within the GDA and the feelings, emotions and thoughts are related to the topic.

4.2 Research Design

The research design phase, as stated above, will focus on: the methodological choice, research strategy, time horizons and ethical considerations to answer the research question and objectives described in chapter 3.

4.2.1 Methodological Choice and Research Strategy

Qualitative approach

The main aim with qualitative research, is not to emerge with findings that are statistically representative of a given population but to explore subjective patterns of personal or group experience, to gauge the meaning they have for the people involved, to contrast this with the views that others have of them, and to take proper account of situational context (Davies, 2007, p. 148). By using qualitative research, it represents the common belief among qualitative researchers, that qualitative provides a 'deeper' understanding of social phenomena than would be obtained from quantitative data (Silverman, 2008). Using qualitative research, allows the researcher in the case of the focus group setting, to conduct semi-structured interviews with open ended questions. This form of questioning allows the opportunity for the participant to share more intricate information than just short answers that structured questioning may highlight. The questions (Appendix 4) for each focus group interview and the way the interviews were held gave room for slight differences, which is in-line with the element of semi-structured interviews. The possibility to further validate the qualitative approach, are the elements of observation. The researcher can rely on what the subject says but can also have the added element of being present and view what and how participants act. Thus, given a sense of increased validity to the data gathering process (Davies, 2007, p243).

4.2.2 Time Horizon/ Constraints to Data

Due to this research project being under a short time constraint, a cross-sectional study was employed to understand the research question and objectives at the same point in time. All data was collected and analysed between the months of May to August 2017. The limitation associated with this time constraint; only a small sample is available as a representative of the population of employees experiencing the daily commute to and from their working environments within the GDA. A factor explained further in section 4.3.

4.2.3 Ethical Considerations for this Research Project

Ethics refer to the standards of behaviour that guides conduct in relation to the rights of those who become the subject of your work, or are affected by it (Saunders, et al 2016, p239) and therefore, ethical concerns are greatest where research involves human participants, irrespective of whether the research is conducted person-toperson (Bryman and Bell 2011; Saunders, et al 2016, p220) highlight the ethical principles broken down by Diener and Crandall (cited in Bryman and Bell, 2011) into four main areas: whether there is harm to participants, lack of informal consent, if there is an invasion of privacy and is there deception involved?

Relating these principles to this research project, the researcher ensured all information was clear to all involved within the project. As human participants were required in focus group settings to gain access to the data required to answer the research question and objectives, the researcher also considered participants and their affiliation with other colleagues within the organisation. That topics spoken about during the group sessions would not be voiced at any stage before during or after. The researcher had to consider participant's private lives outside of the work setting.

The researcher then began the formal access. First, by highlighting the need to use human participants from the selected organisation and requested the physical access through a HR representative from the organisation. The research project was highlight to senior management, who then granted the access to continue with the study within the selected organisation. Once the physical access was defined formal invites, by email (Appendix 2), were sent to the three groups identified for focus group attendance. The formal requests explained that each participant were under no obligation to accept the invitation to take part in the focus group interview. Overtime eight participants within each of the three focus groups agreed to take part.

Upon receiving the agreement from all participants to take part in the study, consent forms were individually distributed (Appendix 3). The consent forms explained the background to the research taking place and once again highlighted that participation was voluntary, anonymity would be maintained, and that all information was held as confidential. Participants signed a consent form to acknowledge and record their understanding of this.

4.3 Sampling

The main purpose of sampling is to choose a subset of individuals from a population to estimate characteristics of the whole population (Collis & Hussey, 2009; Fisher, 2007). Qualitative research explores subjective patterns from a personal or group level, where the sample or core sample, are the people who make up your key target group, with their beliefs, attitudes and social situation (Davies, 2007, p143). Therefore, by having a small core sample of people to make up a target group will give the area of this research a basis to be explored in-depth.

The core sample chosen were a subset of the population group of employees from a research and development center located in a business park on the outskirts of Bray. The idea was to take three groups, with similar demographics in that they are of similar age, commuting from within the GDA or Dublin city center, either travelling bus private car, bus, DART or active transport, i.e. cycle or walk. Across the three groups, twenty-three participants were interviewed. Out of the twenty-three, eight participants owned their home and the remaining all renting. The difference between the groups, the distance in which each group lived from work, as explained further by Tables 1, 2 and 3 and section 4.3.1.

4.3.1 Sample Size and Participant Profiles

The researcher required three groups including eight participants each to ensure the correct amount of in-depth knowledge, insights and ideas were gained. A limitation is highlighted from the second group (Table 2), in which, only seven participants attended due to working commitments of the eighth participant.

In this study, the focus was mainly on employees working for a Research and Development facility situated in a busy business park, located on the out-skirts of Bray town and to understand if the employee's daily commute effected their wellbeing and work-life balance over all.

The criteria of each group, all of whom commute to and from work were divided into three separate groups, depending on the distance in which they lived from the facility in Bray. The first sample were defined as those living between 15 to 30 kilometers from the facility in Bray. The second sample are those living 30+ kilometers from the facility and the third sample being the furthest from the facility, at 0 - 15 kilometers. The reason for selecting distance as the differing categories was to see if the objectives 1 to 4 would differ across the groups or would the same themes and commuting factors highlight throughout each group.

Each group, as in Table 1, Table 2 and Table 3, contained eight participants apart from the second group only having seven participants. The purpose was to begin each season with an ice-breaker, as stated in appendix 4, which lead to the collection on the demographics of each participant displayed in Table 1, Table 2 and Table Table 1 holds the information of the first focus group. The group consisted of both female and male participant, all a young working age and travelled either by carsharing, as a single driver or sometimes by public transport. The group was segregated by distance in relative to the second and third group. The distance selected and set at 15 - 30 kilometers from the workplace.

Table 1: Demographics of Group 1 including the region participants are travelling from,what mode of transport the participants take to work and the participants favourite afterwork activity

Participant	The area	Participant Age	How do you get to	Favourite
Number and	travelling from	Groupings (years)	work?	after work
Acronym	daily			activity
P1– Mathew	Grand Canal Dock	30 - 34	Car-share (passenger) or sometimes by Dart, either walk or taxi from the Dart Station	Cook and exercise
P2 – June	Sandymount then moved to Ballsbridge	25 - 29	Car-share (passenger), sometimes by partner's car	Cook and Pilates
P3 – Margret	Donnybrook but then moved to Blackrock	25 - 29	Drives alone but has experienced a month of public transport on the bus	Rest, cook and participate in sports
P4 – Amy	Ballsbridge	30 - 34	Driver of a car-share with other colleagues	Prep for dinner and take part in activities
P5 - Declan	Donnybrook but was living in Bray	25 - 29	Drive's to work alone everyday	Going to the gym or the cinema
P6 – Christina	Grand Canal	25 - 29	Car-share with others (passenger)	Cook, do crafty stuff or exercise
P7 – Tina	Wicklow Town	40 - 44	Drives alone	Horse riding everyday
P8 - Sally	Wicklow Town	45 - 49	Drives alone	Walking by the sea

Table 2 holds the information of the second focus group. The group consisted of both female and male participant, all a young working age and all seven travelled, as a single driver 5 days a week, apart from one participant cycling 3 days out of the 5. The group was segregated by distance in relative to the first and third group. The distance selected and set at 30+ kilometers from the workplace.

Participant Number and	The area travelling from daily	Participant Age Groupings	How do you get to work?	Favourite after work activity
Acronym		(years)		
P1 – Alan	Naas	35 -39	Drive alone everyday	Running when home
P2 – Cian	Ashtown, Dublin 7	35 -39	Cycle three days a week in the summer and drive other times on my own	Football, Cycling or sleeping
P3 – Maeve	Straffan	25 - 29	Drive alone everyday	Walk my dogs
P4 – Evelyn	Leixlip	35 -39	Drive alone everyday	Cooking and eating my dinner
P5 – Morris	Kilmainham, Dublin 8	35 -39	Drive alone most days but sometimes car- share	I swim twice a week in the winter and prefer to walk in the summer
P6 - Elaine	Baldoyle	30 - 34	Drive alone every-day	Walking my Dog
Р7 — Кіт	Clontarf	30 - 34	Drive alone every-day	I enjoy reading but that doesn't go well with driving so I wait until I get home

Table 2: Demographics of Group 2 including area travelling from? What mode of transportthe participants take to work and the participants favourite work activity

Table 3 holds the information of the final focus group. The group consisted of both female and male participant, all a young working age and travelled either by carsharing, as a single driver or sometimes by public transport or active transport i.e. cycling. The group was segregated by distance in relative to the second and third group. The distance selected and set at 15 - 30 kilometers from the workplace.

Participant Number and Acronym	The area travelling from daily	Participant Age Groupings (years)	How do you get to work?	Favourite after work activity
P1 – Annie	Bray	18 - 24	Cycle's to and from work	To take part in rugby activities
P2 – Betty	Greystones	35 -39	Drives alone every-day	Loves to go to the gym after work, well tries too
P3 – Jacquelyn	Killiney	25 - 29	Drives alone every-day	Loves to go to the gym
P4 – Angela	Bray	30 - 34	Drives alone every-day, evening though only living five minutes from work	To head home and watch series on the TV
P5 – Ryan	Bray	30 - 34	Walks to work every-day	Loves to read or head on walks to Bray seafront
p6 – Pearce	Greystone	35 -39	Drives alone every-day or sometimes takes the bus	Loves to golf
P7 – Janine	Dun Laoghaire	30 - 34	Drives alone every-day	Loves to sleep
P8 - Donal	Greystones	30 - 34	Drives alone every-day	Takes care of his baby

Table 3: Demographics of Group 3 including area travelling from? What mode of transportthe participants take to work and the participants favourite work activity

4.4 Collecting the Data

The aim once again was to collect the data required to answer and understand the research question; Does commuting within the Greater Dublin Area affect employee's wellbeing and work-life balance? As Krueger and Casey (2009, p. 21), refer to such participants as being 'information rich', it was important to have the correct participants for the study to collect the most efficient data.

4.4.1 Pilot Study

A pilot study was conducted prior to hosting the three separate focus groups (Table 1, 2 & 3). The aim of the pilot study was to refine the original intended questions (Appendix 1) for the final focus groups interview schedule. The purpose was to avoid problems in answering the questions by participants during the actual research interviews and inevitably no problems in recording and collecting the data (Saunders, et al 2016). Two separate pilot studies were conducted with groups comparable to the final population over the month of June. All suggestions were considered, and lead to continuous amendments to headings, the wording and the layout of the postpilot refined questions (Appendix 4). It is important to check all completed pilot questions devised to ensure that respondents follow all instructions correctly and have had no problems understanding or answering questions.

4.4.2 Focus Groups

Focus groups are a form of group interview that avails on communication from research participants to generate data. The group interviews are essential for exploratory matters when considering people's experiences, opinions, wishes and concerns.

Although group interviews are often used simply as a quick and convenient way to collect data from several people simultaneously, focus groups explicitly use group interaction as part of the method. This means that instead of the researcher asking each person to respond to a question in turn, people are encouraged to talk to one another: asking questions, exchanging stories and commenting on each other's experiences and points of view (Kitzinger, 1994, p. 16).

This way the interviewee had a possibility to expand their answer freely but the interviews would still have certain pillars of consistency and comparability.

4.4.3 Venue used to collect the data

The focus group sessions took place within the research and development facility the premises of both the researcher and the participants place of work. The meeting took place in the *innovation room*, a designated room designed for innovation workshops and focus group studies. The style of this room is styled on an apartment setting, comfortable and familiar to all participants taking part within the study. Each individual group was hosted for a one hour session with all sessions taking place at 11 am on the morning of the 17th, 20th and 21st of July. Each respondent was more than willing to take part in the study, without a reward expected.

4.4.4 Technology used to collect the data

The voice recorder application on the Samsung A5 was used to capture the three group discussions between the 19th to the 21st of July 2017

4.5 Data Analysis

Thematic analysis was chosen by the researcher to analyse the data collected from the three focus groups stated in Table 1, Table 2 and Table 3. Thematic analysis is a method of qualitative data analysis and is commonly used by most researchers when analysing data. Braun & Clarke (as cited in Saunders et al, 2016) have highlighted six phrases when it comes to analysing the data, which involves the researcher to become familiar with the data, coding, searching for themes, review and search the themes before writing the results obtained. The phrases are more of a guidance over a liner model, therefore the following headings were used as a guidance:

Familiarisation with the data allows the researcher to immerse themselves in and become extremely familiar with the collected audio-data and noting any analytical observations during the focus group session.

Coding allows the researcher to formalise the relevant data in order of themes. A method allowing the evolution and reduction of data collected.

Searching for themes identifies the data further into the correct groupings which allows the researcher to easily interpret the data to collate results.

Reviewing themes enables the researcher to reflect on whether the themes found tell a convincing and compelling story about the data, and begin to define the nature of each individual theme, and the relationship between the themes. It may be necessary to collapse two themes together or to split a theme into two or more themes.

Defining and naming the themes requires the researcher to conduct and write the detailed analysis of each theme and to identify the 'essence' of each theme and constructing a concise and informative name for each them

Writing the results allows the researcher to now create a coherent and persuasive story about the data and to contextualise to existing literature

4.6 Limitations to the methodology

Once the focus group analysis took place and substantial data was collected with a subjective view, there are limitations to highlight which could question the validity and reliability to the research. The researcher collected a high quantity of data, which enabled four themes including sub-themes to evolve from the use of thematic data analysis, as Wilkinson (cited in Silverman, 2008, p. 177), highlights the moderator should have some basic interviewing skills, some knowledge of group dynamics, and some experience in running group discussions. Although some of the skills involved in moderating a focus group have similar traits to those involved in one-to-one interviewing, the number of research participants involved in focus group requires more in terms of 'people management'. The element described is difficult for an individual to conduct, although once a rapport is developed between the researcher and the participants, an enabler to collect substantial data is created.

In this case the full amount of data may not have been collected for this reason, but also considering time constraints as a limitation is useful.

Time constraints only allowed for a cross-sectional study to be employed. It would be interesting to carry out a longitudinal study over a longer period, and preferably use diary entries as well as focus group interviews.

Finally, the researcher carried out rigorous analysis of the data. It is, however, the researcher's own interpretation of the data and, therefore, will be limited by that interpretation.

4.7 Methodology Conclusion

In conclusion of the research methodology chapter the researcher followed was a philosophy of Interpretivism by incorporating semi-structured interviews through a focus group method. Due to time constraints, a cross-sectional study was employed.

Chapter 5

Findings

5.1 Introduction

This chapter will build on the key findings from the literature review and relate the primary research conducted to these findings. The primary research being the three semi-structured focus groups using open ended questions as part of the interview schedule layout.

The researcher analysed the data and saw that from the four objectives grounded from the beginning (section 3.2.2), *Objective 1* and *Objective 3* had large similarities when comparing the study themes relating to these objectives. Objective 3 could not be defined alone as the aspect of wellbeing was highlighted strongly within Objective 1, therefore the researcher decided to combine Objective 1 and 3 to strengthen the analysis. The key findings will then be discussed as study themes under the three objectives:

Objective 1: Examining the effects commuting within the GDA has on the employee and their wellbeing

Objective 2: Understand if different modes of transport have an impact on the feelings experienced by the employee during the daily commute

Objective 3: Understand the relationship between commuting and the work-life balance of employees

The study themes emerging linked well with each heading as described above and are explained further within sections through 5.2 to 5.5.

5.2 Examining the effects commuting within the GDA has on the employee and their wellbeing

The study sought to understand the commuting factors influencing the effects commuting within the GDA has on the employee and their wellbeing, as described under theme 1 of section 5.2.

Theme 1: Factors Influencing Commuting

The reality of commuting for those travelling to and from the workplace, is the potential to experience congestion and slow journeys on a regular basis. Considering this reality, the researcher wanted to find out a little more information on how the employee perceived their daily commute. The responses revealed, several themes linking to factors: isolation of business parks, lack of control when commuting, seasonality and expenses to consider when commuting.

First, to begin, the researcher wanted to understand how the concept of wellbeing was perceived by the participants of the groups, by asking the question, *'What does wellbeing mean to you?'* and *'what does wellbeing in the workplace mean to you?''*. The questions would allow the researcher to understand if the participants' own thoughts of wellbeing, would link into definitions found in the literature or if the notion of wellbeing is 'buzz word' trend? The definition of wellbeing, as described by the national framework, *Healthy Ireland*, 'Health means everyone achieving his or her potential to enjoy complete physical, mental and social wellbeing. Where wellbeing, reflects the quality of life and the various factors which can influence it over the course of a person's life (Department of Health, 2013).

5.2.1 Perception of Wellbeing

The perception of wellbeing was unanimous across all three focus groups, when asked the question, 'What does wellbeing mean to you?', the resulting responses, were, Happy, stress free, balance between health and happiness, healthy life, mental balance. There was also a factor of work-life balance evident through participants thinking of wellbeing, were Margaret in group 1 (Table 1) described wellbeing as:

Margaret: I see wellbeing as separate boss activities, separate work and home... separating everything apart.

Another participant also described wellbeing from the aspect of a work-life balance and included the concept of transport:

Tina: A lot of aspects can bring on stress, like work and, transport bringing on stress. If you are short of money as in you can't pay your bills, that brings on stress, you know. For me, wellbeing is stress free. Keep life simple. Everything that can possibly bring on stress...remove!!!

Wellbeing in the workplace took on a different perception, when asked, 'What does wellbeing in the workplace mean to you?'', as a response, the remaining participants across the three groups described this area as no conflict, good communication, autonomy of the employee, time to one's self, motivation, good relationships, and again the element of work-life balance was evident through describing flexibility;

Pearce: To me wellbeing in work is having that feeling that you have done your best, because there is an understanding that you are operating at the best of your knowledge

Maeve: I just don't think you should ever feel sick with work or sick with worry. You should be able to enjoy what you do and get on with it and enjoy your day What was very interesting and can be later described in detail through the theme of disconnection from work and home life, an insight to non-English speaking employees using the commute as a disconnection from a work to home life, which in turn, helps not only from the aspect of feeling happy and relaxed but also encourages wellbeing among employees:

Cristina: It's true though, sometimes we as non - English speakers are not understood by the native English speakers. Sometimes you just need to switch off, or just not to think when you speak your own language.

There was a clear segregation between wellbeing and workplace wellbeing for most participants. Wellbeing was considered as having a healthy body and mind, were wellbeing in the workplace was to have autonomy, good relationships with others and be motivated within one's self. The perceptions had a strong link to those defined by the national framework, therefore why not consider the entire picture and include not only the employee's wellbeing within the working life and home life, but also for the transition employees encounter most days, a stressful commute.

5.2.2 Isolation of Business Parks

Considering the location of most business parks and industrial estates within the greater Dublin area, the majority are all located either off the busy ring road around Dublin, i.e. the M50 or considering the facility in Bray, located on the outskirts of the town away from facilities, amenities and the variety of public transport options. Most employees located among the business parks are immediately subjected to isolation, relying on a car, transport by public bus and the idea of car-pooling. Although some participants described a positive relationship between car-pooling commuting, the negative relationship highlighted is when the location of the facility in relation to public transport station and town center was limiting the participants to the most reliable form, the car:

Cian: I took public transport for a period and it's actually fine until you get to the bus stop at the station and that was always the problem. You ended up having either 35minute walk from the train station or a 20minute walk to the bus stop on main street to wait another 25 minutes for the bus. That was the problem

A participant from the first group echoed this view, highlighting the view of isolation was evident:

June: I would prefer to take the Dart if it could be possible but the problem is it would take so much more time to go from the Dart to here afterwards because I would prefer to, it's not like I don't like to take the car anymore but if I had the option to take the Dart straight home to work, it would be perfect

Most participants have considered other modes of transport other than commuting by car but have dismissed the idea due to the position of the facility in Bray:

Kim: I've been asked about three times I'd say in the last fortnight by my boyfriend's parents if I couldn't get the train to work from Clontarf and I've had to explain to them it would be a 20minute walk to the train station near us and then over an hour on the train and then another god knows how long to get from the train station to here, so there really isn't an alternative to driving because I'm not a cyclist.

From this theme, it was clear that most participants found the location of the business park to limit their choice in modes of transport to the car. This factor is forcing most employees to take the car, to sit in the ever-growing congestion issue surrounding the greater Dublin area. The factor is also forcing the employees to rely heavily on the car bringing the element which is evident in section 5.2.3, on the lack of control when commuting.

5.2.3 Lack of control when commuting

Regardless of the distance travelled (explained further in section 5.5) by each focus group, there was a clear theme highlighted when a stop to the commute occurred or having to rely on others when commuting to and from work. The participants were no longer in control of their commute or routine they may have created, the participants are now relying on either other employees to transport them to and from the workplace or to rely on public transport. The participants mainly emphasised frustration when discussing aspects on the lack of control they experienced when commuting, experiencing a sudden or constant stop to their commute. In the same fashion as the literature. The only time when strain is not effective, is in the experience of constant flow of traffic. The speed of travel is reported to reduce the stress from congested commutes (McLennan and Bennetts, 2003, p. 183). There was strong evidence from the data collected upon the positive relationship between commuting and on the increased lack of control experienced.

Alan, a participant in group 2 (Table 2), emphasised this factor through describing the different route he would take to remain in control of his journey. A lack of unforeseen commuting incidents leading to a complete stop, would leave him in a better frame of mind, as he a continued in a constant flow of movement:

Alan: I can come across the mountains at times, it takes you 50 minutes to an hour but you are moving the whole time and you don't get stuck behind traffic compared to the M50 where it would be an hour to an hour and a half of constantly stop, start, stop, start. It's actually better to go across the mountains even though it roughly takes the same time but you are coming in a better frame of mind because you are not frustrated....

Another participant, Ryan echoed Alan's view from the aspect of stress developing when travelling routes with constant stopping due to traffic lights:

Ryan: I would prefer to be half an hour by car because public transport takes more, but then again the N11, there are so many traffic lights that you must stop every few seconds and this is what I find is stressful, yeah I don't like this. It was clear from Sally from group 1 (Table 1), when a stressful journey had occurred the effects of the journey impacted the beginning of her day, therefore effecting her wellbeing and partially effecting her working day:

Sally: because there is nothing worse arriving to your destination, whether its work or home, stressed! I mean there are days when I get to work and I'm just like angry!

This view was also highlighted by Janine in group 3 (Table 3), although she stated the journey wouldn't affect her wellbeing within the work setting, she highlighted that her mood would change:

Janine: I don't think journey effects my wellbeing but it can definitely effect my mood and I generally feel relaxed coming into work, well I do get serious road rage, so sometimes I can be angry coming into work so it can affect how you start your day. As affecting wellbeing, I don't think this is effected

Other participants may not have emphasised negative relationships when considering hindrance to their journey, but highlighted how they felt when either depending on public transport or on colleagues to car-pool.

Jacquelyn: Yeah it restricts you, you don't mind doing lifts here and there, once or twice a week, but it does restrict you, like say if you want to leave early or have a doctor's appointment

Pearce: Sometimes when I know I don't have the car the following day, I either try to organise with Donal or with somebody else because I know there are a few colleagues living in Charlesland. I don't like to car-pool unless there is a way I can contribute as I don't think... I would rather pay my bus ticket and be tied up with the bus schedule than hop in someone else's car and have him restrict his freedom to do whatever he likes... It was clear from the data collected, lack of control and independence brought stress, frustration upon the employee when travelling either into or from work in the evenings. Whereas those who rarely encounter this form of hindrance are happy with their journey and have the sense of happiness when reaching their destination.

5.2.4 Seasonality

Winter has a huge effect on the mood of the employee when travelling to and from work compared to the effects the summer would have on the individuals. The tone from each of the three groups was negative when describing their travel in the winter compared to the positive tone detected when describing the travel in the summer. Summer had a positive relationship with wellbeing and a negative with winter and wellbeing of the employee.

Declan: It's the stop, start, stop, start....because at least on the motorway, again I don't mind motorways but again during winter I agree it's very stressful with dark and wet and all that.

Clear too see across the groups a negative relationship between commuting in the winter months to employee wellbeing. It was clear the aspect of frustration, anger and tiredness were evident in the tone of the participants when describing how they felt when commuting during the winter months

Sally: Yeah, in the winter time it's definitely the toughest and like you said (refer to participant), you can get home from work and you are just plain exhausted and then you are going straight to bed and thinking this is not a life for me; to be getting up, going to work, coming home, having dinner and going to bed. That's not a good work – life balance.

Another respondent mentioned during the winter month's a strict routine is essential. Linked the difference between travelling in the summer to travelling in the winter

Evelyn:and I think that is also the time...like you, Cian, leave early and I think....now if I'm not in the car, leaving my estate by quarter to or ten to seven, even ten to seven is too late I know, I will get stuck. If I was to leave at seven, I won't get in for you know eight or after eight. Okay maybe not during the summer time but winter time definitely

A view was highlighted from those using cycling as their mode of transport either a few times a week, if not throughout the entire working week. By using this mode of transport in the winter, their commute was further restricted compared to cycling in the summer. Most of the employees cycling not only used this mode as a form of transport but also as their point of exercise, which in turn, when hindered, the exercise was effected which can later effect mood and wellbeing:

Cian: I mean I have a very different aspect from summer to winter. I try to keep up cycling in the winter as much as possible but there is many a day it's horrible and you go, 'I'll get the car''.

Annie: I'm not living far, it's only 10 minutes by bike but when it's raining it's not the best, but for the moment it's okay...

5.2.5 Expense to consider when commuting

Each of the three groups saw expense of travelling as a stressor, especially when considering and deciding as where is the best option to live. Comparing the cost of travelling by public transport to using the car was an evident factor. This seemed for most travelling by car, the more effective option over paying for public transport:

Declan: When travelling alone you are not saving much, so the cost of petrol is all on me. When you think about the bus is quite expensive now as well, even if you have a Leap card you are still almost, if not over a \in 5.

Maeve: but isn't the train also more expensive, if you needed a car at the weekends as well you are paying both tax, for your car insurance and then getting the train on a weekly basis as well, it's added expense.

The interesting point highlighted from group 2 (Table 2) was the current situation within the housing market. Most of the group were actively house hunting or had just recently bought. The commute was a large factor for them to consider when buying as most had to comprise the commute to live in a more affordable location.

Morris: The thing is the prices of South county Dublin and north Wicklow is too expensive or they are very close or what you pay is not quality or you could pay crazy money for a house here in Greystones or in Bray and it may not be worth it...

Kim states: Yeah, it wasn't pleasant having all those discussions, as you didn't want to buy in the South side because it's too expensive but I like working here in Bray and you know now that we are looking to buy a house it makes sense to...my boyfriend works city centre so it makes more sense to go between the two of us. Yeah it's not a fun discussion, especially with the costs

Those travelling from the GDA into Dublin city centre highlighted a positive relationship when considering the cost of commuting. Although Alan and his wife had already made the decision to settle outside the city centre, where the housing market was more affordable in the Kildare region. They have seen the positive with infrastructure improving, but only from the public transport aspect into the city centre and not from Alan's case when it comes to driving.

Alan: My wife would commute to Dublin every-day and it has actually worked out pretty well because of the expansion of the commuter train to include Sallins and Naas, so they have actually reduce the commuter ticket price from whatever it was before and again she is lucky because she works in central Dublin, so I think it depends on your circumstances, it can work out well in some instances like public transport but it purely depends on where you are travelling to and where you are coming from.....

It was clear from the results that expense of commuting is a factor considered by most. The concept was considered from the most affordable choice of transport to the most affordable living area.

5.3 Understand if different modes of transport have an impact on the feelings experienced by the employee during the daily commute

The study sought to determine if different modes of transport have an impact on the feelings experienced by the employee during the daily commute.

The researcher wanted to find out a little more information on how an individual/employee perceived their mode of transport and the effects this mode had on either their mood or wellbeing. The responses allowed the researcher insights into the following emerging themes; *feelings associated with different types of commuting* and *the comparisons associated between different modes of transport* to lead to a choice of one mode over another to have less of an effect on an individual's wellbeing.

Theme 2: Feeling associated with different type of commuting modes

Theme 2 saw the following feelings emerging: anger and annoyance when different modes of transport were highlighted. There was a negative relationship between forms of public transport and the effects they had on each employee. The positive response arose when cycling and active transport was considered, the feeling of being happy was evident.

5.3.1 Feelings associated with Public Transport

As stated above, public transport (public and private buses, commuter trains, the DART and the LUAS), the feelings of anger and annoyance were associated to these forms. Declan and June, two participants within the first group, who travel from the city centre every-day agreed on the fact to how they felt when using the bus as their mode of transport. The anger was not only evident within their comments but also within their tone of which they explained their situations

Declan: It used to be a nightmare, I used to HATE getting the bus into work, because it's so early and the constant stopping and starting was a pain

June: When I first started in the company I didn't have to use public transport much, I got to go with Amy quite quickly. As in when I started coming by bus, the 145 they were extremely long journeys from the city to here, by bus because it stops pretty much everywhere.

The responses regarding using the DART or the commuter trains were positive when travelling out from the city centre but those travelling from the Wicklow area found the service as a negative experience:

Tina: Can I add an extra comment: I'm only a 15minute walk from the train station in Wicklow town but going to work with the commuter would be completely impossible because there are almost no trains and the timetable doesn't match ever

From the positive aspect to the commute by public transport:

Amy: I do see one good thing in the train is that it is along the sea so the view is quite and you have your own seat as well

Tina: On the train, you can also read or can do things, you know...if you are in the car, even if you are not driving you can get car sick anyways.

Sally:suppose we are going against the rush hour....

June from group 1 (Table 1), reiterated from a positive aspect how car-pooling works and led on from the view she would be happy to travel by Dart or Car-pool over driving alone:

June: Car-pooling is nice because we get to talk about things in general in the morning, like I'd prefer to car-pool or take the DART, and not drive on my own because it can be boring.

5.3.2 Feeling associated with Active Transport

When the factor of active transport (cycling, walking) was discussed the tone of the participants was positive. Cian, a participant from Group 2 (Table 2), cycles up to three times a week and is travelling the furthest compared to those in Group 1 and 3. His response highlighted the factor of combining both transport and fitness together and stated that he almost plays on the fact that his commute is quite extensive and long, he uses the mode of cycling as a release.

Cian: Cycling for me, well I basically I combine fitness. It's an easy way to combine exercise and commute, it takes less out of your day. If I went home and then travelled 60km it would take another two hours after I've driven for two hours so its combining the two. It's also sometimes the traffic and sometimes on a Friday afternoon you just go, 'I'm cycling next week'', because you are just stuck in traffic, that's the other reason.

Cian then proceeded to state the fact as to why he has considered personal transportations, such as, the electric bike. As the experience of cycling is already grounded, Cian is accustomed to travelling the distance by bike.

Cian: I was considering the electric bike as its one of my all-time aims for in terms of transport is to reduce the fact of having two cars and it's not environmentally friendly and sustainable and therefore we have talked about getting an electric bike to be able to cycle five days a week. I would investigate.

Another participant, Annie from Group 3 (table X), travels a short distance everyday but her frustration with the cycling mode of transport was from an aspect of organisation is key to her and can bring stress and a feeling of being unsafe, therefore the idea of a car by transport is more appealing:

Annie: For example, if I am going to the gym or to rugby after work and with the bike I can't carry that much and for me this is a problem because it's not safe at all. I have a big bag, the bike and everything so if I want to go to shoreline straight after, it's not the best. So for a car it is easier Theme 3: Comparisons associated between different modes of transport to lead to a choice of one mode over another to have less of an effect on an individual's wellbeing.

5.3.3 Comparisons associated between different modes of transport

What developed throughout the analysis were the comparisons associated between the different modes of transport and the experience of taking different modes of transport in the past. The participants had experienced the stress and strain of commuting by either being restricted by public transport in the past and then alternating to the transport mode of the car:

Declan: In terms of wellbeing and to go back over it again. For me going from public transport to driving had a huge effect on me for the better because you go from having an hour and a half commute in the morning and again in the evening, so three hours of your day gone to kind of 30 minutes. You have a lot more time for things to do in the evening.

Declan further the conversation to reiterate the negative experience prior to change his mode of transport:

Declan: In the past people, would say, 'let's do something in the evening', and I'm kinda thinking by the time I get home, I have to eat dinner and this and that. Whereas now that I am driving you get home faster, eat a lot faster and go out, and you can head out. It free's up your evening a little bit more depending on how you get to and from work, it makes a huge difference.

Those travelling the furthest distance had encountered public transport and resorted to taking the car to free up their personal time:

Evelyn: I did it for two days when I started working for the company first and it took me three hours to get to work because I had to get one train into town, another train down to Bray and then the bus from Bray town and it took me three hours, so after that, then I moved to Bray and when I moved back out of Bray I made sure I drove all the time.... Alan: It's the same for me, I have no other option, because public transport would take too long, to catch a train, the Luas and then the Dart followed by the bus. It's just not worth it!

Annie from group 3, although living close to the facility located in Bray, cycles most days by bike but has thought about *the need* of a car, especially on wet days and essentially not to be relying on others as a mode of transport to work, which in turn links to the factor within objective one.

Annie: Yeah for example, for me, I am ready at 7:30 but I will wait until 8:30 for me to leave so I am going to lose one hour to think how I am going to go to work without being completely wet so I have to call someone. For me I lose time waiting for nothing. If I had a car maybe I could go to work straight.

5.3.4 Comparison associated between travelling within other countries compared to the GDA

Furthering from the data analysis a strong sub-theme emerged from the review. The notion of comparing different modes of transport to experiences in other countries was strong in most of the groups experiences. What resulted was the change in mode of transport and distance travelled when moving to Ireland:

Angela: Well I know in my past I have had very bad commuting and that is why I am enjoying now. It is the fact that it is five minutes and I am so happy about it. Maybe if I didn't have this bad experience before I wouldn't be so happy about it and I wouldn't feel the joy or being so close. When I am now at home, as I said, I forget about work.

Cristina: But I think, compared to what I used to commute before, I think that fact we are car-pooling, we don't have the stress of sharing with others on public commuting. On the Dart or the bus it's okay but I remember in Paris every morning I was stressed to deal with the large amount of people The lack of options to combine active and public transport here in Ireland arose from the data. The participant suggesting the annoyance of not having the option was frustrating

Cristina: Yeah, like in some other countries you can take your bike on the bus for like example, if you only want to do half an hour cycling or where cycling stops you can take the bus and then finish by bike. Here, in Ireland, you cannot do that

5.3.5 Comparisons among people travelling within the GDA

As the three focus groups were defined from the aspect on distance of commute (section 5.5) a strong feeling of empathy to other employees travelling a greater distance, especially the M50 was highlighted. Another aspect, was the thoughts of not having the desire to ever experience the traffic observed daily, i.e. the traffic commuting towards the center of Dublin. Pre-empting situations of the congestion was strong among those participants living closer to the facility in Bray. The responses were mainly negative in relation to commuting and the effects it could potentially have on the employee.

Ryan: Yeah I don't think I could do it, it would have a huge effect on me. I mean, if I was spending or it was taking me an hour and a half to two hours to get home or into work in the morning, it would annoy me

Cristina: When we see the other side of the road, as in traffic going into Dublin, I will never do that

Margaret: We are lucky, because every-day and especially these days where traffic is much heavier, we see on the other side of the roads the heavier traffic but really heavy, like continuous traffic.

5.4 Understand the relationship between commuting and the work-life balance of employee

The final part of the study sought to understand the relationship commuting has on the work-life balance of employees. The researcher wanted to find out a little more information on how an individual/employee perceived their daily commute, in relation to commuting and balance between work and home life. From the responses, two sub-themes emerged: *Disconnection between work and home life* and *Flexibility*.

Theme 4: Factors associated with commuting and work-life balance

Both flexibility between work and commuting time and disconnection between work to home life was an important factor for the employees. These features can be linked well to the studies carried out by studies previously analysing commuting and the recovery time after the working day. Van Hooff (2015) analysed data using the effortrecovery theory, to effectively state that in certain circumstances the commute can be used as a buffer, transition, down time between home and work life.

5.4.1 Recovery between Work and the Home Life

The data collected showed the participants using their commuting time as a disconnection or buffer between the workplace and the home, which in turn had mainly a positive relationship for participants. It is clear for the employees that the recovery time was effective:

June: We often discuss in the car, those who car-pool, things that have nothing to do with work. You know people from work but you can get to know the people outside of work. It's hard some times to discuss some things about work in the car but sometimes we just decide we don't talk about work

Tina: for me I need to switch off people, so basically having my car on my own, is my switch off time. If I'm in the car with other people I can't switch off

Pearce: Most of the time I drive home and probably think of some sort of situations in work, go back home and I have that 5 to 10 minutes of chatting with my wife saying... ah... well these things happen and I need that kind of buffer time to just lay it all out and then after that I can think of other things

Other participants voiced their desire to remain in the car for a longer period to disconnect further before reaching home, but also stated that he would be only happy with forty minutes or less and would find any longer would impact on him

Donal: For me it is fine because I am such a short journey and there are times where I actually wish I was a bit longer, as I like to be in the car listening to music and that. I also wouldn't like to be too long as in I wouldn't like to go over 40 minutes

5.4.2 Flexibility

The participants/employees travelling the larger distance their work-life hours were longer to their after-working hours, which in turn, has the employees working longer hours and having less personal time for themselves:

Evelyn: I find when you come home and you have to cook the dinner, tidy up after that.....I find now that I don't do very much during the week, whereas when I used to live in Dublin the commute was less, I used to do a bit more in the evenings.

As Morris in Group 2 (Table 2) stated the fact when living around built, industrialised areas his time routine to leave in the mornings is strict compared to Angela in Group 3, where her commute is minimal therefore her time and routine is flexible.

Morris: I've noticed for myself the best time window is 7:30 or 7:45 to leave or after 8 to come to work during the winter, it's gonna take 30 /35 minutes and if you are between 7:45 to 8 its going to be much longer because then there are all the cars, parents going to school or all the big trucks going to the industrial estates and many cars going all together. I've noticed that early in the morning there a lot of trucks going to the industrial estates and then later the cars going to the business estates. This is something I think of, because when you drive these are the things you think of....

5.5 Distance as a Factor across the Three Focus Groups

The nature of qualitative research is to explore subjective patterns of group experiences and to gauge the meaning of these experiences and what have for the people involved. What doesn't lend itself well to qualitative research is the element of comparison. Although the findings didn't compare the data collected from each of the three focus groups varying by distance (Table 1, 2 and 3). The research model was executed in a way to explore within the different groups i.e. Group 1 at 15 to 30km in distance from the organisation, Group 2 - 30+km and Group 3 at 0 to 15km from the organisation, the objectives set for the research. It was in the interest of the researcher to understand if the variables of distance and duration of the commute as highlighted in the literature search would become apparent of the participants daily commuting experiences.

The findings suggested that those travelling the largest distance 30+ km emphasised the strain to which the length of the commute place on them, as stated by two of the participants, Evelyn and Maeve:

Evelyn: Yeah, the length of commuting, I think, has an impact as well, like sometimes I which it was a bit shorter so I could do more things at home because when you are driving you cannot do anything else...

Maeve: Yeah but when you are stuck in traffic you cannot control that either and that's the frustration, because it's those empty hours we spoke about earlier

Similarly, those travelling between 15 to 30 km daily, experienced negative aspects when commuting the distance but only by public transport and not by the private car. It was inevitable that the participants travelling the shortest distance sought effects of commuting but not from the fact of distance travelled, but more from the mode of transport used. Which in this case saw this group (group 3) use active transport more freely than the other two groups (1 and 2).

Margaret: When you have no issue with traffic you go straight home and you are so happy because you have much more time to do things and you even have time to think in the car what you will do at home

Chapter 6

Discussion

This chapter will link the key findings of the primary research and relate the findings back to previous literature as presented in Chapter 2. The chapter will close with the limitations of the study and possible practical implications.

6.1 Restatement of the Research Questions

The research question and the objectives established had a sole purpose to explore the wonders of commuting and to explore the effects the activity may have had upon employees' wellbeing and work-life balance. While, in parallel to also understand the current commute of the greater Dublin area. Together they accentuated the status of the land transport system around the GDA region, were true experiences were conveyed in the views of employees commuting on a regular basis to and from the workplace, in this case a facility situated in a business park on the outskirts of Bray town.

6.2 Examining the effects commuting within the GDA has on the employee and their wellbeing

One aim of the current research project was to explore the effect of commuting on wellbeing. The research found that commuting influenced wellbeing and those who commuted long distances to work felt that it affected their wellbeing. Section 6.2 explains the analysis and further links in detail to the research

The lack of investment is now impacting on the day-to-day lives of people as they commute the state's roads. The findings agreed with these statements as participants highlighted they are now experiencing longer commutes to and from the home, season dependent commutes and higher costs. This doesn't come as a surprise, as previously stated in the literature review. Melia (2016) reported that commuters are now leaving an hour earlier, to join the 159 thousand commuters using the M50 ring road transporting those from the GDA in and out of Dublin city. These commuters are now subjected to rush hour on the M50 that last eight hours a day.

A strong response regarding this statement was evident from one participant. The participant already settled living within the Kildare region and had accepted the length of the commute to live in an affordable area, settling with the idea to include the expense of the travel. Other researchers have also expanded on this factor, that the decision for residential placement is not only influenced by the voyage to work, but by the "cost and quality of housing, the quality of the neighbourhood, and the access to schools, family, and friends; and a trade-off will be made between the factors" (Lyons & Chatterjee, 2008, p. 188). Subsequently, Stutzer and Frey (2008, p. 339) also emphasised in the way that people will forgo the short distance commute to live in a desired area and the burden of commuting is chosen when compensated with the anticipated career or job.

As previously stated in the literature, workers dislike their long commutes, but the cost of moving or finding another employer is higher; which can be balanced out by their enjoyment for the non-work components of urban life (Rouwendal & Nukamp, 2004, p293). A response from one participant challenged this statement in that she would accept the level of expense to live closer to her workplace, with the view stemming from her previous employment and the current distance she is now entailing. The participant was happy to move closer to the workplace and accept the expense to potentially forgo the long-distance travel.

The primary research highlighted the element of isolation of business parks and the negative aspect of the location of the business park in Bray in relation to the public transport station in the town center. The factor limiting the participants to the most reliable form of transport i.e. the car, which in turn increases road congestion and leaving participants to sit longer hours in the car. A unanimous response with regards to improving cycling infrastructure and access to a variety public transport modes was clear. Participants were comfortable to take other modes if this factor was available. Even though there is very little literature available regarding the relationship between isolation of business parks and industrial estates and the effects this can have on the employee. What is known, however, are mobility management plans.

These incentives have arisen over the past two decades in relation to the development of industrial estates and the lack of transport these business zones provide. This was evident back in 2001, when the Eastlink business park noted this very point and established a mobility management plan. A guide produced as part of the 'Way to Go' research project, co-funded through the European Commission's SAVE II programme (2001). The guide reported that several organisations are viewing mobility management as a means of improving accessibility to their site, improving organisation image and making it easier to recruit and retain staff. What these mobility management plans can counteract are what have been stated by participants; if easy access was available to a wider variety of public transport sources or cycling paths were safe, participants would be happier with the wider variety of choice to their daily commute. Relating back to the mobility management report (2001) stating the additional external benefits of mobility management plans should not be ignored. Benefits to the wider community include reduced congestion and overspill parking into adjacent residential areas, and environmental improvements such as enhanced air quality and reduced noise.

An aspect that links strongly to commuting and the effects on wellbeing, is the factor of control or the lack of control the commuter has when either driving or relying on public transport timings and speed (Schaeffer et al, cited in Novaco 2009). The research analysed by Stutzer and Frey (2008, p. 343) links into commuting. The authors stated that commuting can be more stressful when people are not in control of certain factors that can crop up on the drive to work e.g. due to traffic congestion or when under considerable time pressure (Stutzer and Frey 2008, p. 343). The frustration was evident among the participants, especially those travelling the largest distance. One participant stated the frustration she experienced when stuck in traffic, that she was stuck in a cycle of empty hours. The experience of the travel-to-work, which cannot be considered as leisure, but equally cannot be considered work in the sense of paid employment (Wheatley, 2012, p. 815), was certainly evident in this instance This aspect can bring a huge strain to the individuals' mood and wellbeing. Others stated if the journey was shorter more could be done at home other than stuck in a car or on a bus for longer than expected. Other research has suggested that commuting stress can be reduced in many ways. These are ensuring the predictability of the journey, reducing the duration of the journey and increasing the control of the journey as analysed by McLennan and Bennetts (2003, p185). Again, a strong response by one participant, stated if he experienced a constant movement to his journey, he would arrive to the workplace in a 'better frame of mind'.

The final factor evolving from the primary data in relation to commuting within the GDA and its effect on the employee's wellbeing, was the factor of travelling at different times of the year and how season effect the travel and their mood. The participants' responses mainly linked to how though and lengthy the commutes are in the winter months compared to the summer. A Swedish study has been conducted where valence to the commute was analysed during the summer and winter months (Olsson, Gärling, Ettema, Friman and Fujii, 2013), in respect that different aspects of weather effect the mood of the participants and was not factoring in the time of year. During the winter month's in Ireland the volume in traffic is dense compared to the summer months, which mainly relates to the lack of the school traffic and the holiday period during the summer months

6.3 Understand if different modes of transport have an impact on the feelings experienced by the employee during the daily commute

The second aim of the research project was to gain an understanding of different modes of transport and the impact this may have on the feelings of employees. Interesting findings concluded to show comparisons between the different modes of transport i.e. active and public transport and then to compare to other transport systems of other countries.

Previous studies have found the car remaining as the dominant mode due to perceived lack of reliability, inconvenience, and the escalating cost of public transport (Pooley et al., 2005 cited in Wheatley, 2012, p. 818).

This was evident throughout the focus groups, the car has remained as the main reliant to employees, due to the lack of other modes of transport available in the area but also due to the reliability of public transport. Again, it related to the findings that most participants will rely on, the car, due to the isolation of the business park and to remain in control of their journey to and from the workplace. The link between the finding and the research has disagreed with previous authors who have highlighted the positive aspect to commuting. The positive effect of commuting is the potential use of public transport as an alternative workplace. This allows the time spent commuting to be productive from an organisational and individual perspective (McLennan and Bennetts, 2003, p180). The negative response from the participants was in relation to carry out work tasks on any mode of transport. Not only was motion sickness highlighted the lack of space offered by public transport forms and how this would cause more strain to themselves, along with the working tasks.

The two themes emerging from the thematic analysis conducted from the data collected on three focus groups. These sub-themes are in relation to comparison among people travelling within the GDA, were the feeling of empathy towards other colleagues was emphasied. The second sub-theme of comparison associated between travelling within other countries compared to the GDA. The researcher felt it important to state that the literature was not yet identified to discuss these thematic elements but for future research it may be a possible to analyse further. They were of importance has the interesting factor was linked to previous experiences and hence the possible feeling of empathy towards others. There could be on the other hand an element of not knowing the unknown.

6.4 Understand the relationship of commuting and the work-life balance of employees

The final aim set to discover the relationships between the commute and the worklife balance of the employee. The research found that the need for improved flexibility to the employee was needed. Travelling the large, congested roads around the GDA was not sufficient to the employee's flexibility traits any longer.

For many, travel-to-work creates mobility and flexibility, acting as a bridge between work and home. However, it is also a potential source of constraint and conflict (Wheatley, 2012 p815). This statement was proven correct by participants, especially those travelling the largest distance. The participants highlighted when they were subjected to longer working hours, their journeys home would add to the lengthy time and therefore impact on their personal time after work.

This left a participant stating about the lack of time to either cook the dinner, interact with family to then consider the cycle of work and travel to begin again the following day.

The practical implication for those employees, especially travelling the longer distance, would be the case for the organisation to introduce a wider choice of working hours to the employees. Therefore, the employees have a wider window to travel to and from the workplace to avoid the pain of commuting, as stated by one participant, 'empty hours'. It is not unknown that flexibility has positive impacts, as evidence has suggested, higher levels of satisfaction with work, indicative of perceived improvement, have been reported among those using flexible working arrangements (Wheatley, 2012; Kelliher and Anderson, 2008; Hyman and Summers, 2004, p424). A positive relationship to these suggestions was evident as participants agreed to the fact of teleworking and improved flexible hours would strengthen the divide between work and home life.

Another point to consider and has been emphasised in many studies, the transition that can occur between the workplace and home, or vice versa, in the mornings, from home to the workplace. These transitions, disconnection or buffer times have been analysed by the author Van Hooff. Van Hooff (2015, p133) analysed the recovery status of the employee/commuter. It was found that relaxation during the commute from work to home was positively related to serenity after returning home from work, also after taking commuting time into account. For stressful delays, as expected, an opposite pattern of results was found. These results support the assumption that experiencing relaxation during the commute home is beneficial for employees' recovery status, whereas experiencing a stressful delay impedes this process (Van Hooff, 2015, p133). This statement was echoed by majority of participants, especially those using the mode of car-pooling. It allowed the participants to share thoughts about the work-day in the evening but then to transition into conversations about the normal activities of their personal life. There was a positive tone noted when participants spoke on this subject. Another participant even voiced that he would prefer a longer journey, just for the fact to switch off before or after the working day.

6.5 Limitations and Implications for further Research

The researcher found there to be limitations when analysing the data of the current project.

Due to the three-month time scale, resourced to the research project, it allowed the researcher to conduct the analysis using one method, being of a qualitative nature. Comparing to previous research in the realm of the commuting world, some used longitudinal studies, to which participants were advised to fill diary entries for the duration of three-week studies. Therefore, if the resources and time were allocated to the researcher of this project, the method of analysis to stem to a three-week study to understand deeper how the daily commute influences employees. This would give the researcher real-time information with the possibility of analysing situational wellbeing coupled with commuting

The focus groups used for the study were highly populated with either single participants with no children or married participants with no children. If extra time was allocated to the project the researcher would incorporate a in which all participants had the demographic of being a parent under strict routines. In the opinion of the researcher, this would allow for further in-depth knowledge of the subject in relation to commuting and working time flexibility on work - family life. There would also be the potential to conduct a questionnaire based survey to look at the wider picture before, conducting the in-depth view.

In combining the three research areas of commuting, wellbeing and work-life balance. On reflection, the researcher would advise to either further analyse the categories of commuting and wellbeing together or commuting and work-life balance. Time was of the essence during the research project, to have a time-scale of six to twelve months would allow the research to delve deeper into the literature, along with themes that emerged and could not be linked fully to any recent literature. In this case the unexplained emerging themes could fill gaps to what is missing in the literature. The researcher only later into the analysis of the literature phase of the dissertation happened upon a recent study by Sposato, Röderer and Cervinka (2012). The study looked at the impact of several factors on the stress that commuters experience and clarified relations between the said variables (control, predictability, impedance and stressor to the journey), to which previous research only investigated the variables as a separate entity. The researchers devised a model of source on commuting stress (Diagram 1). What was evident from the study were commute characteristics, i.e. impedance, predictability and costs to the commute and stressors link to control and environmental stressors.

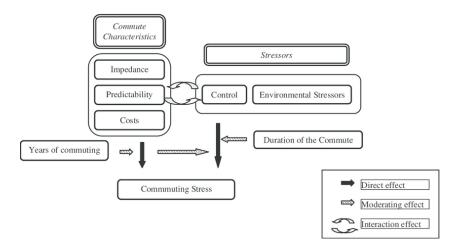


Diagram 1: Model of commuting stress source (Sposato, Röderer and Cervinka, 2012, p. 586)

The researcher of this dissertation project believes that using the thoughts of Sposato et, al 2012, would be of huge interest. Linking the themes emerging from this research project and understanding in relation to the model of diagram 1, would allow further and insightful avenues to understand the role of commuting in Irish society.

Chapter 7

Conclusion and Future Research

7.1 Conclusion to the Study

The research and its purpose was to investigate under an exploratory manner the relationships between commuting and the effects this phenomenon has on the employee wellbeing and work-life balance. The main area of interest was of those travelling from within the greater Dublin area. Therefore, to achieve the results the researcher adopted a qualitative method using three focus groups travelling within the greater Dublin area. Each focus group varied by distance travelled to and from work daily. Data collected was presented in the form of themes that arose from the findings and from which the following conclusions and recommendations have been made.

Objective 1: Examining the effects commuting within the GDA has on the employee and their wellbeing

Those employees commuting within the greater Dublin area (Wicklow, Kildare, Meath and the city centre of Dublin) had various traits and experiences of the variables as described in the literature i.e. control, distance and impedance to the commute. The factors highlighted to impact on the daily commute and wellbeing of the employees were of: isolation of business parks, lack of control when commuting, seasonality and expenses to consider when commuting. It was clear from the study both negative and positive emotions tied in with these factors

Objective 2: Understand if different modes of transport have an impact on the feelings experienced by the employee during the daily commute

The responses allowed the researcher insights into the following emerging themes; *feelings associated with different types of commuting* and *the comparisons associated between different modes of transport* to lead to a choice of one mode over another to have less of an effect on an individual's wellbeing.

It was evident from the results that the negative relationship lay with the mode of private car but when driving alone. Those using car-pooling as an option expressed joy in relation to communication with others. Those using active transport, i.e. cycling or walking were happy with the choice of mode, but during the winter months the effect took a negative tone. The two themes highlighted upon empathy for other colleagues commuting long-congested routes and the comparison of previous travel on public transport in other countries. The research could not be linked to these findings but could be of interest for future research.

Objective 3: Understand the relationship between commuting and the work-life balance of employees

From the responses, two sub-themes emerged: *Disconnection between work and home life* and *Flexibility*. The information expressed the relationship and linked well to the literature. The outcome from the findings had a strong affiliation to suggestion to evolve the aspect of flexibility in the work place. In this case the participants felt their work-life balance could be further improved while also alleviating the strain of the commute on the employee. If it was possible to extent the work hours either side of the 9 to 5 core hours, the participants felt they could then work around the forever populated congested roads they are subjected to daily.

In conclusion, the research question and the objectives established had a sole purpose to explore the wonders of commuting and to explore the effects the activity may have had upon employees' wellbeing and work-life balance. While, in parallel to also understand the current commute of the greater Dublin area. All three concepts of employee commuting, wellbeing and work-life balance were effectively analysed in relation to the effect commuting can have on the individual.

7.2 Future Research

After concluding the study and affirming that commuting does have to some degree an effect to an employee's wellbeing and work-life balance. There are future possibilities to further commuting research from an Irish perspective.

It is fair to say that this research was conducted using the exploratory nature of qualitative research but to further emphasise these effects the use of a mixed method analysis would allow the research to further into a larger population of those commuting daily.

Mobility management programmes are available for use in any industrial or business parks wishing to incorporate transport for those isolated from any means of transport. Therefore, to achieve an efficient service for those employee's, a large survey could be circulated to quantify information for companies budgeting for future investment into means and ways for their employees to attend daily work in a stress-free manner.

As this research study was conducted during the summer months, it could be an opportunity to use the analysis method developed for this research project and repeat during the winter months.

Following from here is would also be interesting to take the study or the premise of the study to national level. Only a small sample was used and specific to a certain segment of the GDA, therefore it would be interesting to extend the research to a larger population of the GDA, with the potential to bring to a national level. Of course, separating to the quantitative surveys used by the National Transport Survey annually.

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Appendix 1: Pilot Study working questions and ideas

Pilot Study Questions – Aim to Refine

The aim is to place the questions under headings/themes and include sub-questions under the main for or 5 questions.

- 1. What mode of transport do you take to and from work? Why?
- 2. How work-life balance impacts on the wellbeing of employees of X facility
- How commuting within the great Dublin area impacts on the well-being of employees of X
- 4. Is commuting by car a necessity or taken for granted (use because it's easier)
- 5. What is your choice of transport to travel to work?
- 6. Do you travel alone? Why?
- 7. If not, why do you car-share? Do you find this is more of a stress?
- Do you ever consider your safety on your daily commute to work? will this link to people with families or people in general
- 9. During the past month, has there been a stop to your commute? If so, why, what, when and for how long?
- 10. Do you ever feel strain in the evenings before heading home? Whether it's to meet family life tasks, exercise regimes, others?
- 11. What are your perceptions when it comes to travelling at different stages of the year? Do you feel of a different mood? Seasons into account
- 12. Do you feel the organisations offers open flexibility
- 13. The new national framework for Ireland, Healthy Ireland, is there a way we can integrate this into the corporate setting?
- 14. Is there an understanding of well-being amongst the staff? Do they understand what it entails or even considered it?
- 15. Have you travelled the distance and moved close to work because of the commute?
- 16. Have you considered finding a new job to be closer to home and why?
- 17. Have you considered walking or cycling to work?
- 18. If the infrastructure was built in the area surrounding our facility in Bray, would you consider walking, cycling to work?

Appendix 2: Example of email sent to potential participants

Date 5th July 2017

Dear potential participants,

As some of you may know, I am currently at completion of my Master's degree (MSc in Management). The course is now at the stage of dissertation level, involving focus group (group interview) analysis to take part as part of the project.

The focus group session, in which, I am conducting on the 17th July at 11am, will host those participants living 15 to 30km from the facility here in Bray.

The background to the research will analyse the main question of the dissertation: [Working Title]: *The perspective of full-time employees from a Research and Development facility commuting within the Greater Dublin Area: How does commuting effect employees Wellbeing and Work-Life Balance*

The focus group analysis will allow me, as the researcher, to understand if commuting contributes to a negative or positive way of thinking while considering employees Wellbeing and Work-Life Balance. The focus group session will last no more than 45 minutes and recording of the session will take place. You, as a potential participant are under no obligation to take part if you feel uncomfortable or unwilling to take part in a group interview environment.

When all participants have agreed to take part I will forward the consent forms individually for you to sign.

If you have any queries regarding the setup or structure of the focus group, please do contact me at my usual address.

Thanking you all in advance.

Kind Regards,

Jessica



The perception of full-time employees from a Research and Development facility commuting within the Greater Dublin Area: How does commuting effect employees Wellbeing and Work-Life Balance (working title)

Consent to take part in research

- I..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand data will be stored until 21st July 2022 (according to NCI research ethics guidelines)
- I can withdraw my data (consent forms and original audio recordings and transcripts) until the point that the thesis has been submitted on 25th August 2017
- I have had the purpose and nature of the study explained to me by email and
 I have had the opportunity to ask questions about the study.
- I understand that participation involves voicing my opinion to questions asked within a group interview environment
- I understand audio-recording will take place during the group interview
- I understand that all information I provide for this study will be treated confidentially and I will remain anonymous in any report on the results of this research
- I understand that disguised extracts from my interview may be quoted in the body of the thesis report, which is held on the premises of the National College of Ireland.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Participant Signature and Date	
Researcher Signature and Date	

Appendix 4: Post-Pilot refined Questions for focus group sessions

Questions for Focus Groups Week commencing 17th July 2017

Beginning of the session the researcher will ensure and explain to participants:

- All participants are comfortable with the statements highlighted in the consent forms.
- A brief explanation on the back ground of the project i.e. That the premise is based on the daily commute to and from the work-place and to see if this influences employee wellbeing and employee work-life balance
- The session will be recorded from the time the researcher will ask the questions.
- The recordings will only be heard by the researcher
- The researcher may call the participant by name during the group discussion, for ease of later transcribing, but as participants you will remain anonymous during the report writing or any writing that may happen thereafter.
- State that at any stage, any participant would like to leave, they have every right to do so and the name of the organisations they work for will remain confidential.
- Feel free to talk around the subject as much as possible, whatever comes to mind and open the discussion, if however, the researcher feels like we are going off in a tangent, the researcher might just draw participants back in or stop you if the researcher feels they have enough information.
- The researcher will have the computer present, so please don't feel ignored. The researcher will let the participant talk and the researcher to listen

The questions will be used as a guide in the event participants are going off topic and due to the short space of time questions need answering.

The session to start with a quick ice breaker - The participants to answer three questions, out loud...Where do you live i.e. area? How you get to work? Favourite after work activity?

Section 1: Transport/Commuting

Participant X you said you travel by travel mode X, why is this your choice of?

- 1. Why is this your choice of transport to travel to and from work?
- 2. Have you considered other modes of transport?
- 3. How do you feel arriving into work and again arriving home from work after your daily commute?
 - Would you ever feel the strain of commuting either to or from work?
- 4. What do you do with your time while commuting to and from work?
 - Would you carry out any work tasks during this time?
- 5. Do you find your journey is hindered or delayed on a regular basis, and if so, how does this make you feel?
- 6. Have you moved/ considered moving closer to work to reduce your commuting time?
- 7. How does your summer commute differ from your winter commute, if at all?
- 8. Do people car-share in the mornings and/or the evenings? Why?
 - Do you think there are any negatives to car-sharing?

Section 2: Health and Wellbeing

- 1. What does wellbeing mean to you?
- 2. What does wellbeing in the workplace mean to you?
- 3. Do you think commuting to and from work influences your wellbeing?
- 4. Does the thought of your commute home have a negative effect on your work performance?

Section 3: Work-Life Balance

- 1. What does work-life balance mean to you?
- 2. Do you think this Work-Life Balance, is effected by daily commutes to and from work?
- 3. Have you ever worked outside the flexible hours, either morning or evening, to avoid traffic? If, so how often? Do you feel less strain is experienced?
- 4. With traffic congestion rates steadily increasing, what could the company offer to its employees to alleviate the stress of commuting.