The Female Non-Cyclist: An Exploratory Study into the Low Levels of Participation in Cycling Among Females in Dublin

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I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of BA Hons Media Production Management is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Abstract

This exploratory study investigates the barriers to participation in cycling for females in Dublin. A large disparity exists between both genders who cycle for transport and leisure in Ireland 15.1% of male's cycle more frequently nationwide in comparison with only 6.1% of females. Females state that the lack of appeal of the activity of cycling is one of the key factors limiting participation in cycling compared to men. Despite the proposed measures by government to increase participation in cycling by 10% by 2020 and create a cycling culture in Ireland as discussed in the National Cycle Policy Framework 2009-2020, little progress is being made. The proposed measures in the National Cycle Policy Framework 2009-2020 are further delayed by the lack of investment in cycling infrastructure as laid out in the latest Capital Spending Plan 2016-2021.

The Road Safety Authority (RSA), a statutory organisation funded by and reporting to The Department of Transport, has the responsibility for promoting safety on the roads in Ireland for all users. The use of campaigns with the words 'vulnerable' when promoting safety specifically to cyclists is common and provides a very negative narrative and one-size-fits-all approach to safety. This narrative does allow a tailored approach of delivering a message of safety that needs to take into account the differences that exist in perception between males and females in emotional responses and risk aversion.

The research that informs Irish government reports to encourage cycling appears to be informed from research that has been carried out outside Ireland and due to cultural and infrastructural differences, lacks an understanding of the barriers to cycling for females. Therefore there is a gap in the literature that explores this topic from an Irish perspective.

This issues in the exploratory study are viewed through a theoretical feminist lens. The research employed a sequential mixed methods approach using face to face interviews and an online survey. The key findings that emerged suggests that infrastructure, the pressure on females by society to be presentable and ineffectiveness of safety campaigns are the biggest barriers to cycling for females in Dublin.

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1.0 Introduction

The aim of this research is to examine the perceptions of female non-riders to cycling in Dublin in an effort to understand the physical and psychological barriers that discourage participation in cycling at all levels including sport, transport and leisure. There is significant increases in women participating in sport in general, but there remains a disparity in the numbers of females cycling for transportation, sport and leisure compared to men. The Irish Sports Council (2013) statistics show that 15.1% of males cycle more frequently nationwide in comparison with only 6.1% of females. The lack of appeal of cycling is one of the key factors limiting women's participation and risk aversion among females due a lack of separated cycle lanes from motorised traffic is a major contributor to the low levels of participation in women (Garrard, Rose and Lo 2008). Other factors that were found to play an important role in the decision for female's to cycle, especially among non-riders include weather, distance, route connectivity, steep topography and grooming and cargo issues (Broache 2012).

The health benefits of cycling are substantially greater than the risks involved and society in general also benefits from cycling due to a reduction in air pollution and greenhouse gases and traffic accidents compared to automobiles (De Hartog et al. 2010). However, there is a complex interaction between what influence an individual's decision or choice such as attitudes, beliefs, values and emotions (Bamberg et al 2003, Chen and Chau 2011), especially when making a choice regarding to cycle or not. The role of an individual's culture and how that culture translates into knowledge and therefore beliefs is one that is shaped by many factors.

The Road Safety Authority (RSA), a statutory organisation funded by and reporting to The Department of Transport, has the responsibility for promoting safety on the roads in Ireland for all users. Campaigns often appear on mainstream media and other outlets to ensure maximum exposure. In relation to cycling, campaigns often refer to cyclists as 'vulnerable road users' when promoting safety which is a very negative narrative and one-size-fits-all approach to safety. This narrative does allow a tailored approach of delivering a message of safety that needs to take into account the differences that exist in perception between males and females in emotional responses and risk aversion.

The media plays an important role in the shaping beliefs and attitudes. Women in general are largely underrepresented in the media when compared to men (Davis 1982, Potter 1985,

Greenwald 1990, Duncan, Messner, and Williams 1991, Zoch and Turk 1998). It is argued that the disparity in coverage is not only reflecting gender inequalities that exist in society but also it is the media practices which includes the extent of coverage, the type of coverage, the style of coverage and the production value which magnifies the inequalities (De Swert and Hooghe 2010, Tuchman 1978). When women do appear, they are often portrayed as submissive and weak which informs audiences what is valued and esteemed in society and women are subject to a symbolic annihilation (Tuchman 1978). Women are also frequently sexualised and this leads to stereotyping of women which portrays a negative image which contributes to the trivialising of women at all levels and especially in sport (Creedon 1994)

Coverage of women sports and cycling in particular, is not afforded the same amount of coverage as men in Ireland. Men are often afforded live coverage while women's sport is often shown at a later time or often at a later date. (Shor et al 2015) found that media outlets that are led by women tend to allocate more coverage of women in certain newspaper sections. Their evaluations of the various theoretical explanations for the persistent gender gap in media relates to the persistent dominance of men in top positions. This directly correlates to the lack of representations of women in the media and that almost all coverage focuses only on a small number of famous individuals in sport whom are largely men (Shor et al 2015). Based on this information, there could be a link between the low participation rates of females cycling in Ireland, specifically Dublin that is influenced by the media. However there has been no research carried out to confirm this.

This research seeks to examine the perception females in Dublin to cycling in an effort to understand the barriers to cycling for females. By employing a sequential mixed methods approach to the research, recommendations will be presented to the findings of this research in an effort to provide a voice to those that are underrepresented.

1.2 Research Rationale

This research will operate as a starting point to understand the Irish perspective, specifically a Dublin perspective, on what the perceived barriers are for female non-riders. I am extremely interested in advocacy for underrepresented groups and the social inequalities of gender that permeates society. There are unwritten but largely spoken of, societal rules that that denotes that women must maintain certain level of presentation and 'look good' at all times and behave a certain way and it is my belief that this, coupled with the lack of media

representation of females in sport, it is my belief that, that may have an effect on cycling rates for women in Dublin.

2.0 Literature Review

2.1 The Historical Perspective on Females Cycling in Ireland

In the 1880's in Ireland small numbers of women around Ireland began to ride tricycles which attracted a lot of negative attention as Griffin (2006) presents in a collection of media publications from the late 19th century. Irish Cyclist and Athlete (1886 cited in Griffin 2006 p223) reported that "Lady cyclists are now showing themselves. No less than three were spotted out at the same time one day last week". Women cycling for fun, or even worse for sport, and 'being seen' was frowned upon.

The males that participated in modern sports in the late 19th century in Ireland had many prejudices about sportswomen. Griffin (2006, p215) states that "Irish society and the Irish cycling world were slow to accept the idea that cycling was an acceptable or respectable form of activity for women". Articles in the media and letters which appeared in the publications, that were mainly written by men, demonstrated their outrage, disgust and amusement at the notion of a women cycling, especially on her own or unaccompanied by a man (Griffin 2006).

The late 1890's saw the introduction of the safety bicycle which gave women more mobility which equated to more freedom and independence. An independence that sent shivers down the backs of men mostly out of fear of a loss of control of women. This fear was masked as a worry about the clothing worn during cycling and the negative health effects. Women riding bicycles in their skirts and dresses with their bloomers on show promoted much public debate at this time. Many medical reasons were given as to why women should not cycle as it was deemed that cycling was too strenuous for women due to the physical effort required (Garvey 1995). This was also given as a reason why women should not participate in other sports too. It was further feared that cycling could have a negative impact on a women's reproductive system and could also lead to gout, epilepsy and tuberculosis (Strange and Brown 2002).

Women in this period were viewed as weak and invalid. Men viewed women cycling as a challenge to conventional opinion (be it consciously or unconsciously), on what was deemed as appropriate behaviour for women (Griffin 2006). Strange and Brown (2002, p616) states

that "the bicycle posed a challenge to the doctrine of separate spheres by offering women a way to escape the physical confines of the home". Perhaps that challenge was not just to the physical confines but the emotional ones constructed by the confines of a patriarchal society.

Many women persisted in their actions and continued to cycle despite the disparaging comments. Enterprising classes were given by innovative cycling agents where beginnersmainly women- were given lessons on how to mount and ride their bicycles and how wearing the right hat that was most attractive when cycling, was key. The persistence by women to cycle paid off as the first women-only bicycle clubs began to pop up throughout Ireland in the late 1890's and demonstrated how Irish society had grown accustomed to the sight and concept of the female cyclist. Griffin (2006) suggests that one of the reasons that they were accepted is down to the fact that the majority of women conformed to the proper behaviour while cycling which included wearing the appropriate dress, which was a long skirt and that there was no riding at a rapid pace also known as scorching. Irish Cyclist (1893 as cited in Griffin 2006, p237) declared that "Any woman who cannot remain feminine in nature and behaviour when on a cycle would do well not to mount one at all if cycling is to become popular". This further demonstrated the levels with which the media, mostly men, tried to dominate and control women who cycled for if they didn't comply, fear being cast out or advised to stay away from their bicycle altogether. Culturally, it also perpetrated the belief that women need to look a certain way to be accepted.

This media reaction to female cyclists shapes the cultural context of when cycling was introduced in Ireland and perhaps has left a negative memory in the psyche which contributes to the male domination of cycling in Ireland and the lack of participation by women. Women were told what they could wear, how they could behave and if they didn't comply they would be looked down upon and treated in a negative manner. In the 21st century, although women are free to participate in cycling, they are still under extreme pressure to look good, be presentable at all times and comply with the demands society places on them. A study in Seattle by Broache (2012) on the barriers to cycling for female riders and non-daily riders, found that the most frequently selected barrier for women to cycle was in the pressure of having to be presentable upon arriving at their destination. 54% of the total respondents worried about the difficulty in changing clothes and grooming in general (Broache 2012).

2.2 Infrastructure & Environment as a Barrier to Cycling

There are many benefits to riding a bicycle. Regular cycling can contribute to improved health and well-being, ensure less pollution and traffic congestion (De Hartog 2010). Despite the positives of cycling though, there are also barriers to cycling, especially in urban environments due to lack of physical infrastructure and transport (Bauman et al, 2008). Many Irish reports by government rely on research into cycling behaviour to tackle the issues relating to infrastructure and transport at home. In relation to cycling, Ireland's first National Cycle Policy Framework 2009-2020 (2009, p6) seeks to create "A culture of cycling will have developed in Ireland to the extent that 10% of all trips will be by bike by 2020". The aim of this policy examines how transportation in urban and rural areas need to be designed to be cycling friendly. Within the report it is acknowledged that the quality of dedicated cycling facilities are inadequate and are not encouraging an increase in cycling numbers.

Dublin has 120km of on road cycle lanes at present but many are not connected up with others around the city. Plans for an expansion of the Liffey cycle route which will run from the Phoenix Park to the end of the Quays has been postponed due to problems with planning and the route itself. The National Cycle Policy Framework policy poses a hierarchy of measures be introduced with a focus on reducing volumes of through-traffic, especially HGVs, traffic calming traffic / enforcing low traffic speeds in urban areas and making junctions safer for cyclists The policy's objective is to also redesign infrastructure to be more cyclist friendly through the widening of carriages to fit in cycle lane, or separated cycle lanes and removing one-way systems that hinder cycling.

There is a high correlation of increased numbers in cycling with separate cycle lanes and greater levels of commuter cycling at city levels in many of the 90 largest metropolitan areas in the United States are associated with lanes and paths in general (Buehler and Pucher 2012, Forsyth and Krizek 2010). With this evidence therefore, the National Cycle Policy Framework measures should improve cycling participation rates in Ireland. However with the introduction of the latest Capital Spending Plan 2016-2021 (2015), out of \in 10 billion, only \in 100 million is allocated to 'active' travel which includes both walking and cycling which equates to 0.5% for cycling alone. This low allocation of funds decreases the likelihood of the implementation of National Cycle Policy Framework and means that there is little chance of the 10% increase of all trips being taken by bicycle 2020.

The lack of funding being allocated in the Capital Spending Plan (2015) shows the lack of commitment in Ireland to change its dependence on motorised transport. Many reports have

determined a need to increase the use of alternative modes of transport and in turn curb the carbon emissions in line with the European Commission commitment to reducing carbon emissions throughout Europe, but Ireland is failing to reduce these emissions. Transport is the second largest sector after agriculture and it accounts for 29% of carbon emissions in Ireland (Environmental Protection Agency 2015). Ireland is expected to miss its existing target of a 20% reduction of carbon emissions by 2020 and a new figure and date have been set which seeks to reduce emissions by 30% by 2030 (RTE.ie 2016). The moving of the goal posts will possibly continue to have a negative impact on real measureable increases in cycling and the infrastructure changes required to increase participation in cycling for transport.

Another problem in delivering on promises is the delayed Dublin Bikes Scheme expansion plan. Dublin Bikes is a public rental bike scheme that has operated in Dublin city since 2009. The scheme has 1500 unisex bikes and over 100 stations with subscription costing \notin 20 per year. Plans to upgrade the scheme to 5000 bicycles and include 300 stations by the end of 2016 have been put on hold due to a lack of funding available by Dublin City Council.

Alam et al (2013) found that disproportionate investment in road infrastructure resulted in larger volumes of road traffic as opposed to other more sustainable modes. This is refuted in studies by Banerjee and Hine (2016) who confirm that there is an extremely car-dominated society in Northern Ireland, with Belfast found to be the most car dependent city, despite the amount of money allocated by government for improving infrastructure being four times more than the amount allocated for public transport. This proves that infrastructure alone is not the only factor that plays a role on encouraging people to cycle as an alternative to motorised transport. And while this research provides a framework for thinking about how infrastructure plays a role in encouraging cycling as a mode of transport for women, many researchers claim that there is not sufficient data to fully understand what the role of infrastructure plays on cycling behaviour by either gender (Dill 2009).

2.3 The Automobile as a Barrier to Cycling

Ireland as a nation has a particular love affair with the automobile and the infrastructure generally is suited to them compared to bicycles. The total number of passenger cars purchased in 2015 was 124,945 (SIMI.ie 2016). This is quite a high figure for a country just out of a recession. When contrasted with results for the first half of 2016 in which 101,338 passenger car vehicles were purchased (SIMI.ie 2016), this figure could double by the end of 2016. This demonstrates an extreme dependency on the car. The car culture that exists in Ireland is further supported by the saturation of car advertisements that sell the idea of 'the good life' that is linked to owning a car and drowns any promotion for cycling.

Traditional advertising of automobiles before the 1920's and 1930's were about the technical inner workings of the car and were presented as parts and machines and advertising focused on the safety features. It was not until the late 1930's that cars advertisements began to focus less on the functional features of a car and painted more idealised scenes and demonstrated freedom while appealing an important component of the personality and were promoted as a status symbol (Laird 1996). Initially women in the 1920's and 1930's were depicted in car advertisements as in control of their destinies but after the 1930's and World War II, they were portrayed as helpless passengers who only cared about the makeup mirror (Berk 2013). In the 1980's automotive advertisers began to target segregated and repressed groups and included them in their marketing strategy to capitalise on, and began to specifically sell cars to women (Berk 2013). Thanks to clever advertising, car ownership by the mid-20th Century became commonplace and bicycling, as a transportation form, continued to decline dramatically among both genders but especially women. Women believed they needed a car for doing things that they enjoyed doing and were less likely to cycle (Emond et al 2009).

Rissel et al (2011) highlights that cycling is perceived to be risky by non-riders because of traffic and that it's less safe than a car. However, road deaths involving a car in Dublin is down from 29 in 2014 to 17 in 2015 and nationally fatalities are down 14% (RSA.ie 2016). Pedal cyclist fatalities were highest in Cork with 2 fatalities and there was none reported for Dublin in 2016. Pucher et al (2010) indicated that as the number of bicyclists on the road increases, the likelihood of injuries declines, as it is believed there is more safety in numbers.

In the Netherlands, cycling is a common mode of transport and 55 percent of cyclists are women. (Pucher and Buehler, 2008). However, there is still a reliance on the car. Engbers and Hendriksen (2010) undertook a study in the Netherlands to examine why despite the effort

going into campaigns to promote commuter cycling, was there still a large amount of commuter journeys of up to 5 kilometres, done by car. 41% of those surveyed said the main barrier to cycling was the distance from work. The main facilitators for starting to cycle to work were shorter travelling times and '*if I didn't need my car that much for my job*'. (Engbers and Hendriksen 2010).

While distance does play a role in the decisions related to transport, the power of car advertisements and the images used to promote driving are possibly drowning out the campaigns that promote cycling.

2.4 The Perception of Risk and Safety as a Barrier to Cycling

The perception of risk involved in cycling is highlighted by Rissel et al (2002). The negative perceptions of non-riding cyclists report significant safety concerns which then disappear when road riding experience is gained (Rissel et al 2002). It is encouraging non-riders and in particular woman to try cycling in the first place that is the main hurdle and an adequate response is needed to alleviate the perception of risks involved in cycling that needs to be addressed for females to feel safer.

Slovik et al (2004) posits that risk perceptions are based on emotional responses to situations as opposed to a rational analyses of it. These emotional responses are shaped by culture and a range of psychological processes. The perception of risk is based on biases that can contribute to the misjudging of risk and may foster an inordinate fear of cycling, particularly amongst women (Slovik et al 2004). Women are believed to be more emotional than men and thus elicit more emotional responses. In Ireland safer cycling campaigns often address safety as an issue to encourage cycling in an effort to address and allay these fears.

In Germany, Denmark and the Netherlands, there are strategies and infrastructure in place to improve safety include providing separated bike facilities such as off-road paths and separated cycle lanes and safer intersections. There is also more education about how to cycle safely, which is communicated through campaigns and the implementing of traffic laws that emphasise the rights of cyclists (Pucher and Buehler, 2008). Researchers claim that the reason for improved safety in these countries is a strong top-down focus on making cycling a more feasible option. Something that is lacking in Ireland despite the policies for implementation, they are never fully seen through to completion.

There are many organisations that promote safer cycling campaigns in Ireland including The Irish Cycling Advocacy Network, The Dublin Cycling Campaign, Safe Cycling Ireland and the Road Safety Authority. The information distributed includes the correct distance for passing out cars and to always wear a helmet and encourages the wearing of high visibility clothing when cycling etc. This information is useful and necessary to make the roads safer and alleviate fears regarding the risk of cycling. However it is the delivery of these messages that could be contributing to fear for cyclists to cycle.

On the website for the Road Safety Authority, the national authority for road safety, show the current road safety campaigns listing with the caption "High-profile, impactful TV campaigns are a key part of the RSA's strategy to educate road users about the perils of dangerous driving" (RSA.ie 2016a). The use of the word 'perils' is enough to put off any cyclist who is even thinking about cycling on the roads coupled that with 'high profile, impactful'. It demonstrates a very negative narrative for cycling and may evoke the belief that it is too risky to contemplate. The current cycling campaign entitled "Cycle Smart, Cycle Safe" (RSA.ie 2016b), depicts a young women making the necessary checks on her bicycle before cycling, but the voiceover is a condescending male which possibly loses the positive message and image the advertisement is trying to display.

In an attempt to suggest how to encourage cycling (Daley and Rissel 2011) make the suggestion that an online social media campaign may be a helpful tool but warns that it needs to be careful to avoid sending out a mixed message that encourages cycling but reminds the audience of the dangers and safety issues involved in it. Horton (2007) also agrees with this and believes that positive social media marketing campaigns could contribute substantially change the negative image of cycling and he notes that "such campaigns need to be careful to avoid the mixed message of encouraging more cycling, but then reminding the audience of the dangers and focusing on fear and safety—for example, ride more but be careful" (Horton 2007, p150).

2.5 The Perception and Images of Cyclists and Cycling

Daley and Rissel 2011) completed a focus of group of 24 males and 46 females who were classified as non-riders, occasional riders and regular riders. The themes in relation to the perception of cycling explored were 'clean and green'; 'healthy and fun'; 'dangerous' and 'serious business', while the images of cyclists were themed as 'risk takers and law breakers'

and 'status and sub-cultures'. Cycling as an activity was viewed as an environmentally friendly activity among all the groups and was generally viewed as positive. However, it was the actions of cyclists and the perceived images of them appeared to lead to negative connotations.

Daley and Rissel (2011) found was that there appeared to be a perception of a hierarchy among cyclists; with recreational riding at the top, cycling for sport and exercise in the middle, and transport/commuter cycling at the bottom. Daley and Rissell (2011) also found that the view of cycling as a mode of transport/commuting was perceived as having a low social status over other transport modes. Non-riders viewed riders cycling for sport and cycling for transport as 'rule breakers' and 'risk takers', which led to regular riders feeling that they are unfairly judged by this stereotype. The 'clean and green' images of cyclists were associated with the wearing of Lycra, who owned expensive bicycles, and were perceived to be 'serious business' cyclists and were seen to be part of a subculture. Some participants believed that the wearing of Lycra raised the status of the individual and contributed to giving a confident impression on behalf of the cyclist. A number of riders rejected the wearing of Lycra who wished to avoid the sporty image. These riders preferred to wear regular clothing when cycling. However, some non-riders thought it was strange that people would choose to ride a bike in their work clothing. For example, one female non-rider asked "Who would have the nerve to cycle to work wearing a suit?" (Daley and Rissell 2011, p 214). The research found that acceptance of recreational riding is greater, whereas cycling as a form of transport is not viewed as an accepted mainstream activity.

The conclusions drawn by Daley and Rissel (2011) show there is a need to improve the public acceptability of cycling to ensure that cycling is perceived as an everyday activity and that it can be undertaken by anyone, without the need for special clothing or expensive equipment Interestingly, the largest group that participated in this study were non-rider females (11 females), and overall the focus group was attended by almost twice as many females than men. This demonstrates that female non-riders were eager to voice their opinions on the barriers to cycling that discourage their participation in cycling.

Similarly a hierarchy among transport users exists in Ireland. (Basford et al 2002) carried out a mixed methods study to understand driver's perceptions of cyclists. The responses given indicated that hierarchies were generally based on the size of vehicle including bicycles. The larger the vehicle, the more respect it that was shown from road users. Whereas the smaller the vehicle, the more likely it was to come off the worst in an altercation, especially if on a bicycle, which viewed as the lowest on the hierarchy and thus having a low status on the roads.

Conclusion

The perceived barriers as outlined in the literature review demonstrate that there are negative perceptions associated variables of choosing to ride a bicycle for females. These themes include problems with infrastructure, general negative perceptions of automobile drivers and cyclists respectively, perceived risk and the societal pressures to remain presentable when travelling to their destination. These appear to be pivotal issues relating to the lack of participation by females in cycling when compared to men's participation levels.

3.0 Methodology

3.1 Introduction

The goal of this exploratory study was to discover what the barriers to cycling are for females in Dublin. The method adopted was a mixed methods approach with semi-structure interviews and a survey with thematic analysis applied to the findings. The discussion of the findings is guided by a feminist theoretical lens.

3.2 Research Question

What are the barriers to participation in cycling for female non-riders?

3.3 Research Approach

This research is rooted in an epistemological viewpoint with an advocacy and participatory worldview. Through the five senses the world is perceived and interpreted in how it is experienced and meaning is given. This experience forms a belief which then becomes knowledge and is then grounded in the individual and thus becomes their reality (Armstrong 1961). Meaning is therefore developed and then transmitted societally through dialogue, it is not discovered but constructed. This dialogue is often constructed by elements of gender inequality and political agendas and then promoted through various platforms, specifically the media and thus distorts reality. A primary way in which media distort reality is in underrepresenting women (Davis 1982, Potter 1985, Greenwald 1990, Duncan, Messner, and Williams 1991, Zoch and Turk 1998). This further perpetuates gender inequality through the misrepresentation and/or the non- representation of the half of the population.

The focal point of this research is on the gender inequalities of cycling participation rates among women and what barriers exist for women. It is linked with the socio political agenda that does not provide adequate reform of as is discussed within the literature review. This initiates the advocacy and participatory worldview as defined as:

'An advocacy participatory worldview holds that research inquiry needs to be intertwined with politics and political agenda. Thus the research contains an action agenda for reform that may changes the lives of participants... specific issues need to be addressed that speak to important social issues of the day, issues such as empowerment, inequality, oppression, (and) domination (Creswell 2009 p9).

3.4 Research Method

This exploratory study employed a sequential mixed methods approach to the research which expands on the finding of one method with another. Creswell (2009 p211) states "the purpose

of this strategy is to use quantitative data and results to assist in the interpretation of qualitative findings". The specific strategy is a sequential transformative strategy which is guided by a theoretical lens. Mertons (2003 cited in Creswell 2009) emphasises the importance of a theory lens in mixed methods research and especially when dealing with a transformative strategy of inquiry. A feminist lens will guide this study. It is also acknowledged that the use of a feminist lens may be seen as biased but the use of a triangulation of methods has been employed to protect against biases. Staley, Shockley-Zalabak (1989 cited in, Carter and Spitzack, p250) state that "triangulation encourages the use of both qualitative and quantitative methods, thereby maximising single method benefits while neutralising single methods drawbacks".

Two phases of study are used in this strategy of inquiry. The first phase employed a qualitative method. Two of face-to-face semi structure interviews were chosen as an explorative method of qualitative data collection as it has an open framework which allows a focused and two-way communication between a researcher and the participants of the study. The questions were guided by topics in the literature review. The interviews followed the interview protocol as suggested by (Creswell 2009). Advantages of this type of inquiry method are that allows control on behalf of the researcher over the line of questioning. Participants cannot be directly observed, or in this case do not engage in a behaviour for a particular reason (Creswell 2009). The disadvantages for this method include information revealed is filtered through the views of the participant and it takes place a designated setting as opposed to the natural setting and the researchers personal bias may be present (Creswell 2009).

The second phase of the strategy of inquiry used a quantitative method of data collection which was informed from the themes that have arisen in the first phase of inquiry. It employed the instrument of an internet survey through Survey Monkey. Questions were a mix of closed and open ended questions. Survey research provides quantitative description to the sample being studied which includes cross-sectional studies using questionnaires for data collection with the intent of generalising from a sample of the population (Creswell 2009). The open-ended question in the survey asked respondents if there are any cultural implications that prevent women from cycling. The definition of culture is used in a broad sense and is defined by Keesing (1985, p18) as "...the totality of a person's learned and

accumulated experience which is socially transmitted, or more briefly, behaviour through social learning"

Advantages of this type of data collection is more economical as resources for this exploratory study is limited. A disadvantage to the qualitative approach may result in a loss of the rapport between interviewer and interviewee (Bryman 2012).

3.5 Sources of Data

Participants were selected through purposive sampling that met the demographic being studied in this research. It selected participants based on their unique position. While it is a non-probability sampling technique that is not representative of the entire population, it was chosen due to limited resources financially for the research and the study was time bound. It is acknowledged by the researcher that this may construe a sampling bias.

The demographics of the desired sample were as follows -

- Females aged 18 and over
- Females that had no children.
- Females that have not participated in any form of cycling for a year or more.
- Females that live in Dublin

The access to the participants for the interviews was gained through a social media post on Facebook and gained interest from many females of the desired demographic, further proving it was topic worth researching. For the first phase of the research two respondents were chosen to interview face to face. The location of the interviews took place in the homes of the respondents. The data gained from these interviews then informed the second phase of the research sequentially. The second phase of the research employed the use of an internet survey that was distributed on the Facebook closed group *GirlCrew*. *GirlCrew* operates worldwide with location specific secret groups on Facebook. It is a place for women to meet, chat and discuss different topics of interest to them. The group chosen to distribute the survey is called *Girl Crew Dublin Only*. With specific instructions of the desired demographic to answer the survey, the link to the survey was posted for a period of 36 hours.

3.6 Data Analysis

The first phase of the presenting the findings, through thematic analysis, presents the themes that arose from the exploratory interviews. Qualitative data was coded and then categorised into themes using Excel. The second phase presents the findings of the survey with the statistical results and thematic analysis of the open-ended question. The final report in the discussion chapter includes a discussion on the statistical information that emerged and through an integrative approach, the use of thematic analysis was applied to the statements and themes that emerged from the qualitative element of the data. The findings were then compared to the literature in the literature review. The discussion is guided by a feminist theoretical lens with recommendations made.

4.0 Findings

4.1 Introduction

The aim of this chapter is to present the findings of the data analysis in the two sequential phases in which they were carried out. Phase one presents the findings from the interviews under using thematic analysis. These themes were identified through transcription of the interviews followed reading and re-reading the data and then categorising them. The full transcription of the interviews can be found in (Appendix 2). Phase two of the findings presents the statistical findings of the quantitative results of the survey with qualitative results for question 8 presented according to the themes in which they appeared. The full statistical results of the survey can be found (Appendix 4). The significance of the findings from both phases of inquiry are integrated and discussed in the following chapter. The interviewees were females aged 22 and 31 and are referred to as participant 1 and participant 2 respectively. The survey participants were given full anonymity with ages between 18 and under and 65+.

4.2 Phase 1 – Thematic Analysis of Interviews

The following interviews analysis from the exploratory interviews are presented below. The questions used to extract the themes were based on the barriers to cycling identified in the literature review. This exploratory research identified six themes that were of importance to the participants.

Perception of Cycling and Cyclists

When asked what the perception of cycling was, both participants viewed cycling in two different categories. Participant 1 said their view of cycling and cyclists was negative and that it takes place on a busy street when they are trying to get around

"it's kinda like a biased view because from myself and being in the car with my Mam, that they nearly get in the way. You're trying to get around the city, you're nearly after knocking one or two off their bikes because you are so rushed to get somewhere. Sometimes they can be a bit of a nuisance".

When prompted if women were viewed in the same way she replied,

I guess that they are not as dangerous as men maybe. But I still consider them a bit of nuisance if they don't adhere to the rules of the road. Like I mean sometimes I think it's a

miracle more of them aren't knocked down. They appear to be lit up some of them and others don't really try. Em like I see how there are two different types. The serious ones and the ones just cycling to work.

Participant 2 also viewed cyclists in both leisure and commuter settings as separate entities. Her view on cycling referred to males predominantly cycling on a popular cycling

"men cycling around Blessington Lakes on the weekend in all their Lycra, in packs". When prompted if this was a negative image, she replied "It's like they are trying to avoid their families for the entire weekend (laughs). Don't you see lots and lots of them on the Wicklow Mountains?"

These cyclists were viewed quite negatively as the participant believes that they are spending large amounts of time away from their families. The view of cyclists wearing Lycra was considered to show a 'serious' cyclist. Whereas cycling for commuting purposes to and from work was viewed in a more positive way by participant 2 that they were environmentally friendly *"I'm happy to see the ones that are cycling into work in that I think they are kinda eco warriors"*.

Infrastructure

The lack of cycle lanes in Dublin was mentioned four times in different answers to questions by participant 2. The lack of cycle was equated with lack of protection when cycling,

"You're not protected, you're not a lane of your own em you're sharing the bus lane with the bus lane which is just painted as a cycle lane but in fact it's still the bus lane. Like I was in Copenhagen on holiday and they have all the bicycle lanes separated by a kind of miniature footpath from the road".

Participant 2 believes the lack of cycle lanes in Dublin as being an issue in which the government are responsible for,

"I'd say that's probably more of a failure of the government. I mean what cycle lanes have they put in apart from painting a strip of the road red and sticking a picture of a bike on it. They haven't you know? To me that's not a cycle lane. That's a bus lane that I'm sharing with cyclists". Participant 1 shared a similar view with participant 2 in relation to cycle lanes in that although there are limited ones place, they are still not safe, "*The fact that we do have these cycling paths and stuff like that now if great but even so it's just not safe enough*".

Participant 2 further made reference to the proposed changes to the cycling route along the Liffey in Dublin and discussed how there were public submissions being sought to have one side of the Liffey completely closed from cars and used just for cyclists which in her view would encourage higher rates of participation in cycling

"There was talk of, they were asking the public for submissions to do with the traffic problems on the Quays. Some of the suggestions were to just have one side of the Quays that was just for cyclists. And then the other side of the Quays that was for both lanes of traffic or one lane of traffic. Em so something like that where you are actually protected I think that's a huge one for women that they are not protected and there's a vulnerability within women"

A lack adequate parking facilities for a bicycle was discussed by participant 2 as another barrier to cycling. She also expressed mistrust in the Gardai to respond in a satisfactory manner when a bicycle is stolen due to not having safe parking available similar to cars.

Risk

Cyclists were labelled as 'vulnerable' who need to be 'protected' when cycling as they were considered to be at risk. A lack of insurance for cyclists and a belief that cyclists weren't afforded the same protection as people with cars, was an issue for participant 2. Risk of injury when cycling was found to be a barrier to participation in cycling for both interviewees. Participant 1 believed that they do not adhere to the rules of the road, "you nearly knock down a cyclist on a daily drive in the city centre because they are just weaving in and out of the traffic".

Reasons not to cycle were due to the perceived risk of injury which was due to the high volumes of traffic in the city centre. Risk involving traffic in the city centre and heavy vehicles and the lack of aggression and confidence for women were considered risks as hesitation to complete a maneuver in a timely manner on the road due to lack of confidence could result in an injury due to being hit by a car,

"I know you have to be quite aggressive on the road. You know just decide that you're turning and go for it and you can't hesitate. And I think that's a real turn off for women in particular. Maybe. It seems to me that men seem to find that easier, I mean like I'm worried that they guy that's driving that car and I don't wanna be hurt. I don't kinda have that aggression to, or the confidence to just go around that corner and not worry about it you know. Em I'd definitely be nervous"

The lack of cycle lanes was viewed contributing to the risks involved in cycling. Participant 2 drew attention to women who may be trying to get pregnant as not have adequate cycle lanes imposed a risk of being knocked down and harming the foetus.

Participant 1 viewed cycling overall as '*too risky*' to even contemplate. Both participants considered to be far more aggressive, confident and risk aversive when cycling compared to women.

Environment

Cycling and cyclists was viewed as "good for the environment" and "healthy" in the interviews. The use of the work 'eco-warrior' was used in a positive manner associated with cycling and it is believed that when it comes to the environment and that people are generally more conscious of it

"I think there's eco warriors but I don't think you have to be like a hippy on a really low income to be an eco-warrior. I think it's in the consciousness of the general public more that the onus is one us as a society to take care of the environment. So I think's it just normal people that are doing 9-5pm jobs in the city centre. So it's your middle income people cycling.

Weather also featured in responses by both respondents as a barrier to cycling. The lack of good weather made it less desirable to cycle, especially for a women, due to the pressures of having to arrive at their destination looking a certain way and that bad weather could increase the likelihood of injury,

"Plus the weather like. We don't have to the good weather they have in other countries to encourage more cycling but I'm not sure what you could really do about that apart from having the cycle lanes blocked off from the road then at least if you were slipping, you wouldn't be slipping into the path of a truck".

Participant 1 also believed weather played a role as a barrier to cycling

"Like if you're driving or getting the bus then you are going to get shielded from the weather and that. So for a women, that could be a bigger reason to not cycle"

Safety

Helmets were discussed regarding the lack of wearing them, especially for women. It was noted by participant 2 that Dublin Bikes do not provide helmets with their bikes and the onus is on the person to have their own.

"..you'll obviously see that people won't even be wearing helmets on the way into town. Like the Dublin Bikes don't even have helmets with them".

In regards to safety campaigns that promote or encourage cycling, both respondents were unaware of any campaign that encouraged cycling for either men or women or both.

Cultural Issues

The cultural issues that created barriers to cycling for women included being absent in the sports media as cyclists compared to men and that they were not 'seen'.

"Probably because, well personally myself because I don't get like cycling for sport and that on the telly much but when you do it's always men in these positions and stuff like that. For the likes of Lance Armstrong. Or like you just don't see women really cycling as much a men like they I think because of how they are portrayed on TV"

It was acknowledged that women have the same right to cycle as men but societal pressures for women to 'look good' and be 'presentable' were the main cultural barriers.

"You know for women, it might be easier to drive because they don't want to arrive at work all puffed out. You know I wouldn't wanna arrive my job, you know, I need to turn up presented well. Not huffing and puffing. There's no shower there to you know sort myself out. But even if there was, I'd have to blow-dry my hair. So like I have all these things I have to consider if I'm gonna go to work on a bike.

A lack of showers and places to do make-up was also discussed as a barrier specific to women.

4.3 Phase 2 – Survey Results

Phase two of the research employed the instrument of a survey (Appendix 3), with quantitative and qualitative questions used that were based on the additional themes that arose from the exploratory interviews in phase one. Results are available in full in (Appendix

4). Thematic analysis of the open-ended question can be seen in question 8. The survey was titled 'What are the barriers to participation in cycling for females in Dublin?'

Question 1. Which statement accurately describes you?

47.1% reported owning a bicycle but not using it regularly. While 32.9% did not own a bicycle. 17.6% reported never cycling. 2.4% cycle sporadically (less that once a month) using Dublin Bikes.

Question 2. In relation to your general perception of cycling, which one of the following statements do you agree with?

37.6% perceived cycling as 'a risky mode of transport'. 24.7% believed it to be good for the environment and 'I would like to cycle more'; 27.1% leisure cycling was perceived safe that on-road cycling; 8.2% didn't cycle as they 'just don't like it'; 2.4% considered it 'a safe mode of transport';

Question 3. Please tick the most relevant answer that applies in your opinion according to the following statement. Female cyclists in Dublin are....

36.5% of female cyclists in Dublin were considered 'brave'. With 21.2% considered them as 'taking a risk'. 7.1% ticked 'confident'; 11.8% were considered 'sporty'. 8.2% believed female cyclists to be 'environmentally friendly and 4.7% were viewed as 'responsible. No 'other' responses were collected for this question.

Question 4. Which statement most accurately describes your awareness of the amount of media coverage of female cyclists at a sporting level?

84.7% reported never seeing sports coverage of women's cycling events on mainstream media. 4.7% reported somethings seeing coverage of women's cycling events. 10.6% did not know.

Question 5. Do you think the cycle-safer campaigns send out a positive message to encourage women to cycle?

43.5% were unaware of any campaign that encourages 'safer cycling'. 17.6% said 'no'; 14.1% believed that they 'maybe' did with 7.1% believing that they sent out a negative message that creates fear as opposed to encouragement. 5.9% did not know.

Question 6. Which of the following do you think has a negative impact on the lack of females cycling as a mode of transport? (Please tick the one that has the most negative impact in your opinion)

28.2% believed 'lack of cycle lanes' had the most negative impact on cycling; 25.9% believed it due to 'pressure for females to look good and be presentable; 17.6% viewed 'weather' as a barrier with 16.5% ticking traffic; 3.5% believed it was 'distance to work'. With 1.2% for 'not wanting to be on show'. From the comments section of the respondents who ticked 'other', responses to the having a negative impact for females cycling as a mode of transport were, 2.3% 'dangerous', 2.3% 'problems with cycle lanes', 2.3% 'showers and changing facilities', 3.5% said 'weather' was the most negative impact, but that and was tied into having to have hair and make-up on while cycling and the lack of showers and changing facilities in work. 1.1% reported 'safe bike parking' as having a negative impact and 1.1% cited 'safety' as an issue.

Question 7. In a typical day, which of the following forms of transportation do you use? (Please tick as many that apply)

Walking was the most common form of transportation with respondents, however in the breakdown of results 7% of respondents selected walking as a sole form of transportation. 54.4% of respondents selected walking in conjunction with other types of transport including automobiles, taxis and passenger in a car. 43% of respondents selected walking with only public transport of one or more types. 44% of respondent travel by 'bus' 38.1% selected 'automobile'; 25% 'Luas'; with 15.5% being a 'passenger in a car'. And 6% using a 'taxi'. One 'other' responses yielded one result, moped.

Question 8. The number of men cycling is higher than women, with at least a 3:1 ratio in Dublin. Do you think there are any cultural issues that affect the low numbers of women participating in cycling? (Please comment in the box below)

Responses to this open-ended question showed a response rate of 69.4%. 21.1% of respondents who selected automobile, or passenger in a car or taxi either skipped it or provided the answer 'no' or 'not really'. The answers to this question regarding cultural issues that may have an effect on the low numbers of women participating in cycling but also included other themes. The answers have been thematically analysed and grouped below with quotations -

Societal Pressures

A large number of responses included the issue of societal pressures as a barrier for women to cycle more often or at all. One respondent believed it was easier for men to cycle than women "Yes pressure to look presentable. Men can just splash their face when they arrive to work all sweaty!" Another respondent commented "Perception that women must always look presentable - cannot show up to work in cycling gear and cannot cycle to work in work clothes as would be sweaty for the whole day then". Clothing also provided a barrier "I know that I won't cycle when I wear a dress or skirt because of the hassle and not wanting to show anything". Not wanting to be on show or be seen was further commented on "When I cycle friends and colleagues act very surprised like I shouldn't be. I do not know any other women who cycle, I think they are afraid to be seen by others cycling". Pressure to not only look good but look immaculate was cited as a reason from another respondent "Probably the pressure that women should look immaculate at work holds them back to cycle more often to work". Pressure to look "professional and "made up" on arrival to work" was the biggest barrier.

Societal pressures coupled with a lack of facilities for women to maintain their appearance contributed as a barrier "Having to be presentable in work skirts etc. and make up but no changing facilities". Another respondent commented that "Many work places do not have showers and dressing rooms, and it would be unacceptable for a woman to work without having presentable hair, clothing and make up. The issue is not so prominent for men, who need not worry about 'helmet hair', and make up".

One respondent commented that with the added pressure women are taking spin classes at the gym instead of cycling on the road "*The pressure to look good on arrival, combined with the risk of bad weather. I see more women taking spin classes at my local gym*".

Safety

Women felt unsafe due to being harassed "I think the fear of being harassed puts women off. I've cycle twice in the city since moving here and both times I was harassed by men in vehicles". A further comment said she did not cycle because of "Sexual harassment in the street, wolf whistling etc." One respondent said she believed it was "Unsafe in city centre, travelling on your own". A desire for cycling but lack of safe facilities was a considered a stressor "I'd love to cycle but the stress of finding somewhere to put a helmet and somewhere safe to leave a bike would be a turn off".

Cycling campaigns were found to instil a fear in cyclists, one respondent commented

"I think a lot of the RSA cycling campaigns perpetuate an idea that cycling is dangerous. Showing people togged out in high vis and sports gear while cycling, the idea that you need all this safety equipment to cycle which implies it's dangerous. Rather than emphasising the importance of safety equipment which can put women who are maybe a little more risk adverse than men off.

Men were considered to be worried that women about safety "I think women are more concerned with safety than men".

A lack of confidence and lack of aggression was linked with feeling safe cycling "*Male cyclists seem more aggressive on the city roads, I think women might feel intimidated*". One respondent said that women don't cycle as frequently as men because of "*A lack of aggression or bravery that cyclists need on Dublin streets*"

Risk

It was evident that respondents believed that there was risks involved with cycling. One respondent who had previously cycled said "*Having cycled in town you are taking your life in your hands both with drivers, pedestrians and other cyclists who are not great at following the rules of the road either.* And "*Women just have more common sense and aren't as willing to risk their life*".

Fears about injury included the comments "I think that women avoid it due to dislike of cycling and worry about injury".

Gender played a role in the perceptions of the risks involved for women. It was viewed by some respondents that men engage in risky behaviour more often than women "Men take more risks" and "Maybe women are more cautious- cycling in the city seems dangerous and women might be more aware of this and put off". One respondent believed that women have a need for comfort "...it's less convenient for women I guess because our risk factor is lower than for men and need in comfort much higher".

Infrastructure

The lack of cycle lanes was cited as a large problem with the infrastructure that acts as a barrier to cycling. One respondent commented that "In Dublin it's the safety issues for me and no designated cycle lanes. Dublin bus and other vehicles are scary". The lack of cycle lanes was perceived as dangerous for respondents "...No cycle lanes (are) extremely dangerous especially in Dublin" and "Cycling is just too dangerous and I think women are more aware of this factor than men, shared cycle lanes with buses and no lanes at all are massive factors". A lack of confidence in traffic due to lack of cycle lanes was also cited as a reason for lower levels of women cycling that men "I think women are less confident cycling around Dublin due to the high volume of traffic, pedestrians and lack of cycle lanes.

Respondents felt that there was a negative attitude from drivers "car drivers have a negative attitude towards cyclists, I wouldn't feel safe cycling in Dublin. Or I don't want to put myself in position where I'd be roared at and beeped at by car drivers".

Media Representation of Cyclists

The results show that women did not feel represented adequately in the sports media "All through women's lives they are never encouraged to be sporty. Media coverage and society solely focus on men in sport". The role of women in society was deemed to be a contributing factor by one respondent "Maybe I think that we slightly have a perception of a certain role that women hold in society. A traditional role in general around women and sporting events. I believe that cycling should be promoted as a healthy easily accessible exercise for women"

It was felt by one respondent that advertising safety for cyclists did not focus on the ordinary everyday cyclist "...these ads never seem to show women on hybrid bikes in cities for example, cycling down the grand canal on a sunny day with a cool retro bike with a basket and a bell...."

Question 9. What is your age?

The average age of respondents to the survey was 27-33 year olds at 41.2%. The second largest group the19-26 year olds (29.4%). 34-40 year olds 21.2%. 51-59 5.9%. 18 and under and 61+ 1.2% respectively.

Question 10. I am a female (Please select an answer)

84 of the respondents responded 'yes' to this question. One respondent chose to skip this question this question but their other responses have been included in the data analysis.

5.0 Discussion

The aim of this chapter is to discuss the results and how they correlate with the findings in the literature review. Due to the limited scope of this research, a focus on the overarching theme and results and themes that have emerged will be discussed.

The results of both sequential inquiry phases of this exploratory study show that a lack of adequate infrastructure, namely cycle lanes are the biggest barrier to cycling for females. These findings are similar to (Bauman et al, 2008 and Garrard, Rose and Lo 2008). The research shows that females do not feel safe cycling in Dublin because of a lack of segregated cycle lanes and the general consensus was that the cycle lanes that are in place are extremely inadequate. The exploratory interviews revealed that this is linked to a lack of implementation of the socio political agenda set out by government. The government has identified and made recommendations for changes to infrastructure in the National Cycle Policy Framework, however, this is unlikely to happen due to the latest Capital Spending Plan (2015) and paltry amount of finance allocated to the improvement of cycling lanes within it. This lack of expenditure on suitable infrastructure that would possible encourage cycling will further promote the use of motorised transport and prevent the bicycle from being a mainstream choice. The result will continue to be a heavy reliance on cars and other motorised vehicles similar to the findings of Alam et al (2013), which states that disproportionate investment in road infrastructure results in larger volumes of road traffic as opposed to other more sustainable modes. This will ultimately have a continuing negative impact on cycling rates for females.

The perception of risk when cycling was evident in the findings as 36.5% of female cyclists in Dublin were considered 'brave' to cycle at all and 21.2% considered female cyclists to be 'taking a risk', similar to the findings of Daley and Rissell (2011). Respondents and interviewees labelled cyclists as 'vulnerable' who need to be 'protected' when cycling. While traffic represented the biggest worry about the risk of injury to cyclists, respondents also viewed other cyclists as responsible for risky behaviour on the road. Men were considered far more risk averse than women and it appears that females believed that men's aggression and confidence allows for them to cycle more frequently than women.

Interestingly there was a lack of awareness of safety campaigns 43.5% of those surveyed were unaware of any campaign that encourages 'safer cycling'. Both of the interviewees said that they were also unaware of any campaigns that promote or encourage safer cycling,

proving that the message of safety is not being heard. One respondent believed that the Road Safety Authority's campaign perpetuates the idea that cycling as dangerous which proves it has the exact opposite effect of the desired outcome. The advertisements promoting safety are based on playing into the fears of non-riders as opposed to promoting the activity in a positive way. The same respondent further suggested that emphasising the importance of safety equipment creates a barrier to cycling for women.

Perception of the differences to the wearing of high-vis sports clothes and/or Lycra was evident and showed signs of a hierarchy in place in terms of a creating of a divide of cyclists similar to the findings of Daley and Rissel (2011). The wearing of Lycra was viewed as meaning 'serious business', whereas the wearing of ordinary clothes while cycling was linked to the perception of the ordinary worker travelling in and out of the city and this was viewed with a greater acceptance than 'serious business' cyclists. Also as Daley and Rissel (2011) and Basford et al (2002) presented, there appears to be hierarchy in place. Large vehicles and cars were at the top of the hierarchy and female non-riders considered themselves to be near to bottom of the hierarchy and definitely beneath male cyclists. This perception of female cyclists shows that even in cycling, women still view themselves as being beneath men.

Congruent with the findings of Broache (2012), a common barrier to cycling that emerged in this research was perception that women need to be presentable upon arriving at work or other destination. This pressure was the second biggest barrier to cycling for female non-riders after infrastructure. Those interviewed and surveyed felt that they are bound by societal pressures to look and present themselves in certain way compared to men and it is this that is a major barriers to cycling. A further barrier was the lack of showers and changing facilities available to women. It was viewed that men have an easier choice to cycle in this regard as they don't have to apply make-up or bring a change of clothes with them. Bad weather also contributed to the decision not to cycle as it would further provide a hassle for females who believed that they must maintain a certain image that is acceptable to society and where they work. Looking professional and 'made-up' was equated to feeling pressure to look a certain way upon arriving into work which demonstrates the extreme pressure that society puts on females to look a certain way.

One of the interesting results from the research that was not directly catered for by scholars in the literature review was the connection of low levels of participation of females in cycling and the lacks of representation of females cycling in the mainstream media. One interviewee commented how she never saw women cycling on television and that it was always men's cycling that was shown. 84.7% of respondents to the survey reported never seeing sports coverage of women's cycling events on mainstream media. There is a distinct lack of media representation of females in cycling and it appears to be contributing as a formidable barrier to cycling for females.

Other disturbing results that emerged from this study not mentioned in the literature were the wolf whistling and sexual harassment that female cyclists in Dublin were subject to by men when cycling. This treatment of a women when cycling reduces a women to a mere sexual object by men which contributes to the gender inequalities that already exist in Ireland and also worldwide.

6.0 Conclusion

This study has confirmed the research of other scholars as identified by the literature review but has also shed light on a bigger issue that affect the gender inequality that exists between females and male participation rates in cycling in Dublin. The biggest barrier remains to be problems with adequate infrastructure which is similar to the results in other research studies from other countries. This lack of adequate cycle lanes appears to have a direct correlation with the perception of the risks involved in cycling, especially for females as identified in this study. There is a lack of commitment on behalf of the government to carry out meaningful changes to implement the many recommendations that their countless reports have identified. The European Commission have allowed the Irish government to change their date of reducing carbon emissions by ten years but with an increase of the percentage by 10% up to 30% which further will contribute to a delay in a real meaningful improvements to other nonmotorised transport. Also, the Capital Spending Plan (2015) and its allocation of 0.5% of €10 billion for cycling improvements in Dublin, will also further delay any real meaningful changes for the foreseeable future in relation to encouraging females to cycle. The government appear to just release reports for eminence with the media but instead must cater to the needs of society and as this research concludes, the needs of cyclists, especially women. It would appear that even the safety campaigns that are promoted by the Road Safety Authority, a government body, whose purpose is to promote safety and encourage cycling, are either not taken notice of or are promoting a message that is laden with fear when it comes to cycling. Proving that the measures to encourage cycling through the media are simply not working.

In many ways it appears that we have not moved on from the 1890's when it comes to females and cycling as discussed by Griffin (2006). The media is still responsible for its negative impact on the perception of females cycling and the negative perception attributed to them by society. There is still rules present, though largely unwritten compared to the 1890's, for women who cycle which appear to be perpetrated by the media. The media are found by this study to be a barrier in the present day to as responsible for the misrepresentation of cyclists and the lack of representation of females who cycle at all levels including sport, transport and leisure. As Shor et al (2015) found when women do appear, they are often portrayed as submissive and weak which informs audiences what is valued and esteemed in society and women similar to what Tuchman (1978) identified as a symbolic annihilation. This annihilation leads to stereotyping of women and thus portrays a negative image which

contributes to the trivialising of women at all levels and especially in sport and also as this research finds, also in cycling too.

Similar to the findings of other scholars, there is no single entity that can rectify the issues that discourage female participation in cycling. The government, their safety campaigns and the media are complex phenomena. Media gate-keeping is dominated by male norms and the traditional stereotypes still exist for females cyclists in the 21st century as they did in the 1890's. The government policies continue to delay any real meaningful changes that allow women to participate in cycling should they wish to do so. An integrative approach to policy issues and a tailored campaign that effectively promotes cycling in the media that specifically targets females is recommended. Through the creation of a collective awareness and a positive message regarding cycling to females, the traditional unequal norms and values that exist in our culture can be overcome as barrier to participation in cycling for females.

6.1 Limitations of the Research and Recommendations

Time constraints and lack of resources associated with an undergraduate and non-funded exploratory study, did not allow for random sampling to be used to gain an insight for the entire population of Ireland. Also, females who had children were excluded from this study. It is acknowledged that women with children should be included in further research of the topic as their reasons may differ to that of single females with no children and would have included a scope beyond the realm of this research. Further research is recommended study employing random sampling with a female-only focus group. This would possibly yield further empirical data that would inform government therefore ensuring a better informed production of the reports and campaigns to encourage females to participate in cycling and remove the barriers that exist.

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Appendices

Appendix 1 – Interview Questions		
Name of Interviewer:		
Name of Interviewee:		
Location of Interview:		
Permission to recording and use audio:	Yes:	No:
Date:	<u> </u>	
Owns a bicycle:	No:	
Owns a car: Yes: No:		
Age:		

1. When I say the word cycling to you, what comes into your mind?

2. What is your view or perception of the cyclists themselves?

3. What kind of economic status do you think cyclists have?

4. Women cycle less than men, for both transport and leisure in Ireland. Why do you think that is?

5. Do you think there is any cultural issues that prevents women from cycling in Ireland?

6. Are you aware of the campaigns that provide information on how to cycle safer?

7. What might encourage you to cycle?

Appendix 2 - Transcription of Semi-Structured Interview- Interviewee 1

Name of Interviewer:Sue Brereton
Name of Interviewee: <u>Megan</u>
Location of Interview: <u>Interviewees</u>
Permission to use recording and use audio: Yes: No:
Date:
√
Owns a bicycle: \checkmark Yes: No:
Owns a car: Yes: No:
Age: <u>22</u>
No Children
Distance From City Centre: 5.7 Km
Works in the City Centre: Yes
Interviewer: Hi Megan, thank you for letting me interview you regarding the barriers to cycling for women. Do I have permission to use this recording?
Interviewee: of course, yeah
Interviewer: So I'm just going to ask you a couple of questions, a couple of standards questions at the start. Do you own a bicycle?
Interviewee: No
Interviewer: Do you own a car?
Interviewee: No
Interviewer: And can I just ask you your age please?
Interviewee: 22
Interviewer – OK Megan, I am just going to talk to you and ask you some questions ab cycling.
Interviewee – Yeah ok.
Interviewer - When I say the word cycling to you, what comes into your mind?
Interviewas - Ovalists on the read I don't really get a gnorte view if someone gave eval

Interviewee - Cyclists on the road. I don't really get a sports view if someone says cyclists to me, I just get an image of cyclists on a busy street.

Interviewer – Ok. And what is your view or perception of these cyclists themselves?

about

Interviewee -Em well it's kinda like a biased view because from myself and being in the car with my Mam, that they nearly get in the way. You're trying to get around the city, you're nearly after knocking one or two off their bikes because you are so rushed to get somewhere. Sometimes they can be a bit of a nuisance.

Interviewer: So would you say that your view is quite negative then?

Interviewee: Yeah I guess I kinda would. I know they are probably trying to be healthy or like are helping the environment and that, but I just think some of them are dangerous like.

Interviewer: Ok. And what do you think of female cyclists in particular?

Interviewee: Em well I guess that they are not as dangerous as men maybe. But I still consider them a bit of nuisance if they don't adhere to the rules of the road. Like I mean sometimes I think it's a miracle more of them aren't knocked down. They appear to be lit up some of them and others don't really try. Em like I see how there are two different types. The serious ones and the ones just cycling to work maybe?

Interviewer - Ok and what kind of economic status do you think cyclists have?

Interviewee - I wouldn't really put them into just one economic status. Obviously I know it's a way of saving money and stuff like that but it wouldn't be anything to do with their social status and that. It's probably to do with environmental issues and stuff like that. They probably think it's better for the environment. But if I had to put them into a kind of economic social status em probably middle class maybe.

Interviewer – Ok. You know women cycle less than men, for both transport and leisure in Ireland. Why do you think that is?

Interviewee - Probably because, well personally myself because I don't get like cycling for sport and that on the telly much but when you do it's always men in these positions and stuff like that. For the likes of Lance Armstrong. Or like you just don't see women really cycling as much a men like they I think because of how they are portrayed on TV.

Interviewer: So you think the coverage of cycling on the television is not balanced?

Interviewee: Em yeah like I do. Because you don't really see women cycling on TV. Like promoting it as a sport. It tends to just be men's racing and that, that you see. So that could I guess, have an effect on getting women to cycle but then again maybe not. I guess it's quite a personal choice for women. Like if you're driving or getting the bus then you are going to get shielded from the weather and that. So for a women, that could be a bigger reason to not cycle.

Interviewer – Ok so with that in mind, do you think there is any cultural issues that prevents women from cycling in Ireland?

Interviewee – well I suppose that that could be a cultural issues in that they are not 'seen'. Well it could be like. Are we talking about in Ireland or like Worldwide?

Interviewer- In Ireland.

Interviewee – In Ireland? Em no. Like I don't really see a reason why. Especially in our culture why women shouldn't cycle. It's not like we are not allowed and stuff like that. Like

em I think a cultural issue could be an identity because of how little they are portrayed on telly, like in that type of category.

Interviewer – And what is it that prevents you from cycling?

Interviewee - Personally I don't even have the money to get a bike never mind a car but if I was going to actually get a mode of transport, I would choose a car over a bike because I just think that it's not too safe at all (cycling). The fact that we do have these cycling paths and stuff like that now if great but even so it's just not safe enough. You nearly knock down a cyclist on a daily drive in the city centre because they are just weaving in and out of the traffic.

Interviewer: You know there are campaigns that provide information on how to cycle safer. Are you aware of any campaigns?

Interviewee: God no. Eh not at all come to think of it. But then maybe I might have missed that because I don't cycle maybe.

Interviewer - Ok so despite having a view that cycling is not safe, what might encourage you to cycle, for transport or even for leisure?

Interviewee – For leisure even? Em personally, I don't know actually. Like I would never really want to cycle for transport but even for leisure, I would probably pick something like skateboarding but you know? It just doesn't look like cool.

Interviewer: So cycling to you is not 'cool'?

Interviewee: (Laughs) No not really like. It's just not a way that I would even consider trying as it's too risky, especially in town (Dublin city). And plus I have to meet customers and all so like I'd be afraid that I'd be smelling of sweat or like my hair and make-up would probably be in bits. Especially if it was raining.

Interviewer: Is there a place in work where you could change or shower?

Interviewee: Eh no. Like there's a small little bathroom and that's about it so like you wouldn't be able to freshen up in there.

Interviewer – Ok Megan I think you have answered all the questions I have for now. I am just going to finish there and I want to thank you very much for your time.

Interview ends.

Transcription of Semi-Structured Interview- Interviewee 2

Name of Interviewer:Sue Brereton			
Name of Interviewee: <u>Louise</u>			
Location of Interview: Interviewees Home			
Permission to use recording and use audio: Yes: No:			
Date: <u>27th /July / 2016</u>			
Owns a bicycle: Ves: No:			
Owns a car: Yes: No:			
Age: <u>31</u>			
No Children			
Distance From City Centre: 5.3 Km			
Works in the City Centre			
Interviewer: Louise, do I have permission to use this recording.			
Interviewee: of course, yeah			
Interviewer: So I'm just going to ask you a couple of questions, a couple of standards questions at the start. Do you own a bicycle?			
Interviewee: Not at the moment. My bike was stolen a good while ago so. So yeah I'm not in a hurry to get another one.			
Interviewer: Do you own a car?			
Interviewee: Yes			
Interviewer: And can I just ask you your age please?			
Interviewee: 31			
Interviewer: Ok so Louise when I say the word cycling to you, what comes into your mind?			
Interviewee: Em men cycling around Blessington Lakes on the weekend in all their Lycra. In packs			
Interviewer: Ok. And is that a negative thing to you or is it positive?			
Interviewee: Yeah negative. It's like they are trying to avoid their families for the entire weekend (laughs). Don't you see lots and lots of them on the Wicklow mountains?			
Interviewer: That's true there is a lot. It's pretty popular.			

Interviewee: They are all of the same age group. All men

Interviewer: And so you don't see many females?

Interviewee: Not in those big groups that are doing the serious cycling at the weekend over kilometres and kilometres up and down hills.

Interviewer: Ok, so you would take them to be serious cyclists?

Interviewee: yeah. If they are wearing Lycra they are serious right? (Laughs)

Interviewer: Ok and what about the ones you see every day, maybe on a commute to work?

Interviewee: Well you see mostly workers going in and out of town. A lot of people are on the Dublin Bikes. I see them from the bus. So that looks like a good way of getting around the city but they would have to be quite brave.

Interviewer: Why would you need to be brave?

Interviewee: Well... it's kind of terrifying. You know, I did cycle around the city previously before my bike was stolen although not very often because it was just so scary when you're caught between a bus and a taxi and there's a lorry coming around the corner. You're not protected, you're not a lane of your own em you're sharing the bus lane with the bus lane which is just painted as a cycle lane but in fact it's still the bus lane. Like I was in Copenhagen on holiday and they have all the bicycle lanes separated by a kind of miniature footpath from the road.

Interviewer: Ok

Interviewee: And from the road. They're completed protected in there and wide so lots of bikes can go there at the same time. And I think if it was like that here then I probably would cycle more but I don't really want to be killed by a lorry or a Dublin bus.

Interviewer: Ok. So that's what kinda what cycling mean's to you?

Interviewee: Yeah

Interviewer: So your view or the perception of cyclists themselves, you did mention your view of the Lycra wearing cyclists. Is that how you view all cyclists?

Interviewee: No, it's not how I would see all cyclists but it would be how I see a lot of leisure cyclists. I suppose people who are cycling to work, especially women would have to you know, be presentable when they arrive to work so they are not wearing the Lycra and they are not doing huge distances. You know I think the people who are cycling into town, it looks like they coming from somewhere fairly close to town to their jobs ya know? And they are wearing their work clothes or thereabouts ya know?

Interviewer: As opposed to the rigout?

Interviewee: The rigout yeah and I mean you'll obviously see that people won't even be wearing helmets on the way into town. Like the Dublin Bikes don't even have helmets with them so.

Interviewer: So the onus is on the cyclist themselves to protect themselves and should be worn for safety purposes?

Interviewee: Yeah.

Interviewer: Ok so it's a negative perception of some cyclists but positive of others then that you're saying that they ones that are out leisure cycling, you say that they tend to be men and away from their families but then you see the ones that are cycling into work.

Interviewee: I'm happy to see the ones that are cycling into work in that I think they are kinda eco warriors. Like I'm usually on the bus into work so I would see myself as caring about the environment and using public transport. I mean I hate when I'm in the bus lane going real fast down the Quays but then you're stuck to turn right to go down to Dame street because there's so many cars there. Just people that are driving into the City Centre which just seems mental. So you know, I think if you're not on the bus then you should be on a bike. I don't understand why a lot of people are still driving into town in the mornings and evenings. You know for women, it might be easier to drive because they don't want to arrive at work all puffed out. You know I wouldn't wanna arrive my job, you know, I need to turn up presented well. Not huffing and puffing. There's no shower there to you know sort myself out. But even if there was, I'd have to blow-dry my hair. So like I have all these things I have to consider if I'm gonna go to work on a bike. If I'm gonna get another bike, those are kinda some of the things that would put me off. Plus the weather like. We don't have to the good weather they have in other countries to encourage more cycling but I'm not sure what you could really do about that apart from having the cycle lanes blocked off from the road then at least if you were slipping, you wouldn't be slipping into the path of a truck (laughs). So maybe that's all just about protecting yourself and feeling safer on the road, you know?

Interviewer: So that's what would lead you to feel a bit more safer? Separated segregated cycle lanes?

Interviewee: Yeah I think when you are cycling, like I did cycle, like I know you have to be quite aggressive on the road. You know just decide that you're turning and go for it and you can't hesitate. And I think that's a real turn off for women in particular. Maybe. It seems to me that men seem to find that easier, I mean like I'm worried that they guy that's driving that car and I don't wanna be hurt. I don't kinda have that aggression to, or the confidence to just go around that corner and not worry about it you know. Em I'd definitely be nervous

Interviewer: Ok

Interviewee: And that kinda thing so

Interviewer: And so the cyclists that you see what kind of economic status do you think that they have? You mentioned eco warriors,

Interviewee: Well I think there's eco warriors but I don't think you have to be like a hippy on a really low income to be an eco-warrior. I think it's in the consciousness of the general public more that the onus is one us as a society to take care of the environment. So I think's it just normal people that are doing 9-5pm jobs in the city centre. So it's your middle income people cycling.

Interviewer: So you think they have more consciousness but if I said to you that the government have now had to move their goal of reducing their carbon footprint by 2020 by 20% and it's now been moved to 2030 and they are trying to get it down 30%, what would you say to that? Do you still think that people are more conscious?

Interviewee: Yeah I mean I do personally think that people are more conscious but if I was to respond to that, I would say that the government aren't doing enough. I would say that the desire is there amongst people to cycle to work or to do other things that will help the environment but without the government's policy in developing those things then people don't have the support they need to do it so. I'd say that's probably more of a failure of the government. I mean what cycle lanes have they put in apart from painting a strip of the road red and sticking a picture of a bike on it. They haven't you know? To me that's not a cycle lane. That's a bus lane that I'm sharing with cyclists.

Interviewer: Yeah Ok. So it's been proven with the latest Census records, though they are not available for 2016, but some of the report have posit a 3:1 ratio that men cycling rates are higher than women's. Why do you think that is? Do you think there are any cultural issues that prevent women from cycling?

Interviewee: I definitely think it's about what you are wearing to work. You're commuting for work as opposed to leisure, then you are deemed by society to have to turn up to work with a perfect face of make-up and perfect hair and perfect clothes. You can't be coming up to you know, the office huffing and puffing. So you know I think that's a huge turn off for women. And then I don't think women like wearing helmets. I think that's also, like you know men don't really care but you know women care about what they look like more, even just on that commute. You know, are they gonna show up for work all tussled with their helmet? They just look ugly then as well as they're going. You know I think that even when women are working out they like to go and buy themselves workout clothes like leggings.

Interviewer: Always looking their best?

Interviewee: Yeah and I think that's a big one for cycling as well, that people don't like to wear the helmet. Like there is the Hovding, it's like a little collar that you wear around your neck, it's a new helmet and it just kinda activates.

Interviewer: Almost like an airbag?

Interviewee: Like an airbag yeah. So they are quite expensive so it's gonna be a barrier isn't it for most women to pay for.

Interviewer: So what prevents you from cycling? You did say that you had a bike but you have no intention of replacing it. What's putting you off?

Interviewee: Em probably risk. It's the main thing like em for a couple of reasons. Like we're trying for a baby so I don't wanna end up cycling when I'm pregnant and maybe didn't realise I was pregnant and because we don't have the proper cycle lanes or facilities for cyclists. I'm just gonna fall off it and god knows what would happen then.

Interviewer: Ok

Interviewee: Another one is the, like where can you park your bike? There's like one place in Dublin where you can park your bike that's monitored in a car parking garage. But apart from

that your bikes just gonna get nicked like the Gardai don't do anything about bike theft. Like I reported my bike missing, I probably shouldn't have even bother going to the Garda station. They couldn't have cared less like. Like you know, what protection is out there for cyclists?

Interviewer: Like I suppose if it was a car you would have insurance and probably care more?

Interviewee: Yeah. But if I'm gonna invest in another bike, it will probably get stolen in Dublin while I'm in shopping or at work. So it's a waste of money maybe.

Interviewer: So I'm not sure if there's any campaign that you are aware of that try an encourage women to cycle. Are you aware of any campaigns?

Interviewee: No. None at all. I can't think of anything that's targeted at women to cycle.

Interviewer: Is there anything that would encourage you to cycle again or cycle more often in the future?

Interviewee: yeah there was talk of, they were asking the public for submissions to do with the traffic problems on the Quays. Some of the suggestions were to just have one side of the Quays that was just for cyclists. And then the other side of the Quays that was for both lanes of traffic or one lane of traffic. Em so something like that where you are actually protected I think that's a huge one for women that they are not protected and there's a vulnerability within women. I think men have, feel less of a vulnerability. Maybe they are not less vulnerable. You know the human body is the human body. But I think women perceive themselves more vulnerable than men do. Like men have this sort of "I'm gonna live forever" mentality that women don't. Psychologically I just think that's the way women are.

Interviewer: I suppose there are differences there and there will continue to be differences in the numbers of women that cycle for now but hopefully through this research we will help to find out what those barriers are.

Thank you so much for taking the time to let me interview you Louise. I'm just going to end the interview there and stop the recording.

Interviewee: No worries

Appendix 3 - Survey Questions

What are the barriers to participation in cycling for females in Dublin

Thank you for taking the time to fill out this survey

Hello. Thank you for taking the time to click into this survey. Please note that this survey is only aimed at females or those who identify as female, who do not have child dependants of any age and are non-cyclists or female cyclists who don't cycle regularly (regularly is defined in this instance as once a week), and live in Dublin (City and County).

The reason for this survey is to understand the perceptions and barriers that discourage females from cycling regularly or at all. It is a follow up survey to two interviews. The data collected will be included in a 10,000 word research dissertation on the topic to be submitted to Ballyfermot College of Further Education and Dublin City University as part of the fulfilment of Bachelor of Arts honours degree award in Media Production & Management. This reason it is only targeting Dublin is due to the small scope of the project. Please be assured that respondents will remain anonymous and the data collected will only be used for inclusion in the dissertation. This survey is not targeting females who actively participate in cycling for transport and/or leisure. Thank you very much for your time

- 1. Which statement most accurately describes you? (Please tick one)
- I own a bicycle, but I don't use it regularly (regularly is defined as at least once a week)
- I don't own a bicycle
- I cycle sporadically using the Dublin Bikes Scheme (sporadically is defined as once a month or less)
- I never cycle
- Other

In relation to your general perception of cycling, which one of the following statements do you agree with? (Please tick the answer that most applies to your individual perception)

- Cycling is a safe mode of transport
- Cycling is risky as a mode of transport
- Cycling is good for the environment and I would like to cycle more
- I never cycle as I just don't like it
- Leisure cycling off-road is safer than on-road cycling
- I don't think cycling is cool

Please tick the most relevant answer that applies in your opinion according to the following statement.
 Female cyclists in Dublin are....

- Brave
- Taking a risk
- Confident
- Sporty
- Environmentally Friendly
- Responsible
- Other

4. Which statement most accurately describes your awareness of the amount of media coverage of female cyclists at a sporting level? (Please tick one)

- I never see sports coverage of women's cycling events on mainstream media
- I sometimes see sports coverage of women's cycling events on mainstream media
- I think sports coverage of men's and women's cycling events are balanced in the media?
- I don't know

Do you think the cycle-safer campaigns send out a positive message to encourage women to cycle? (Please tick one answer)

O Yes

O No

Maybe

- I don't know of any campaign that encourages safer cycling
- O The campaigns send out a negative message that creates fear as opposed to encouragement
- I don't know

6. Which of the following do you think has a negative impact on the lack of females cycling as a mode of transport? (please tick the one that has the most negative impact in your opinion)

- Weather
- Traffic
- Pressure for females to 'look good' and be presentable
- Distance to work/college etc
- Lack of cycle lanes
- Not wanting to be 'on show'
- Safe bicycle parking facilities
- Other

Other (please specify)

7. In a typical day, which of the following forms of transportation does you use? (Please tick as many that apply)

Bus
Luas
Automobile
Taxi
Train
Walking
Passenger in a car
Other (please specify)

8. The number of men cycling is higher than women, with at least a 3:1 ratio in Dublin. Do you think there are any cultural issues that affect the low numbers of women participating in cycling? (please comment in the box below)

9. What is your age?

\$

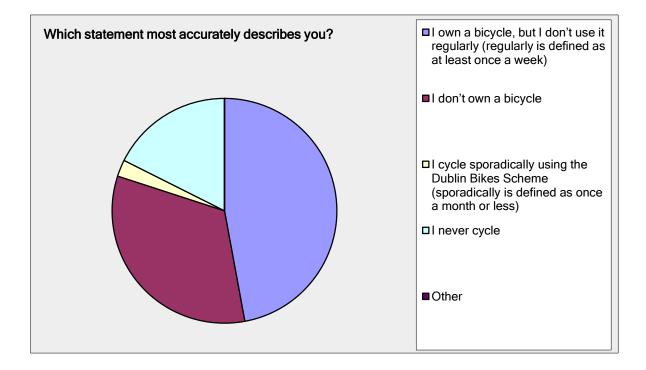
10. I am a female (Please select an answer)

\$

Appendix 4 - Survey Results

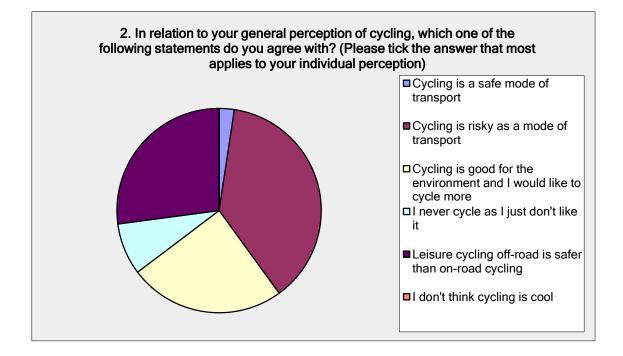
What are the barriers to participation in cycling for females in Dublin

1. Which statement most accurately describes you? (Please tick one)			
Answer Options	Response Percent	Response Count	
I own a bicycle, but I don't use it regularly (regularly is defined as at least once a week)	47.1%	40	
l don't own a bicycle	32.9%	28	
I cycle sporadically using the Dublin Bikes Scheme (sporadically is defined as once a month or less)	2.4%	2	
l never cycle	17.6%	15	
Other	0.0%	0	
answered question		85	
skipped question		0	



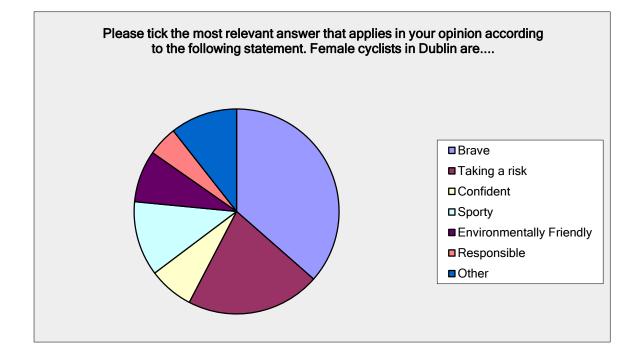
2, In relation to your general perception of cycling, which one of the following statements do you agree with? (Please tick the answer that most applies to your individual perception)

Answer Options	Response Percent	Response Count
Cycling is a safe mode of transport	2.4%	2
Cycling is risky as a mode of transport Cycling is good for	37.6%	32
the environment and I would like to	24.7%	21
cycle more I never cycle as I just don't like it Leisure cycling off-	8.2%	7
road is safer than on-road cycling	27.1%	23
I don't think cycling is cool	0.0%	0
answered question skipped question		85 0



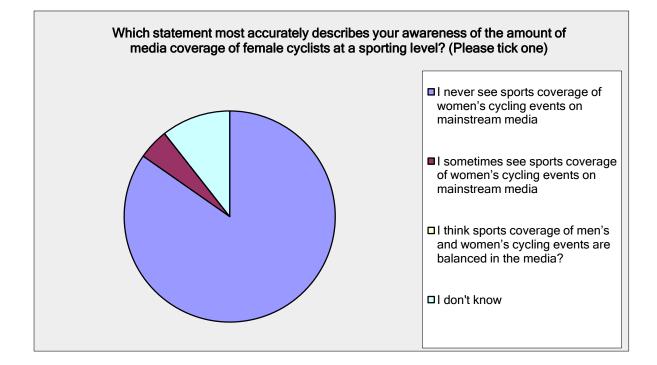
3, Please tick the most relevant answer that applies in your opinion according to the following statement. Female cyclists in Dublin are....

Answer Options	Response Percent	Response Count
Brave	36.5%	31
Taking a risk	21.2%	18
Confident	7.1%	6
Sporty	11.8%	10
Environmentally Friendly	8.2%	7
Responsible	4.7%	4
Other	10.6%	9
answered question		85
skipped question		0



4. Which statement most accurately describes your awareness of the amount of media coverage of female cyclists at a sporting level? (Please tick one)

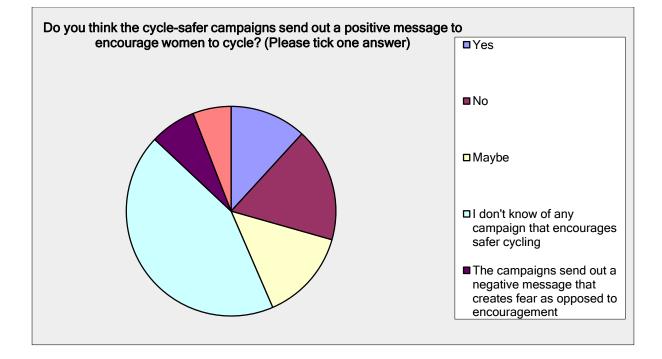
Answer Options	Response Percent	Response Count
I never see sports coverage of women's cycling events on mainstream media	84.7%	72
I sometimes see sports coverage of women's cycling events on mainstream	4.7%	4
media I think sports coverage of men's and		
women's cycling events are balanced in the media?	0.0%	0
I don't know	10.6%	9
answered question		85
skipped question		0



Do you think the cycle-safer campaigns send out a positive message to encourage women to cycle? (Please tick one answer)			
Answer Options	Response Percent	Response Count	
Yes No Maybe I don't know of any campaign that encourages safer cycling	11.8% 17.6% 14.1% 43.5%	10 15 12 37	
The campaigns send out a negative message that creates fear as opposed to encouragement I don't know	7.1% 5.9%	6 5	
answered question skipped question		85 0	

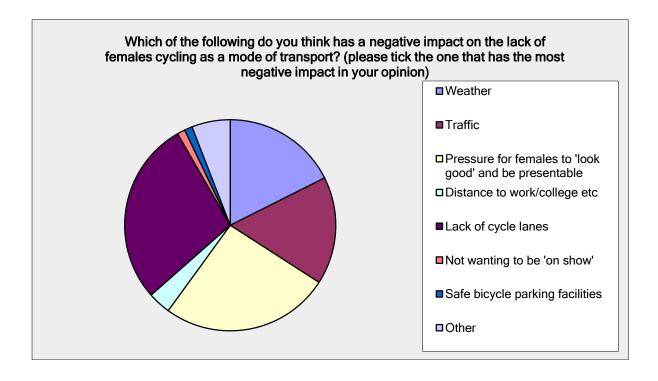
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6. Which of the following do you think has a negative impact on the lack of females cycling as a mode of transport? (please tick the one that has the most negative impact in your opinion)

Answer Options	Response Percent	Respo nse Count
Weather	17.6%	15
Traffic	16.5%	14
Pressure for females to 'look good' and be presentable	25.9%	22
Distance to work/college etc	3.5%	3
Lack of cycle lanes	28.2%	24
Not wanting to be 'on show'	1.2%	1
Safe bicycle parking facilities	1.2%	1
Other	5.9%	5
Other (please specify)		8
answered question		85
skipped question		0



(Please tick as many that apply)		
Answer Options	Response Percent	Response Count
Automobile	38.1%	32
Bus	44.0%	37
Train	4.8%	4
Luas	25.0%	21
Taxi	6.0%	5
Walking	64.3%	54
Passenger in a car	15.5%	13
Other (please specify)		1
answered question		84
skipped question		1

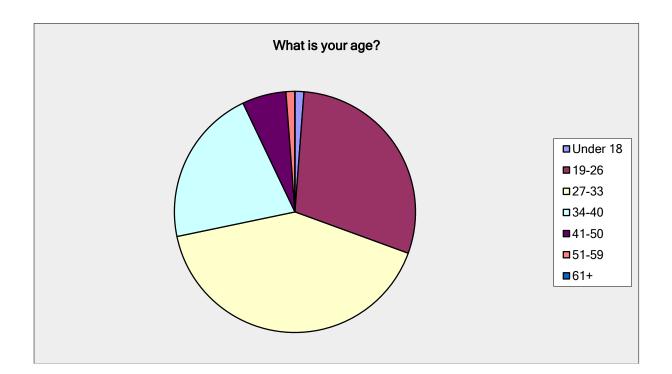
In a typical day, which of the following forms of transportation do you use? (Please tick as many that apply)

7. In a typical day, which of the following forms of transportation do you use? (Please tick as many that apply)

8. The number of men cycling is higher than women, with at least a 3:1 ratio in Dublin. Do you think there are any cultural issues that affect the low numbers of women participating in cycling? (please comment in the box below) Answer Options

	Count
	59
answered question	59
skipped question	26

9. What is your age?		
Answer Options	Response Percent	Response Count
18 or under	1.2%	1
19-26	29.4%	25
27-33	41.2%	35
34-40	21.2%	18
41-50	5.9%	5
51-59	1.2%	1
61+	0.0%	0
answered question		85
skipped question		0



10. I am a female (Please select an answer)			
Answer Options	Response Percent	Response Count	
Yes I am female	100.0% 0.0%	84 0	
answered question		84	
skipped question		1	

