

**IMPACT OF THE WORKPLACE CLIMATE ON THE RELATIONSHIP BETWEEN
MOTIVATION AND PRO-ENVIRONMENTAL BEHAVIOUR IN THE IRISH PUBLIC
SECTOR**

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ABSTRACT

This study looks at the moderating role of the workplace climate on the relationship between motivation and employee workplace pro-environmental behaviour in the Irish public sector. The aim of this study is to identify if Irish public sector workplace climates have an impact on the environmental behaviour taking place within them. The significance of this research is in seeking to identify potential contributing factors which may assist public sector organisations in achieving their sustainable goals and targets.

Previous research in the United States shows that the workplace climate plays an influencing role on employees' participation in pro-environmental behaviour in the workplace. Correspondingly this current study intends to expand on this research and apply that methodology and research approach to an Irish public sector context.

The contributions from this study are 1) providing additional research in the area of workplace climate and pro-environmental behaviour and 2) provide research on workplace climate in the Irish public sector, and 3) identification of key workplace elements which can be adopted to encourage pro-environmental behaviour in the Irish public sector workplace.

A quantitative research approach was adopted for this study through a survey which asked participants questions on five key areas; demographic data, personal motivation towards the environment, their perception of their workplace climate, their perception of their workplace's environmental initiatives, and the frequency in which they engage in certain workplace activities. The responses were interpreted through moderation analysis. The findings of this study show that Irish public sector employees are environmentally motivated, workplace pro-environmental indicators, sustainable policies, sustainable practice and sustainable procedures encourage employees to engage in pro-environmental behaviour.

Declaration

Submission of Thesis and Dissertation

National College of Ireland Research Students Declaration Form (*Thesis/Author Declaration Form*)

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Title of Thesis: Impact of the workplace climate on the relationship between motivation and pro-environmental behaviour in the Irish public sector.

Date: 19th August 2020

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Table of Contents

Abstract.....	i
Declaration.....	ii
Acknowledgement.....	iii
Table of Contents	iv
List of Figures	vii
List of Tables	vii
List of Abbreviations.....	viii
Section One: Research Introduction	1
1.1 Introduction	1
1.2 Background	1
1.3 Context of this Research	4
Section Two: Literature Review	6
2.1 Literature Review Introduction	6
2.2 Human Resource and Organisational Sustainability.....	6
Green Human Resource Management	7
2.3 The Workplace Climate and Employee Pro-Environmental Behaviour	9
Employee Organisational Citizen Behaviour towards the Environment (OCBE).....	9
Theory of Planned Behaviour (TPB)	10
2.4 Individual Pro-Environmental Motivation and Pro-Environmental Behaviours	12
2.5 Summary of Literature Review	13
Section Three: Research Aims and Objectives	14
Section Four: Methodology	15
4.1 Methodology Introduction.....	15
4.2 Research Philosophy	16
Research Assumptions.....	17
4.3 Research Approach	19

4.4 Population and Sample.....	19
4.5 Survey Design and Measurements.....	21
4.5.1 Demographics	21
4.5.2 Individual Pro-Environment Motivation: Motivation Toward the Environment Scale.....	22
4.5.3 Perception of Workplace Climate: C4C Scale.....	23
4.5.4 Workplace Elements: C4C-Global Scale	24
4.5.5 Frequency of Pro-Environmental Behaviour.....	25
4.6 Pilot Study.....	26
4.7 Data Collection.....	27
4.8 Data Analysis	29
4.9 Ethical Considerations	30
4.10 Summary	30
Section Five: Research Findings	30
5.1 Participant Demographics	30
5.2 Measure of Central Tendency	31
5.3 Research Objective One: Level of Motivation and Amotivation Toward the Environment in the Irish Public Sector	32
5.4 Research Objective Two: Workplace Climate Moderation on the Relationship Between Motivation and Pro-Environmental Behaviour in the Irish Public Sector.	34
5.5 Research Objective Three: Workplace Climate Elements	37
Section Six: Discussion	39
6.1 Key Findings	39
6.2 Implications of Study Findings.....	40
6.3 Limitations and Future Research	42
Section Seven: Conclusion and Recommendations.....	43
7.1 Conclusion.....	43
7.2 Recommendations.....	44

Personal Learning Statement	47
Reference List	48
Appendix A – Climate for Climate Measures.....	53
Appendix B – Current Study Survey.....	56

List of Figures

Figure 1: Organisational Citizen Behaviour toward the Environment model estimation findings, Luu, (2018).....	10
Figure 2: Pictorial representation of the Theory of Planned Behaviour, Parker (2011)	11
Figure 3: The "research onion", Saunders, et al. (2019).....	16
Figure 4: Simple moderation model, Hayes (2017)	29

List of Tables

Table 1: Comparison of participants gender and age.....	31
Table 2: Analysis of Skewness of Scale Scores	32
Table 3: Mean and Median of Scale Score.....	32
Table 4: Interaction of the workplace climate on the relationship between motivation and workplace pro-environmental behaviour.....	35
Table 5: Interaction of the workplace climate on the relationship between amotivation and workplace pro-environmental behaviour.....	36
Table 6: Interaction of the workplace climate elements (C4C Global) on the relationship between motivation and workplace pro-environmental behaviour.	38
Table 7: Interaction of the workplace climate elements (C4C Global) on the relationship between amotivation and workplace pro-environmental behaviour.....	39

List of Abbreviations

EMS	Environmental Management Systems
GHRM	Green Human Resource Management
HR	Human Resource
HRM	Human Resource Management
OCB	Organisational Citizen Behaviour
OCBE	Organisational Citizen Behaviour towards the Environment
PEB	Pro-environmental Behaviour
TPB	Theory of Planned Behaviour

Section One: Research Introduction

1.1 Introduction

This study seeks to examine the potential moderating effect of the workplace climate on the relationship between employee's motivation and participation in workplace pro-environmental behaviour in the Irish public sector.

The aim of this study is to identify if a workplace climate interaction is present and affecting behaviour. This study makes recommendations based on the findings which may assist in successful implementation of sustainable workplace initiatives in the Irish public sector and in turn assist Irish public sector bodies in achieving their sustainable targets and goals as outlined in the Climate Action Plan.

1.2 Background

There is a growing focus on environmental sustainability and climate action worldwide resulting in organisations becoming more aware of the impacts of their operations on the environment, encouraging them to increasingly act in a sustainable manner, reducing their environmental impact and carbon footprint (Jackson, et al., 2011). Businesses are now considering the three P's: People, Planet, and Profit, moving towards a vision of the environment as well as their financial returns (Viswanathan & Varghese, 2018). This change in direction, or "Green Wave" by businesses can be attributed to a variety of factors including the awareness of the limits of nature's resources and that stakeholders are becoming more environmentally concerned which in-turn causes businesses to become concerned too (Esty & Winston, 2006, p. 8). Further to this, some consumers are

now opting for green or sustainable consumerism (Viswanathan & Varghese, 2018) and businesses are responding to this and engaging in more sustainable practices to gain a competitive advantage (Esty & Winston, 2006).

This engagement in sustainability is something that organisations are implementing into their daily operations. According to KPMG's 2017 Corporate Responsibility Reporting survey (2017), 67% of the world's largest companies disclosed their carbon reduction targets in their published annual reports (an increase of 9%) while 43% linked their corporate responsibility activities to the United Nations' Sustainable Development Goals. This public expression by the world's largest companies on their sustainable activities and goals shows commitment and increased transparency of large industry's operations and sustainable activities.

Organisations may also be implementing sustainability as a reaction to global climate goals which their country of operation has pledged to achieve. As of May 2020, there are currently 189 countries signed-up to The Paris Agreement (United Nations Framework Convention on Climate Change, 2020a), which asks parties to commit to ambitious national goals aiming to minimise an increase in global temperatures by 2 degrees Celsius in-turn minimising associated environmental and climate impacts (United Nations Framework Convention on Climate Change, 2020b). In April 2016 Ireland signed The Paris Agreement (United Nations Framework Convention on Climate Change, 2020a) committing to supporting the implementation of climate change reduction efforts, regularly reporting of national emissions, and efforts in place to reduce same (United Nations Framework Convention on Climate Change, 2020b).

Supporting Ireland's commitment to the Paris Agreement the Department of Communication, Climate Action, and Environment (2019a) released Ireland's Climate Action Plan which outlines the actions Ireland plans on undertaking between 2019 and 2030 to begin to transition to a decarbonised society by 2050. This plan has identified key areas for redevelopment to reduce carbon emissions; Electricity, Buildings, Transport, Agriculture, Enterprise and Services, and Waste and the Circular Economy (Department of Communications, Climate Action, and Environment, 2019a). This plan requires set actions to be undertaken by Government Agencies and Departments and asks for the regular measuring and monitoring of the delivery of targets and the demonstration of leadership in the area of climate action.

The Climate Action Plan also suggests that public sector bodies may be asked to report or adopt certain practices which promote sustainable behaviour within their workplace environment. Included in these practices are:

- establishing a green team for staff to engage in,
 - reporting on food waste, water conservation, waste segregation and recycling measures,
 - adoption of a lower carbon lifestyle by employees,
 - adopting the digitisation of paper-based systems (paperless office)
- (Department of Communications, Climate Action, and Environment, 2019a, pp. 125-126)

In addition to those practices outlined in the Climate Action Plan, on January 4th 2019 all Government Departments ceased the purchasing of single-use plastics for use within their

offices including cutlery, and straws (Department of Communications, Climate Action, and Environment, 2019b). Both this ban on single-use plastics and the previous practices which have been suggested for adoption by public sector bodies, require commitment to new behaviours by both the employer and employee for success. This intersection of corporate sustainable goals, workplace practices, and employee participation requires workplace collaboration and an environment through which these activities can be achieved.

The literature on workplace climate and participation in workplace pro-environmental behaviour highlights two theories through which employee behaviour can be assessed: (1) Organisational Citizen Behaviour Towards the Environment and (2) The Theory of Planned Behaviour. Both of these theories will be introduced in this study and additionally research by Magill, et al., (2020) will be introduced whose research included an additional element of motivation in the assessment of employee pro-environmental behaviour. Magill, et al., (2020) research is central to this current study, with their methodology and scales being utilised.

1.3 Context of this Research

The context for this research is the Irish public sector and their requirements to achieve ambitious carbon reduction targets as outlined in the Climate Action Plan. In considering the implementation and successful achievement of these actions in a public sector organisation the potential obstacles which the public sector faces must be considered.

As of Q4 2019 there are 412,200 public sector employees (including semi-state bodies) in Ireland (Central Statistics Office, 2020). These employees are hired over a variety of

areas including the civil service, defence, education, health, justice, local authorities and non-commercial state agencies (Department of Public Expenditure and Reform, 2017).

A 2019 report by the Institute of Public Administration (2019) identified that the proportion of the Irish workforce working in the public sector fell below 15% in 2016, and has remained below 15% since. Furthermore this report identified that in comparison to other European countries, as a percentage of overall workforce, Irelands employment in government services is towards the lower end of those countries surveyed (Institute of Public Administration, 2019).

Furthermore, an additional challenge for the Irish public sector is the bureaucratic workplace environment which was highlighted in research by Dooley, et al., (2011) and was identified as a “significant sector-specific factor that adversely impacts leadership effectiveness”. This research underlines the perception of bureaucracy in public sector structures, the lack of ability for an individual to act due to central constraints, and lack of control by leaders over their resources and ability to implement change (Dooley, et al., 2011).

Here, the limited availability of staffing resources, shrinking proportional workforce and bureaucratic structure gives support to the importance of identifying specific key areas through which climate action targets can be achieved efficiently.

Section Two: Literature Review

2.1 Literature Review Introduction

According to Saunders, et al., (2015, p. 74) a literature review is the foundation onto which research is built, and for this study the literature review outlines key concepts and theories through which employee pro-environmental behaviour is discussed.

Previously, Section 1.2 provided the background to this study and the sustainable workplace requirements of Irish public sector agencies as given in the Climate Action Plan. Expanding on this, Section 2.2 discusses the role of Human Resources (HR) in implementing organisational workplace sustainability, along with Green Human Resource Management (GHRM) a perspective on HR which is sustainability oriented.

Section 2.3 discusses two key theories through which workplace employee participatory behaviour may be predicted: Organisational Citizen Behaviour Toward the Environment and the Theory of Planned Behaviour.

To conclude the literature review, Section 2.4 introduces significant research which will be utilised in the current study's methodology.

2.2 Human Resource and Organisational Sustainability

Given that Irish public sector agencies must achieve substantial climate action targets (as outlined in the Climate Action Plan), the methods or approaches through which these can be achieved must be considered. Traditionally Environmental Management Systems (EMS) are implemented within organisations to improve their sustainability and protect the environment (Daily & Huang, 2001). Typically the implementation of EMS requires

HR input to develop “top management support, environmental training, empowerment, teamwork, and rewards” (Daily & Huang, 2001).

Similarly, Renwick, et al., (2008) suggests that the HR Department plays a key role in promoting environmental sustainability in the workplace by translating an organisations sustainable goals into organisational policies and practices.

Furthermore, Ahmad (2015) states that HR has a role to play in the implementation of a green culture or workplace climate, that it is through HR that businesses implement eco-friendly policies that create a green atmosphere which enable an organisation to go green.

This intermediary role between organisational goals and the workplace implementation of practices to accomplish them positions HR as an important catalyst in the achievement of sustainable goals. The term for this merging of organisational sustainable goals and HR is “Green Human Resource Management”, and is considered to be the most “significant element” for sustainability within an organisation (Ahmad, 2015).

Green Human Resource Management

Mampra (2013, p. 1273) defines Green Human Resource Management as Human Resource Management (HRM) policies which “promote the cause of environmentalism and in the process, create improved employee morale and satisfaction”. Green Human Resource Management can be further defined as “the human resource management aspects of environmental management” (Renwick, et al., 2013), encouraging not just the sustainable use of resources within a business’s operations but also the pivoting of an organisations culture to become more environmentally focused. The benefits of GHRM

are not just limited to a reduction of an organisations environmental impact. Research has also shown that GHRM policies in the workplace can be connected to increased employee well-being and organisational performance (Renwick, et al., 2013).

The implementation of GHRM promotes green culture within organisations into which workplace and employee policies and practices can be embedded (Ramasamy, et al., 2017). These policies and practices can be implemented at all stages of employment, from recruitment through to exit (Renwick, et al., cited in Jackson, et al., 2011). Examples of GHRM practices include the addition of green job descriptors during recruitment, green employee performance appraisal, rewards for workplace pro-environmental behaviours, green training and development, green employee relations, and green workplace initiatives (Ahmad, 2015; Renwick, et al., 2013; Aishwarya & Thahriani, 2020).

This continuous presence of organisational green policies and practices provides organisations with ample opportunities to encourage and promote pro-environmental behaviour throughout an employee's lifecycle helping them achieve their sustainable goals.

We see through GHRM how HR can play an important role in promoting employee pro-environmental behaviour with the introduction of green-oriented policies and practices from a top-down strategic approach. These policies and practices however require an environment or climate to function in, and when implemented successfully into an appropriate climate can play a significant role in encouraging and creating a “pronounced pro-environmental work climate” (Hicklenton, et al., 2019). Therefore an organisations climate is a key factor to consider in employees pro-environmental behaviour and its role

in orienting employees towards behaviours which they are expected to participate in (Hicklenton, et al., 2019).

The next section, Section 2.3, considers two theories which has been applied to research on employee behaviour and the workplace climate.

2.3 The Workplace Climate and Employee Pro-Environmental Behaviour

Organisational Citizen Behaviour towards the Environment (OCBE)

Organisational Citizen Behaviour Toward the Environment (OCBE) is defined by Daily et al., (2009) as “environmental efforts that are discretionary acts, within an organizational setting, not rewarded or required from the organization”. Research into OCBE establishes that employee pro-environmental behaviours can be effected by the nature of the social norms within an organisation (Luu, 2019). This social and cultural approach of OCBE to encouraging pro-environmental behaviour differs from the policy approach of GRHM. Organisational Citizen Behaviour Toward the Environment considers how unique organisational factors, such as how their leaders giving support green behaviours, can create a setting through which employee’s personal pro-environmental behaviours are supported (Luu, 2019).

Daily, et al., (2009) suggests that organisations can utilise their managers as promoters of their organisations’ environmental goals and that employees can be encouraged to engage in pro-environmental behaviour through the integration of meaningful corporate social performance, in-line with the organisations environmental concerns. This interrelationship between the influence of leadership, support for green behaviours, and

employee engagement can result in employees participating in OCBE or pro-environmental behaviour (Luu, 2019) (Figure 1).

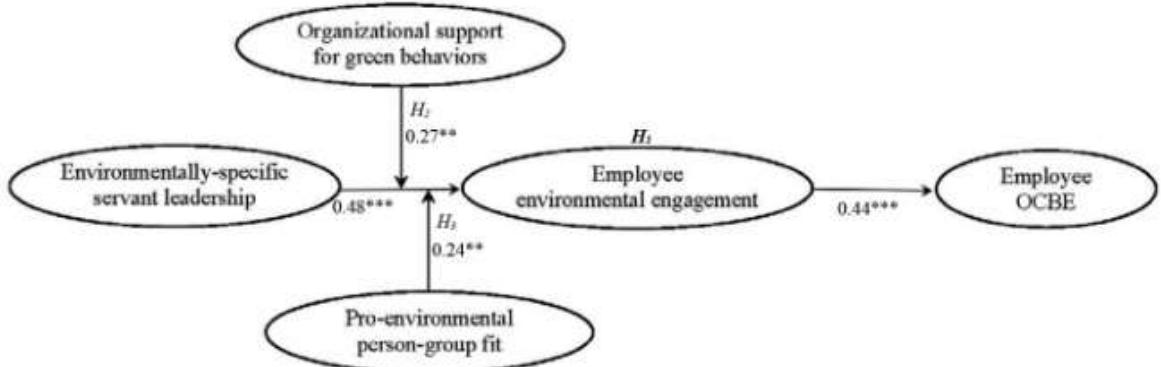


Figure 1: Organisational Citizen Behaviour toward the Environment model estimation findings, Luu, (2018)

Organisational Citizen Behaviour Towards the Environment is important to consider for this study as it gives insight into one theory as to how workplace climate can affect employee's pro-environmental behaviour, without explicitly requiring or requesting this behaviour from them.

Theory of Planned Behaviour (TPB)

Another theory relevant to workplace pro-environmental behaviour is the Theory of Planned Behaviour. The Theory of Planned Behaviour (TPB) supports the concept that the workplace climate is a combination of policies, practices, and other indicators of corporate norms, which can influence the behaviour of its employees. The Theory of Planned Behaviour looks at how an outcome (behaviour) can be predicted based on an individual's attitude toward that behaviour, subjective norm, and perceived control they have over that behavioural which contributes to an intention to carry out a behaviour and subsequently the behaviour taking place (Ajzen, 1991) (Figure 2).

This theory was applied previously to research on workplace recycling and found that where an organisation makes use of workplace social networks (peers and managers) to communicate messages on recycling, and gives increased perception of control to employees participating in recycling, the likelihood of employees practicing recycling (the pro-environmental behaviour) in the workplace increases (Parker, 2011).

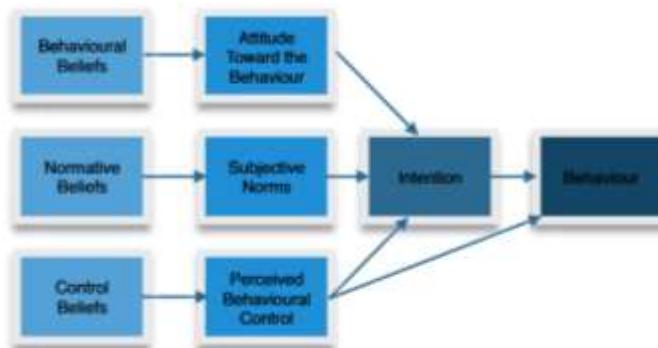


Figure 2: Pictorial representation of the Theory of Planned Behaviour, Parker (2011)

An additional research application of the TPB in the workplace by Ho et al., (2011) looked at employee participation in training in a public sector environment. Ho et al., (2011) found that employee participation in workplace training increased when the participant's perceived they had control over attending, received support to attend, encouragement was given to participate in training, and the links between participation and personal benefits were communicated. This shows how workplace culture, supports and norms can influence an employee's behaviour.

Both the OCBE and the TPB illustrate how workplace settings, cultures, norms, and perception of control can influence employee's participation in activities and pro-environmental behaviours.

While these organisational factors can influence employees behaviour and pro-environmental behaviour, Blazejewski, et al., (2018) stated that organisational interventions like supervisory support and training schemes may become less relevant in organisations where employees are “intrinsically motivated green activists”. Blazejewski, et al. (2018) further identified that an investigation is required in organisations where employees are ahead of their organisation in green development issues. This approach is asking to take into consideration an employee’s individual motivation and interest in sustainability on their participation in pro-environmental behaviour rather just the workplace climate or organisational policies which may be encouraging them.

Section 2.4 will introduce recent research relevant to this gap in literature and where this current study is positioned in relation to it.

2.4 Individual Pro-Environmental Motivation and Pro-Environmental Behaviours

Employees are key to organisational goals (del Brío, et al., 2007), they can embrace opportunities within the workplace to engage in environmental and sustainable problem solving (Liebowitz, 2010; Zoogah, 2011), participate in environmental training, and commit to the strategies, policies and practices of their organisation. The OCBE and the TPB both show influencing cultural factors within an organisation that can have an impact on employee behaviours. However as stated by Blazejewski, et al., (2018), consideration must also be given to an employee’s independent beliefs and the impact that their pro-environmental motivation may have on their actions. This has recently been addressed by Magill, et al., (2020) who conducted research in the United States on the impact of the workplace climate and participation in pro-environmental behaviour, but also included

motivation as an important factor. Magill, et al., (2020) identified that certain elements within the workplace moderated the relationship between motivation and employee pro-environmental behaviour. Magill, et al., (2020) also found that for employees with low independent levels of pro-environmental motivation, the workplace climate plays an important role in encouraging pro-environmental behaviour. This study shows the importance of including individual motivation as a key factor in assessing participation in workplace pro-environmental behaviour.

Magill, et al., (2020) research is central to the current study, and the researcher of this current study makes reference to the methodology developed by Magill, et al., (2020) to gather and analyse the impact of the workplace climate on the relationship between motivation and workplace pro-environmental behaviour in the Irish public sector.

2.5 Summary of Literature Review

In summary this literature review provides the foundation for this study giving an overview of previous research and theories surrounding employee participation in pro-environmental behaviour.

This review shows firstly the role which HR plays in promoting organisational sustainability and introduces GHRM a sustainability-oriented approach to strategic HRM.

Secondly, this review considers the internal cultural factors which may be influencing employee's participation in workplace pro-environmental behaviour, through the theories of OCBE and TPB. These theories show how research focused on cultural norms, internal networks, and managerial support to encourage pro-environmental behaviour.

Finally, this review shows the gap in the research where individual motivation should be considered when assessing participation in pro-environmental behaviours. It also introduces recent research by Magill, et al., (2020) which includes this element and their approach is an important prerequisite for this study as it provides a robust analysis of the workplace climate . The measures and scales implemented and developed by Magill, et al., (2020) are utilised in this study and applied to an Irish public sector context which is unique.

Section Four will give additional information on these measures and scales and their application to this study.

Section Three: Research Aims and Objectives

The research question and title of this study focuses on workplace pro-environmental behaviour and the factors which effect participation in same.

This research question of this study is:

What is the impact of the workplace climate on the relationship between motivation and pro-environmental behaviour in the Irish public sector?

The aim of this study is to expand on previous research within the area of workplace pro-environmental behaviour and to assist the Irish public sector in the effective achievement of their sustainable targets by identifying if the workplace climate moderates the relationship between motivation and employee workplace pro-environmental behaviour and making recommendations based on this finding.

Three sub-objectives were developed to answer the research questions. These sub-objectives are:

Objective 1: *To identify the level of motivation toward the environment amongst Irish public sector employees.*

Objective 2: *To identify whether the workplace climate moderates the relationship between individual motivation and pro-environmental behaviour in the Irish public sector.*

Objective 3: *If workplace climate does moderate the relationship between individual motivation and pro-environmental behaviour, identify where applicable, the workplace climate elements which have more of a significant effect.*

Section Four: Methodology

4.1 Methodology Introduction

According to Saunders, et al., (2015, p. 2) there is no one best way to complete research, but rather research is conducted through the making of “informed choices”. This section will provide information on the research choices taken for this study, with justification for each. It will also outline the standardised scales and measurement tools utilised for the current study.

4.2 Research Philosophy

Saunders, et al. (2019) created the “research onion” as a depiction of the different layers through which researchers can position their choices for both data collection and data analysis (Figure 3).

Research philosophy is the first layer of the onion (see Figure 3) which researchers should consider for the positioning of their study. Saunders, et al. (2019) identified five research philosophical positions:

- 1) Positivism
- 2) Critical Realism
- 3) Interpretivism
- 4) Postmodernism
- 5) Pragmatism

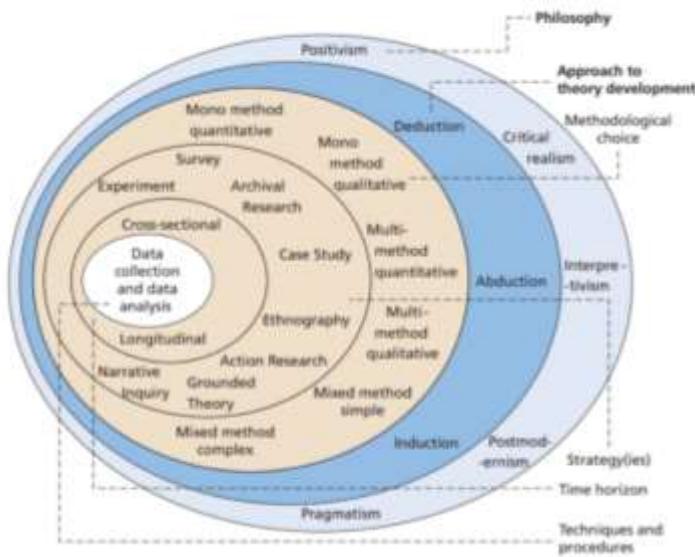


Figure 3: The "research onion", Saunders, et al. (2019)

A positivism view is that observed reality can be explained through laws or generalisations and through science we get the “clearest possible ideal of knowledge”

(Cohen, et al., 2007). Critical realism seeks to explain our experiences through the causes and mechanism which surround us (Saunders, et al., 2019, p. 147). Interpretivism considers that reality is something that we create, as humans we translate our surroundings and experiences into our reality (Kekeya, 2019). Postmodernism perspective is that there is no “right” or “true” meaning in the world, but that collectivism and power relations creates the value at a period in time (Saunders, et al., 2019). Finally, from a pragmatism research perspective the research objective is the key focus at all times (Saunders, et al., 2019), and as such the methods or approach to meet those objectives may vary.

From these positions, the researcher of this study identified with a positivism perspective to research, and in the case of this study, a positivism positioning was chosen with the aim to answer research objectives through laws or generalisations proven by data analysis.

This positivism approach is further supported after considering the three research assumptions: ontology, epistemology, and axiology.

Research Assumptions

Ontology considers the “nature of reality” for the researcher and how this can shape their research choices (Saunders, et al., 2019, p. 133). According to Saunders, et al. (2019, p. 144) through a positivism lens the world is “ordered” and there is “one true reality”. In the perspective of this study there is the acceptance that there is one reality within the workplace which employees experience equally.

The second research assumption to be considered is for this study is epistemology or what is “acceptable, valid and legitimate knowledge” (Burrell and Morgan, as cited in

Saunders, et al., 2019, p. 133). The research methodology will reflect the epistemology assumptions. A qualitative approach to knowledge is to gather “mental facts” or information that can only be gathered through discussion (Barnham, 2015). Being based on descriptive language, qualitative data provides observations of the participants. Alternatively, quantitative methods provide the researcher with numbers and figures which are taken as “facts” (Barnham, 2015). For this current study as we are seeking to find and confirm measurable effects within the workplace, a quantitative method was selected.

The final research assumption to consider in relation to this study is axiology or how values and ethics can impact research (Saunders, et al., 2019, p. 133). For the current study, the researcher acknowledges a personal interest in sustainability and the progression of public sector environmental goals as being the motivation for the research area chosen. Applying a positivistic perspective to this research requires the author to maintain an objective stance (Saunders, et al., 2019, p. 144) and provide an analysis of the data and research from a detached perspective.

The application of a positivism view to the three research assumptions, ontology, epistemology and axiology, explains the overarching choices made in relation to this study and how they best reflect the researcher’s views and ideologies. The selection of a quantitative methodology to measure the objectives of this study meets the positivist view of research being structured, measured and deductive (Saunders, et al., 2019, p. 144).

Following the identification of a positivism view to this current study by the researcher, a deductive approach to theory development was chosen. Through a deductive approach

the research aims and objectives are developed first from the analysis of previous research and literature followed by the collection of data to test the research question (Saunders, et al., 2019, p. 153).

4.3 Research Approach

Various methods of measurement of employee participation in workplace were considered for the current study. These include the application of the Theory of Planned Behaviour as applied by Parker (2011) to green workplace behaviour and Ho, et al., (2011) to training participation in the public sector, and the Organisational Citizen Behaviour Toward the Environment which considers the social norms of a workplace (Luu, 2019). Both approaches to measuring employee behaviours are proven valid, however as stated by Blazejewski, et al., (2018) employees personal motivation or interests should be considered in relation to their behaviours. Magill, et al. (2020) shows that workplace climate has a moderating effect on employees' motivation and environmental behaviour. Applying the research approach of Magill, et al. (2020) to this study the researcher utilised scales and system of measurement which they developed.

4.4 Population and Sampling Methods

The population for this study is the Irish public sector. As of Q4 2019 there are 412,200 public sector employees (including semi-state bodies) in Ireland (Central Statistics Office, 2020). Snowball and criterion sampling methods were applied to this research.

Snowball sampling is the collection of data using referrals to individuals from those who have already participated and can assist with gaining access to participants which would

otherwise be difficult to reach (Bernard & Gravlee, 2014, p. 675). Criterion sampling is the collection of data from individuals that meet a specific criterion (Bernard & Gravlee, 2014, p. 236), for this study Irish public sector employees was the criteria for valid participation.

For snowball sampling the survey was initially distributed to a sample of 43 individuals consisting of HR professionals and HRM dissertation students some of which work in the public sector. These individuals were targeted for participation in the study as the researcher has access to them and prior knowledge of their area of employment. Secondly the survey was distributed to close contacts, family members, and acquaintances whom either work in the public sector or have contacts within the public sector. Both groups committed to sharing the survey with other contacts they knew which may participate.

Thereafter, criterion sampling commenced, and the survey was issued to 120 public sector employees in Company X of which the researcher has access to. Company X is a national authority for sustainable energy in Ireland. Both the snowball and criterion sampling resulted in 60 responses to the survey.

To encourage further engagement in the survey a request for participation was issued on a public sector network “Energy Link” which has 3,013 registered members. Membership for this network is available exclusively to Irish public sector employees. The network is for those who are involved or interested in energy management solutions for their organisation. These members were selected to participate in this study not only because they meet the criterion of being Irish public sector employees, but also because of their interest in workplace and organisational initiatives (energy management solutions) which

would vary based on their organisation and which would provide potentially a greater variety in answers from a broader group. Sharing an invitation to participate in the study on the Energy Link network resulted in an additional 40 responses.

A total of 100 responses were received, with 83 responses submitted from public sector employees, meeting the criterion and for inclusion and analysis in this study.

4.5 Survey Design and Measurements

The researcher of this study selected pre-existing scales for this study to ensure reliability and validity of the data collected. The scales selected showed validity in previous research by Magill, et al., (2020) who tested the influence of the workplace climate on pro-environmental behaviour in the United States. The researcher chose these scales as they satisfied the need for the study to measure a variety of potential contributors to workplace pro-environmental behaviour. Sections 4.5.1 to Section 4.5.5 inclusive provides an explanation of these scales.

4.5.1 Demographics

Section one of the survey collected demographic data from the participants including gender, age, location of employment and sector. No identifiable data was collected from this survey; however, these demographic measures allowed for the positioning of this study within the Irish population and provides confirmation that the responses are employed within the Irish public sector (see Appendix B).

4.5.2 Individual Pro-Environment Motivation: Motivation Toward the Environment Scale

The participants level of motivation toward to participate in environmental behaviour was assessed using the Motivation Toward the Environment Scale. This scale measures the participants independent drive to consider and act environmentally (Villacorta, et al., 2003) and can be used as a predictor of the level of motivation which participants have towards environmental behaviour (Pelletier, et al., 1998). This scale provides the first measurement of the study which is defining if a participant is environmentally motivated.

This scale will also measure the level of amotivation toward the environment. Amotivation toward the environmental is when someone engages in pro-environmental behaviours, but these behaviours have not got a pro-environmental intention behind them (Magill, et al., 2020).

A high motivation score indicates greater pro-environmental motivation (Mandip, 2012) and a low score indicates the opposite or low pro-environmental motivation to their behaviours. In contrast a high amotivation score indicates “mechanistic” engagement in pro-environmental behaviour, or lack of environmental intent (Magill, et al., 2020) and a low amotivation score indicates high environmental intent to behaviours.

Level of pro-environmental motivation and amotivation is measured using a five-point scale from “does not correspond at all” to “corresponds exactly”. The score range for this scale is 5-1 with 5 indicating “corresponds exactly” and 1 indicating “does not correspond at all”. The Motivation Towards the Environment Scale consists of 24 items (see Appendix B) and examples of the questions included in the survey are:

- I get pleasure improving the quality of the environment
- Doing things for the environment is an integral part of my life
- I do things for the environment to avoid being criticised

4.5.3 Perception of Workplace Climate: C4C Scale

The workplace climate is first measured using the C4C Scale (see Appendix A). The C4C scale was developed by Magill, et al., (2020) to assess the level of pro-environmental indicators in the workplace. The C4C scale measures an employee's perception of workplace behaviours based on their observations or experiences (Magill, et al., 2020). This scale assumes that employees who observe pro-environmental behaviour in the workplace will rate their organisation highly (Magill, et al., 2020), and a low rating indicates an absence of pro-environmental indicators within the workplace.

Perceptions of the workplace climate is measured through 7 items using a five-point scale from “strongly disagree” to “strongly agree”. The score range for this scale is 5-1 with 5 indicating “strongly agree” and 1 indicating “strongly disagree”. Previous research shows that the benchmark mean for scores is 3.03 with a standard deviation of 1.01 (see Appendix A).

Examples of the questions included in the survey include:

- Employees have the necessary job knowledge and skills to carry out organisational environmental objective
- Leadership shown by management in my organisation adequately supports our environmental objective

4.5.4 Workplace Elements: C4C-Global Scale

The second workplace climate measurement is through the C4C-Global scale which assesses specific organisational elements that support pro-environmental behaviour (Magill, et al., 2020). A high score on the C4C Global scale indicates elements within the organisation are supporting pro-environmental behaviours and a low score indicates the workplace elements are not supporting pro-environmental behaviours.

There are eight sub-scales under which 28 items are included, these eight sub-scales are workplace events, policies, procedures, rewards, expectations, laws, supports, and practices. This scale is measured using a five-point scale from “strongly disagree” to “strongly agree”. The score range for this scale is 5-1 with five indicating “strongly agree” and 1 indicating “strongly disagree”. Previous research shows that the benchmark mean for scores is 3.88 with a standard deviation of 1.64 (see Appendix A).

Examples of the questions included in the survey include:

- My organisation holds events that address our impact on the environment (organisational events)
- My organisation’s policies encourage employees to consider the environment as they work (organisational policies)
- My organisation’s procedures allow employees to detect risk to the environment (organisational procedures)
- My organisation rewards employees who identify ways of working that can reduce potential harm to the environment (employee rewards)
- Leadership in my organisation expects people to minimise waste material as they carry out their work (expectations)
- People in my organisation create initiatives that minimise the potential harm we might have on the environment. (law)

- My organisation gives support for employees to reduce their energy spend (supports)
- People in my organisation have pro-environmental practices that are not part of their job requirements (practices)

4.5.5 Frequency of Pro-Environmental Behaviour

After the workplace climate, participants were asked to give the frequency with which they participate in a series of pro-environmental behaviours. The frequency with which they engage with these behaviours indicate the level at which they engage in extra-role and work related pro-environmental behaviour (Magill, et al., 2020).

Extra-Role Pro-Environmental Behaviour

Extra-role pro-environmental behaviour was measured using the Organisational Citizen Behaviour for the Environment Measure developed by Boiral and Paillé, (2012) as a tool to measure behaviours such as participation in eco-initiatives, civic engagement, and eco-helping.

High score indicates frequent involvement in extra-role pro-environmental behaviour and a low score indicate no involvement in extra-role pro-environmental behaviour.

Extra-role behaviour was measured using a five-point scale from “always” to “never” and consisted of 10 items. The score range for this scale is 5-1 with five indicating always participating and 1 indicating never participates. Examples of the questions included in the survey include:

- I spontaneously give my time to help my colleagues take the environment into account in everything they do at work (eco-helping)
- I participate in environmental events organised in and/or by my company (eco-civic engagement)

- I voluntarily carry out environmental actions and initiatives in my daily work activities (eco-initiatives)

Work Related Pro-Environmental Behaviour

Work related pro-environmental behaviour was measured through the Employee Pro-Environmental Behaviour scale developed by Graves, et al., (2013) who identified reasons work related pro-environmental behaviours.

Work related behaviour was measured using a five-point scale from “always” to “never” and consisted of 13 items. The score range for this scale is 5-1 with five indicating always participates and 1 indicating never participates. Examples of the questions included in the survey include:

- At work I reduce my energy use
- At work I help create green processes

4.6 Pilot Study

Prior to finalising the survey, a pilot study was issued via Survey Monkey to six individuals. A convenience sample was selected for the pilot study of close acquaintances, family and friends. The pilot study was issued to identify any usability or legibility issues for participants.

Participant feedback on the pilot study highlighted concerns that some questions to the participants seemed repetitive. However, participants also acknowledged that the survey followed a logical format and was of similar style to those which they would have participated in previously.

The survey was amended post-pilot testing to include additional demographic questions and a final question asking the participant to confirm that they agreed to their responses being submitted to the study for analysis.

4.7 Data Collection

An online quantitative survey was chosen as the data collection method of this study. This method of data collection was selected after consideration of the philosophical positioning of the research and researcher. It also provides the opportunity for the researcher to access the target population, public sector employees, which the researcher has limited access to. This access was limited in nature due to the current Covid-19 pandemic, where a significant proportion of the public sector employees are working from home with potentially irregular or limited working hours and availability, as was identified by Company X employees. An online survey communicated via email gave the participants flexibility in when they could complete it, at a time that suited them.

The survey collected responses over a two-month period between June and July 2020 and were collected through the online survey platform Survey Monkey.

Communication with employees of Company X was via email. The participants received an email outlining the topic of the research, the degree which the research was contributing to, and contact details of the researcher for any queries, the email also included the link to the Survey Monkey survey.

The first page of the survey gave information again on the focus and topic of the research, ensuring that participants understood what research their responses were contributing to. The first page of the survey also outlined that participation in the survey was voluntary,

that the survey was anonymous, the data collected would be stored securely, and that no identifiable information was being collected. Participants were also notified on the first page of the survey that their responses would be aggregated and used solely for research purposes. Contact information of both the researcher and Advisor for this study was also provided so the participant could contact either with queries. The participants were then asked to confirm that they were happy to participate in the survey.

The participant was then presented with the questions of the scales to answer and the order in which these appeared were demographics, Motivation Toward the Environment Scale, C4C Scale, C4C Global Scale, Organisational Citizen Behaviour for the Environment Measure and Employee Pro-Environmental Behaviour scale (see Appendix B for the survey).

After completing the survey, participants were once again reminded of the terms of the survey (voluntary and anonymous participation, the data is stored securely, the data is non-identifiable, and the data aggregated), participants were required to once again confirm submission of their answers to the survey with the option that they may instead opt-out of submitting their answers by closing the browser.

Contact information was provided for participants on last page of the survey again to allow any issues to be addressed directly with the researcher or Advisor of this study.

The same survey was also posted on “Energy Link” as outlined in Section 4.4. Instead of an email accompanying the survey link, a message was posted outlining the research topic while requesting for participation.

The final data collection method utilised was via WhatsApp to HR professionals, family, friends, and acquaintance who work in the Irish public sector or have contacts who work in the Irish public sector. The survey link was shared with a message providing an overview of the study and the degree the degree which the research was contributing to.

4.8 Data Analysis

The participants data was analysed using SPSS (v.26) statistics software. Moderation testing was completed using an SPSS macro called PROCESS V3.5 developed by Hayes (2017) which provides the tools to complete a moderation analysis. Simple moderation analysis looks for the level of effect that a variable (W) has on the interaction (X on Y) (see Figure 4).

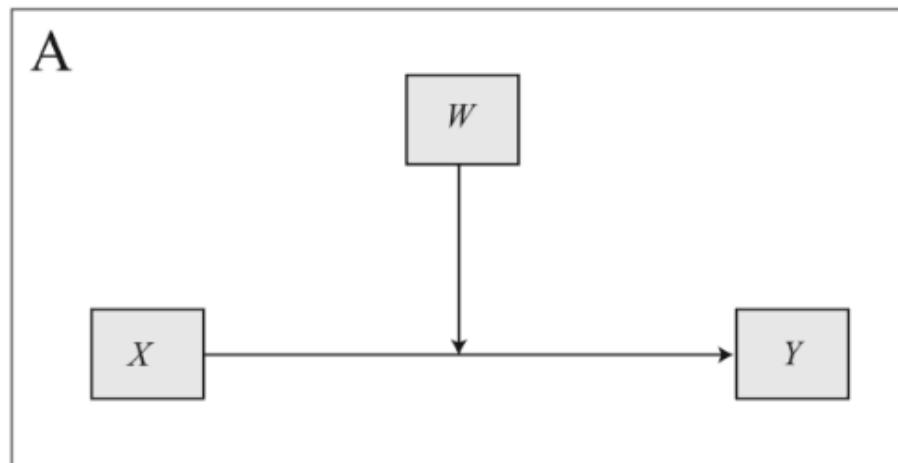


Figure 4: Simple moderation model, Hayes (2017)

In the current study, moderation analysis using the PROCESS V3.5 macro analysed the effect that the workplace climate (W) has on the relationship between employee motivation (X) and pro-environmental behaviour (Y).

The p value is reported which identifies if the finding is significant. An alpha (α) level or significance level of $p < .05$ was adopted for the analysis.

4.9 Ethical Considerations

The researcher of this study followed the National College of Ireland guidelines (National College of Ireland, 2017) at the commencement of this study. The guiding principles of respect, beneficence and non-maleficence, and justice were implemented to ensure ethical management of the study.

At commencement of this study, the HR Department of Company X was emailed to obtain permission to circulate a survey internally. The organisation had a concern with regards anonymity and any research findings which may be assumed to be reflective of their employees or workplace. To account for this, the organisation has been anonymised.

4.10 Summary

In summary, this section outlines the methods through which this study was conducted. The chosen population, the measurements for data collection, and the tools for data analysis are identified. Finally, the ethical considerations of this study are provided.

Section Five provides the outcome and findings of this study.

Section Five: Research Findings

5.1 Participant Demographics

Overall, 100 responses were received for this study with 83 ($n=83$) participants meeting the criteria of working in the public sector.

Of the public sector participants, 60.2% identified as female and 39.8% identified as male. 33.7% of the public sector participants in the survey were aged 45 to 54 years of age, 28.9% were 35 to 44 years of age, 26.5% were 25 to 34 years of age, and 10.8% were 55-64 years of age. The average or most frequent participant of this study identified as female aged between 35 and 44 years of age, see Table 1 for comparison of age by gender for this study.

		Age					
		25-34	35-44	45-54	55-64	Total	
Gender	Female	Count	15	18	13	4	50
		% female	68.2%	75.0%	46.4%	44.4%	60.2%
	Male	Count	7	6	15	5	33
		% male	31.8%	25.0%	53.6%	55.6%	39.8%
Total		Count female and male within age range	22	24	28	9	83
		Overall % of participants	26.5%	28.9%	33.7%	10.8%	

Table 1: Comparison of participants gender and age

5.2 Measure of Central Tendency

Using SPSS (V.26) data was checked for normality of distribution. Four out of six scale scores were not normally distributed (skewness range of 1.415 to -.754) (see Table 2). Due to the level of skewness and the collection of ordinal data through the use of a Likert scale in the survey, the median was selected as the measure of central tendency for the scales as it is not distorted by skewed data (Manikandan, 2011).

	Motivation Score	Amotivation Score	C4CG Score	C4C Score	Extra Role Score	Work Related Score
N	Valid	83	83	79	82	83
	Missing	0	0	4	1	0
Mean	3.3578	1.5904	3.2871	3.0296	2.6157	3.4810
Median	3.4000	1.5000	3.3929	3.0000	2.5000	3.4615
Skewness	-.754	1.415	-.462	.029	.636	-.587
Std. Error of Skewness	.264	.264	.271	.266	.264	.264
Kurtosis	.244	3.265	-.249	-.610	.716	.962
Std. Error of Kurtosis	.523	.523	.535	.526	.523	.523

Table 2: Analysis of Skewness of Scale Scores

5.3 Research Objective One: Level of Motivation and Amotivation Toward the Environment in the Irish Public Sector

All data collected was computed to give the overall scores for each scale in this study.

These scores reflect the preferences of the participants to each of the scale subjects with

Table 3 showing the mean and median score for each scale.

	Motivation Score	Amotivation Score	C4C Scale Score	C4C Global Scale Score	Work Related PEB Score	Extra Role PEB Score
Mean	3.7289	1.5422	3.0361	3.3373	3.4940	3.3855
Median	4.0000	1.0000	3.0000	4.0000	4.0000	3.5000

Table 3: Mean and Median of Scale Score

In the survey participants were first measured on their level of motivation and amotivation towards the environment through The Motivation Toward the Environment Scale.

Previous research by Wanda, et al., (2018) applied this scale for the collection of normative data of a population. For this scale the higher the score the more the participants are pro-environmental motivated (Magill, et al., 2020). From the median motivation score

(Table 3) we can see that overall, the participants of this study showed moderately high levels of motivation toward the environment (median =4 on a 5-point scale) implying that the participants are independently pro-environmentally motivated.

Similarly, the participants were measured for their level of amotivation, or intention to act in an environmentally friendly manner. High scores of amotivation can imply that an individual does not act with the environment as their main priority, but rather their engagement in pro-environmental behaviour is “mechanistic” (Magill, et al., 2020). Overall, the participants of this study showed a low level of amotivation toward the environment (median =1 on a 5-point scale) implying that the participants engage in pro-environmental behaviour with environmental intent.

Table 3 also shows the how participants of this study view the workplace climate. The participants responses show that they sometimes see pro-environmental behaviour in the workplace as indicated by the C4C scale (median = 3 on a 5-point scale). The participants responses also show that their workplaces support pro-environmental behaviour (C4C-Global) is moderately high (median = 4 on a 5-point scale). Finally these scores show how frequently the participants engage in pro-environmental behaviour in the workplace and shows that they usually engage in work-related pro-environmental behaviour (median = 4 on 5-point scale) and sometimes in extra-role pro-environmental behaviour (median=3.5 on a 5-point scale). These findings are key to research objective one of this study.

Objective 1: *To identify the level of motivation toward the environment amongst Irish public sector employees.*

Research findings: There is a moderately high level of motivation toward the environment amongst Irish public sector employees. The implications of these findings will be discussed later in Section Six of this study.

5.4 Research Objective Two: Workplace Climate Moderation on the Relationship Between Motivation and Pro-Environmental Behaviour in the Irish Public Sector.

Moderation analysis was completed to measure the interaction between the workplace, motivation, and workplace pro-environmental behaviour. As outlined in Section Four, the C4C scale measures the an employee's perception of workplace behaviours based on their observations and the C4C-Global scale assesses specific organisational elements within the workplace that support pro-environmental behaviour (Magill, et al., 2020). High scores on both the C4C scale and the C4C-Global scale indicates that the participants have recognized and observed pro-environmental behaviour within their workplace (e.g. office composting and green commuting incentives) and low scores would indicate absence of these behaviours (Magill, et al., 2020).

Section Four also outlined the Organisational Citizen Behaviour for the Environment Measure which is used to measure level of frequency of extra-role workplace pro-environmental behaviour and the Employee Pro-environmental Behaviour scale which is used to measure level of frequency of work related pro-environmental behaviour. High scores on the Organisational Citizen Behaviour for the Environment Measure indicates more “involvement in work place environmental citizenship” and high scores on the Employee Pro-environmental Behaviour scale indicate more frequent engagement in work related pro-environmental behaviour (Magill, et al., 2020).

The participants data from these scales was analysed through two-way moderation using the SPSS PROCESS V3.5 macro which measures the level of interaction between multiple elements. Four tests were completed to measure the C4C Scale and the C4C Global scale and their interaction on the relationship between motivation, amotivation, and extra role and work-related pro-environmental behaviour. Table 4 and Table 5 shows the results of this moderation analysis.

<u>Motivation</u>	<u>Extra Role PEB</u>		<u>Work Related PEB</u>	
	B	p - value	B	p - value
C4C Scale	.2953	.0169	-.2879	.0098
C4C Global Scale	.2323	.0577	-.2771	.0168

Table 4: Interaction of the workplace climate on the relationship between motivation and workplace pro-environmental behaviour.

Interpreting these results, we can see that the public sector workplace climate has a significant effect on the relationship between motivation and workplace pro-environmental behaviour in the public sector, where p-value is $<.05$ for interactions. The results show that both workplace procedures and policies (C4C Global, $p = .0168$) and observing pro-environmental behaviour in the workplace (C4C, $p = .0098$) has a significant effect on the relationship between motivation and frequency of work-related behaviour. The results also show that observing pro-environmental behaviour in the workplace (C4C, $p = .0169$) has a significant effect on the relationship between motivation and extra-role behaviour. Workplace procedures and policies (C4C Global, $p = .0577$) does not have a significant effect on the relationship between motivation and extra-role behaviour.

Considering the beta(B) level, we can report that observing pro-environmental behaviour in the workplace (C4C) positively ($B=.2953$) and significantly ($p=.0169$) influences the relationship between motivation and extra-role pro-environmental behaviour. We can also

report that observing pro-environmental behaviour (C4C) and workplace procedures and policies (C4C Global) negatively ($B=-.2879$, $B=-.2771$) and significantly ($p=.0098$, $p=.0168$) moderate the relationship between motivation and work-related pro-environmental behaviour. These results are in line with previous research by Magill, et al., (2020) who found that the C4C scale positively predicted extra-work pro-environmental behaviour in the workplace. Magill, et al., (2020) also reported negative beta levels for the effect of moderation by the C4C Global scale and work-related behaviour, however a unique finding of this study is the negative beta level for the effect of moderation of C4C scale and work-related behaviour.

Similarly, for amotivation (Table 5) we can see that the public sector workplace climate has no significant effect on the relationship between amotivation and workplace pro-environmental behaviour in the public sector, where p-value is $<.05$ for interactions. The results show that amotivation and frequency of work-related behaviour is not significantly moderated by both workplace procedures and policies (C4C Global, $p = .2330$) and observing pro-environmental behaviour in the workplace (C4C, $p = .6175$). Likewise, amotivation and extra-role behaviour is not moderated by both workplace procedures and policies (C4C Global, $p = .4945$) and observing pro-environmental behaviour in the workplace (C4C, $p = .5114$).

<u>Amotivation</u>	Extra Role PEB		Work Related PEB	
	B	$p - \text{value}$	B	$p - \text{value}$
C4C Scale	-.0960	.5114	-.0683	.6175
C4C Global Scale	.1338	.4945	-.2197	.2330

Table 5: Interaction of the workplace climate on the relationship between amotivation and workplace pro-environmental behaviour

These results show that the public sector workplace climate does moderate the relationship between motivation and pro-environmental behaviour in the workplace. However, the public sector workplace climate does not moderate the relationship between amotivation and pro-environmental behaviour in the workplace.

Additionally, the amotivation result show a contrast to previous research by Magill, et al., (2020). In this study for individuals who are not environmentally motivated (amotivated), the workplace climate does not have a moderating effect between motivation and workplace pro-environmental behaviour and Magill, et al., (2020) found for these participants that the workplace climate had a moderating effect on this relationship.

Objective 2: *To identify whether the workplace climate moderates the relationship between individual motivation and pro-environmental behaviour in the Irish public sector.*

Research findings: The workplace climate does moderate the relationship between individual motivation and pro-environmental behaviour in the Irish public sector. The implications of these findings will be discussed later in Section Six of this study. The next section will explore this in detail and identify key elements within the workplace climate which can encourage pro-environmental behaviour.

5.5 Research Objective Three: Workplace Climate Elements

The C4C Global scale in this study contains eight sub scales or workplace elements and as per previous research by Magill, et al. (2020), each of these sub scales can be measured as their own moderator on the relationship between motivation toward the environment

and extra role and work-related pro-environmental behaviour. The analysis of these sub scales as moderators resulted in an additional 32 tests using the SPSS PROCESS macro (see Table 6 and Table 7 for results).

<u>Motivation</u>	<u>Extra Role PEB</u>		<u>Work Related PEB</u>	
	B	p - value	B	p - value
Events	.1592	.0603	-.2266	.0055
Policies	.2658	.0055	-.2409	.0113
Procedures	.2459	.0179	-.2356	.0184
Rewards	.1323	.2881	-.2117	.0815
Expectations	.1714	.0557	-.1590	.0605
Laws	.1322	.1766	-.2054	.0267
Support	.1761	.0472	-.1649	.0487
Practices	.0700	.4118	-.1732	.0297

Table 6: Interaction of the workplace climate elements (C4C Global) on the relationship between motivation and workplace pro-environmental behaviour.

Three C4C Global sub scales, workplace policies ($B=.2658, p=.0055$), procedures ($B=.2459, p=.0179$), and supports ($B=.1761, p=.0472$) showed to have positive and significant moderating effect on the relationship between motivation and workplace extra-role pro-environmental behaviours.

Six C4C Global sub scales, events ($B=-.2266, p=.0055$), workplace policies ($B=-.2409, p=.0113$), procedures ($B=-.2356, p=.0184$), laws ($B=-.2054, p=.0267$), supports ($B=-.1649, p=.0487$), and practices ($B=-.1732, p=.0297$) showed to have negative and significant moderating effect on the relationship between motivation and workplace work-related pro-environmental behaviours.

<u>Amotivation</u>	<u>Extra Role PEB</u>		<u>Work Related PEB</u>	
	B	p - value	B	p – value
Events	.1674	.2326	-.1277	.3475
Policies	-.0360	.7504	-.0859	.4362
Procedures	.2895	.0197	-.3118	.0086
Rewards	-.0941	.5479	-.1101	.4647
Expectations	-.1132	.3604	-.0008	.9944
Laws	.1193	.3911	-.1051	.4245
Support	.0598	.6191	-.1412	.2124
Practices	.2468	.0577	-.0291	.0866

Table 7: Interaction of the workplace climate elements (C4C Global) on the relationship between amotivation and workplace pro-environmental behaviour.

One C4C Global sub scale, workplace procedures ($B=.2895, p=.0197$), showed to have a positive and significant moderating effect on the relationship between amotivation and workplace extra-role pro-environmental behaviours.

One C4C Global sub scale, workplace procedures ($B=-.3228, p=.0086$), showed to have a negative and significant moderating effect on the relationship between amotivation and workplace work-related pro-environmental behaviours.

Objective 3: *If workplace climate does moderate the relationship between individual motivation and pro-environmental behaviour, identify where applicable, the workplace climate elements which have more of a significant effect.*

Research findings: Some workplace elements provide positive and significant moderation on motivation (workplace policies, procedures), amotivation(procedures) and extra role pro-environmental behaviour. The implications of these findings will be discussed in Section Six.

Section Six: Discussion

6.1 Key Findings

This research has key findings of which some are in line with previous research and others which are unexpected. This study aims to answer the question “What is the impact of the workplace climate on the relationship between motivation and pro-environmental behaviour in the Irish public sector?” and we see in the findings that there are multiple elements and interactions that need to be considered in answering this question.

To summarise the findings, public sector workers are motivated toward the environment, and have environmental intentions when they participate in pro-environmental behaviours. The study also shows that in the Irish public sector workplace indicators of pro-environmental behaviour (C4C) positively moderate the relationship between motivation and engagement in pro-environmental behaviours which are outside of key workplace roles (extra-role). Other elements also positively moderate the relationship between motivation and extra-role pro-environmental behaviour, and these are pro-environmental policies, procedures and supports.

We can also report from this study that workplace procedures specifically have a positive moderation effect on the relationship between motivation and extra-role pro-environmental behaviour.

The next section will discuss the implications of these key findings, contribution to this area of research and the limitations of this study,

6.2 Implications of Study Findings

This study builds on the research by Magill, et al., (2020) focusing on the moderating effect of the workplace on the relationship between motivation and pro-environmental behaviour. The rationale for this research was to provide insight into the Irish public sector workplace climate and identifying where possible key workplace elements which may assist in the public sector in achieving sustainable goals and targets through increased employee pro-environmental behaviour.

Some findings of this study are similar to that of previous research by Magill, et al., (2020) who found in the United States that some workplace elements will have a moderation

effect while others do not and that workplace indicators of pro-environmental behaviour (C4C) is a good predictor of extra-role behaviours. Another similar finding is the role of procedures in assisting encouraging pro-environmental behaviours for employees who are not environmentally motivated (amotivated). Magill, et al., (2020) states in previous research that “sustainable procedures may be an important lever for employee PEB (pro-environmental behaviour” and from the analysis of this study’s findings, this is also true for public sector workplaces.

The implications of these findings for the public sector is that this study finds that the Irish public sector workplace does moderate pro-environmental behaviour, and that there may be benefits in implementing pro-environmental policies, procedures, and supports within the organisation to increase pro-environmental behaviour. The introduction to this study outlines GHRM, a sustainably oriented perspective of HRM. It is through GHRM that the researcher of the current study suggests this study’s findings are implemented as GHRM helps to create the green culture into which workplace and employee policies and practices can be embedded (Ramasamy, et al., 2017). Furthermore, GHRM provides an outline of policies, procedures, and supports which public sector bodies can reference for implementation. Specific to the findings of this study public sector bodies could implement the following GHRM practices within the workplace:

- Sustainable policies: Methods through which employees can voice organisational environmental concerns, environmental management training for employees enabling them to self-evaluate waste reduction opportunities within their roles (Ahmad, 2015; Shaban, 2019).

- Sustainable procedures: Waste reduction procedures (e.g. composting, recycling, paperless office), processes which enable employee environmental problem-solving (Ahmad, 2015), introduction of environmental risk detection processes.
- Sustainable supports: Increased supports and structures for employee involvement in environmental problem-solving (knowledge sharing) (Renwick, et al., 2008), managerial and organisational support for employee involvement in environmental initiatives (Ahmad, 2015).

6.3 Limitations and Future Research

The researcher of this study has identified the main limitation of this study to be quantity of participants gathered in relation to the overall population size. This limited number of responses(n=83) resulted in a sample size which is not representative of the wider public sector population. The second limitation identified in this study is potential subject bias of participants from Company X. The results of this study show a moderately high level of motivation toward the environment; however, this finding may not be representative of the overall public sector population, but that a reflection of Company X's employees.

Two C4C Global sub scales were not included in this study, technology and advertising, for future research these sub-scales could be included providing additional data on workplace elements. Future research may also opt to be mixed method and include interviews to gather additional information from respondents providing descriptions on their individual workplace experiences and workplace climate. This additional method may capture specific variations based on their location (headquarters vs. regional offices), time spent working remotely or from the home, workspaces shared with other agencies

(such as satellite offices or hotdesking), shared facilities with other Government agencies (and restrictions which may result from this).

Section Seven: Conclusion and Recommendations

7.1 Conclusion

In conclusion this study shows key findings in relation to the Irish public sector which can be utilised to help encourage pro-environmental workplace behaviours. The findings of this study are public sector employees are environmentally motivated, key indicators in the workplace help to encourage pro-environmental behaviours with these indicators moderating the relationship between motivation and pro-environmental behaviours. Similarly, key workplace elements help to encourage pro-environmental behaviour through moderation of the relationship between motivation and pro-environmental behaviour, these elements are workplace pro-environmental policies, procedures, and supports.

Furthermore, workplace procedures can help encourage pro-environmental behaviour for employees that do not have an environmental intent to their behaviours. These findings expand on the previous research by Magill, et al., (2020) and contribute to research in the areas of workplace climate and pro-environmental behaviour and public sector workplace pro-environmental behaviours.

The researcher of this study recommends the application of these key findings in the workplace through GHRM to assist with the implementation of practices which will leverage the public sector workplace and pro-environmental behaviours. These behaviours may in turn will assist public sector bodies in achieving their sustainable goals

and targets as outlined in the Climate Action Plan (Department of Communications, Climate Action, and Environment, 2019a).

7.2 Recommendations

From the findings of this study, the researcher recommends that Irish public sector organisations consider the following;

- Complete an analysis of the current workplace climate through the C4C and C4C Global practitioners toolkit (Appendix A) to give an initial assessment of the workplace climate at that point and time which can be used as a baseline for the success rate and future reporting of sustainable practices implemented. This analysis should also include a collated list of all pro-environmental activities which are currently present, assisting with monitoring and reporting on activities in the future.
- The researcher of this study also recommends the development of Green Teams and the Green Teams National Programme, which is part funded by the Environmental Protection Agency, can assist with this. The Green Teams National Programme is for “Environmental Champions” within organisations, or members of a Green Team and provides training on practices and policies which can be adopted for increased sustainability (Green Teams National Programme, 2020).
The costs for participation in the Green Teams National Programme is approx. €1,000 per person. However, the benefits of having an Employee Champion for workplace sustainability who will ensure management of a Green Team within the organisation will benefit the organisations long term as public sector bodies may be required to have a Green Team in place and report on their activities as outlined

in the Climate Action Plan (Department of Communications, Climate Action, and Environment, 2019a, pp. 125-126).

- The workplace Green Team can help with the development of organisational practices policies and supports. Organisations should encourage Green Teams to prioritise sustainable policies, procedures, and an exploration of workplace supports for employees to engage in pro-environmental behaviour. Employee involvement in developing these policies and practices can result in commitment and pride in their work (Renwick, et al., 2013). Encouragement and support for engagement in this may include management support for their teams to engage in pro-environmental initiatives with the allocation of time and resources to this.
- The researcher is also aware of the role which HR will play in researching, managing, implementing, and potentially reporting on these green initiatives. Where capacity is not available on a HR team, an additional employee may be employed to maintain workplace sustainabled initiatives. The financial costing of one additional employee at level C or Programme Assistant is starting at €23,965 (as of March 2019).

The Climate Action Plan outlines that the implementation of a Green Team may be required by Q4, 2020 (Department of Communications, Climate Action, and Environment, 2019a, p. 125). The researcher suggest that public sector bodies proceed with the initial analysis of their workplace climate using the C4C and C4C Global toolkit (Appendix A) either Q3 or Q4 of 2020. Simultaneously, the researcher suggests proceeding with the development of a Green Team where one is not present and appointing an Employee Champion for enrolment on the Green Team National

Programme in Q4 2020, or when next available. From this a two-year strategy with collaboration between HR and the Green Team to develop and monitor new sustainable policies, procedures, and supports should ensure robust and meaningful improvements, while contributing to long-term decarbonisation targets by 2050.

Personal Learning Statement

My dissertation provided me many opportunities for growth. Various obstacles throughout the duration of the research were overcome, personal, professional, and Covid-19 related. Reflecting on the development of my study there were areas which could have been improved on; personal stress management techniques could have been adopted earlier and greater interaction with my Advisor where permitted. Given the exceptional circumstances which 2020 brought, I am satisfied with the research achieved.

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Appendix A – Climate for Climate Measures

Climate for Climate Measures

C4C-Scale

Instructions. Think about the place where you currently work. Then, for each of the following statements, please write the number that corresponds to your level of agreement: (1) *Strongly disagree*, (2) *Disagree*, (3) *Neither agree nor disagree*, (4) *Agree*, (5) *Strongly agree*.

<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
1	2	3	4	5

- _____ 1) Employees have the necessary job knowledge and skills to carry out organizational environmental objectives.
_____ 2) My organization effectively measures progress towards their environmental objectives.
_____ 3) My organization has a formal recognition and reward system for employee environmentalism.
_____ 4) My organization's environmental initiatives have a large impact on employee environmental behaviors.
_____ 5) Leadership shown by management in my organization adequately supports our environmental objectives.
_____ 6) My organization effectively communicates to employees about environmental objectives.
_____ 7) Employees have the necessary resources to carry out organizational environmental objectives.

C4C-Scale Supplementary Materials

Benchmark Statistics

Benchmark mean (*M*) and standard deviation (*SD*) for C4C-Scale

C4C-Scale

M (*SD*)

3.03 (1.10)

C4C-Global

Instructions. Think about the place where you currently work. Then, for each of the following statements, please write the number that corresponds to your level of agreement: (1) *Strongly disagree*, (2) *Disagree*, (3) *Neither agree nor disagree*, (4) *Agree*, (5) *Strongly agree*.

<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
1	2	3	4	5

My Organization Holds Events:

- 1) ... that address our impact on the environment.
- 2) ... that teach employees about helping the environment.
- 3) ... where employees volunteer to support the health of our local habitat.
- 4) ... where employees can discuss environmental issues.

My Organization's Policies:

- 5) ... encourage employees to consider the environment as they work.
- 6) ... encourage employees to voice concerns about the organization's impact on the environment.
- 7) ... help minimize the waste material that employees generate.

My Organization's Procedures:

- 8) ... allow employees to detect risks to the environment.
- 9) ... help employees to minimize harm to the environment when incidents do occur.
- 10) ... help employees minimize the waste material that they generate.

My Organization Rewards Employees who:

- 11) ... identify ways of working that can reduce potential harm to the environment.
- 12) ... travel to work in a way that minimizes air pollution.
- 13) ... voluntarily reduce their energy use.

The Technology That my Organization Uses:

- 14) ... effectively teaches employees about the impact their actions have on the environment.
- 15) ... makes it easy for employees to take proenvironmental actions.
- 16) ... allows employees to minimize the amount of waste material they generate.
- 17) ... encourages employees to make choices that promote the health of the environment.

My Organization's Advertising Effectively:

- 18) ... teaches employees about environmental issues.
- 19) ... informs employees about the organization's environmental initiatives.
- 20) ... encourages employees to take actions that improve the health of the environment.
- 21) ... explains how employees can improve the health of the environment.

Leadership in my Organization *Expects* People to:

- 22) ... minimize waste material as they carry out their work.
- 23) ... find ways of working that are better for the environment.
- 24) ... participate in the environmental efforts of the organization.
- 25) ... question practices which may be harmful to the environment.

People in my Organization:

- 26) ... create initiatives that minimize the potential harm we might have on the environment.
- 27) ... lobby one another to promote the health of the environment.
- 28) ... argue when environmental issues are not the top priority.
- 29) ... openly engage in environmental activism at work.

My Organization Gives *Support* for Employees to:

- 30) ... reduce their energy use.
- 31) ... generate sustainable solutions to environmental issues.
- 32) ... learn more about environmental issues.
- 33) ... adopt more environmentally friendly ways of working.

People in my Organization:

- 34) ... have proenvironmental practices that are not part of their job requirements.
- 35) ... openly discuss the environmental impact of their practices.
- 36) ... Effectively encourage one another to engage in practices that support the health of the environment.

C4C-Global Supplementary Materials

Benchmark Statistics

Benchmark means (*M*) and standard deviations (*SD*) for C4C-Global and subscales

C4C-Global

M (*SD*)

3.88 (1.64)

Events <i>M</i> (<i>SD</i>)	Policies <i>M</i> (<i>SD</i>)	Procedures <i>M</i> (<i>SD</i>)	Rewards <i>M</i> (<i>SD</i>)	Technology <i>M</i> (<i>SD</i>)
3.51 (1.95)	4.28 (1.81)	4.32 (1.68)	3.31 (1.92)	4.07 (1.75)
Advertisements <i>M</i> (<i>SD</i>)	Expectations <i>M</i> (<i>SD</i>)	Laws <i>M</i> (<i>SD</i>)	Supports <i>M</i> (<i>SD</i>)	Practices <i>M</i> (<i>SD</i>)
3.71 (1.95)	4.28 (1.69)	3.49 (1.80)	4.04 (1.84)	3.89 (1.84)

Appendix B – Current Study Survey

Workplace Climate and Pro-Environmental Behaviour

Introduction

i, my name is Sara Norris. I am a student at the National College of Ireland, working towards a Masters degree in Human Resource Management.

This research is focused on the workplace environment examining employees behaviour within it and pro-environmental choices.

Please note that participation in this survey is completely voluntary. Data collected in this survey is anonymous, stored securely, and non-identifiable. The data will be aggregated and used solely for scholarly research purposes only.

If you have any questions about the research you can contact me at x18126154@student.ncirl.ie or my supervisor Matthew Hudson at Matthew.Hudson@ncirl.ie.

This survey will take around 15 minutes to complete.

* 1. Please confirm that you are happy to participate in this study:

- Yes, I am happy to participate
- No, I am not happy to participate

Workplace Climate and Pro-Environmental Behaviour

* 2. What is your age?

- | | |
|--------------------------------|-----------------------------|
| <input type="radio"/> Under 18 | <input type="radio"/> 45-54 |
| <input type="radio"/> 18-24 | <input type="radio"/> 55-64 |
| <input type="radio"/> 25-34 | <input type="radio"/> 65+ |
| <input type="radio"/> 35-44 | |

* 3. What gender do you identify as?

- | |
|--|
| <input type="radio"/> Female |
| <input type="radio"/> Male |
| <input type="radio"/> Prefer not to say |
| <input type="radio"/> Prefer to self-describe: |

* 4. What sector are you currently working in?

- | |
|--|
| <input type="radio"/> Public Sector |
| <input type="radio"/> For a Private Sector Company |
| <input type="radio"/> Self-Employed |
| <input type="radio"/> Non Profit |

* 5. In what country do you work?

To what extent do the following questions correspond to your environmental behaviour:

* 6. I do things for the environment because I get pleasure in mastering new ways to help.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 7. I get pleasure improving the quality of the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 8. I get pleasure when doing things for the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 9. I get pleasure in contributing to the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 10. Doing things for the environment is an integral part of my life.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 11. Taking care of the environment and myself are inseparable.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 12. Doing things for the environment is a fundamental part of who I am.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 13. Doing things for the environment is a part of the way I have chosen to live.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 14. Doing things for the environment is a sensible thing to do.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 15. Doing things for the environment is the way that I have chosen to contribute.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 16. I do things for the environment because it is a reasonable thing to do.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 17. It is a good idea to do something about the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 18. I would regret not doing something about the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 19. I would feel bad if I didn't do anything about the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 20. I would feel guilty if I didn't do anything for the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 21. I would feel ashamed if I didn't do anything for the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 22. Other people will be upset if I didn't do anything for the environment.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 23. I do things for the environment for the recognition I get from others.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 24. I do things for the environment because my friends insist I do.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 25. I do things for the environment to avoid being criticised.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 26. I wonder why I do things for the environment, the situation isn't improving.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 27. I don't know why I am doing things for the environment, I have the impression I am wasting my time.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 28. I don't know why I am doing things for the environment, I can't see how my efforts are helping.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

* 29. I don't know why I am doing things for the environment, I can't see what I am getting out of it.

- | | |
|--|---|
| <input type="radio"/> Does not correspond at all | <input type="radio"/> Corresponds a lot |
| <input type="radio"/> Corresponds a little | <input type="radio"/> Corresponds exactly |
| <input type="radio"/> Corresponds moderately | |

Workplace Climate and Pro-Environmental Behaviour

Workplace Climate

Thinking of your current workplace, do you agree or disagree with the following statements:

30. My organisation holds events:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
that address our impact on the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
that teach employees about helping the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
where employees volunteer to support the health of our local habitat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
where employees can discuss environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. My organisation's policies:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
encourage employees to consider the environment as they work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
encourage employees to voice concerns about the organisation's impacts on the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
help minimise the waste material that employees generate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 32. My organisation's procedures:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
allow employees to detect risks to the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
help employees to minimise harm to the environment when incidents do occur.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
help employees minimise the waste material they generate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 33. My organisation rewards employees who:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
identify ways of working that can reduce potential harm to the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
travel to work in a way that minimises air pollution.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
voluntarily reduce their energy use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 34. My organisation effectively:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
teaches employees about environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
informs employees about the organisation's environmental initiatives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
encourages employees to take actions that improve the health of the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
explains how employees can improve the health of the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 35. Leadership in my organisation expects people to:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
minimise waste material as they carry out their work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
find ways of working that are better for the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
participate in the environmental efforts of the organisation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
question practices which may be harmful to the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 36. People in my organisation:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
create initiatives that minimise the potential harm we might have on the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
lobby one another to promote the health of the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
argue when environmental issues are not the top priority.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
openly engage in environmental activism at work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 37. My organisation gives support for employees to:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
reduce their energy use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
generate sustainable solutions to environmental issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
learn more about environmental issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
adopt more environmentally friendly ways of working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 38. People in my organisation:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
have proenvironmental practices that are not part of their job requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
openly discuss the environmental impact of their practices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
effectively encourage one another to engage in practices that support their health of the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Workplace Climate

* 39. Please consider the following for your current place of work.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Employees have the necessary job knowledge and skills to carry out organisational environmental objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation effectively measures progress towards their environmental objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation has a formal recognition and reward system for employee environmentalism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation's environmental initiatives have a large impact on employee environmental behaviors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leadership shown by management in my organisation adequately supports our environmental objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My organisation effectively communicates to employees about environmental objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees have the necessary resources to carry out organisational environmental objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Workplace Climate and Pro-Environmental Behaviour

How frequently do you do the following:

* 40. I spontaneously give my time to help my colleagues take the environment into account in everything they do at work.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 41. I encourage my colleagues to adopt more environmentally conscious behaviour.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 42. I encourage my colleagues to express their ideas and opinions on environmental issues.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 43. I actively participate in environmental events organised in and/or by my company.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 44. I stay informed in my company's environmental initiatives.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 45. I undertake environmental actions that contribute positively to the image of my organisation.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 46. I volunteer for projects, endeavors, or events that address environmental issues in my organisation.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 47. In my work, I weigh the consequences of my actions before doing something that could affect the environment.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 48. I voluntarily carry out environmental actions and initiatives in my daily work activities.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 49. I make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 50. At work I try to learn more about the environment.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 51. At work I find ways of working that are better for the environment.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 52. At work I offer ideas for reducing my organisations environmental impact.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 53. At work I share my knowledge about the environment with others.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 54. At work I apply new ideas for reducing our impact on the environment.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 55. At work I help create green processes.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 56. At work I perform environmental tasks that are not required by my organisation.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 57. At work I question practices that are likely to hurt the environment

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 58. At work I recycle and reuse materials.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 59. At work I reduce my energy use.

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Rarely |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

* 60. At work I join in environmental activities that are not required by my job.

- Always
 Usually
 Sometimes

- Rarely
 Never

* 61. At work I encourage others to think about the environment.

- Always
 Usually
 Sometimes

- Rarely
 Never

* 62. At work I help others solve environmental problems.

- Always
 Usually
 Sometimes

- Rarely
 Never

Workplace Climate and Pro-Environmental Behaviour

Thank you for participating in this study.

Please click OK and "I Agree" to submit your data to this research.

If you would like to opt out of submitting your data instead please close this browser.

As a reminder this research is focused on the workplace environment, employee behaviour, and pro-environmental choices. Your participation is voluntary, data collected is anonymous, stored securely, and non identifiable. The data will be aggregated and used solely for scholarly research purposes only.

If you have any questions about the research you can contact me at x18126154@student.ncirl.ie or my supervisor Matthew Hudson at Matthew.Hudson@ncirl.ie.