Behaviour, practices, attitudes and motives surrounding domestic waste recycling. Social, environmental and economic considerations.

Sara Porter.

Submitted in partial fulfilment of the requirements of the Bachelor of Arts Degree (Social Science Specialisation) at DBS School of Arts, Dublin.

Supervisor: Dr. Annette Jorgensen.

Head of Department: Dr. Bernadette Quinn.

April 2011
Dept. of Social Science
DBS School of Arts
Table of Contents:

Acknowledgements ................................................. 3

Abstract ................................................................ 4

Introduction ............................................................. 5

Methodology ............................................................ 13

Results ................................................................ 19

Discussion ............................................................... 41

References ............................................................... 45

Appendices ............................................................. 47
Acknowledgements

Interview participants.

Dr. Annette Jorgensen.

DBS College.
Abstract

This research project investigates the behaviour, practices, attitudes and motives surrounding domestic waste recycling in the South Dublin County Council catchment area of South West Dublin. The investigation takes into consideration social, environmental and economic factors. The research was carried out using qualitative research methods and thematic analysis. Seven semi-structured interviews took place with eight participants in total. The main results of the investigation were; the influence of recycling habits on the next generation, a general waning in interest in separating food and garden waste and a general dissatisfaction with the waste collection service provided by South Dublin County Council. The main conclusions drawn from the research were that attitudes and practices could benefit more from a positive campaign by Government and waste collection service providers in provision of information to householders together with an improvement in the current waste collection service.
Introduction

The title of this research study is “Behaviour, practices, attitudes and motives surrounding domestic waste recycling. Social, environmental and economic considerations”. Debates and conflicts about environmental issues can be said to be one of the key social issues of our time. Uncovering a wealth of academic literature on this subject has therefore not proved to be an overly arduous task. Previous studies provide insight into behaviour, practices, attitudes and motives surrounding domestic waste recycling in different demographic areas such as Malaysia, Northern Ireland, Sweden, the USA, the UK and Ireland, using various research methods, mainly mixed methods involving survey questionnaires with follow up interviews. Davies et. al (2005) investigated householders’ recycling behaviour in four Local Authority areas identified across Ireland and Purcell and Magette (2010) researched attitudes and behaviour towards waste management in the Dublin region. These studies have led this researcher to narrow the field one step further by investigating the motivational factors and behavioural influences affecting recycling practices of householders in the South West area of Dublin. The aim of this research is to expand on the work of Purcell and Magette by focussing on the day to day practices implemented by a typical household in its domestic waste recycling in the South West Dublin area. The objective is to uncover householders’ attitudes and explore their opinions on and motives for recycling in this specific demographic area, focusing on environmental, social and economic considerations, from the cost of recycling to the householder, to the general attitude towards environmental issues, waste, landfills, global warming and climate change. The reason for this research is to identify any problems that may exist in the attitude-action relationship which can be addressed to encourage a higher level of recycling activity. The target population was a random sample of householders residing within the South Dublin County
Council catchment area and more specifically, the participants in this study reside in the Clondalkin, Lucan and Tallaght areas of South West Dublin.

The study of recycling behaviour

Ambitious waste management targets set by central Government policy makers presents a challenge to Local Governments in working towards achieving them according to Barr et al. (2003), Robertson and Walkington (2009) and Davies et al. (2005). This researcher sought to investigate whether an effective link exits between governmental waste management targets and the attitudes, motives and practices of householders towards the day to day management of their household waste in the South West area of Dublin.

In the study of recycling behaviour, uncovering motivational factors in recycling behaviour is essential and is a common concept uncovered by Barr et al. (2003), Robertson and Walkington (2009) and Davies et al. (2005). In their research into the actions of householders in Devon in the UK, Barr et al. suggest that householders’ cooperation and participation in recycling activities is crucial to Government targets being reached. They go on to argue that householders are possibly presumed to be in favour of recycling but that in fact there are many motivational factors affecting the recycling actions of householders. This view is supported by Davies et al. in their research into exploring the gap between concern for the environment and the action actually taken to protect it by householders in certain areas in Ireland. In contrast however, the findings of Robertson and Walkington in their online survey of recycling behaviours of students at Oxford University in the UK, claim that recycling behaviour is determined by very few variables such as provision of recycling facilities, convenience and the influence of family or housemates. Local knowledge, such as
possessing an awareness of the facilities available in the immediate neighbourhood or nearby, emerged as having particular relevance to what, where and how recycling behaviour is practiced by householders.

Influences on recycling behaviour

Environmental concern, convenience and access (also referred to as situational factors), psychological factors and the provision of services are cited in previous research as common possible influences on participants’ recycling behaviour as reported by Barr et. al (2003), Davies et. al (2005), Robertson and Walkington (2009) and Erickson and Jackson-Smith (2005).

Environmental concern

Environmental concern was reported as having a possible positive influence on recycling behaviour by Barr et. al (2003), Aini et al. (2002), Berglund (2006), Ericksen and Jackson-Smith (2005) and Holland (2000). According to Barr et. al, individuals holding more ecocentric values, i.e. having a high regard for the environment, tend to be more environmentally conscious. This view stems from previous research carried out using quantitative methods calculating individuals’ scores on a range of statements concerning the environment. In their results Barr et. al found that those concerned about the state of the environment were likely to be willing to recycle. Aini et al. also referred to environmental concern as having an influence on individuals’ recycling habits, as their study carried out in Malaysia argued, that in order to address the problems regarding levels of recycling; individuals’ consciences should be raised through environmental awareness. Berglund
(2006) found that environmental concern or moral motives, as it is referred to in that particular study, significantly reduce the cost of domestic recycling practices in Pitea, Sweden. Ericksen and Jackson-Smith (2005) found respondents in their study, when specifically asked about attitudes towards recycling; almost all said that recycling makes the world a better place to live. For Holland (2000), environmental concern as a motive to affect recycling behaviour is the key focus of that particular study, as it proposes that recycling activity can be used as a model to encourage individuals to participate in similar activities and become aware of wider issues.

While all of the foregoing examples illustrate the positive influence that environmental concern may have on individuals’ recycling habits, there are also examples where environmental concern was found to have no effect. Davies et. al (2005) found that environmental concern as an influence on recycling practices was due to personality traits, as more people were inclined to say that their personality justified their inaction more so than their action, as environmental concerns were a minor part of their daily thoughts. In the same study, a lesser number of participants stated personality traits as a positive motivating factor to take part in more active waste management behaviour. Environmental concern was noted as not having an influence on recycling behaviour by Robertson and Walkington (2009) when they found that the participants in their study, who were more concerned about environmental issues, were more likely to minimise waste than to claim high levels of recycling. And Kurz et al. (2007) found that general environmental concern had no effect on the recycling behaviour of the respondents in their research carried out in Belfast, Northern Ireland.
Situational factors

Situational factors more specifically, access to appropriate recycling services and convenience of recycling for participants, are frequently quoted as factors influencing recycling behaviour. Barr et. al (2003) found that householders in Exeter, Devon were more likely to recycle if they had access to a convenient and well understood kerbside recycling scheme. This view was shared by Robertson and Walkington (2009) when they found that situational factors had the greatest influence on recycling behaviour out of all other factors tested in their research. They found that providing a recycling box to participants contributed towards recycling behaviour, being the result of increased participation coupled with a decrease in personal inconvenience. Convenience was also cited as one of the five motivational factors affecting domestic waste recycling by participants in the research carried out in Malaysia by Aini et al. (2002). Results uncovered by Erickson and Jackson Smith (2005) indicated that participants who recycled least were more inclined to believe they would recycle more if it was more convenient for them. A similar result was reported by Davies et. al (2005) when they found that the most commonly identified factor influencing waste management behaviour was practicality of actions. They reported that if waste management was easy and practical in accordance with householders’ lifestyles, then householders were more likely to engage in positive recycling practices. Convenience, or the lack of it, is referred to in Purcell and Magette’s (2010) research study when they report their findings regarding composting activities, being that participants were of the opinion that composting activity took too much effort.
In investigating psychological factors, the influence of social norms is a prominent feature in previous studies. According to Barr et. al (2003), being aware of others’ recycling habits and accepting them as the norm, greatly affected householders’ intentions and behaviour regarding their recycling behaviour, a concept also reported by Robertson and Walkington (2009). Interestingly, psychological and situational factors overlapped where the visible nature of kerbside recycling programs presented a type of social pressure which was a motivational factor quoted by some participants (Barr et. al.). Again, this concept was also reported by Robertson and Walkington. However Robertson and Walkington also reported that it is the recycling behaviour that takes place within the household which affected the levels of recycling behaviour rather than the sight of a stranger practising their recycling routine. This is illustrated by their results that the strongest influence on the recycling behaviour of Oxford University students was the influence of the students’ families and to a lesser extent, their housemates. The students were found to be more likely to practice a high level of recycling if they felt a sense of community where they live, and if their friends, families and neighbours practiced recycling. A contrasting position was however reported by Erickson and Jackson-Smith (2005). They differentiate between personal norms, being a personal sense of obligation, and social norms, being external social pressure to recycle from friends, family and neighbours, and found that overall in their study that few participants felt much social pressure to recycle. Davies et. al (2005) reported that it should not be presumed that individuals practicing high levels of recycling will increase the levels of recycling in others. They found that while respondents felt that peer pressure was a useful way to motivate recycling behaviour, those practicing high levels of recycling felt they were viewed as being extreme environmentalists, and while they had no intention of changing their high
recycling behaviour, they felt that this might be off-putting for others who might be considering it.

**Provision of services**

Provision of services was also found to be of significance in influencing recycling behaviour in previous studies (Barr et al. (2003), Robertson and Walkington (2009) and Davies et. al (2005). In this regard, an interesting concept was uncovered by Erickson and Jackson-Smith (2005) when they found that exposure to a structured recycling program had a positive influence on recycling behaviour on a community in Cache County, Utah in the USA. However it was not apparent whether or not attitudes precede recycling behaviour or vice versa. Attitude-behaviour relationships were shown to be more interdependent than traditionally thought. Recycling behaviour was found to be more likely with the presence of a local understanding of recycling services available, such as access to a kerbside collection service (Barr et. al., Davis et. al. and Robertson & Walkington). Awareness and knowledge of services is also reported as a significant theme in a study of practices, attitudes and motives for domestic waste recycling conducted in Malaysia in 2002 (Aini et al., 2002). Householders in certain areas of Ireland expressed a feeling that Local Authorities, being their main service provider, did not have their best interests at heart (Davies et. al). Some of those householders also reported negative experiences in dealing with their Local Authority. However most of them acknowledged that their Local Authority and staff were likely to be facing difficult decisions and that any improvement of relations between householders and the Local Authority should be a two way street, i.e. that it was not only a matter for the Local Authority to address and improve the situation. Overall, householders’ main concerns were with access and communication of information and resulted in a feeling of distance from their
service provider (Davies et. al.). In contrast Purcell and Magette (2010) in their study conducted in the Dublin area of Ireland found that most householders expressed themselves satisfied with their waste collection service.

Narrowing the field - recycling in Ireland

Davies et. al (2005) uncovered a complicated array of attitude-action relationships affecting householders’ recycling behaviour in four Local Authority areas identified across Ireland. In their findings they claim there is no one simple model that can be developed by policy makers to fit all people and places, as the differences are simply too diverse. This view is supported in Purcell and Magette’s (2010) research into attitudes and behaviour towards waste management in the Dublin region which highlighted that waste management initiatives designed for one area of the City of Dublin ignored the needs of other areas of the City. Purcell and Magette set about to prove that attitudes about management of biodegradable municipal waste are spatially variable even within a City made up of a modest population such as Dublin (1.2 million). They have also shown that not all areas in Dublin have identical requirements regarding waste management which led this researcher to investigate this finding further.

While many avenues of interest have been uncovered by the data generated to date which warrant further investigation, the most significant themes; the influence of environmental concern, convenience and access, psychological influence and the provision of services on recycling behaviour, have been outlined here for further analysis. Davies et. al (2005) investigated householders’ recycling behaviour in four Local Authority areas identified across Ireland and Purcell and Magette (2010) researched attitudes and behaviour
towards waste management in the Dublin region. Utilising qualitative research methods of face to face interviews together with thematic analysis, this research study narrows the field one step further. “Behaviour, practices, attitudes and motives surrounding domestic waste recycling. Social, environmental and economic considerations” investigates the motivational factors and behavioural influences behind recycling practices of householders in a particular neighbourhood in the South Dublin County Council catchment area and more specifically, householders residing in the Clondalkin, Lucan and Tallaght areas of South West Dublin.

Methodology

This research project investigates the behaviour, practices, attitudes and motives surrounding domestic waste recycling in specified neighbourhoods in South West Dublin. The investigation takes into consideration social environmental and economic factors.

The reasoning behind the researcher’s choice of research subject was that as Local Authorities in Dublin are pushing forward with environmental, waste and recycling issues, many households in areas of North and South Dublin in particular, currently have three types of bins supplied by their Local Authority for the disposal of household waste. The aim of this research was to find out the day to day practices implemented by a typical household in domestic waste recycling, to uncover householders’ attitudes and explore their opinions on, and motives for, recycling. The study commenced with a general focus of the project title without any preconceived theories or predictions of results. The goal was to achieve some understanding of the typical householder’s reasons for recycling domestic waste and to uncover some beneficial information for use, by Local Authorities for example, to promote and encourage domestic waste recycling and possibly identify some concerns which may
arise and which can then be addressed

As the research revolves around investigating peoples’ views, feelings and opinions and involves uncovering individual descriptions of practices and methods of recycling, it was appropriate to use qualitative research methods, specifically, interview techniques together with thematic analysis.

Apparatus

For this research the only apparatus required was a handheld Dictaphone which was used to record each interview session. The software package used to analyse the data collected in the interviews was Nvivo 9.

Participants

The total number of participants in this research study was eight. Two of whom were a married couple and were interviewed simultaneously. The majority of participants were female, with only one male participating. The age group of participants ranged from the mid twenties to early sixties. All participants reside within the South Dublin County Council catchment area.

Ethics

The ethical considerations adhered to were appropriate to a study of a subject matter such as domestic waste recycling and consideration was limited to; an assurance of the
confidentiality and anonymity of participants; the participants’ right to withdraw from the study; regard for the privacy of participants and a guarantee that confidential information will not be shared without each participant’s informed consent.

Design

The research was carried out using qualitative research methods together with thematic analysis. Punch (2005) outlines empirical research as involving data of two main types; quantitative in the form of numbers and qualitative involving words. Punch also argues that the method a researcher employs must depend on what the research is trying to uncover. This concept is also referred to by Flick (2009) who proposes that rather than choosing the favoured research method, it is the research subject that should determine the research method to be used and not the other way around. Flick illustrates this by providing an example of a researcher intending to learn details of the subjective experience of a mental illness. In that example Flick explains it would be appropriate to interview patients suffering with the mental illness and analyse the data gathered using qualitative research methods. However a researcher wanting to learn about the frequency and grouping of a mental illness in a population would run an epidemiological study using quantitative research methods. There are many debates to be found favouring one method over the other and lately there has been an increase in the combination of the two approaches and utilising mixed research methods. Quantitative and qualitative continue to be the two pivotal approaches to social research today.

According to Punch (2005), in or around the 1960s, qualitative research methods began to challenge the traditional dominance of quantitative research methods in social
science and a split in the field between the two for the study of human behaviour subsequently emerged. As a result, qualitative research methods are more frequently used in social science research compared to 40 years ago. Flick (2009) refers to Kleining (1982) who held that qualitative research methods can stand up without quantitative research methods, but that quantitative research methods may require the additional use of qualitative research methods to explain their results. Flick also cites Cicourel (1981) as proposing qualitative research methods as being appropriate for micro sociological questions and quantitative research methods for macro sociological studies.

This research was conducted using semi-structured qualitative interviewing procedures. Seven interviews took place with eight participants in total; one interview was conducted with a married couple. The target population was a random sample of householders who reside in the South Dublin County Council catchment area and who were eligible for a brown bin for the recycling of food and garden waste from June 2010. According to Flick (2009), qualitative research methods were developed in response to limitations of quantitative research methods, and this is commonly a reason for the employment of qualitative research methods. A quantitative study would be useful in gathering information on a larger scale such as how many householders follow a certain procedure of recycling, or for testing a hypothesis for example - that householders exaggerate the extent of their recycling practices - but finding out numerical values or testing a hypothesis are not the types of research that this study involves. Qualitative research methods in particular, semi-structured interviews, were the appropriate design for this research and the interview procedure of using a standard set of fifteen questions formed a foundation which afforded the researcher the opportunity of delving deeper into a subject whenever it arose during the interview process. According to Ritchie and Lewis (2003) what
Qualitative research methods offer is this flexibility which is useful in social research and which can often involve some unexpected developments. The fifteen standard questions utilised acted as a tool to generate data in two ways; firstly providing data with direct responses to the questions posed, and secondly, providing data indirectly as a channel in the participants’ thought processes to related subjects and consequently, additional and free flowing data. The flexibility of qualitative research methods allows relevant or interesting leads to emerge from a question or discussion which could reveal potentially useful data for analysis. The flexibility of the data collected in the semi-structured interview is crucial to this study. This enabled the researcher to uncover the depth of reasoning behind participants’ behaviours, practices, attitudes and motives required for this research (Ritchie & Lewis, 2003).

Snape and Spencer (2003) also describe qualitative research methods as having an essential exploratory purpose and as involving unearthing why social phenomena occur and what influences them, by examining what drives decisions, attitudes and behaviours. It can therefore be said that qualitative research methods are suitable for this particular research study as qualitative research methods involve uncovering human behaviour, attitudes and motives and it is uncovering this human behaviour, attitudes and motives regarding recycling and environmental issues that is the objective of this study.

Flick (2009) suggests that a researcher in a qualitative research study analyses participants’ knowledge and practices from a subjective perspective and studies the social interpretations of their knowledge, this provides further grounds for the use of qualitative research methods in this study. Flick also highlights the role of the researcher as well as the participant, as the researcher’s interpretation is central to the research. Further, Snape and
Spencer (2003), discuss the qualitative researcher as using methods of interpreting data gathered through the meanings attached to them in a real or normal setting, through the use of interviews and conversations and other interpretative methods. They also describe one of the pivotal concepts of qualitative research as the way in which participants in a study understand and interpret their social reality through revealing their experiences, circumstances and perspectives. Again this illustrates the justification for the appropriateness of qualitative research method for use in this study. Qualitative research methods could be said to view social life in terms of processes rather than in statistical terms. Qualitative research methods are used to generate an in depth interpretation of a social phenomena that requires to be researched, explored, understood and explained (Snape and Spencer). Snape and Spencer argue that a key issue of qualitative research methods is the interpretative concept, i.e. the meanings people attach to their experiences. The idea being that interpretism is viewed as a solution to the proposed limitations associated with positivism. Positivism being the key concept underlying statistical social research.

**Procedure**

Face to face recorded (audio) interviews were conducted at the researcher’s home or the participants’ homes depending upon the convenience of the participant. The length of interviews ranged from 16 minutes to 48 minutes but averaged about 20 minutes duration. Denscombe (2007) proposes that a face to face interview, while possibly being more expensive than a postal, internet or telephone interview, including the interviewer’s time, may be counter-balanced by a possible accumulation of rich and detailed data. For example, the interviewer is arguably more likely to be alerted to any provision of false information in a face to face setting than in a questionnaire or telephone interview.
Before interviews commenced, the research study was explained to the participant. The participants were informed that their participation in the study was completely voluntary, that there were no right or wrong answers to the questions and that the answers would be specific to them i.e. their thoughts and opinions. The participants were told that should any question cause them any discomfort that they did not have to answer it and the interview could be terminated at any stage and if they decided at a later date and within a period of two weeks from the date of the interview that they no longer wished to participate, that their data could be withdrawn from this study entirely. Participants were also assured of confidentiality, anonymity and privacy and were afforded a guarantee that confidential information will not be shared without each participant’s informed consent.

Results

From the thematic analysis of the raw data collected during the interviews, a number of common themes emerged. The first theme which became apparent was that all participants had an opinion on whether people in general are recycling.

Recycling behaviour of people in general

Analysis of the data reveals that the participants generally feel that people are recycling in some form or another. However there is some doubt surrounding how much recycling is actually taking place; approximately half of the participants express doubt such as this. Interviewee A comments that while the majority of the people she comes into contact with were recycling, she felt they could probably do more and that some were not recycling
at all:

“... I think there are a lot of people that do recycle, some people like a lot of people I speak to, friends, family, neighbours, parents from the school, they do a bit but I know they could probably do a lot better ‘cos I’d say about 50% goes into the bin and maybe the other stuff is y’know sort of recycled, but because they’re not bothered and I kind of feel that they should ...

This view is shared by interviewee B who goes on to speculate whether people say they recycle merely to avoid a controversial conversation:

“... well, going by my family and my friends, yes I think they all do but then you come across some people who are just like “no” and everything just goes into one bin and that’s it ... but I get the general feeling that everyone does, well the people I talk to, but I could be totally wrong. See people say one thing but then they do another ... I do get that impression. ‘Cos it’s easier to say “ah yeah, yeah I do it” than getting into a big row with someone saying “why don’t you?!”

Interviewee F expresses doubt as to whether her neighbours are recycling properly:

“...well you always see that the bins are full and people are ... recycling, now you wouldn’t know if they’d be washing the stuff out ... I’d say they’d be firing any oul stuff in there! ... And ... a lot of people aren’t using the brown bins properly because they don’t get how to do it ... they think that its gross ... but
you can wrap it up in newspaper ... cos people ... I don’t think read the instructions and they don’t get it and therefore they’re not using it.”

Interviewee G illustrates her point that people generally are recycling by saying that in her place of work, a Supermarket, she has noticed that people do not want to take a plastic bag for their grocery shopping:

“ ... sure I even find them in Dunnes, that they don’t want to take the bags off you know ‘cos they’re all “no ‘cos I’ll only have to get rid of it then” and if they don’t have to, they won’t take a bag ... they were coming in and ... going “oh! I forgot to bring a bag” and they’d buy a bag but now they all have the bags”

These extracts from the interview text illustrate that interviewees generally feel that people are engaging in recycling activities in some form or another however they go on to express doubt around what levels of recycling activity is taking place and whether it is being carried out properly. This sense of doubt may prove significant as further research could reveal whether or not this has an effect on the attitude-action relationship of recycling.

Bin storage

Another theme which emerged was the storage place of external bins. Those participants who reside in a terraced house with no choice but to store the bins at the front of their property in full view, had accepted that while their preference would be to have their bins stored out of view and they were not happy about it, there was nothing they could do
about it. Interviewee A now lives in a house with a side entrance and stores her bins out of view. However, she used to live in a terraced house and was not entirely happy about having the bins in her front garden:

“that was a mid-terrace house, with no side entrance, but back then there was only one bin, the black bin and I kept that outside the front of the house. I mean I had sliding doors on my porch and I would have had to take the door off its hinges to fit the bin in and out of the house every time I was puttin’ it out, it was just too much hassle, so I left it in the front garden ... I didn’t really like it, but I didn’t have a side entrance, so I had no choice”

Another participant living in a terraced house says she does not like having her bins stored in the front garden, but has accepted that this cannot change:

“well I don’t really like them out the front but there’s nothing you can do when you’re in a terraced house, you can’t get them in or out you know ....” (Int. G)

Interviewee F who also lives in a terraced house and has three bins, washes out her brown bin which is used for recycling food scraps and garden waste and wheels it through her house to store it in her back garden, but she is not concerned about her other two bins being stored in the front garden:

“Well I don’t mind, ‘cos I like to keep my bins clean [laughs] so I don’t really mind. I keep the brown one clean ‘cos that has to be wheeled through the house but the fact that the other ones are out the front, I wouldn’t bother with them, I
These interview extracts identify a problem for interviewees regarding the storage of their bins. It is clear that those interviewees who reside in terraced houses generally experience feelings of dissatisfaction at having to store bins at the front of their property as they would prefer the bins to be stored out of view. This feeling of dissatisfaction illustrates a negative sentiment by these householders towards the compulsory location of their bins, and while these householders have accepted that this will not change, it may be worth investigating further to see whether this negative sentiment has any knock on effects on the levels of recycling practised. A problem such as this or similar to this does not appear to have been identified in previous research studies.

Dissatisfaction with service provider

Another theme which was common with most participants was a general dissatisfaction with their service provider. The majority of participants had a story to tell about a problem they or someone they knew had with South Dublin County Council who were stated as being the main service provider. Only one participant expressed themselves satisfied with their service without having a negative incident to report, saying the only thing she would change would be for the green bin, being the receptacle for dry recyclable waste, to be a weekly collection rather than bi-weekly.

Interviewee A explains a problem with her brown bin not being collected by South Dublin County Council. She subsequently telephoned the Council to enquire what had happened and was not satisfied with the outcome:
“... I’d been doing lots of gardening and I made sure it [my brown bin] was full to go out ... and ... everybody’s bin on the road had been taken in except mine ... I ’phoned the County Council and ... the woman on the ’phone ... said ... “they’re not going to call up to you to make a one-off collection, so you’re going to have to wait” ... So I said “but then I can’t recycle ‘cos it’s already full” and she said “well that’s not my problem” ... the only thing is that it now weighs a tonne and I’m worried ... that they may not pick it up ‘cos it goes by weight as well ...”

The same interviewee did however concede that this was not a usual occurrence:

“... no it wouldn’t be a normal occurrence but it has happened a few times say a couple of times but not very often ...“

Another participant said she had the impression that the County Council were always looking to sell on their waste collection business as they had no interest in it themselves:

“Y’know, I don’t think the Council ever really wanted that. I feel that they were always looking for someone to buy them out ... you kind of always got that impression from them ... as I always felt that they thought it was too much hassle and that they wanted to privatise it to the private companies ... they all just ... “ah whatever, we just won’t pick it up that day it’s a Bank Holiday” you know all this casualness? ... well I didn’t think they were ever really bothered” (Int. B)
The same interviewee then relays a negative incident which occurred between her sister and South Dublin County Council which resulted in her sister changing to a private waste collection company:

“... another thing was an incident there with my sister ... she switched over bins recently to a private company ... cos ... they [the Council] sent her out a fine saying her bin was overflowing and that they weren’t going to take it ... they said “we have photographic evidence” so she said “then send me the photographs” ... she knew ... that there was no way that it was overflowing that it may have been heavy but it was not overflowing. So they never sent on the photographs and she never paid the fine - and that was that. I mean they were ringing her up over it ... and saying that she should expect to hear from the Council’s solicitor ... that’s just the attitude of Council for you, yeah that’s why I get the impression that they just couldn’t be bothered. ...”

These two comments by interviewee B appear to be connected. The description she gives regarding her sister’s negative experience with the County Council seems to have given her the impression that the County Council are not committed to providing a quality service and leads her to speculate whether the Council always intended to sell on their service.

Another participant’s experience of dissatisfaction with the service provided revolves around a period when she lived in a different house in another part of Tallaght and there was a problem with the County Council not collecting a bin due to what she conceded was probably an excess of the weight restriction, but while the bin was not being collected, the
payment for collection, which was in the form of a tag attached to the bin, was being detached from the bin:

“...now it would have been a good few years ago that there might have been a few issues with collection when they wouldn’t collect the bin because it was too heavy ... and that happened a couple of weeks in a row ... but they were taking the actual tags so ... we went out to take it and the tag was gone but the bin was still there ... it was really about the weight restriction ... other than that it was fine ... “ (Int. C)

Another participant expressed herself generally satisfied with her service in the three years that she has resided in her house. However, she relays an account of a problem that she experienced with the service together with an account of a problem a woman she works with also had:

“... yeah I think the only thing that annoys me about the bins when you pay for them is that one time I had the lid up a little bit, like literally about that much [shows me a gap of about 15 centimetres] and they wouldn’t take it ... And I can understand if people are piling their rubbish up and if the bin is wide open, but think that they should take them if they’re just a little bit open ... and I even said it to them would they not just take it as it’s not going to be collected for another two weeks and he said “no I can’t take it” and he was real snotty with me and I just said “Oh for God’s sake!” ... So I’d literally go out there now and I’d stand on the bins! ... That was four weeks I was left with that bin, you know?” (Int. D)
Interviewee D also relays an incident involving a woman she worked with who had a negative experience with the County Council, while the full details of the incident are not available and it may prove beneficial to know the facts; this individual’s experience with the Council appears to have been particular negative:

“... I ... know a woman in work ... and she was having a problem with the bin men and it was around Christmas time ... and they weren’t collecting her bin... so she stopped using her bin. And what she is doing now is that she’s just bringing everything ... and paying for her car to go to the dump ‘cos she was refusing to use the bin because of the bin men and the County Council ... she stopped recycling because she was so annoyed with the bin men ‘cos her bins hadn’t been collected for weeks”

The married couple deemed themselves generally satisfied with the service provided by South Dublin County Council, however they did comment that they would prefer that the collection was a weekly thing rather than bi-weekly. They also had a problem regarding the supply of a brown bin which they have since accepted and are no longer interested in pursuing it with the Council. They were out of the Country when the collection system changed and one of them explains what happened:

“... I rang them up about it there before Christmas ‘cos we were away and we didn’t know they’d changed the system to every two weeks for the grey bin, and I said “we never got a brown bin can you send me the literature?” and I’m still waiting so I didn’t bother with them ... we were away at the time and
These interview excerpts identify a problem for interviewees being a general dissatisfaction with their service provider, specifically, South Dublin County Council. It is however worth noting that during the period that this research study was conducted, South Dublin County Council’s waste collection service was sold to Greyhound Recycling and Recovery Limited, a private waste collection company. The excerpts illustrate a general feeling of negativity associated with South Dublin County Council apart from one interviewee who expressed herself happy with the service. This problem of dissatisfaction with the service provider also arises in previous research studies. According to Davies et. al., (2005), householders in some areas of Ireland felt their service provider, did not have their best interests at heart. Some reported negative experiences in dealing with their service provider and feeling distanced from them. They did however find that most of their participants acknowledged that any improvement of relations between householders and the Local Authority as service provider should be a two way stream of communication, meaning that the fault of the negative experiences did not lie solely with the Local Authorities. In contrast Purcell and Magette (2010) in their study focussing on the Dublin area of Ireland found that most householders expressed themselves satisfied with their waste collection service.

Decline in use of brown bin for recycling food waste

The couple, interviewees G and H, who had been left without a brown bin despite their request for one, go on to say that if they were to receive a brown bin now, they would be
unlikely to use it. This leads on to another theme which emerged from thematic analysis of the data which is a decline in the use of brown bins for recycling food and garden waste. While analysis of the data revealed that the participants were generally recycling their household waste in some form or another, the use of the brown bin to recycle food waste was a more complex matter. On the subject of brown bins, one participant commented;

“... there’s an awful lot of people don’t use them ...” (Int. G)

Backed up by her Husband:

“...yeah ‘cos of the flies the maggots and the mice and the rats that are attracted to it ... and because it would cost more money to get it lifted ...”

(Int. H.)

Interviewee C explains how she and her housemates initially had good intentions regarding using the brown bin but their practice of it has gradually declined:

“... at the start we were totally kind of yeah ok that’s grand ... and then it was just messy and there were flies urgh on the bin and it’s kinda not so much now... some weeks we would and then some weeks it’s like ... ugh you know ... to be honest ... we don’t really leave it out that often ... the first few weeks we did we were all for it ... but it’s just kind of phased out ... think that people feel it’s ugh just an effort really and it’s so smelly ... “

She goes on to explain that she and her housemates were using biodegradable bin liners
for the brown bin but when the bin liners ran out, they reverted to using the black bin to dispose of food waste;

“... I think we went through two rolls of them ... I’d wash it out every day and that ... I think the first day or the first week it went well ... when we just started throwing food into it and then we obviously just started wrong from there but there again it’s such a bad attitude to have you know ... like again my Dad was saying “well our wheelie bin is fine” ... but yeah it’s just a bad attitude to have ...”

The same participant also commented that she has noted that her neighbours are not putting out their brown bins for collection as much as they used to:

”... the green bins and the black bins they go out religiously they seem to but not so much the brown bins. Only really for the first few weeks and after than things have just died down”

Another interviewee residing in Lucan appeared to have a similar experience, in that she initially had good intentions to use the brown bin to dispose of food waste, also using biodegradable bags but gradually stopped using it due to the presence of flies:

“... well I was using it for a while but then the flies started and I couldn’t go near the thing! And I was even wrapping it up and using those bags you know that you can buy?... and I just got sick of it so I stopped using it”

(Int. D.)
However two of the participants report not having any difficulties recycling using their brown bin (save for the account of one bin not being collected) and both participants appear to have a similar system in operation with regard to separating food waste in the house. One explains her routine:

“... just say I’m preparing food ... well on the counter I have a large chopping board ... beside that I have a container so if I’m peeling vegetables say or whatever, all the peelings go into that container and if anybody has an apple or whatever in the house, they put the core, the stalk, everything into that container and then in the evening .... it goes into the brown bin ...” (Int. A)

And the other explains that while she has been recycling food waste only since last year she has noticed that she does not leave her black bin out for collection as often as she used to, as it takes longer to fill it now:

“... we only got the brown bin there last year so I’ve only been recycling the food stuff a year and but even at that now I’ve noticed that I’ve absolutely nothing to put in the black bin...... very little ... there’s no need for me to put my black bin out now half the time” (Int. F)

However she goes on to speculate whether people are using the brown bin correctly:

“... I wonder how that works ... ‘cos a lot of people aren’t using the
brown bins properly because they don’t get how to do it like ... they think that its gross and you’re throwing all the let’s say food like potato peel in it and you’re just firing it in the bin and a lot of people don’t want to do that but you can wrap it up in newspaper ... cos people you know I don’t think read the instructions and they don’t get it and therefore they’re not using it.”

It appears from these quotes that while some interviewees appear to be correctly and successfully using their brown bin for garden and food waste, others state that they began using it initially with good intentions which fell by the wayside when smells, flies and maggots came into the equation. Interviewees G and H indicate that while they felt let down in the first place by South Dublin County Council in the lack of provision of a brown bin for recycling food and garden waste, that since then, from speaking to friends who have had negative experiences with the brown bin, they have decided that they would not use one if they were provided with it. Overall most interviewees’ quotes illustrate a problem being a general decline in the use of brown bins for recycling garden and food waste. Similar findings were reported by Purcell and Magette (2010) when they found that approximately 70% of respondents in their study said they put food and garden waste in their general rubbish bins despite being provided with a brown bin service since mid to late 2007. This shows that this problem exists in other areas of Dublin and the pattern is looking like it is set to repeat itself in South West County Dublin. Some householders have stopped using brown bins altogether and, as also found with Purcell and Magette’s research, they are putting garden and food waste in their general rubbish bin.
Motivation to recycle

Another theme that emerged from thematic analysis was that with regard to motivation to recycle, environmental concern did not feature as strongly as various other motivations combined which were cited such as routine, obligation and cost, which will be discussed in more detail below. Approximately half of the participants referred to feelings of obligation and routine and the influence of cost rather than citing environmental consciousness as their motives to recycle. Interviewee C explains here that while she does not think too much about environmental concern, she still practices recycling as it is part of her routine and feels it is also an obligation:

“... I wouldn’t think about it much but I would think it’s important to recycle, like I wouldn’t give out to someone if they weren’t recycling but I just feel we should recycle, I’m all for the recycling ... if I didn’t recycle it would just bug me a little bit, just if everything was just going into the one bin ... maybe I’m just in such a routine of it ... I just feel like really it’s an obligation like you just nearly have to do it”

Interviewee D indicated feelings of obligation were a possible influence on her also when she refers to going to the bottle bank:

“... I’m like “Oh God I’ve to go to the bottle bank!” ... and I’d put it off for as long as possible then I’d go and be glad that I got it out of the way“.
Other participants explained their recycling practices as an automatic action:

“... I think the recycling part of it is in my head, as in what to do and why I’m just doing it, but I’m not thinking about it do you know that way? I just do it ... but I wouldn’t be out there with me banner now marching around shouting “save the environment!” ...” (Int. E)

“... now it’s just become part of our routine y’know you just separate it and that’s it” (Int. G)

A comment which was backed up by her Husband;

“... yeah it’s a routine now something that most people have to do... just get the rubbish out - I like to keep a clean house! ...” (Int. H)

And the issue of cost was also an influencing factor:

“... well if I didn’t [recycle] that grey bin would be full within a day! ... and plus it would cost €10.50 to get it lifted and I’d have to get it lifted it every week” (Int. H)

Environmental concern as a motivation to recycle was however pivotal to the recycling practices of some individuals. Interviewee A explains how she remembers being concerned about landfill sites from childhood:
“... as a kid even when I was 9 I used to worry that all these landfills were going to be full and we’d have nowhere to put the [waste] ... and I don’t know where these ideas were coming from ... “

Interviewee B expresses concern about the proper disposal of domestic waste and the use of landfills sites:

“Well I know that it all gets shoved into the ground with the domestics anyway but you’d like to think that they’re doing it right. With the recycling as far as I’m aware they just melt it down ... with the domestics you do ... wonder what damage that’s doing on the earth ... that’s probably one of the reasons why I would be conscious of recycling because ... what’s the point of ruining what you have? ... they’re already talking about ... running out of space for a domestic waste incinerator plant ... there’s a big row about where that’s going to go ... you don’t what that ... on your doorstep. I say stick it on an Island!”

While interviewee F is clear in expressing that her motives to recycle are such, that to do otherwise is simply bad for the environment, the same participant highlights her motives by explaining that while money may be a motivating factor for some, that is not the case for her:

“... what motivates me I suppose is that it’s just so bad for the environment ... like I think about landfills ... well I just think it’s wrong
... and I just think that it’s such an easy thing to do, to recycle and everybody should be doing it ... it’s not money I suppose for me .... I know with some people they’re doing it for the money as it would be cheaper to recycle and I know that some people recycle ‘cos they have to pay for their bins but I don’t have to pay anyway and I still do it …”

These extracts from the interviews afford the researcher some insight into the reasons why the interviewees recycle. Routine, obligation and cost were the most common motivational factors and were more frequently stated as so than environmental concern. These findings are similar to those in previous research studies, while environmental concern was reported as having a positive influence on recycling behaviour by Barr et. al (2003), Aini et al. (2002), Berglund (2006), Ericksen and Jackson-Smith (2005) and Holland, (2000) it was reported as having less of an influence by Robertson and Walkington (2009), Kurz et al. (2007) and Davies et. al (2005).

The next generation

The most common theme which emerges from analysis of the data collected was that recycling practices and attitudes are being passed on to the next generation. This feature arose in the results in all seven interviews. Interviewee A explains how her two youngest daughters who live with her automatically follow her recycling routine:

“... I don’t even have to tell them what to do. Let’s say they were havin’ a banana for example, they’d automatically put the peel in the container and I could come along and see that they know what goes where
because they’ve been reared with it so that they don’t question it and it
doesn’t just go in the bin ‘cos they automatically know where it goes ...“

She continues to explain that while her older daughters, who no longer live at home
may not continue her practices, she says they would be still aware that their Mother would
not be too pleased about that:

“... well I think my second eldest probably doesn’t care but she could
say to you, “Y’know me Mam wouldn’t like that” and she’d be well able
to tell you what I’m like ...”

Another participant refers to her Father’s recycling regime and explains one incident
how he called her back into the kitchen as she had put something in the wrong bin:

“... yes, my Dad was very into it, he’s a big recycling man ... he
actually called me back out to the kitchen one day and said “I saw you
put that in there!”” (Int. B)

Interviewee C advises that she was very conscious of recycling as a result of her
parents’ influence, in particular Father’s:

“... my Mam and Dad now they would be totally into it now my Dad is
just religious about it ... so maybe that’s why I am a bit ... yeah my Dad
has always been really totally all about recycling ... everything has to
be recycled cut down and shredded ... literally everybody would just
leave something on the counter and then my Dad’ll deal with it in the evening time or whatever ... he’d be there having a cup of tea and cutting up the recycling ... I think it’s just instilled in my brain from my Dad ‘cos they’re just so ... green ... yeah he’s just really into recycling so no food goes to waste in our house - it’s just not allowed! ...”

And she also believes that her Father’s recycling habits were carried on by her brother and sister when he moved out of the family home:

“... our house was just all about recycling ... and that just seemed normal. ‘Cos my brother Patrick was saying that when he was renting that everyone recycled in his house ... Patrick was always into recycling as well from living in our house ... and as well my sister Clare and her husband, they recycle everything too ...”

The same participant expressed possible feelings of guilt that the practice of recycling food waste in her house with her housemates had waned, feelings probably instigated by the fact that she said that her Father commented that he had no problems with this food waste recycling routine:

“... there’s my Dad and he’s like “I don’t know what you’re talking about” so I suppose it’s maybe something we should take on board ...”

Interviewee D, who is temporarily living in her late Grandmother’s house while the family try to sell it, also confirms that she intends practicing the recycling habits she has
picked up from her Mother when she eventually has her own home, for the moment, she and her sisters follow their Mother’s routine:

“... Have you met my Mam!? ... yeah we fall into line because ... you know you just do it ... like I mean when I get my own house that’ll be my way too you know, and I’ll know what to do, so yeah I think its common sense really, I mean you’ve got your green bin, your black bin, your brown bin so how hard is it?”

Interviewee F also felt that she picked up her own recycling habits from living at home with her parents:

“... Well I used to live at home with my Mam and Dad so that’s probably where I saw all this recycling, washing things out and all that ... they'd be big into it as well”

And she goes on to say that that her 12 year old son is starting to pick up her recycling habits:

“... he knows ... I would send him out to the bin with the recycling and he’d ask me which bin to put it in ... but he wouldn’t wash the stuff out or anything like that, but he’d put it in a place beside the sink, that’s where I’d gather all the stuff up first, then wash it out and then put it in the recycling bin. Like he knows not to just put stuff in the bin, he’d leave it there to be recycled ... when we were younger we never knew
Interviewee D also said she recycles automatically as this was practiced when she lived at home. And while the married couple, interviewees G and H initially laugh at the suggestion that their daughters participate in recycling in their home, they conceded that their daughters were likely to practice recycling when they move away from home, as that is what they have learned while living in the family home with them.

These results indicate a positive response area regarding recycling activities. As stated, all interviewees gave examples of experiences of recycling habits being passed on to the next generation and the extracts from the interviews illustrate each individual’s experience; from interviewee F, who explains that she picked up her recycling habits when she lived at home with her parents and now her son is starting to do the same, or interviewee D who says she intends to carry on her Mother’s practising habits when she has her own home, to interviewee C who appears to feel some guilt that she is not recycling at the same levels that she learned while living at home with her parents. In previous research Davies et. al (2005) reported that it cannot be presumed that individuals practicing high levels of recycling, will increase levels of recycling in others and Erickson and Jackson-Smith (2005) found that few participants in their research felt much social pressure to recycle. However it is Robertson and Walkington’s (2009) results that correspond with the results of this research when they reported that it is the recycling behaviour that takes place within the household which affected the levels of recycling behaviour, rather than the sight of a stranger practising their recycling habits.
Discussion

For waste management targets established by policy makers to be achieved and maintained, some understanding of the public’s recycling behaviour must be gained (Purcell & Magette, 2010) and uncovering the motivational factors in people’s recycling behaviour is essential (Barr et al. 2003), Robertson & Walkington (2009) and Davies et al. (2005).

Overall, the majority of interviewees feel that people are positively engaging in recycling activities in some form or another. However they also convey some doubt around the levels and quality of this recycling activity. This expression of doubt could prove significant as it provides an initial indication that there may be room for improvement in householders’ recycling attitudes.

A negative sentiment was revealed by householders living in terraced houses towards the compulsory location of their bins in their front garden. While these householders have accepted that this will not change, it may be worthwhile for service providers and policy makers to investigate this issue further to see whether this negative sentiment has any consequential effect on the levels of recycling practised by householders, and if so, what measures if any could be adopted to improve the situation.

Another negative factor identified by interviewees was a general dissatisfaction with their service provider, specifically, South Dublin County Council. It should however be noted that during the process of conducting this research study, South Dublin County Council’s waste collection service was sold to Greyhound Recycling and Recovery Limited, a private waste collection company. This finding is in line with the research of Davies et. al.,
(2005), who found that householders in some areas of Ireland had negative experiences in dealing with their service provider and felt distanced from them. In contrast however, Purcell and Magette (2010) in their study concentrated in the Dublin area, found that most householders expressed themselves satisfied with their waste collection service. Householders’ relationships with their service providers may be worth investigating further to see whether the reported negative experiences produce detrimental effects on the levels of recycling practised.

A clear area for improvement is householders’ attitudes and behaviour towards the recycling of food and garden waste. While some interviewees appear to be correctly and successfully using their brown bin for food and garden waste, others reveal a general decline in this practice. Similar findings were reported by Purcell and Magette (2010) when they found that approximately 70% of respondents in their study conducted in the Dublin area said they put food and garden waste in their general rubbish bins despite being provided with a brown bin service since mid to late 2007. This, together with the results from this piece of research, illustrates that this problematic pattern looks set to repeat itself in South West County Dublin where the brown bin collection service was introduced in June 2010.

A key area identified by this research presenting a prime opportunity for policy makers and service providers relates to main motivational factors on householders’ recycling habits. This research found that key area to be that all interviewees recounted experiences of recycling habits being automatically passed on in the family home to the next generation. While in previous research, environmental concern was reported as having a positive influence on recycling behaviour, (Barr et. al (2003), Aini et al. (2002), Berglund (2006), Ericksen and Jackson-Smith (2005) and Holland, (2000) and as having less of an influence by
Robertson and Walkington (2009), Kurz et al. (2007) and Davies et. al (2005). In this piece of research, routine, obligation and cost were found to be the most common motivational factors, more so than environmental concern but much less than familial influence.

It may be beneficial for policy makers and service providers to investigate this further to see whether householders’ current motivational factors could be supplemented by encouraging or promoting those motivational factors which they do not identify with. For example, a householder who recycles out of routine or feelings of obligation could be encouraged to practice higher levels of recycling activity by the provision of factual information on environmental issues.

The concept of recycling activities within the household being passed on to the next generation, presents policy makers and service providers with a natural stepping stone to delve deeper into this development to expand on it to encourage householders to engage in a higher level of recycling, the objective being that their habits will automatically be repeated by the younger generations growing up in their homes.

**Conclusion**

This research study set out to identify any problems that may exist in the attitude-action relationship towards recycling of householders residing in the South West area of Dublin. The research uncovered householders’ attitudes and revealed their opinions on, and motives for recycling, consequently identifying some problems and also some positive concepts. The research pinpointed areas with scope for improvement in particular; a dissatisfaction with the service provider and a decline in use of the brown bin for food and
garden waste disposal. It also identified a core area of opportunity to encourage householders to increase their levels of recycling by expansion of the influence of familial recycling habits within the home. The results of this research can therefore be used for future research into waste management policies in Ireland.
References:


Appendices

Appendix 1

Codes generated in Nvivo 9
Appendix 2

Interview questions.

1. How many external bins do you have at your home?

2. Where are they stored? How does that make you feel?

3. Do you know what goes in each bin?

4. What motives you to recycle?

5. Do any other members of your household recycle?

6. If you arrived at a full bottle bank with bottles to recycle what would you do?

7. Do you think that people in general are recycling?

8. Do you think that people feel under social pressure to recycle?

9. Who collects your bins?

10. Is there anything missing from your waste disposal / recycling service?
11. Do you ever think about where the waste goes after its collected?

12. Do you pay for your waste collection?

12. Would you regard yourself as environmentally conscious?

13. Do you experience any feelings of satisfaction when recycling?

14. Where is your local recycling centre?

15. Is there anything you would like to say on this subject that I haven’t asked you?