Student engagement with sustainability : understanding the value–action gap

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Abstract

Purpose

The purpose of this paper is to present the findings of research that aimed to determine what university students living in accommodation provided by The UNITE Group Plc., in the UK, understand about the concept of sustainable living. It considers what barriers they perceive to be standing in the way of following sustainable living practices. In particular the research aimed to explore any value-action gap for the student population with a view to informing future actions to help close any gap.

Design / methodology

The study was completed through an online questionnaire survey of students living in halls of residence operated by UNITE. The survey informed focus groups that explored the issues raised in greater detail.

Findings

It was found that students living in properties provided by UNITE believed sustainable living to be important, yet levels of understanding were very low and there appeared to be a wide value-action gap. Reasons for this are varied, however an unexpected theme emerged around the association of effort and importance. There was a very strong association between sustainable living and recycling, which therefore saw the lack of adequate recycling facilities as a significant barrier to sustainable living. There were also issues around a lack of information, cost and respondents' flatmates as further barriers. However, the most significant barrier was the displacement of responsibility for sustainable living to other people or organisations.

Originality / value

Gaining an insight into the complexity of attitude and behaviour of students with the sustainability agenda will enable understanding that can be applied to activities that promote sustainability.

Introduction

There is a general consensus that our existing way of life is unsustainable (DEFRA 2007), It can be argued that to become sustainable significant change to behaviour is required, to a limited extent some changes in action appear to be happening (DEFRA 2009). This paper is the development of a research project informed and motivated by books such as *Tribe* by Bruce Parry, and writers such as Sauvé (1996), Kagawa (2007) and Kollmus and Agyeman (2002) to understand the nature and characteristics of any value-action gap identified for University students living in halls of residence operated by supplier The UNITE Group Plc. (UNITE). The study aimed to provide the management of UNITE with understanding that might prove useful in supporting activities that promote behavioural change and inform investment decisions.

The study was influenced by a statement from the Sustainability Director at UNITE (2008) that *'whilst*

students who live in buildings provided by UNITE are within the age group most educated and informed about environmental issues, they are in fact the group who are most environmentally profligate.'

There is significant literature linking sustainable development and higher education, much of this linked to initiatives known as greening the curriculum and being part of the formal learning experience (Hopkinson et al 2008). As Hopkinson et al note less attention is given to the role of extra curricular activities that Speck and Hoppe (2004) refer to as service learning, Hopkinson et al also identify a 'campus curriculum', where campus environmental management is seen as an educational tool, thus an integrated approach to learning combining formal and informal emerges. However this takes perhaps an idealistic educational perspective for understanding. This project emerges from a different perspective of a private sector organisation's need to become more sustainable for a number of reasons including reduction of cost and to meet emerging sustainability agendas, perhaps a more pragmatic perspective? In order to become more sustainable the organisation has recognised the need to understand customer (student) behaviour.

Despite apparent motivations to engage with and behave in what is seen as a sustainable way, behaviour amongst students does not appear to correspond, there appears to be a value-action gap, as noted by McKenzie-Mohr and Smith (1999, p9), *'it is warranted to believe that by enhancing knowledge, or altering attitudes, behaviour will change? Apparently not. Numerous studies document that education alone often has little or no effect upon sustainable behaviour.'* If it is stated by so many students that they believe sustainable living a very important concept, why do they not reflect this in their living habits (Su, 2007 and Kagawa, 2007)?

Three aspects will be explored;

i) what barriers students perceive prevent them from acting sustainably,
ii) These will be used to inform the idea of a displacement theory of responsibility for sustainable living on to other individuals or organisations, and explore the nature of any displacement with this student group
iii) Finally, the discussion will focus on the idea of a relationship between importance and effort, in that sustainable activities that are deemed as difficult are also not important and vice versa.

At first sight the nature of a value-action gap suggests either hypocrisy or non understanding, however this research has illustrated that the situation is more complex. The results will inform programmes being developed to support and encourage more sustainable behaviour amongst university students including the set up of energy networks, sustainable building toolkits, improved recycling facilities, student competitions, and enhanced links with the universities to identify opportunities that emerge from relationships with student support services and within curriculum development.

Literature review

The existence of organisations such as UNITE and their competitors are a growing phenomenon in the UK, the study aimed to understand how students living within buildings provided *by* UNITE view sustainability and how this may impact on behaviour.

Understanding

The importance of understanding some of the contested definitions of sustainable living cannot be understated; Leal Filho (2000); Kagawa (2007); Sauve (1999) and Shriberg (2000) have all noted the importance of clearly communicating definitions and understanding the concept before anyone can be encouraged to follow sustainable practices. The complex and shifting nature and definitions contribute to making sustainability difficult to understand; Shriberg (2000) goes on to note that this may never be rectified.

It is important to clarify what the term sustainable living is taken to mean, placing the responsibility for sustainability with the individual, the following has been adopted:

Individuals can meet their living needs by using natural resources in such a way that does not compromise the ability of future generations to provide for themselves, or do irreparable damage to the natural environment.

Traditional approaches to promoting sustainable behaviour have focussed on enhancing understanding through increased information provision. Kollmuss and Agyeman (2002) point to the early US linear models that ultimately proved insufficient, where environmental knowledge leads to environmental attitude/awareness and in turn pro-environmental behaviour. Blake (1999) illustrates the complexity and types of issues that can influence behaviour and demonstrates the inadequacy of purely an information strategy for sustainable behaviour. Whilst students should be well educated and have an understanding around the concepts of sustainability, Darnton (2004, p5) points in a Department for Environment, Food and Rural Affairs (DEFRA) survey in 2001, that 18-24 year olds had the lowest of level of understanding of sustainability of any age group

Value-action Gap

Despite apparent motivations to engage with and behave in a sustainable way, behaviour does not appear to correspond, there appears to be a value-action gap (Kollmuss and Agyeman (2002); Marcell, Agyeman and Rappaport (2004) and Blake (1999)). Marcell, Agyeman and Rappaport (2004) attribute this to a lack of understanding of how an individual's actions contribute to climate change, Kollmuss and Agyeman (2002) add that stopping climate change is outside an individual's 'locus of control'. Blake (1999, p262-263) agrees, *'Environmental concern and basic action (such as recycling), are now becoming widespread throughout the population; but few people take environmental actions which involve changes to their lifestyle…Effectively, this means that environmental actions that people take are tokenistic and may be unrelated to the particular concerns that they express about the environment.'*

Action to address the value-action gap

There have been many initiatives at universities within the UK and USA referred to as *greening the campus* that can be described as campus curricular (Hopkinson et al 2008) These various activities demonstrate contrasting approaches of technical solutions and behavioural change. The position of the authors is that sustainability is a behavioural problem where the answers can be supported by technological advances.

Kahler (2003 p230) established a 'green dorm room' that included energy efficient appliances, thus the importance of 'learning by doing' was emphasized, *'By combining education and outreach with a living model the students were able to inform the entire Tulane community about their efforts and change some bad energy habits.'* This is particularly relevant to UNITE, current sustainable living campaigns have focused on providing information alone and energy costs are included within a flat rate charge therefore for these students there is no direct financial cost associated with use of energy. As Kagawa (2007, p327) notes, *'Increasing knowledge by itself will not automatically facilitate individual behaviour change…There are multiple factors which influence the process of behavioural change and further investigation of dissonance between students perceptions of sustainability and their individual actions needs to be explored.'* Whilst discussing understanding it is important to recognise the '*three legged stool*' of sustainability (Newport, Chesnes and Lindner 2003). Kagawa (2007, p335) states, *'students strongly associate the concept of sustainable development and sustainability with their environmental as against their economic and social aspects.'*

Motivation

Students, as many other population groups, appear to be disengaged from the issue of sustainability, despite professed support for the concept (The Cosgrove Group, 2003 and Zimmerman and Hitchcock, 2006) as a consequence of mistrust of those delivering the message applying to both politicians and organisations being perceived to have something to gain by promoting this message.

Diekman and Preisendoerfer (in Kollmuss and Agyeman, 2002) demonstrate that people are more

likely to engage in a pro-environmental behaviour if the 'cost' is low, they argue that cost can either be financial, or take a broader psychological sense, in terms of the time and effort needed to engage, Kollmuss and Agyeman (2002, p252) state, *'People who care about the environment tend to engage in activities such as recycling but do not necessary (sic) engage in activities that are more costly and inconvenient such as driving or flying less.'* As Dobson observes, (2007 p280), *'The environmental citizen's behaviour will be influenced by an attitude…that is informed by the knowledge that what is good for me as an individual is not necessarily good for me as a social collective.'*

To achieve the goal of sustainable behaviour will require a closing of this gap, understanding the characteristics of this gap will be crucial, and a more holistic approach is needed toward understanding sustainable lifestyles that goes beyond understanding what motivates participation in 'traditional' pro- environmental practices. Consumers are more likely to purchase in a sustainable way if they can see the differences it makes (Allen and Ferrand (1999) and Kollmus and Agyeman (2002)).

Attitudes towards energy efficiency should be considered in a consumerist society with an ever increasing number of electrical goods on the market. Boardman (2004) notes that the benefits gained by energy efficient white goods could very well be wiped out by the increase in the proliferation of consumer electronics, particularly prevalent amongst the student population. The characteristics of consumerism in determining attitude and behaviour are significant, as illustrated by a lack of understanding of the impact of waste from the production and packaging of food (Bekin et al, 2006).

It is fair to say that the idea of energy efficiency is widespread, yet, it is suggested that the only pro-environmental behaviour that could be classed as normative is that of recycling (Barr, 2007). Barr's model points to a discrepancy between value, beliefs, and behaviours, suggesting that motivators behind recycling and reuse and reduction are very different. As recycling can be classified as a normative behaviour, participation is largely reliant on practical issues such as access to facilities. The likelihood of participation in reduction and reuse behaviours, on the other hand, is determined by much more complicated phenomena such as underlying environmental values.

Incentives may be a means of promoting behavioural change, this can take two forms when considering promoting pro-environmental behaviours, either rewarding participation or penalizing non-participation. There can be financial rewards or others, such as gaining social approval, it is argued that it is better to reward positive behaviour than punish negative behaviour, punishing the negative behaviour does not necessarily promote an alternative positive behaviour. (McKenzie, Mohr and Smith, 1999); Boyce and Geller (2001) and Allen and Ferrand (1999)) point to the notion of 'Actively Caring' in relation to incentives, a reciprocity, in that there is a perceived obligation to participate if a reward is given before someone actually participates in the behaviour.

The enormity of climate change and the dramatic and widespread action needed to combat can make people feel helpless to act. It is recognized that if a particular behaviour can have demonstrable effects to the participants they are likely to be more successful (Allen and Ferrand (1999); Gilg, Barr and Ford (2005) and Kollmus and Agyeman (2002)).

Method

The primary aim of this research, triggered by a hunch, based on anecdotal evidence and literature review, was to gain an understanding of the awareness and behaviours associated with sustainability and the characteristics of any observed value-action gap for university students living within residences owned and operated by UNITE. The purpose of the study was to gain an understanding that might prove useful in supporting activities that promote behavioural change and inform investment decisions.

The research was completed from the epistemological position that it is not possible for the researcher to be independent of that research. Weber (in Saunders, Lewis and Thornhill, 2007) put that the results of any research will be largely grounded in the moral and political beliefs of the researcher, and acknowledgement and understanding of such positions is considered significant. Such a view of research can be seen to be inductive (Morgan and Smircich 1980) with the researcher seen as a participant observer (Saunders, Lewis and Thornhill 2007).

A mixed method approach was adopted that combined quantitative evidence for the understanding of sustainability, behaviour, and the existence of a value-action gap, and qualitative evidence of the nature, possible causes and issues of that gap. The approach taken was a combination of online survey, followed by focus groups (Collis and Hussey 2003).

The survey combined quantitative and qualitative questions and was structured on the Select Survey software tool. A link to the survey and a brief explanation of its purpose was emailed on the 1st of April 2009 to a population of 5703 people who live in 105 different properties across the England and Scotland. These students were on what is known within UNITE as the 'White List' of all customers who have opted to be contacted again by the organisation. Permission for use of the white list was gained from the organisations managing board as being seen as a value adding activity that fit within the restrictions of the opt in agreement, and on condition of anonymity for all those responding. An e-mail approach was adopted as a large response from multiple sites was required and that experience suggests this is a common way for the organisation to communicate with the students, and that the vast majority have access to e-mail facilities.

A sample of 396 responses were received, a 7% return rate allowing confidence in the conclusions and enabling generalisations that are representative of the kind of student that chooses to live with UNITE.

The survey comprised 6 quantitative questions utilising Likert scales (Bryman, 1988 and De Vaus, 2002), and 8 free text qualitative questions, the choice of questions for the survey drawn from the literature review.

The second data collection method were two focus groups (Silverman, 2006) participants were selected from a request for volunteers from UNITE site in Sheffield, the city chosen for ease of access for the author, limited time and other resources restricting participation to a single site. Whilst this does create some limitations in terms of generalizability, the purpose of the focus groups was to explore further emergent themes that could inform local action that may be generalised. It is recognised that it was probable that the kind of person who would reply to this form of request would be interested in the subject matter and as such have a more comprehensive understanding of the term.

The qualitative survey question responses, focus group transcripts and contemporaneous notes were analysed through a coding approach with an emphasis on reflective practice to elicit an authentic account of a subjective experience (Silverman, 2006)

The survey indicated possible explanations for differences in behaviour around interest and action and the concept of displacement; these were developed within the discussions to gain a deeper understanding.

There were four main areas covered within the focus groups with the following questions used to open the discussion:

- What do you think is meant by the term sustainable living?
- Why do you (not) think sustainable living is an important concept?
- What would encourage you to follow sustainable living practices?
- What barriers do you perceive to be preventing you from acting sustainably?

Results

Commencing with a brief look at the demographics of the survey respondents, nearly two thirds (262 of 396) were female and supports the literature (Barr et al, 2001 and Gilg et al, 2005) in that females

tend to be more interested in the subject area and more likely to participate in pro-environmental behaviours. As would be expected 73.2% of respondents were under 22 years of age, fitting the targeted demographic, and all areas of England and Scotland where UNITE operate were represented.

It is clear from the survey that students believe that they value sustainability and think it an important (36%) or very important (40%) concept (as shown in figure 1) with 73% believing they understood the term.

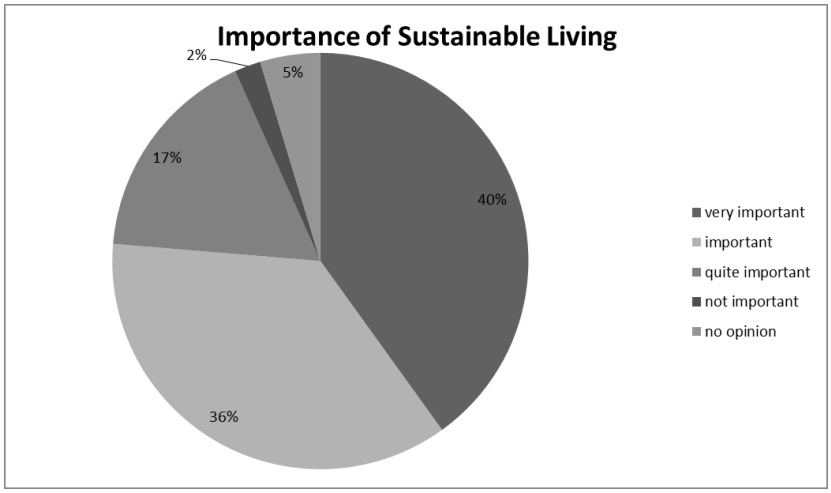

Figure 1 – The Importance of Sustainable Living

Taking that an acceptable definition of sustainable living would include a mention of both the need to preserve natural resources and a concern for the wellbeing of future generations (Giddens, 2009, Hawken, 1994, Roger and Beard, 2006 and WCED, 1987), only 6% of that group who claimed to understand sustainability were able to give a satisfactory definition. The total groups answer were categorised and shown in figure 2, and despite the level of education illustrate a problem with understanding that supports the literature.

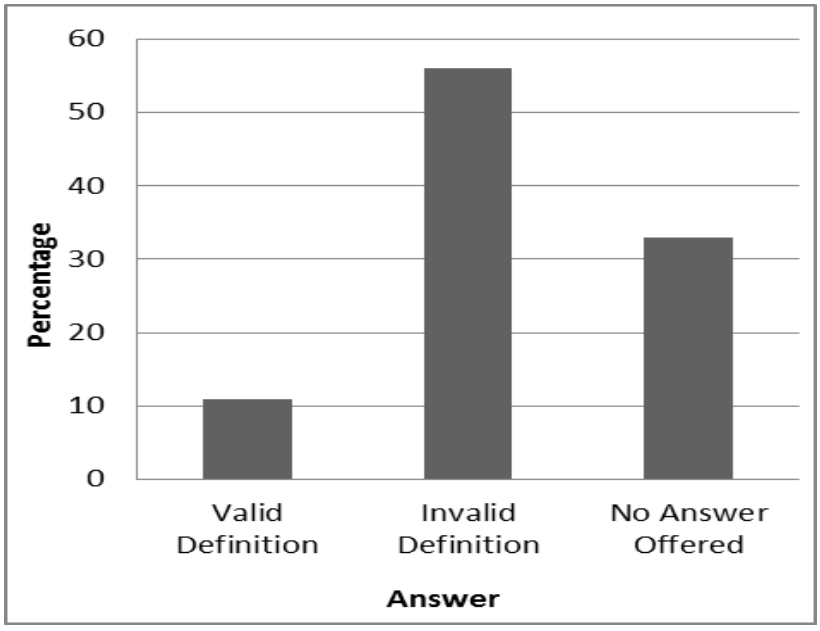

Figure 2 – Valid Definition of Sustainable Living

The lack of understanding is further illustrated with analysis of the terms that the students used to define sustainability, shown in figure 3 below.

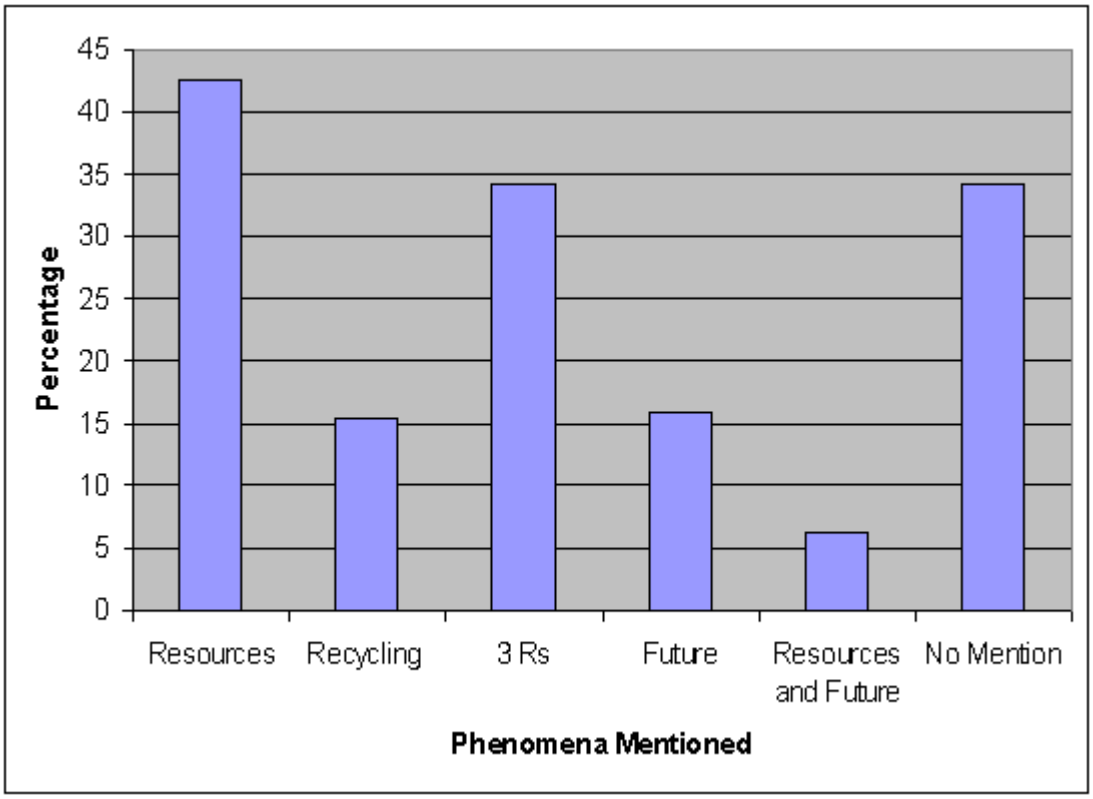

Figure 3: Phenomena mentioned in definitions of sustainability

Moving on to the perceived barriers to sustainable living, figure 4 below illustrates the issues, two categories stand out, the need for adequate recycling facilities and what became defined as displacement, perceptions that it was another's responsibility, or that their own actions made little difference.

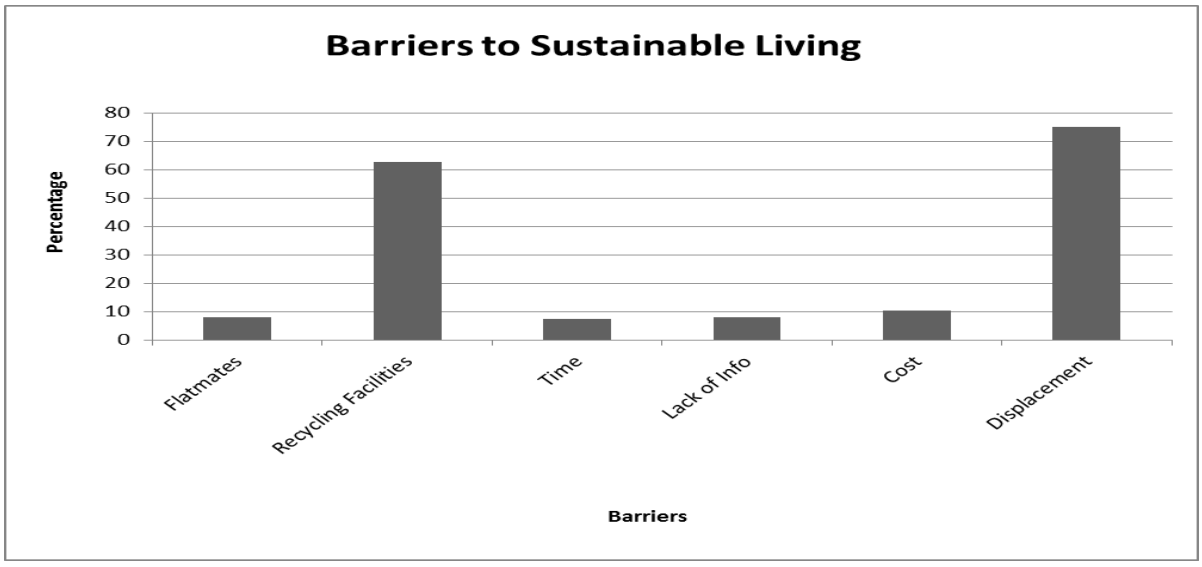

Figure 4 – Barriers to Sustainable Living

It emerged that a majority (75%) felt that whilst there were issues that needed to be addressed with regard to sustainability, it was not their problem to rectify, the responsibility was displaced towards other people or organisations such as UNITE or local and central government. To fall into this category a mention had to be made to someone else having to do something before the respondent could participate in a pro-environmental behaviour: *'I know that they say it takes one person to make everybody else move (and follow sustainable practices) but I just think that that one person should have to be a bit higher up than someone like me'*

The idea of displacement was developed further when discussing the contents of some consumer goods, the participants saw the responsibility with the manufacturer and it was not up to them as consumers to make the environmental decision when purchasing: *'you expect the manufacturer to be more interested (than the consumer) in the contents'* and *'you can't control what's in it, but you know you need to use it'*

It was interesting that a number of respondents placed the blame with flatmates and their behaviour, the prevailing view that respondents struggled to see the point in them following sustainable practices, such as energy conservation or recycling, if their flatmates did not participate: *'Not everyone in my flat will contribute and consistently make sure the sustainable (sic) practices would be carried out'* and '*living as a student means you can't afford certain more ethical products'* and *'living in a shared living environment means you can't always operate as you would do if you were living as a non-student'* and particularly powerful, *'I would like to do it but my flat mates do not really care about it'.*

In a focus group, two of the participants felt that because three of their flat mates were on computer courses, and had their computers on for most of the day and night, there was no point in trying to compete for monthly energy saving incentives.

It is clear that the lack of recycling facilities is a major barrier students perceive to be preventing them from following sustainable living practices. This links with the author's anecdotal evidence from working in these properties that students think the provision of these facilities is poor. This compliments the analysis on definitions; students strongly associate sustainable living and recycling. Evidence from the focus groups supports this: *'lack of a recycling system, I think that's the major thing. At the moment there is only a permanent facility for cardboard and paper, what we need is facilities for metal which means all the beer cans that students drink, we get through more beer than the majority of the population, so that's a prime target for metal collection. Then glass as well because of jars for the curry or tomato sauce, plastic increasingly as well'* and *'There are no recycling facilities available on site. The nearest facilities are at the local Sainsbury's (15 minute walk away).'*

It is of interest that the lack of recycling facilities was mentioned 12 times during the course of a focus group by one participant in response to numerous different questions.

Time, or lack of it, was a recurring theme with some students feeling that a lack of time was preventing them from engaging in pro-environmental behaviours. They felt that spending time concentrating on their studies was more important: *'lack of time, just focusing on daily stuff and studies'* and *'management of time with course work and exams'*

As three of the participants of a focus group were final year undergraduates, and had a significantly increased workload, compared to their previous two years study, time seemed to be a major factor: *'you just don't think about it you keep going, if you've got an assignment due next week, the last thing I want to think about is 'did I turn the tele off' or 'have I switched the lights off' and 'well, work-wise, stuff like that (is important), going on a trip to take bottles somewhere…isn't really a top priority'*

The notion of sustainable living as being expensive was limited to buying fair trade or organic goods, with comments such as: *'buying fair trade food and organic food is too expensive, so you can't afford to do that, you can just about afford basic stuff sometimes. If you're scraping for money, basic stuff is as far as you get, so organic food you can't do'* and *'if cost wasn't such an issue, I'd prefer to buy something that's got the recycling symbol of one to four in the middle, rather than five and above'*

The case of one participant, who clearly had passion for having the most up to date gadgets, and had

declared a high level of importance to sustainable living and demonstrated a high level of understanding was interesting. It was clear from his answers, that where he saw a barrier, he was willing to take action to work around it. The interview started with the participant removing their Apple laptop from their bag with which to make notes, and as the interview progressed more references were made to other bits of technology or gadgets that he had. It became apparent that technology was of great importance to him, he seemed to be unaware of the damage that the heavy metals used in producing circuit boards could do.The participant was asked if he would be willing to either give up gadgets or limit how often he upgraded once the damage they can do to the environment had been explained, the response, *'no, but I think we can make reductions elsewhere that are easier to do so, I think we still need technology, but laptops are more environmentally friendly than desktops, so maybe its desktops we can give up'.*

This supports the final theme to be discussed where participants directly related the importance of a sustainable behaviour with the effort required to participate. When asked, 'do you think sustainable living is an important concept?' it was met with responses such as: *'partly, not all of it, 'cause I think to buy organic food and fair trade food every day can be expensive. But I think like recycling stuff is important.'* and *'if there's lots of effort involved its not going to encourage people'.*

Many of these discussions were reinforced with the response to the question about encouraging sustainable living; figure 5 below, improved recycling was listed as a practical solution, the other suggestions revolved around activity that might promote behaviour change through changing understanding and motivating behaviour through direct reward.

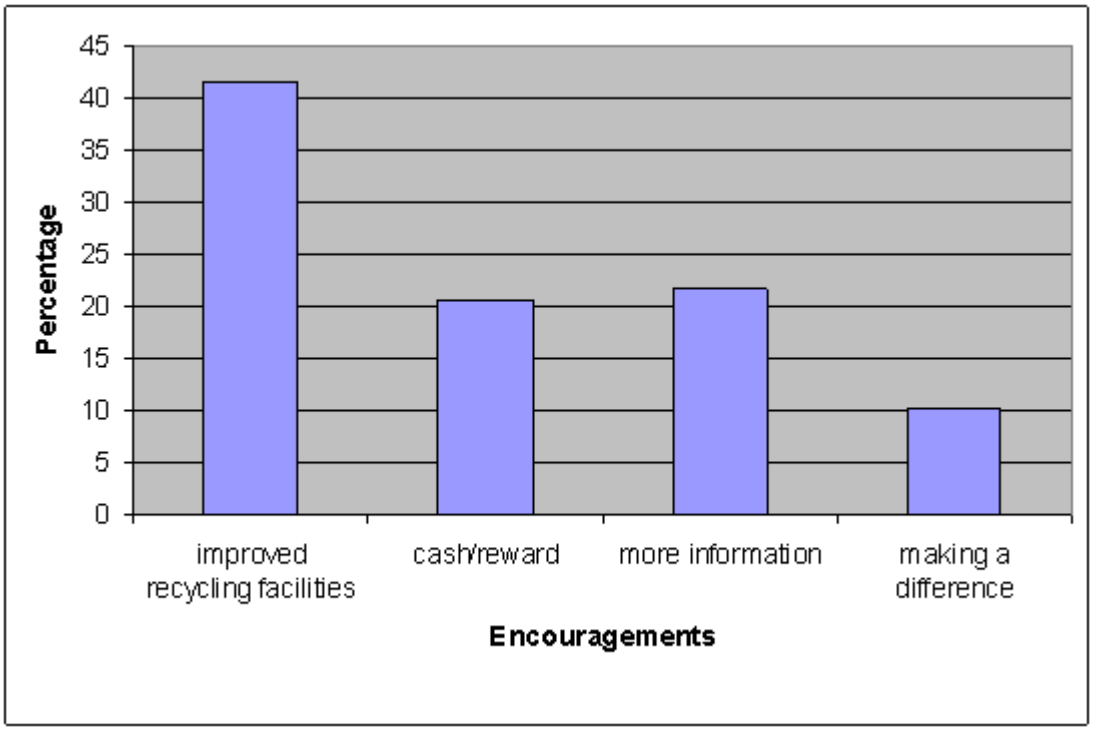

Figure 5: Encouraging sustainable living

To summarise, the findings of this study concur with the wider literature that students' understanding of sustainable living is limited. It is clear that the majority think it is an important concept but struggle to define it, and there seems to be a strong link between perceived definitions of the concept and recycling. The surprising findings are that there seems to be an inverse relationship between perceptions of importance and the ease of participating in a particular behaviour, also students appear to believe the responsibility for sustainable living lies with others leading to a displacement theory. The suggestion made by Kagawa (2007) is supported, in that there is little benefit in a group of people believing the concept to be important without fully understanding what it means and how and what

they can do to get involved.

Conclusion

The focus of the Brundtland Report in 1987 places responsibility for sustainability on society. This study looks much more closely at the individual student's understanding of and attitude to the responsibility for sustainability. The results clearly demonstrate a value–action gap, where students who have been through significant education within this area perceive sustainability as important however demonstrate a lack of understanding of the concept or behaviour that accords with these values. The literature supports the view that information and understanding alone are not enough but a non-understanding prevents sustainable behaviour. Given the low levels of understanding there is clearly a need to improve education and information approaches that meet the requirements of this particular group of people. The attitude to use of heating, lighting and other plug in devices indicates a gap that requires action so that minimising energy consumption becomes a normative behaviour.

It is clear from the discussion and results that university students strongly associate recycling and sustainable living, it can even be suggested that in many cases they are believed to be one and the same thing. This links up with the literature insofar as recycling is the only behaviour that can be classed as normative. Therefore, if recycling facilities are not easily accessible students believe they cannot follow a sustainable lifestyle.

These students appear to associate the importance of a sustainable activity with ease. This links with literature that focuses on environmental cost, in these circumstances 'cost' is related to the effort it takes for an individual to participate. Building on this idea, this study finds that if an activity is perceived to be difficult it is not important and therefore not worth the effort (Kollmuss and Agyeman, 2002).

Finally there was evidence of a 'Displacement Theory', which says that university students pass their responsibility for sustainability, or inability to act on to other agencies such as government, business or their social group. There are a number of ways in which this is evidenced, it is suggested that this attitude is due in part to the enormity of the issue of climate change (Allen and Ferrand, 1999; Gilg, Barr and Ford, 2005; Kollmuss and Agyeman 2002), but displacement theory goes beyond, there is a perception that they do not have the time or resources to act in a sustainable way and that ‘someone’ should address these issues. Finally there is evidence that co-students such as flat mates are blamed, their behaviour preventing others from engaging. Bandura (2007) sees this as a selective moral disengagement and as Nieto (1996) observed places ‘displacement of responsibility to the centre of the ethical stage’ and ‘Responsibility is not just one more burden for the human being; it is a human dimension that defines our dignity and humaneness’ and in so doing emphasised the significance of taking responsibility for your own actions.

Individuals need to accept responsibility for their actions and this to be integrated into the way people lead their lives and not thought of as a stand-alone subject. It needs to be built into the way people think and act. As suggested above the only behaviour that could be classed as normative is recycling, firmly within the 'environmental pillar' of sustainability, there are no economic or social behaviours that fit this criteria.

To combat 'displacement' it is suggested that educational programmes increase not only understanding of the subject area, but also the potential impact an individual can have by adjusting their own behaviours. After all, society is no more than a (huge) collection of individuals.

This research in improving understanding has informed a number of actions within UNITE initiated to address the value–action gap and promote / encourage / drive sustainable behaviours / actions including:

- Trailing and investment in energy efficient technologies
- Monthly incentives to reduce electricity consumption
- Retro-fitted 'green' shower heads and taps to reduce water wastage
- Improved information within customer flats such as 'top tip' posters
- Establish energy networks

The concept of greening the campus has also been addressed, despite UNITE being a private organisation, there are actions commencing to better link UNITE with wider action on sustainability within the university sector.

UNITE are a private company with the objectives of reducing cost and carbon intensity as well as meeting the sustainability agenda, this research has contributed to achieving those objectives through an enhanced understanding of the value-action gap amongst students.

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