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This is an author produced version of a paper published in

Social Business (ISSN 2044-4087, eISSN 2044-9860)

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Citation Details

Citation for the version of the work held in 'OpenAIR@RGU':

OATES, C. J., MCDONALD, S., BLADES, M. and LAING, A., 2013. How green is children's television? Available from *OpenAIR@RGU*. [online]. Available from: <http://openair.rgu.ac.uk>

Citation for the publisher's version:

OATES, C. J., MCDONALD, S., BLADES, M. and LAING, A., 2013. How green is children's television? *Social Business*, 3 (1), pp. 37-45.

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Case study: How green is children's television?

Case study submitted for consideration to

Social Business: an interdisciplinary journal

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ABSTRACT

Purpose

To meet stated waste reduction goals, the UK government via Defra (Department for environment, farming and rural affairs) is attempting to reduce household mainstream waste. One approach is to encourage children in environmentally-friendly behaviour. We take this as a starting point to document the environmental content of dedicated children's channels, and to consider whether television could act as an ecological socialising agent for waste reduction behaviour.

Approach

Our content analysis of four children's television channels over 168 hours recorded the extent to which the waste hierarchy (reduce, reuse and recycling behaviour) was included in all forms of broadcast output: programmes, advertisements, trailers, sponsorship and idents.

Outcomes

We found 6,921 instances of waste activity, distributed across 666 broadcasts which included eleven identifiable materials, such as plastic and cardboard. Whilst reuse behaviour

was well represented (5,751), instances of reduction (406) and recycling were relatively infrequent (275) and there were 489 instances of materials being placed in refuse bins.

Contribution

By placing children's television on the environmental agenda, we raise the possibility of channels examining their own broadcast material to assess its environmental content, and how that content is distributed across the waste hierarchy and in relation to broadcast output.

Further research

Our case study was based on four channels and within the specific context of waste. There are many more channels (e.g. available on cable/satellite) and more environmental behaviours that can be examined with a view to meeting other targets – for example those connected to climate change such as travel, domestic energy consumption, and food choices, all of which are included on children's television. The response of the intended audience to the environmental content can be assessed.

Keywords

Children's television, green, waste hierarchy

INTRODUCTION

The participation of children in environmentally friendly behaviour with regards to household waste (reduce, reuse, recycle) is crucial if the UK government is to meet its ambitious targets for waste reduction by the year 2020 (Defra, 2011). The role of households is key to an effective waste reduction strategy, and Defra (2011:6) has publicly announced its aim is 'to recycle 50% of waste from households by 2020.' In terms of public participation this means moving towards a situation in which every household takes an active part in waste reduction as a matter of course. To meet these targets, one of the acknowledged strategies is culture change (Cooper, 2005). As part of a range of cultural strategies the UK government recognises the central role of children in meeting current and future targets by planning to involve them in initiatives such as recycling litter, part of the 'Big Society' vision (Defra, 2011:52).

In the present case study, we outline the role of children's television in promoting pro-environmental behaviour to a young audience, we examine what kinds of behaviour are presented and how, and what forms of output incorporate a 'green' message. Given the recent proliferation of children's television channels (including channels aimed at preschoolers) and the fact that some young children watch up to four hours of television each day (Durkin & Blades, 2009), we suggest that it has become even more important to research the role of children's television as a provider of information about reduction, reuse and recycling behaviours.

BACKGROUND

Previous researchers have shown that those who are better informed about waste reduction actions are more likely to perform such actions than those who are not informed (Vicente & Reis, 2008). Researchers have also shown that programmes of environmental education which are placed within school curricula can be successful in promoting recycling behaviour (Duvall & Zint, 2007), both by the children directly affected by the environmental education, and also, by families through reverse socialisation in the households to which they belong (Uzzell, 1994; Evans, Gill & Marchant, 1996). Reverse socialisation indicates that children influence their parents in various skills related to consumer behaviour. For environmental behaviour, Gentina and Muratore (2012:163) term this 'ecological resocialisation'.

Although school based initiatives comprise an important strategy for reaching the recyclers of the future and boosting current household participation, such initiatives are limited to school age children and are only one way to raise awareness. Mechanisms which have proved to be effective in increasing recycling rates such as improving knowledge about recycling, introducing antecedent prompts and influencing social norms (Schultz, Oskamp & Mainieri, 1995) all have the potential to make the transition to broadcast media. But the messages aimed directly at children themselves have rarely been examined (Schumannhengsteler & Thomas, 1994). Research into such messages has focused on older children or adolescents

(e.g., Blake, 2004; Lee, 2008) and on the environmental education they receive through school (e.g., Evans, Gill & Marchant, 1996; Duvall & Zint, 2007). Only a small amount of this work has been set in a UK policy context and was conducted prior to the launch of television channels dedicated to children (e.g. CBBC and CBeebies which started in 2002), and well before the current Waste Strategy (Defra, 2011). The academic debates about reducing household waste (Oates & McDonald, 2006), about marketing to children (Gunter, Oates & Blades, 2005) and about the development of children’s environmental awareness (Spencer & Blades, 2006) are each well established within separate literatures. But the role of dedicated children’s media in broadcasting waste reduction information to children has yet to be examined.

METHODS

The current research addresses a number of gaps in our understanding of the (potential) role of children’s television in delivering environmental information. Our sample, detailed in Table 1 below, allowed us to collect 168 hours of output on dedicated children’s channels at peak viewing times over a timescale of two weeks for each channel. Milkshake on 5 was assessed only in the mornings, to capture Channel 5’s children’s programming.

Channel	Target age group	Delivery	Times recorded	Total hours
CBeebies	Up to 6 years	digital	7am – 9am	24
			3pm – 5pm	24
CBBC	6 – 12 years	digital	7am – 9am	24
			3pm – 5pm	24
CiTV	Up to 12 years	digital	7am – 9am	24
			3pm – 5pm	24
Milkshake on 5	Up to 5 years	terrestrial	7am – 9am	24

Table 1. Television sample

Within the 168 hours of television output, we identified and classified 6,921 instances of waste activity which were distributed across 666 broadcasts. These included all forms of

television output: idents (i.e. the links between programmes), trailers, sponsorship and advertisements, as well as the actual television programmes. We classified the instances of waste activity according to type of material, waste behaviour (reduce, reuse, recycle), location, attitude towards the activity, as well as its visual prominence and connection to the story. Instances were recorded on first appearance and then again at each scene change. If any scene featuring waste activity continued for longer than ten seconds, it was recorded as another instance.

RESULTS

The number of waste behaviours portrayed on screen is shown in Figure 1, and at first glance, the large number of waste behaviours might suggest that the green agenda is at the forefront of children’s television, but our analysis demonstrates an uneven portrayal of these behaviours and indicates what is prioritised and what, by comparison, is neglected.

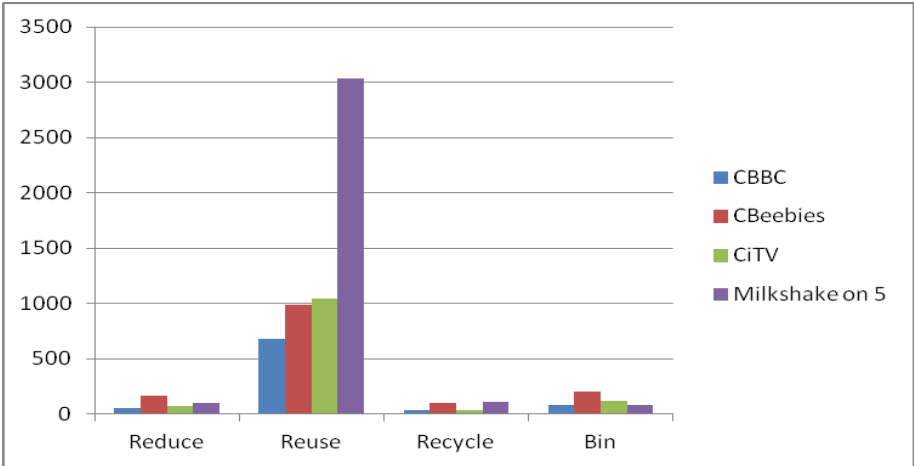


Figure 1. Instances of waste behaviour by television channel

As Milkshake has only morning output, with no afternoon programmes it was initially surprising that in 24 hours of broadcast this channel accounted for 3326 (48%) of the total instances recorded. The high figure for Milkshake can be partly explained by a programme called *Bottletop Bill and his best friend Corky* that accounted for 90% of examples of total

plastic reuse and 87% respectively of total metal reuse. However, every channel had at least one programme that accounted for a disproportionately high number of instances e.g. *Ed and Oucho's Excellent Inventions* on CBBC featured 52% of the reuse instances for that channel; *The Wombles'* newspaper wallpaper was 92% of paper reuse on CiTV; and all the 229 instances of barrel reuse were in just two programmes: *Postman Pat* and *Big Barn Farm* on CBeebies. Overall, each of the channels other than Milkshake was analysed over 48 hours of output and included 863 (12.5%) instances on CBBC, 1462 (21.1%) instances on CBeebies, and 1270 (18.4%) on CiTV. Thus, the two channels aimed at the youngest viewers (CBeebies and Milkshake on 5) featured the highest numbers of instances of waste activity.

Although we found a large number of examples of reuse (5,751), instances of waste reduction were much less common (406) and there was a surprising lack of instances of recycling (275). Some of the examples of reuse were clustered in particular programmes, as mentioned above. In comparison to reuse, reduction behaviours such as saving water (Fifi's water butt in *Fifi and the Flowertots*), and everyday recycling activities, were less frequently included in children's television output. Recycling tended to be the core narrative of a programme (e.g. single episodes of *Come Outside*, *Peppa Pig*, and *Odd-Jobbers* in which characters visited a recycling plant) or was largely ignored.

Much disposal actually went to mainstream waste facilities, as evidenced by the 'Bin' column in Figure 1. Explicit marketing content such as advertising and sponsorship carried little, if any, environmental information but more subtle forms of marketing such as channel idents (particularly on CBeebies) proved to be a rich (if at times unclear) source of green behaviours. For example, one CBeebies ident illustrated a positive scenario of the presenters cycling and picking up litter in a park, only for the (recyclable) litter to be disposed of in a mainstream waste bin.

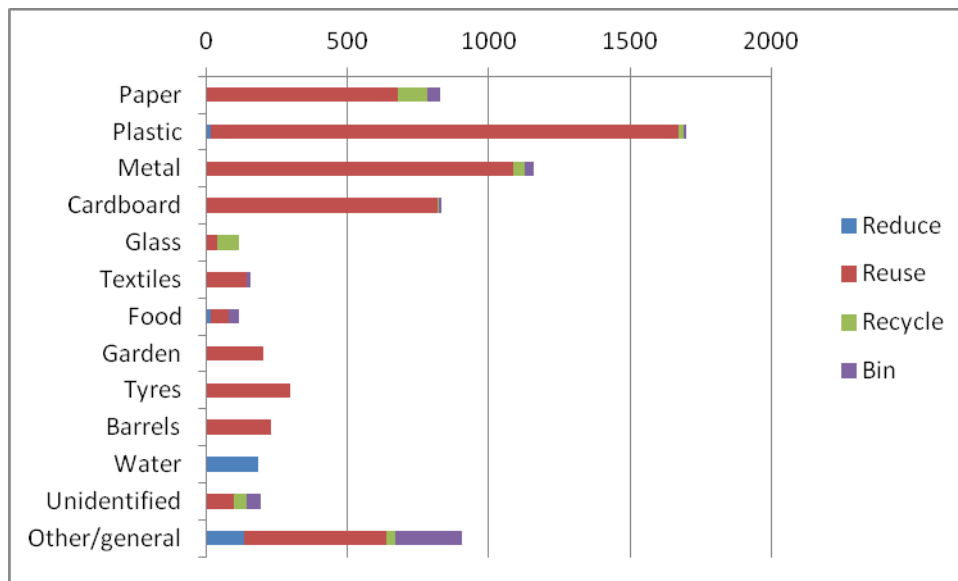


Figure 2. Waste by material and disposal method

The actual materials themselves were unevenly represented across the range of disposal methods, as shown in Figure 2. The top four were plastic, metal, cardboard, and paper. *Bottletop Bill* contributed to the reuse of plastic and metal and *The Wombles* to paper reuse so these results are not surprising. For cardboard, the material was reused imaginatively by characters, for example the use of cardboard boxes and tubes to make objects like a train, a time machine, a bird feeder, a television, a room, and a periscope, in programmes such as *The Tweenies* and *Horrid Henry*.

Around the actual materials, channels, and waste activities, we also examined where the activity was taking place, and identified five main locations, the most frequent being home (308), which one might expect given the age of the channels' audience, many of whom are preschool. Home was followed by work (87), school/nursery (33), and general local environment e.g. park (97), and there were other/unidentifiable locations (141). This analysis was at the level of the broadcast as a whole rather than for individual scenes i.e. the location where the programme or ident was taking place.

We also looked at the visual prominence of the waste activity within the broadcast and out of the 666 broadcasts that featured some green waste activity, we identified 92 as highly prominent, 79 of medium prominence and the remaining 495 of low prominence. This underlined the fact that much of the waste activity taking place was visually peripheral, for example *The Wombles'* wallpaper which was very much in the background. This finding linked to our findings around story connection – with the exception of examples mentioned earlier about visits to recycling centres, most of the programmes we surveyed (555) included waste activity which had only a low level of connection to the story, 47 were medium, and 64 were high. This indicates that green waste activity was not seen as anything of note – it was often simply an integral part of the broadcast and was not commented upon explicitly. This makes sense when we consider the activity most featured i.e. reuse activity. It also fits with the way the activity was presented i.e. in a neutral way, with the exception of a small number of programmes which positively promoted recycling as a good thing to do, and some adverts on CBeebies featuring everyday ways to achieve water reduction. It is not clear whether backgrounding environmental behaviour or making it more prominent would be more effective for the audience – perhaps broadcast output requires a mix of both.

MARKETING IMPLICATIONS

We can identify the wider potential of our study for the marketing of environmentally friendly behaviour to the child audience. Many characters on children's television are well known and popular with certain age groups and although they are often licensed for a limited range of products, particularly food (e.g. yogurt), bedding (e.g. duvet covers), toys (e.g. stuffed animals), games (e.g. playing cards) and toiletries (e.g. hand gel), it would not be impossible to use some in a more social marketing sense to market behaviours such as recycling (e.g. Peppa Pig reminding young readers to put her eponymous comic in a recycling bin rather than a refuse bin); or water reduction (e.g. a branded water butt featuring Fifi from *Fifi and the Flowertots*); or reuse (e.g. Basil Brush birthday cards shredded for hamster bedding). In these days of integrated marketing communications (IMC) (De Pelsmacker et al., 2010),

children's characters appear across many marketing platforms and it would be possible to extend a consistent message across diverse media such as television, advergames and comics. Careful alignment of such environmental messages, according to IMC practice would reinforce the effectiveness of these communications. It might be that channels like CBeebies which use presenters seamlessly between programmes and idents, and across other media like comics, have the ability to control communications to a greater extent than other channels.

CONCLUSIONS

Does it matter what young children see (or do not see) on television? Research suggests that it does – developmental psychologists have long known that children learn by imitation, and repetition is crucial to message retention (Smith, Cowie & Blades, 2011). The characteristics of programmes and marketing output aimed at young children make them ideal contexts in which to encourage pro-environmental behaviours. That does not have to mean making green behaviour the focus of every story, ident and trailer; but if the behaviour is integrated as normal, and characters such as Postman Pat or Tracy Beaker habitually incorporate green behaviour into their usual routines, then this too may become normal for the young viewer.

Encouraging people to engage in environmentally friendly behaviour is complex, and leaving it until they are adults may be too late to change habits built up over a lifetime (Oates & McDonald, 2006). Researchers (e.g. Blumberg et al, 2013) have pointed to the role of media in successfully engaging young people – so as part of a cultural shift, we should consider the hours of television that many children watch every day, and investigate in more depth the role of children's television as a potential provider of environmental information and behaviour. If Defra's target of a 50% reduction in household waste by the year 2020 is to be realised, it is the generation raised on CBeebies and Milkshake who will be at the forefront of environmental change.

FUTURE RESEARCH DIRECTIONS

The next stage of this research would be to see what messages are noticed by and resonate with the intended audience. Is a prominent approach needed for the waste behaviour to be salient to young viewers? Would repetitive viewing of everyday habits and actions have any effect? Does the action need to be done by a central character to be noticed? Are programmes and adverts equally potentially persuasive? In addition, what is the effect of noticing such behaviour? And is there any evidence to support ecological resocialisation? Questions such as these can be addressed by psychologists and other researchers skilled at working with young children.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the support of the Nuffield Foundation in funding this research (grant reference: SGS/38663).

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