

**‘Student Switch Off!’: How do university students respond to a corporate-sponsored pro-environmental social marketing campaign?**

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## **‘Student Switch Off!’: How do university students respond to a corporate-sponsored pro-environmental social marketing campaign?**

Sponsorship in pro-environmental social marketing campaigns has received limited academic attention within a higher education (HEI) context. This study examines how multi-level variables, i.e. individual (general environmental attitudes), organisational (scepticism toward the HEI’s environmental corporate social responsibility (CSR) initiatives; perceived HEI behaviour) and campaign-related (attitudes toward the advertisement; attitudes toward the corporate sponsor) factors, influence university students’ environmental intentions in response to a corporate-sponsored environmental initiative; using mixed methods (231 surveys and 40 interviews). Questionnaires revealed that scepticism toward the HEI’s CSR initiatives led to less positive perceptions of the HEI’s environmental behaviour, which decreased positive attitudes towards the advertisement and environmental intentions. Interviews revealed that the corporate sponsor seemed to motivate environmental behavioural intentions due to product discounts related to the sponsorship. Thus, a corporate sponsor may have confounding effects on pro-environmental behaviour campaigns. This has implications for the use of sponsorship in environmental social marketing campaigns.

*Keywords:* corporate social responsibility; environmental attitudes; perceived higher education institution behaviour; scepticism; sponsored environmental campaign

### **Introduction**

Sponsorship, a strategy used to associate a firm with an object possessing positive attributes (Nan and Heo 2007), is increasingly popular due to its positive effects on firm/brand awareness, trust, loyalty, and purchase intentions (Cornwell 2008). However, little is currently known about the use of sponsorship in social marketing campaigns. Within social marketing, sponsorship often takes the form of sponsorship-linked marketing where ‘the donation (or sponsorship fee) comes first and makes the event [or campaign] possible’ (Cornwell and Coote 2005, 268). Thus, without the sponsor, the social marketing campaign would not be possible. Olson (2010) highlights the need for future research on sponsorship in charitable cause-related marketing settings, where outcomes are moderated by perceptions of the sponsorship and the organisations involved (Polonsky and Speed 2001).

Thus, this study fills this gap in research by evaluating the impact of a corporate-sponsored pro-environmental campaign, among university students as part of the corporate social responsibility (CSR) activities of a higher education institution (HEI). It does this by drawing on contemporary conceptual models of environmental behaviour, which highlight the importance of multi-level variables as antecedents of engagement in environmental social marketing campaigns (Brennan et al 2015; Young et al 2015). This study therefore examines how factors related to the individual (general environmental attitudes), the HEI (scepticism toward the HEI's environmental CSR initiatives; perceived HEI behaviour) and the campaign (attitudes toward the advertisement; attitudes toward the sponsor) influence pro-environmental behavioural intentions of university students. A real campaign, 'Student Switch Off' (SSO) ([www.studentswitchoff.org](http://www.studentswitchoff.org)) is used, which reduces the limitations of laboratory studies or online experiments such as the lack of realism, artificiality, and generalisability (Levitt and List 2007).

Universities increasingly promote environmental sustainability (Muijen 2004) and it is critical for universities to understand students' commitment to sustainability initiatives (Butt, More and Avery 2014) but this work has generally not focused directly on interventions or campaigns but on antecedents to engagement with sustainability such as sustainability education and teaching (Swain et al. 2014), knowledge (Brosdahl and Carpenter 2011; Chaplin and Wyton 2014), barriers to sustainable behaviour (Whannell, Whannell and White 2012) and green self-perception (Figueredo and Tsarenko 2013) amongst others. Until recently, research on the success of interventions within a HEI setting have been sparse but a new focus on environmental campaigns is emerging e.g. in student halls of residence (Parece et al. 2013).

Arguably, students' life is deeply involved with the HEI, as they often study and live on campus and, thus their environmental behaviour is integral to the HEI's sustainability. When living in halls of residence students are not directly responsible for the cost of energy

consumption, have little context for their energy usage and often have energy costs included within a flat rate fee (Chaplin and Wyton 2014). This makes inducing pro-environmental behaviours (PEBs) a significant challenge. Additionally, although university students represent a captive audience, they are generally a young population whom marketers struggle to engage with (Cui et al. 2003). Nonetheless, they embrace sustainability, are more environmentally friendly than their parents and tend to be informed about environmental issues (Brosdahl and Carpenter, 2011). However, Chaplin and Wyton (2014, 405) also note that while students are educated with regards to sustainability they are also the ‘group who are most environmentally profligate’.

While university social marketing interventions/communications are used to encourage PEBs, little research has examined the factors important to students’ acceptance of these communications, their effectiveness and how they might increase participation in PEBs (Figueredo and Tsarenko 2013) especially where a corporate sponsor has been used. Combined with the fact that universities are increasingly trying to improve their sustainability and students play an integral part in it, this study will focus on evaluating students’ responses to a real corporate-sponsored social marketing initiative.

Thus, the unique contributions of the study are as follows. First, this study examines the use and effects of a corporate sponsored social marketing campaign and its antecedents in the context of higher education. While environmental campaigns in higher education have been studied in the extant literature this is the first time a corporate sponsored social marketing campaign has been studied in this context. Additionally, while corporate sponsorship has been extensively studied in standard marketing campaigns, very little is known about the effect of corporate sponsorship on social marketing campaigns (Olson 2010). Secondly, the study brings together multi-level variables (individual, campaign related and organisational) to provide a robust and comprehensive framework of the antecedents of environmental intentions. These multi-level variables in conceptual models are

becoming increasingly utilised in the environmental behaviour literature (e.g., Brennan et al 2015; Young et al 2015) and are examined in this study simultaneously to effectively evaluate their influence on environmental intentions in response to a corporate-sponsored environmental initiative.

To complete the paper we also offer practical recommendations on the use of sponsorships for environmental CSR initiatives for HEIs and how to strategically tailor them for future use.

### **Literature review**

As noted above, a number of variables are likely to play a role in determining the environmental behaviour intentions resulting from a corporate sponsored social marketing campaign. The variables discussed, and relationships hypothesized below are based on contexts away from HEI and in non-social marketing studies. A number of relationships have been studied previously in social marketing (and non-social marketing) contexts (e.g. attitudes) and in sponsorship research (e.g. attitudes towards the sponsorship and the advert) but have not been studied simultaneously in assessing a corporate sponsored social marketing campaign along with perceptions of the organisation which is a key contribution of this study.

In addition, this study provides a comprehensive framework of multi-level variables as antecedents of pro-environmental behaviour, reflecting recent proposals in the environmental behaviour arena (Young et al 2015). The review below discusses relevant prior literature on the individual (general environmental attitudes), organisational [scepticism toward the HEI's environmental corporate social responsibility (CSR) initiatives; perceived HEI behaviour] and campaign-related (attitudes toward the advertisement; attitudes toward the corporate sponsor) factors that may influence environmental intentions in response to a corporate-sponsored environmental initiative.

### ***Environmental attitudes (Individual variable)***

Attitudes have been a popular focus of PEB studies (Steg and Vlek 2009), which focus particularly on general attitudes toward the environment (Bamberg and Möser 2007). Other approaches such as the environmental/ecological worldview, the new ecological paradigm or a general concern for the environment (Figueredo and Tsarenko 2013) have also been used to measure environmental attitudes. The majority of studies agree that attitudes are a key predictor of environmental behaviours (Bamberg and Möser 2007). Swain et al. (2014) found that students' environmental attitudes have a strong influence on environmental sustainability intentions and Figueredo and Tsarenko (2013) found that concern for the environment had a positive effect on willingness to participate in environmental initiatives.

### ***Environmental behavioural intentions (Individual variable)***

Multiple behavioural foci have been utilised in PEB research (see Steg and Vlek 2009). Studies examining student environmental behaviour have focused on energy usage (Parece et al. 2013), bicycle commuting (Whannell et al. 2012) and recycling (Robertson and Walkington 2009). Many studies examining environmental behaviour use the Theory of Planned Behaviour, including those in a HEI context and, consistent with this, attitudes were often found to have a positive effect on intention to participate in environmental initiatives (Figueredo and Tsarenko 2013; Swain et al. 2014). Thus, it is hypothesised:

**H1:** General environmental attitudes will have a positive and significant influence on environmental behavioural intentions.

### ***Attitudes toward the advertisement (Campaign related variable)***

Attitudes toward the advertisement (Aad), meaning 'individuals' evaluations of the overall advertising stimulus' (Muehling and McCann 1993, 25-26), is popular in advertising research and builds on the idea that 'consumers' brand/choice behaviour is...influenced by attitudes

toward the advertising stimulus'. It has recently been studied in a social marketing/advertising context (Marchand 2010) and antecedents of Aad such as personal/individual factors, ad-related factors (e.g. humour) (Muehling and McCann 1993), and brand/non-brand related thoughts (Muehling, Stoltman, and Mishra 1990) have been assessed by past research. Additionally, moderating factors such as involvement, have been shown to affect Aad (Muehling and McCann 1993). Thus, it is likely that those individuals who hold stronger attitudes toward environmental issues are likely to welcome an environmental-related advertisement. Thus, it is hypothesised that:

**H2:** General environmental attitudes will have a positive and significant influence on attitudes toward the advertisement.

Moreover, a number of cognitive (e.g. brand beliefs), affective (e.g. brand attitudes) and behavioural responses (e.g. behavioural intentions) to Aad have been examined and 'positive Aad tends to produce a strong motivation to buy the advertised product' (Muehling and McCann 1993, 48). Thus:

**H3:** Attitudes toward the advertisement will have a positive and significant influence on environmental behavioural intentions.

### ***Perceived HEI behaviour (Organisational variable)***

Past research has examined both the reaction of internal stakeholders such as employees (Lee, Park and Lee 2013) and external stakeholders such as consumers (Mattila, Hanks, and Kim 2010) to organisations' environmental behaviour. In the case of the presently examined campaign, the students are not employees or consumers (they do not work for the HEI or are being asked to purchase a product produced by the HEI) but they are, by either living on campus or being students at the university, deeply ingrained within the culture of the HEI/organisation, and are likely to associate themselves with it (similar to employees). Hence, the behaviours of both employees and consumers may give clues to how students will

react in this type of situation. For example, employees who perceive their employers as socially responsible are more likely to engage in organisational citizenship behaviours, including environmental sustainability and, if organisations are not perceived to behave in a socially responsible way, the employees are likely to exhibit negative work attitudes and behaviours (Paillé and Raineri, 2015). Additionally, studies exploring person–organisation fit have shown that the degree of similarity/dissimilarity between employees’ values and attitudes and those of the organisation (Hoffman 1993) influences how they perceive the organisation’s behaviour. For example, employees who have higher pro-environmental attitudes are harsher critics of an organisation’s behaviours because they place more importance on the organisation’s environmental friendly reputation (i.e. a lack of person–organisation fit) than employees with lower pro-environmental attitudes (Manika et al. 2015). This may also be the case for students who may perceive the university to be less green if they have strong environmental attitudes. There is no research about this specifically within the HEI context but Chaplin and Wyton (2014) highlight the need to understand students’ perceptions of their HEI, especially if they perceive the organisation/HEI to have something to gain by promoting environmental behaviours.

Additionally, perceptions are closely related to and formed on the basis of attitudes (Gilinsky 1955) and thus, it is hypothesised that the general environmental attitudes of the students (as a stakeholder of the organisation) will affect how they perceive the organisation’s/HEI’s behaviour:

**H4:** General environmental attitudes will have a negative and significant influence on perceived HEI behaviour.

Furthermore, the perception of the HEI will affect the perception of anything the organisation does, including the campaign, and this perception will affect stakeholders’ perception of advertisements promoted by the organisation. Jung (2014) found that corporate perception is a strong antecedent of Aad. Thus, it is hypothesised:



**H5:** Perceived HEI behaviour will have a positive and significant influence on attitudes toward the advert.

*Attitude toward the corporate sponsor (Campaign related variable)*

Academic literature identifies sponsorship fit perceptions (i.e. congruence/match) between a sponsor and an object/activity (Mazodier and Quester 2013) as the most critical aspect of this strategy and its potential for success (Aaker and Keller 1990; Nan and Heo 2007). Olson (2010) also highlights that attitudes towards the sponsor are likely to lead to positive responses to the sponsorship itself (Polonsky and Speed 2001). Therefore, aside from perceptions of the advertisement and of the HEI, attitudes toward the corporate sponsor are also important in influencing university students' perceptions of the advertisement. Thus, it is hypothesised:

**H6:** Attitude toward the corporate sponsor will have a positive and significant influence on attitudes toward the advertisement.

*Scepticism toward the HEI's environmental CSR initiatives (Organisational variable)*

Social marketing campaigns that seek to induce behaviour change often do so through persuasive messages (Hoeffler, Bloom, and Keller 2010). The Persuasion Knowledge Model (PKM) by Friestad and Wright (1994) explains that individuals employ *topic*, *agent*, and *persuasion knowledge* (i.e., beliefs about the topic of, the party responsible for, and the tactics and effects of a persuasive message, respectively) to understand and respond to persuasion attempts (Manika, Gregory-Smith, and Papagiannidis 2017). Individuals develop coping behaviours, to achieve desired goals (Ball, Manika, and Stout 2013), after exposure to persuasive messages, by activating one or more of these knowledge types (Campbell and Kirmani 2008).

Specifically, over time individuals develop persuasion knowledge, as they learn to cope better with persuasive messages (Friestad and Wright 1994). This persuasion knowledge

provides inferences and predictions used to judge the appropriateness of agent motives and persuasion tactics (Friestad and Wright 1994, Manika, Gregory-Smith, and Papagiannidis 2017). In other words, targets (recipients of the message) use knowledge about persuasion attempts made by agents (the marketers), and develop coping behaviours in order to understand how, when and why marketers are attempting to elicit a certain response from them in relation to a specific persuasive episode (Friestad and Wright 1994; Becker-Olsen, Cudmore, and Hill 2006). A ‘persuasion attempt’ includes not just the message but also ‘the targets’ perception of the persuasion strategy’ (Shrum et al. 2012, 14). Hoeffler et al. (2010) point to the importance of the PKM in determining reactions to corporate initiatives.

In prior research, persuasion knowledge has been operationalized to encompass scepticism and credibility (Ball, Manika and Stout 2013; Manika, Gregory-Smith, and Papagiannidis 2017). In this context where students may mistrust those delivering the message due to being perceived to have something to gain (Chaplin and Wyton 2014), scepticism is of the utmost importance. Additionally, perceptions of CSR initiatives can often be underpinned by a level of scepticism that moderates how individuals may respond to a persuasion episode (Groza, Pronschinske, and Walker 2011). Obermiller and Spangenberg (1998) note that sceptical consumers tend to react with disbelief toward the claims made by advertisements and on some occasions environmental marketing has been met by sceptical responses when it was discerned as ‘unclear’ or ‘misleading’ (Gray-Lee, Scammon, and Mayer 1994).

This suggests that persuasion knowledge (scepticism) will negatively impact individuals’ evaluations of the advert (Menon and Khan 2003) and most likely the HEI as the messenger. In this study, it is hypothesised that scepticism toward the HEI’s environmental CSR initiatives will directly affect the perception of the HEI’s behaviour, which in turn affects Aad (H5) and environmental behavioural intentions (H3). Thus, it is hypothesised that:

**H7:** Scepticism toward the HEI's environmental CSR initiatives will have a negative and significant influence on the perceived HEI's behaviour.

See Figure 1 for the hypotheses advanced, along with the measurement and structural model tested.

*FIGURE 1 HERE*

## **Methodology**

A quantitative dominant concurrent mixed method design (Johnson et al 2007; Farquhar et al 2011) was used, combining a quantitative student survey at a UK university ('University Y') to examine the aforementioned hypotheses and qualitative data collected via vox populi/vox pop interviews to enrich, provide completeness and triangulate the quantitative data (Harrison and Reily, 2011). Mixed methods have several advantages e.g. findings can be corroborated; weaknesses of each methodology can be offset; a more complex view of the researched topic is obtained and credibility of the findings is increased (Bryman 2006).

The participants of the quantitative and qualitative data collections were *not* the same, even though the quantitative and qualitative data were collected alongside one another (over a two month period) (Farquhar et al 2011). A combination of a homogenous purposive (participants had to be students of the HEI where the campaign examined was running and hence prospective participants were approached on the HEI' campus where it is more likely that students would be) and convenience sampling techniques were used for both data collections. Specifically, prospective participants were approached randomly on campus and asked to participate, after verifying their student status.

To reduce interviewer bias a student from University Y was responsible for the data collection. This approach is aligned with the view that engaging the regular citizen and the public in research would be beneficial (Richardson, 2014). The student involved in this

project and who collected the survey and vox pop data was a representative of the student community which was exposed to the Student Switch Off campaign. Questionnaires were completed by students on an iPad (provided by the student interviewer) and the vox pop interviews were audio recorded (as noted above participants for each method differed).

The data collection focused on a real campaign, 'Student Switch Off (SSO)' ([www.studentswitchoff.org](http://www.studentswitchoff.org)). SSO is a not-for-profit national campaign and was selected as an example of an HEI environmental campaign due to its contribution to the University Y's CSR and use of a corporate sponsor. The corporate sponsor was an international confectionary corporation ('X'), a popular premium brand, active in social and environmental responsibility (see B Corporation 2015). The campaign targeted university students and the sponsor's products discount coupons were offered to students involved in environmental actions. The campaign involved posters and a website. It aimed to engage students who have 'little prior interest or knowledge on energy and climate change' ([www.studentswitchoff.org](http://www.studentswitchoff.org), 2015) by presenting the campaign as a fun competition amongst peers to save energy and recycle to win prizes (i.e. discount coupons). The campaign claimed to benefit 'everyone' by saving the HEI money, by teaching students how to save money through PEBs and aiding society by reducing greenhouse gas emissions.

### ***Survey measures and sample***

A total of 231 students completed the survey (102 males, 129 females, both undergraduate and postgraduate). Most participants (78.3%, n=181) were 18-25 years old, 20.8% (n=48) were 26-30 years old, and two participants (.9%) were over 30 which is consistent with university students' age distribution, where approximately 80% of students are 18-24 years of age (Higher Education Statistics Agency, 2013). Most participants (41.1%, n=95) had been at the university for 1-2 years, 36.4% (n=84) for less than a year and 22.1% (n=51) for 3-4 years. Only one participant (.4%) had been at the university more than 5 years.

Table 1 shows the measures used, which were first piloted among 30 university students. Items were measured on a Likert-type scale (1 = strongly disagree, 7 = strongly agree). The scales for general environmental attitudes and perceived HEI behaviour were adapted from Manika et al. (2015) due to their suitability and proven reliability in examining a real environmental campaign. To measure Aad, the scale by De Pelsmacker, Decock, and Geuens (1998) was chosen due to its ability to measure ‘likability’, ‘clarity’ and ‘informativeness’. The attitude toward the corporate sponsor scale was adapted from Bergsten and Olsson (2014). Scepticism toward the HEI’s environmental CSR initiatives scale was adapted from Chaisurivirat (2009). The survey participants were given a definition of CSR: ‘a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders’ (UNIDO, 2015), prior to the measurement of this construct. Behavioural intentions were measured with Pradeep’s (2012) scale. The respondents were shown a SSO campaign poster as a stimulus before answering the questions.

*TABLE 1 HERE*

### ***Qualitative data collection and sample***

The vox pop interview sample included 40 students (23 females, 17 males). This is a generally accepted sample size used by past research employing a similar marketing concurrent quantitative dominant approach along with qualitative interviews (Coulter et al. 2003; Voorhees et al. 2006). The interviews were used to confirm and triangulate (Harrison and Reilly 2011) the survey findings, but also to obtain in-depth details of perceptions of the campaign (Jayachandran, Hewett, and Kaufman 2004). All vox pop interview participants were asked the same questions about: awareness of/involvement with the campaign; environmental actions taken or intentions; advantages/disadvantages of the campaign; and attitudes toward advertisement and the sponsor. The interview protocol used can be seen in

## Appendix A.

The sampling method used in this paper followed one of the key rules of conducting vox pop interviews, which assumes that “people are sourced by virtue of their putative ordinariness” (Bosch, 2014: 220). Bias was thus reduced because this approach entails no or very limited self-selection bias like in the case of other types of methodologies used in the news media (i.e. protestors and interest groups interviews) to collect the opinion of relevant and ordinary people (Bosch, 2014). Participants were approached randomly on campus and asked to participate. This allowed bias reduction and a good representation of various student views, which enabled us to overcome issues associated with lack of “randomness” (Beckers, 2017) and issues of subgrouping and subtyping (Bosch, 2014).

The interviews were transcribed verbatim and thematic analysis (Braun and Clarke 2006) was used. The quantitative variables and vox pop questions informed an etic side to our analysis where the coding of the interview texts was guided by the a priori themes in the literature. However, we were also alert to emic responses where we could “more reflexively focus on “the unanticipated and unexpected...”in the field” (Reinecke, Arnold and Palazzo 2016, xiv) and develop in vivo codes derived from the data. Additionally, two coders were used, and inter-coder agreement was of a high-order (indicating a low level of intrajudge inconsistency, Krippendorff 1980).

## **Results**

### ***Quantitative results***

After checking the adequacy of the variable-to-sample ratio, a confirmatory factor analysis was conducted (Table 1). All scales had acceptable factor loadings, Cronbach’s alphas, construct reliabilities, and average variance extracted (AVE) scores. The measurement model demonstrated a theoretically and statistically good overall fit ( $\chi^2=750.80$ ,  $df=449$ ,  $p=.00$ ; CFI=.93; TLI=.93; SRMR=.04;  $N=231$ ). While the chi-square value was

significant due to sample size (N=231), the normed chi-square ( $\chi^2/df$ ) was equal to 1.67, which is acceptable; and there were no signs of multicollinearity (VIF  $\leq$  1.23, tolerance  $\geq$  .58 for each construct). Table 2 shows the means, standard deviations, minimum and maximum values, and inter-item correlations. As further indication of discriminant validity, none of the correlations between constructs reached .85, and the Fornell-Larcker criterion [AVE > (r)<sup>2</sup>] indicated that the AVEs for each construct were greater than the square of the correlation estimates.

The structural equation model (SEM) had a statistically good model fit ( $\chi^2=769.145$ , df=454, p=.00;  $\chi^2/df=1.69$ ; CFI=.93; TLI=.93; SRMR=.05; N=231), accounting for 49% of the variance in environmental behavioural intentions, 46.9 percent in Aad and 28.9% of the variance in perceived HEI behaviour (Table 3). General environmental attitudes positively influenced environmental behavioural intentions (H1), and Aad (H2). Aad also positively influenced environmental behavioural intentions (H3). A counter relationship to the one hypothesised, regarding the relationship between general environmental attitudes and perceived HEI behaviour (H4), was found. Positive perceptions of the HEI's behaviour led to positive Aad (H5). Positive attitudes toward the sponsor positively influenced Aad (H6). And finally, scepticism was found to negatively influence perceived HEI behaviour (H7). Thus, all hypothesised relationships were supported except H4 (i.e., general environmental attitudes did not have a negative and significant relationship with perceived HEI behaviour).

*TABLE 2 AND 3 HERE*

***Qualitative results***

Four themes emerged from the interviews. Firstly, the interviews indicated some awareness of the campaign but mainly among students living in halls, rather than all students, which was something that the quantitative data could not reveal. This lack of awareness led to a lack of *involvement* among students. The barriers, which the quantitative data collection

did not assess, mentioned by the students were varied, signalling the challenges that a simple and focused campaign such as SSO might have in achieving its goals. Some students commented on time constraints ('don't have the time' – F12<sup>1</sup>), while others were disengaged by the perceived lack of impact ('[it] would be like a drop in the ocean' – F30) and lack of spillover between home-campus behaviour ('I would do it only for personal purposes' – F26).

Secondly, the *attitude toward the advertisement/poster* was generally positive ('it's good and to the point' – M31) but the vox pops uncovered a more nuanced picture than the survey data. More specifically, some participants recommended design improvements such as 'poster is not very noticeable ...the incentive should be in bigger font' – F33; 'the colour should be more appealing, brighter' – M40. Additionally, comments were made about its visibility "it should be more publicized" – F25; "it's a good campaign...just advertise it more" – F17.

Students also commented on perceived *advantages/disadvantages of the campaign*. They saw the campaign mainly as being beneficial due to environmental implications ('good initiative' – F21) and environmentally positive ('good for the planet' – F11; "good for the polar bears" – M35). Additional, societal benefits, alluding at behaviour change facilitation, were also mentioned as the campaign was seen as 'increasing awareness and good habits' – F30; and that 'it's informational, a reminder' – F38. Nonetheless, other respondents were more critical in their view, alluding that the campaign is more of nudging rather than an imperative approach ("it is going in the right direction but it should be mandatory, not just a campaign" – M15), which could imply less sustained behaviour or attitudinal changes. There were other views aligned with this such as 'look like a one-off because of the incentive; they should encourage ongoing behaviour' – F27, which highlighted some of the key disadvantages of the SSO campaign. Other critical issues raised by the students regarding the campaign were regarding the students' inability to relate to the communicated issues of

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<sup>1</sup> In the reporting the qualitative findings F = female and M = male, followed by a participant number.



saving energy because ‘the message is not personal; students don't pay their own bills’ – M22; and the ‘students on campus see energy as unlimited’ – M35. Unfortunately, this matter was not tackled in the campaign communications and represents a major disadvantage.

Thirdly, the *attitude toward the corporate sponsor* was overall positive (see Table 2:  $M=3.59$ ,  $SD=.80$ ; Range: 1-5) and the qualitative data highlighted that this was mainly due to its positive brand image (‘I don't mind that there is an environmental sponsor as long as they apply the same practices to their business; X are a decent company’ – M9; ‘not sure about their environmental policies but I like X brand’ – F27) and its products being appreciated by the student market. This enhanced the visibility of the campaign (‘everyone knows them and like them’ – F5; ‘it's a good thing, big name, good rewards’ – F26; ‘I do like X products; they were the first thing I noticed on the ad’ – M10). In particular, the incentive was noticed and increased intentions to engage with the campaign (‘I like X company...if it's free [X's products] then I will join’ – M8).

While some students considered there was a good fit between the corporate sponsor/brand and the environmental campaign and some saw it superior to other similar parings (‘it's better than MacDonalDs sponsoring the Olympics’ – M29), other students were unsure, critical or sceptical of the (‘I don't know about their ethics; whether they are hypocritical or not’ – F17; ‘I don't know what is the link between X and energy...maybe an energy corporation would have been better’ – M13; I don't consider X environmentally friendly to the same standard – F14).

Finally, the students' *environmental behavioural intentions* were mixed and thus the vox pop data portrayed a more nuanced picture of students' intentions than the survey data did. The quantitative data indicated overall positive intentions (see Table 2:  $M=3.26$ ,  $SD=.89$ ; Range: 1-5) while the qualitative data showed that the students' intentions ranged from lack of willingness to full engagement (‘no, because I moved into a house with bills included’ – M29; ‘didn't change it a lot’ - F23; ‘for a short time’ – F32; ‘maybe a little bit; sometimes I

might forgot but do my best' – F6; 'yes, definitely' – F26). In some cases the campaign has reinforced and enhanced current behaviour ('I've always been quite good; but when the campaign was on I did help a little bit... I switched off lights' – M35) but for other students it did not lead to a clear behavioural change ('no because it's my habit already – M13).

## **Discussion**

This study has brought together literature on sponsorship, social marketing campaigns and CSR to provide a comprehensive model of multi-level variables, which are likely to affect audiences' intentions to engage in pro-environmental behaviour in the HEI context.

Building on extensive prior research the study highlights the key role general environmental attitudes play in PEBs and intentions in this context (a moderate relationship,  $\beta=.58$ ,  $p<.01$ ), which resembles Swain et al.'s (2014) and Figueredo and Tsarenko's (2013) findings. Therefore, students with strong environmentally friendly attitudes are likely to have positive behavioural intentions toward PEBs within HEIs. However, results from some of the interviews noted low or non-existent levels of energy saving intentions contrasting somewhat with the quantitative data.

Furthermore, environmentally friendly students are more likely to have positive Aad, thus extending the prior literature on antecedents of Aad (Muehling and McCann 1993). In turn, positive Aad led to higher likelihood of behavioural intentions. While the qualitative data largely supported these findings, there were also some negative comments recommending design amendments or requesting more exposure to the campaign.

Overall, this lays the foundations for a theoretical framework of key antecedents of students' environmental behavioural intentions, as a result of the exposure to a corporate-sponsored HEI environmental campaign.

Unexpectedly, general environmental attitudes were not negatively associated with perceptions of the organisation's/HEI's environmentally friendly behaviours and students

with high general environmentally friendly attitudes did not seem to be ‘harsher critics’ of the HEI’s environmental social performance as prior literature had suggested (see Manika et al. 2015). The study did however, find that positive perceptions of the organisation’s/HEI’s behaviour led to positive Aad. This highlights the importance for a university to be perceived as environmentally friendly, in order for its environmental initiatives to be perceived positively and to be effective.

As noted previously, little is known about sponsorships in social marketing (Olson 2010). This study extends this sparse literature by showing that positive attitudes toward the corporate sponsor influences positively students’ attitudes toward the advertisement. The qualitative data supported this, as the majority of the respondents considered the sponsor an appropriate choice due to the familiarity of its brand, the popularity of its products and, thus, appreciated the incentives. This is consistent with previous literature that brands, which elicit high familiarity and positive emotions, will result in positive attitudes toward their associated advertisements (Wei, Fischer, and Main 2008).

Nonetheless, a few respondents raised some concerns over the fit, which has been highlighted in prior literature (Olson 2010) and is considered a key predictor in sponsorship success. Ultimately, the results suggest that using corporate sponsors in HEI environmental interventions can result in a higher likelihood of students developing positive attitudes toward the advertisement, due to associating/transferring their positive feelings for the sponsor to the advertisement. Subsequently, they would be more likely to participate in the promoted PEBs.

Finally, scepticism of the HEI’s CSR initiatives was found to negatively influence perceived HEI behaviour, illustrating that high persuasion knowledge (scepticism) did result in lower attitudes toward the HEI’s perceived environmental behaviour. This corroborates with literature stating that suspicion of an organisations’ motives behind their CSR activities can negatively impact perceptions of the organisation as a whole and, in turn, engagement in corporate citizenship initiatives (Hoeffler et al. 2010). However, this was not mentioned in

the interviews and students only mentioned the campaign-related variables (i.e. corporation X - the sponsor), suggesting that the sponsor may be more important to them in this context.

Figueredo and Tsarenko (2013) highlight that little work has been done to determine students' acceptance of and participation in environmental behaviours, from university environmental CSR communications. This study has extended this literature, complementing the findings from the CSR literatures (Becker-Olsen et al. 2006). This confirmed that students who had more positive general environmental attitudes, more positive perceptions of the HEI's behaviour, and more positive perceptions of CSR initiatives expressed higher engagement with the CSR initiatives and, ultimately, exhibited the desired PEBs (or intentions). This study has also extended knowledge of sponsorships in a real world, HEI context and in the field of social marketing presenting a comprehensive model of multi-level variables as antecedents of pro-environmental intentions. The present study supports the view that fit is important (Olson 2010) but the presence of a well-known and well-liked sponsor can, to an extent, overcome this.

### ***Practical implications for environmental CSR initiatives in HEIs***

If universities and other businesses consider utilising a corporate-sponsored environmental campaign, they should firstly spend time identifying the underlying attitudes, knowledge structure and perceptions of students before designing the campaign in order to ensure its success. Both environmental attitudes and knowledge have been highlighted as key in understanding students' behaviour (Brosdahl and Carpenter 2011). Additionally, this study highlights their importance in determining perceptions of the sponsors, the HEIs behaviour and Aad. In their role as educators, universities can seek to improve students' environmental knowledge and general environmental attitudes through environmental education (Holt 2003). This might lead to the HEI being perceived as 'green', highlight their CSR and reduce any scepticism toward the HEI's motives.

The corporate sponsorship had positive ramifications, however, given some of the concerns raised over fit (which the sponsorship literature highlights as being important; see Olson 2010), the congruency between the HEI, the initiative and sponsor should always be carefully evaluated prior to campaign commencement. Campaigns should better highlight fit or use sponsors that are both appealing to the market and perceived as ‘green’, thus reducing the level of scepticism. Moreover, given that the design of the posters was criticised, pretesting should take place to ensure broad acceptance of the communications. The vox pop interviews also highlighted a number of barriers e.g. limited awareness of the campaign (especially for students not in halls), a perception of the activities as being time-consuming and with limited impact as reported in prior literature (Chaplin and Wyton 2014). Therefore, barriers should be evaluated prior to future campaigns and counter-justifications for students’ rationalisations should be included in future communications. Future campaigns should also consider encouraging longer-term adoption of behaviour as some students considered that ‘people won’t stick to it’.

Overall, this research highlights that corporate sponsors as well as HEIs engaging in environmental campaigns could benefit from a corporate-sponsored environmental campaign, although more research is required for generalisability. However, such initiatives need to be carefully considered, not only in terms of the fit between the sponsor and the HEI but also prior perceptions and recognition of the sponsor.

### ***Limitations and future research***

Future studies should employ a random sampling technique with greater sample size, across multiple universities (with the same campaign) while keeping track of the response rate, to examine differences between undergraduate and postgraduate students (given that undergraduate students may stay longer on campus) and between students living in halls and in private accommodation; which would affect the likelihood of exposure to campaigns.

Although it is debatable whether demographic variables generate attitudinal and behavioural differences (Park, Choi, and Kim 2013), researchers could also explore cultural differences of international students at UK universities. Relevant to persuasion knowledge (scepticism), Shrum et al. (2012) stated that Western cultures may be swayed more by attitudes toward persuasion topics, whereas Eastern cultures could be more focused on their personal attitude toward the relationship with the agent.

Additionally, future studies should use longitudinal approaches collecting data both pre- and post-campaign to examine the effects of the campaign more specifically. Choice of sponsor and fit should also be explored further. Furthermore, an investigation of the same antecedents considered in this study to promote different PEBs (i.e. printing reduction or commuting) or use of different communication mediums (e.g. social media) and sponsors would provide the basis for extensive and compelling future studies. It should be also noted that self-reported measures of environmental perceptions and PEBs are not always reliable (Thøgersen 2011). Actual measures of PEBs should be used to reduce this uncertainty especially given the mixed responses noted between the different data collection methods.

Nevertheless, to our knowledge this is the first study that has examined the ways in which the multiple levels of individual, organisational and campaign-related factors influence the likelihood of PEBs among university students, through exposure to a corporate-sponsored environmental HEI campaign. Thus, this study contributes to scant literature on the use of corporate sponsors in HEI's environmental initiatives and social marketing campaigns.

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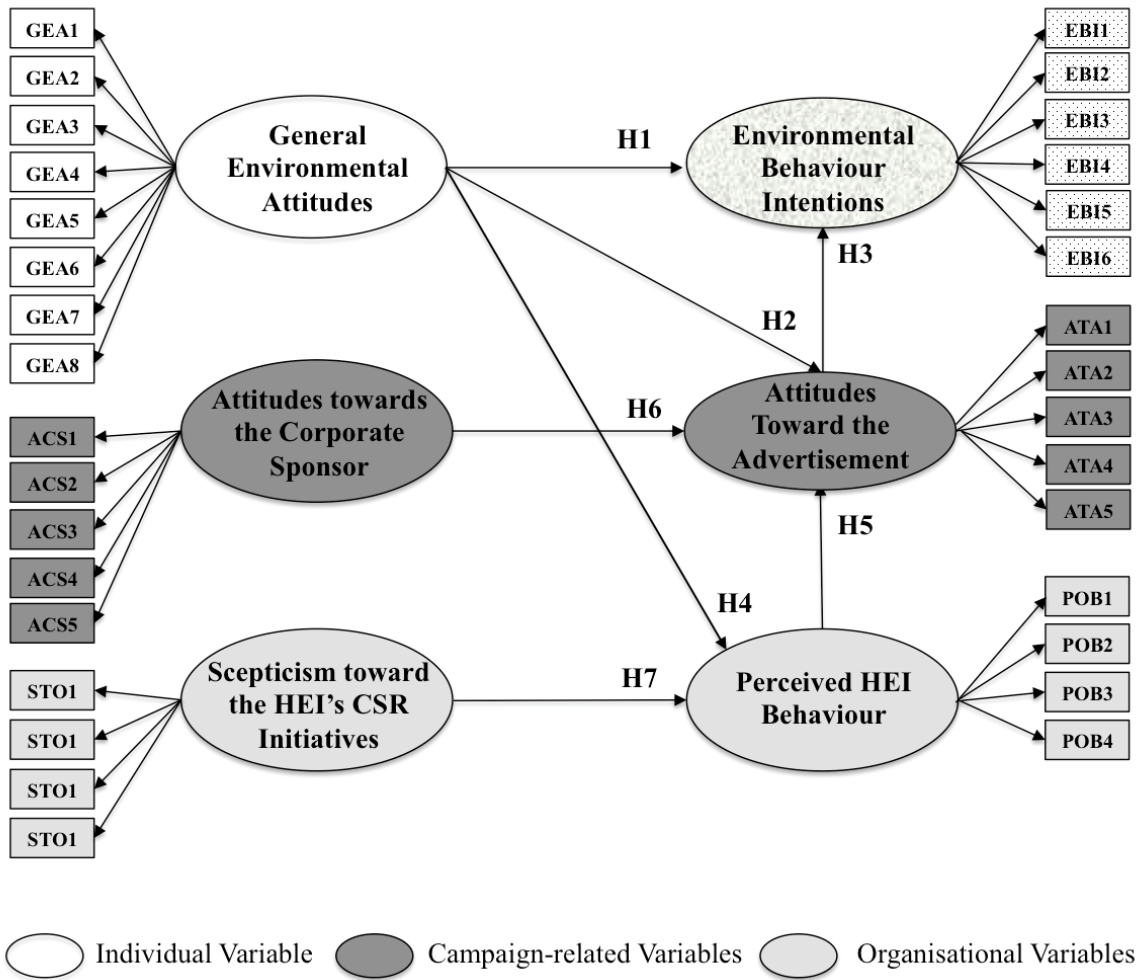
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**Figure 1:** Hypotheses Advanced, Measurement and Structural Model Tested



**Table 1: CFA AVE, CR, Reliability, and Multicollinearity Diagnostics**

Variables	Scale Items	Load.
<b>General Environmental Attitudes</b> AVE=.54; CR=.90 ; a=.90; VIF=1.26; Tolerance=.79		
GEA1	The effects of climate change are too far in the future to really worry me (R)	.68**
GEA2	I don't pay much attention to the amount of water I use at home (R)	.69**
GEA3	It's not worth me doing things to help the environment if others don't (R)	.82**
GEA4	It's only worth doing environmentally-friendly things if they save you money (R)	.69**
GEA5	It's not worth Britain trying to combat climate change because other countries will just cancel out what we do (R)	.68**
GEA6	I don't really give much thought to saving energy in my home (R)	.80**
GEA7	The environment is a low priority for me compared with a lot of other things in my life (R)	.67**
GEA8	It takes too much effort to do things that are environmentally friendly (R)	.83**
<b>Perceived HEI Behaviour</b> AVE=.66; CR=.88; a=.88; VIF=1.56; Tolerance=.64		
POB1	[University Y] is committed to improving the environment	.91**
POB2	[University Y] takes a pro-active approach to helping the environment	.84**
POB3	[University Y] is "green" (environmentally friendly)	.78**
POB4	[University Y] has coherent environmental policies	.70**
<b>Attitudes toward the Advertisement</b> AVE=.64; CR=.90; a=.90; VIF=1.72; Tolerance=.58		
ATA1	I got a positive impression from this campaign	.83**
ATA2	I found it relevant to me	.84**
ATA3	I found it interesting	.85**
ATA4	I found it credible	.73**
ATA5	I found it attractive	.75**
<b>Attitude toward the Corporate Sponsor</b> AVE=.62; CR=.89; a=.89; VIF=1.41; Tolerance=.71		
ACS1	I consider it to be important for companies like [Sponsor X] to be involved in the corporate sponsorship of social causes, like the Student Switch Off campaign	.69**
ACS2	I would consider trying [Sponsor X] as a result of an environmental CSR initiative	.74**
ACS3	I would pay more attention to [Sponsor X] after they have shown commitment to the environment through CSR initiatives ahead of a company that doesn't	.85**
ACS4	I think [Sponsor X] involvement with the [University Y] Student Switch Off campaign suits the company's image/brand	.77**
ACS5	[Sponsor X] commitment to this environmental cause positively affected my image of the company	.89**
<b>Scepticism toward the HEI's Environmental CSR Initiatives</b> AVE=.60; CR=.86; a=.86; VIF=1.23; Tolerance=.81		
STO1	I think [University Y]'s claims about its CSR are inflated to make it seem better	.70**
STO2	I am suspicious of [University Y]'s motives regarding their promotion of environmental awareness within the university	.83**
STO3	I believe that [University Y] is more interested in appearing socially responsible than really committing to environmental causes	.81**
STO4	I believe that [University Y]'s CSR initiatives can possibly be manipulative or for increasing profit	.76**
<b>Environmental Behavioural Intentions</b> AVE=.60; CR=.90; a=.90		
EBI1	I would be willing to sign a petition to support an environmental initiative	.70**
EBI2	I would consider joining a group or club which is concerned with the environment	.76**
EBI3	I would be willing to pay more taxes to support greater government control of pollution	.73**
EBI4	I would be willing to turn off my heating during winter if it meant cleaner air	.77**
EBI5	I would be willing to stop buying products from companies guilty of polluting the environment even though it might be inconvenient for me	.86**
EBI6	I would be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant	.83**

\*\* p<.001, AVE = Average Variance Extracted, CR = Construct Reliability, a= Cronbach's Alpha; (R)=Reverse Coded; All Likert scales:

1=Strongly disagree – 7= Strongly agree.

**Table 2: Descriptive Statistics and Correlations**

Variables	M(SD)	Correlations					
General Environmental Attitudes	3.25(.90)	1					
Perceived HEI Behaviour	3.11(.78)	.26**	1				
Attitudes toward the Advertisement	3.25(.90)	.38**	.53**	1			
Attitude toward the Corporate Sponsor	3.59(.80)	.40**	.29**	.48**	1		
Scepticism toward the HEI's Environmental CSR Initiatives	3.14(.86)	-.11	-.42**	-.29**	-.16*	1	
Environmental Behavioural Intentions	3.26(.89)	.61**	.32	.40**	.47**	-.12	1

\*\*p<.001, \*p<.05, Min-Max= 1-5

**Table 3: SEM Results**

Hypothesised Relationships	Std. Loadings	S.E.	z-scores	Hypotheses Supported?
H1: General Environmental Attitudes → Environmental Behavioural Intentions	.58**	.05	10.75	Yes
H2: General Environmental Attitudes → Attitudes toward the Advertisement	.14*	.07	2.14	Yes
H3: Attitudes toward the Advertisement → Environmental Behavioural Intentions	.22**	.06	3.59	Yes
H4: General Environmental Attitudes → Perceived HEI Behaviour	.24**	.06	3.78	No
H5: Perceived HEI Behaviour → Attitudes toward the Advertisement	.45**	.06	7.92	Yes
H6: Attitude toward the Corporate Sponsor → Attitudes toward the Advertisement	.33**	.06	5.01	Yes
H7: Scepticism toward the HEI's Environmental CSR Initiatives → Perceived HEI Behaviour	-.46**	.06	-7.69	Yes

\*\*p<.01, \*p<.05,  $\chi^2=769.145$ , df=454, p=.00; CFI=.93; TLI=.93; SRMR=.05; N=231

## **Appendix A: Vox Pop Interview Protocol**

1. Are you aware of the student Switch Off campaign?
  - a. If yes, did you get involved? How? Why (not)?
  - b. If no, please look at this poster [interviewer to show copy of the SSO campaign poster also used in the quantitative data collection]. After reading/seeing this poster, do you think you would you get involved? How? Why (not)?
2. Did/do you like the campaign? Why (not)? What elements did you (not) like?
3. What do you think/feel about the campaign being sponsored by X company?
4. Any other comments about the campaign?