<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>'Consuming good' on social media: What can conspicuous virtue signalling on Facebook tell us about prosocial and unethical intentions?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>Wallace, Elaine; Buil, Isabel; de Chernatony, Leslie</td>
</tr>
<tr>
<td><strong>Publication Date</strong></td>
<td>2018-08-21</td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td>Springer Verlag</td>
</tr>
<tr>
<td><strong>Link to publisher's version</strong></td>
<td><a href="https://doi.org/10.1007/s10551-018-3999-7">https://doi.org/10.1007/s10551-018-3999-7</a></td>
</tr>
<tr>
<td><strong>Item record</strong></td>
<td><a href="http://hdl.handle.net/10379/10037">http://hdl.handle.net/10379/10037</a></td>
</tr>
<tr>
<td><strong>DOI</strong></td>
<td><a href="http://dx.doi.org/10.1007/s10551-018-3999-7">http://dx.doi.org/10.1007/s10551-018-3999-7</a></td>
</tr>
</tbody>
</table>

Some rights reserved. For more information, please see the item record link above.
‘Consuming good’ on social media:

What can conspicuous virtue signalling on Facebook tell us about prosocial and unethical intentions?

Dr Elaine Wallace*
J. E. Cairnes School of Business & Economics
National University of Ireland Galway
Galway
Ireland
Telephone + 353 (0) 96 492603
e-mail: elaine.wallace@nuigalway.ie

Dr Isabel Buil
Faculty of Business and Economics
University of Zaragoza
Zaragoza
Spain
Telephone +34 876554939
Email: ibuil@unizar.es

Professor Leslie de Chernatony
Marketing & Strategy Group
Aston Business School
Aston University
Birmingham B4 7ET
England
Telephone +44 121 204 3359
Email: dechernatony@btinternet.com

Conflict of Interest: All authors declare that they have no conflict of interest.

Acknowledgement of funding: This work was supported by the Government of Spain (ECO2017-82103-P), and the Government of Aragón and the European Social Fund (project Generés S54_17R).

*Author for correspondence.
‘Consuming good’ on social media:  
What can conspicuous virtue signalling on Facebook tell us about prosocial and unethical intentions?

Abstract  
Mentioning products or brands on Facebook enables individuals to display an ideal self to others through a form of virtual conspicuous consumption. Drawing on conspicuous donation behaviour (CDB) literature, we investigate ‘conspicuous virtue signalling’ (CVS), as conspicuous consumption on Facebook. CVS occurs when an individual mentions a charity on their Facebook profile.  
We investigate need for uniqueness (NFU) and attention to social comparison information (ATSCI) as antecedents of two types of CVS –self-oriented (to gain intrinsic benefits) and other-oriented (to impress others).  
We also explore the relationship between CVS and self-esteem, and offline prosocial (donation to the charity) and unethical (counterfeit purchase) behaviour intentions. Data from two studies: a college survey (N = 234), and an adult survey via MTurk (N = 296), were analysed using structural equation modeling.  
Results indicate that NFU predicts both forms of CVS, while ATSCI influences both forms of CVS for adults and other-oriented CVS for students. Self-esteem is enhanced by self-oriented CVS. Self-oriented CVS predicts donation intention whereas other-oriented CVS significantly reduces donation intention for both samples. Furthermore, a significant relationship between CVS and purchase intention of counterfeit luxury goods is revealed. Findings provide insights into conspicuous virtue signalling and the relationship between CVS on Facebook and offline behavioural intentions.

Keywords: Conspicuous donation behaviour, conspicuous virtue signalling, need for uniqueness, attention to social comparison information, self-esteem, donation intention, counterfeit purchase intention.
Abbreviations:

ATSCI: Attention to social comparison information

AVE: Average variance extracted

CDB: Conspicuous donation behaviour

CFA: Confirmatory factor analysis

CR: Composite reliability

CVS: Conspicuous virtue signalling

NFU: Need for uniqueness

OECD: Organisation for Economic Co-operation and Development
‘Consuming good’ on social media:
What can conspicuous virtue signalling on Facebook tell us about prosocial and unethical intentions?

Introduction

When people project their charitable behaviours on Facebook, does this reflect offline good intentions? Or, are they simply ‘consuming good’ online, to enhance their social standing? On Facebook, consumers may create idealised identities, presenting a positive self-concept on a highly visible social medium (Hollenbeck and Kaikati 2012). Self-concept theory asserts people behave in ways which maintain their sense of self, often using brands to maintain or enhance that self (Strizhakova et al. 2011). Consumers in a virtual world seek to build an extended self in a virtual world through possessions (Belk 2013). One way to construct the self in the social media environment is through virtual conspicuous consumption. Offline, those who engage in conspicuous consumption do so because it allows them to be associated with, or gain status among the right social group, through the use of appropriate products and brands (Kastanakis and Balabanis 2012). On social media, brands do not require ownership. Mentioning a brand, for example through a Facebook ‘Like’, ensures it is included in ones’ profile page, allowing one to construct the virtual self without a requirement for ownership in the material world (Schau and Gilly 2003).

This study asks: if a person conspicuously consumes on Facebook, to what extent does that virtual consumption predict offline behaviour? Furthermore, if that conspicuous consumption is about ‘doing good’, to what extent does this affect self-esteem and predict offline prosocial (donation to the charity) or even unethical (counterfeit purchase) behaviour intentions?
It is recognised that giving can be ‘agnostic’, with the donor giving for personal satisfaction (West 2004). Drawing on Veblen’s (1912) theory of conspicuous consumption, West (2004) suggests that individuals engage in ‘conspicuous compassion’. Building on West’s (2004) assertion that this behaviour is about informing others about how caring we are, Grace and Griffin (2006) proposed the concept of conspicuous donation behaviour (CDB). CDB is “the act of donating to charitable causes via the visible display of charitable merchandise or the public recognition of the donation” (Grace and Griffin 2009, p. 16). Grace and Griffin (2006; 2009) distinguish between two dimensions of CDB: self-oriented CDB, which is “motivated by the desire to seek intrinsic benefits” (Grace and Griffin 2009, p. 22), and other-oriented CDB, “motivated by the desire to display the behaviour to others” (Grace and Griffin 2009, p. 22).

CDB is limited to behaviours such as wearing charity ribbons following donations (Grace and Griffin 2006), or the application of ‘twibbons’ to a social media page indicating donation (Chell and Mortimer 2014). However, possessions someone uses to construct their self in the digital world may have little resemblance to their material realities (Schau and Gilly 2003). For example, a consumer may ‘Like’ Nike trainers on Facebook, to signal their sportiness to Facebook friends, but they may not exercise in the real world. Therefore, we build upon the concept of CDB and investigate ‘conspicuous virtue signalling’ (CVS), where someone mentions a charity on Facebook.

We assert that our conceptualisation of CVS is in line with conspicuous consumption (Veblen 1912), and CDB (Grace and Griffin 2006; 2009). We distinguish between self- and other-oriented CVS, in line with Grace and Griffin (2006; 2009). Self-oriented CVS is virtue signalling behaviour to achieve intrinsic benefits: CVS allows the individual to enhance their public profile though their virtue signalling on Facebook, which makes them feel good. Other-oriented CVS is virtue signalling behaviour that is focused on highlighting the virtuous behaviour to others. For both self- and other-oriented CVS, the behaviour is 1) intentionally
public, ii) deliberately designed to signal the individual’s virtue, and iii) a social network such as Facebook is used for CVS so that the virtue display is widely visible to others.

Our study offers a unique contribution to the literature on CDB, conspicuous compassion, and conspicuous consumption. First, Grace and Griffin (2009) emphasised that individuals engaging in CDB offline seek conspicuous means to conspicuously highlight their good deeds. With CVS, the behaviour is entirely virtual, and no donation is required. Offline, consumers can, for instance, wear charity ribbons following a donation. Online, individuals do not have to make a donation to mention a charity on their Facebook page. Given the conspicuous nature of Facebook, the potential for individuals to mention charities for the sole purpose of impression management (Schau and Gilly 2003), and the lack of information about the connection between mentions of charities on Facebook and what people donate offline, it is surprising that little work has been done to expand CDB by investigating CVS on Facebook. This study addresses this gap, by exploring CVS on Facebook, its antecedents and its outcomes.

Second, we provide new insights into how the individual’s traits might influence their CVS. Common to the literature on conspicuous consumption and CDB are traits related to consumer’s need for uniqueness (NFU) (Bian and Forsythe 2012; Tian et al. 2001) and consumer social influence (Bian and Forsythe 2012; Grace and Griffin 2009). As Grace and Griffin (2009) call for further research to investigate whether CDB is informed by personality traits we consider NFU and individuals’ attention to social comparison information (ATSCI) as antecedents of CVS.

Third, it is recognised that doing good enhances ones’ sense of self (Andreoni 1989; Taylor 2013), and associating oneself with a brand on Facebook can enhance ones’ self-esteem (Hollenbeck and Kaikati 2012). Therefore, we explore whether CVS on Facebook enhances self-esteem and respond to calls for more research examining how mentioning a brand on Facebook alters how the user perceives themselves (Hollenbeck and Kaikati 2012).
Fourth, our study addresses calls by Grace and Griffin (2009) to investigate the relationship between CDB and donation intentions, as we explore whether CVS in a virtual environment is associated with intention to donate in the ‘offline’ world. Our study offers a particular contribution here, as ‘consumption’ on Facebook is not always associated with the consumer’s material reality (Schau and Gilly 2003). Consumers may gain the benefit of association with a brand on their Facebook profile, “regardless of any ownership or prior use” (Hollenbeck and Kaikati 2012, p. 401).

Fifth, we investigate whether CVS, as a conspicuous behaviour, is associated with other forms of conspicuous, yet unethical, consumption, such as buying counterfeit goods. When people consume conspicuous goods, such as luxury brands, they do so because they want to provide visible evidence of their superior status relative to others (Packard 1959). The conspicuousness of a good may increase consumers’ likelihood of buying counterfeit goods, as consumers wish to demonstrate their status through highly symbolic goods, but lack the financial means to acquire the original luxury good (Wilcox et al. 2009). Therefore, we explore the relationship between CVS and the conspicuous, unethical behaviour of buying counterfeit luxury brands.

Conceptual framework, research hypotheses, and research questions

This study examines whether NFU and ATSCI are antecedents to consumers’ CVS on Facebook. It also poses research questions regarding the outcomes of CVS on Facebook, specifically the influence of CVS on self-esteem, on the prosocial intention to donate, and on the conspicuous, unethical behaviour of buying counterfeit goods. As noted earlier, we distinguish in our model between self-oriented CVS, where the consumer’s motive is to gain intrinsic benefits and other-oriented CVS, where the consumer’s motive is to impress others. Figure 1 presents the conceptual framework. We next describe these relationships in detail.
Proposed antecedents of CVS: need for uniqueness (NFU) and attention to social comparison information (ATSCI)

Need for uniqueness (NFU) is a characteristic where one pursues products to emphasise identity and to distinguish oneself from others (Bian and Forsythe 2012). Derived from Snyder and Fromkin’s (1977) theory of uniqueness, Tian et al. (2001, p. 52) define NFU as “the trait of pursuing differentness relative to others through the acquisition, utilisation and disposition of consumer goods for the purpose of enhancing one’s self-image and social image”. NFU comprises three dimensions: seeking out choices that are different to others, cognisant that others would consider them good choices (creative counter-choice conformity); consuming goods that may deviate from group norms and incur some group disapproval (unpopular-choice counter-conformity); and losing interest in items that become commonplace (avoidance of similarity) (Tian et al. 2001).

We investigated NFU in relation to CVS on Facebook because on Facebook people might seek to stand out from others on the social network (Schau and Gilly 2003), but fear standing out too much (Ruvio 2008). While an individual’s Facebook profile page is commonly used to construct their selves (Hollenbeck and Kaikati 2012), those Facebook profile pages have a similar design and layout for everyone. It is possible therefore that people would have a greater need to differentiate themselves on their Facebook page than in other contexts. As the literature asserts that individuals can fulfil their desire to be unique through possession displays (Belk 1988), and as individuals can display possession through the products they mention on Facebook (Schau and Gilly 2003), we investigated NFU as an antecedent of CVS on Facebook.

Moreover, we considered NFU appropriate when studying conspicuous behaviour. NFU is the trait of pursuing distinctiveness relative to others specifically through goods which
enhance individuals’ self-image or social image. Several studies have asserted that consumption of conspicuous goods, such as luxury brands, is influenced by NFU (for example Bian and Forsythe 2012; Kastanakis and Balabanis 2012). However, to our knowledge no study has explored the influence of NFU on other forms of conspicuous ‘consumption’, such as CVS. Distinguishing between self-oriented CVS and other-oriented CVS, we hypothesise:

**H1a:** NFU positively influences self-oriented CVS on Facebook.

**H1b:** NFU positively influences other-oriented CVS on Facebook.

Although some people focus on their internal and self-related goals, thinking of themselves as unique, others are more cognisant of the opinions and actions of others (Kastanakis and Balabanis 2012). Grace and Griffin (2006) suggest that studies investigating CDB would consider self-monitoring as an antecedent. Self-monitoring is defined as the “self-observation and self-control guided by situational cues to social appropriateness” (Snyder 1974, p. 526). While this construct is appropriate to CDB, it focuses on behaviours required to ‘get ahead’ of others and does not take into account the desire to ‘get along’, or adjust ones’ behaviours to acquire social approval and acceptance (Myszkowski et al. 2014). As our study explores CVS on Facebook, where a key goal is to create friendships under a degree of visibility (Hollenbeck and Kaikiti 2012), it was considered appropriate for this study to investigate how one might adjust ones’ behaviour to acquire social approval. Therefore, this study explores a related construct, attention to social comparison information (ATSCI) (Lennox and Wolfe 1984), as an antecedent of CVS. ATSCI is the degree of sensitivity to social cues and concerns about the reactions of others (Yoon et al. 2016). ATSCI is relevant for a study of CVS on Facebook, due to its positive relationships with public self-consciousness, conformity and the need to comply, social anxiety, neuroticism and fear of negative evaluation (Kim et al. 2016; Lennox and Wolfe 1984; Yoon et al. 2016). Moreover, ATSCI has been found to influence product purchase and
usage (Bearden and Rose 1990), as high ATSCI individuals are more likely to believe that others judge them by their purchases (Kim et al. 2016). Therefore, as Facebook mentions can be considered a form of virtual consumption, we question whether ATSCI influences what individuals choose to mention on Facebook, specifically CVS.

Kim et al. (2016, p. 264) assert that high ATSCI individuals seek to avoid mistakes in product or brand choice to avoid making “the wrong kind of social statement to others”. We suggest that mentioning charities on Facebook offers the individual an opportunity to make a positive social statement, by allowing the poster to ‘play it safe’ (Wooten and Reed 2004) with their Facebook mentions. Furthermore, Grace and Griffin (2006, p. 151) state that “a person may become involved in charitable behaviour because their relevant others actively endorse this behaviour”. We therefore suggest that individuals high in ATSCI may conform to social norms by mentioning charity brands on Facebook, thereby seeking acceptance from others. We hypothesise:

**H2a: High ATSCI positively influences self-oriented CVS on Facebook.**

**H2b: High ATSCI positively influences other-oriented CVS on Facebook.**

*Proposed outcomes of CDB on Facebook: self-esteem, intention to donate, and intention to buy counterfeit luxury brands*

In extant literature, charitable behaviour such as donating has been associated with enhancing self-esteem, but less is known about the effects on self-esteem of virtual behaviour such as mentioning a charity on Facebook. Likewise, little is known about the relationship between mentioning a charity online and actual donation intention. Finally, limited research also exists on the relationship between one form of prosocial conspicuous consumption (CVS) and another form of unethical behaviour, namely the purchase intention of counterfeit goods. In sum, more research is needed to investigate outcomes of CVS in this context. Therefore, we further
explore the outcomes of CVS by posing research questions, rather than by formulating hypotheses about the role of CVS in predicting outcomes.

Self-esteem is a person’s evaluation of their self-worth (Rosenberg 1965). Self-esteem has been associated with Facebook exposure, as viewing one’s own profile has been found to enhance self-esteem (Gonzales and Hancock 2011). This enhancement in self-esteem is due in part because Facebook provides an opportunity to present a positive perspective of the self, and to minimise negative aspects of the self (Gonzales and Hancock 2011). Building on earlier research by Park and John (2010), Hollenbeck and Kaikati (2012) also found that participants’ liking of brands on Facebook either to maintain a self-concept or to communicate an ideal self had a positive effect on self-esteem. Offline, charitable donations can be motivated by the desire to receive a ‘warm glow’ from the prosocial act (Andreoni 1989), which enhances self-esteem, because the person is more likely to think of themselves as generous and kind (Taylor 2013). Therefore, it is likely that CVS on Facebook will enhance self-esteem because CVS: i) allows the person to present a positive perspective of themselves on Facebook, and ii) allows the person to receive a ‘warm glow’ from CVS.

Moreover, social identity theory is helpful in considering the relationship between CVS on Facebook and self-esteem. Social identity theory (Tajfel and Turner 1979) maintains that people gain social identity from the groups to which they belong. It recognises the need to consider behavioural and cognitive processes to explain intergroup behaviour and perceptions, and highlights the importance of social category membership and social comparison between categories in maintaining one’s positive social identity (Brewer and Kramer 1985). Social identity theory also suggests that people will adopt interpersonal strategies to enhance distinctiveness to favour their own group (Brewer and Kramer 1985). The literature asserts that one maintains self-esteem through in-group favouritism, distinction from the out-group (Tarrant et al. 2001). Moreover, group belonging can enhance well-being. Extant literature suggests
that a sense of a shared social identity helps to buffer individuals during stress (for example Walsh and McGrath 2000) and minority group identity can help psychological well-being (Outten et al. 2009). By associating with ones’ own group, and engaging in in-group favouritism in terms of preferences as a form of intergroup discrimination, self-esteem is enhanced. In summary, we query the relationship between CVS and self-esteem. We present the following research questions for investigation:

**RQ1a: Does self-oriented CVS on Facebook positively influence self-esteem?**

**RQ1b: Does other-oriented CVS on Facebook positively influence self-esteem?**

Intention to donate is included as an outcome of our model. Basil et al. (2006) found that self-reported donation intention can serve as an accurate measure of actual donations. Therefore, by investigating intention to donate this study addresses Grace and Griffin’s (2009) call for research to explore the relationship between CDB and donating behaviours. Our study focuses on CVS on the social network Facebook. Extant literature suggests that Facebook may encourage presentation of an ‘ideal self’ (see for example Hollenbeck and Kaikati 2012). Moreover, it is long recognised that products ‘consumed’ on social networks for the purpose of identity construction or identity enhancement, may have little resemblance to the individual’s material reality (Schau and Gilly 2003). Thus, although the relationship between online CVS and offline donation intention has been unexplored, it would seem possible that people would engage in CVS on Facebook with little intention of donating offline. To investigate the relationship between CVS and donation intention, we therefore present the following research questions:

**RQ2a: Does self-oriented CVS on Facebook influence donation intention?**

**RQ2b: Does other-oriented CVS on Facebook influence donation intention?**
Finally, we investigate the relationship between CVS and offline conspicuous consumption, where the conspicuous consumption is also unethical. We chose the purchase intention of a counterfeit brand as the unethical conspicuous consumption behaviour in our study. Counterfeiting is “the process of producing and selling any unauthorised product that infringes upon intellectual property rights”, and is a “rapidly growing, international problem” (Chen et al. 2016, p. 1). The problem of counterfeit goods is widespread and detrimental to the economy. Counterfeiting cost the UK economy £17.3 billion in 2016, and contributed to the destruction of 72,000 jobs (Hannah 2016). In 2013, the OECD stated that the counterfeit industry was worth 2.5% of global imports (OECD 2016).

A market for counterfeits only exists because a consumer is willing to buy them. Although some counterfeits are deceptive, usually with luxury brands consumers know they are buying counterfeits (Nia and Zaichkowsky 2000). While counterfeit brands offer a means to ownership of luxury brands at lower prices (Bian and Moutinho 2009), another reason for their demand is their high brand value (Lai and Zaichkowsky 1999). As Marticotte and Arcand (2017, p. 178) explain, “if the (luxury) brand did not elicit envy, there would be no interest in the counterfeit product bearing the brand logo or any other signs associated with the original brand”. The literature suggests that consumers may feel that buying such counterfeits is bad, but they do not feel bad enough to stop buying them (Kim et al. 2009) because the counterfeit allows them to attain the social marker of luxury (Kapferer and Bastien 2009; Marticotte and Arcand 2017). Therefore, consumption of a known counterfeit luxury brand is a form of conspicuous consumption because counterfeit brands offer signalling value, allowing the consumer access to a brand that communicates exclusivity and prestige (Commuri 2009). Research shows that individuals may buy counterfeit luxury goods if they fulfil social goals through their conspicuousness (Wilcox et al. 2009).
We considered it interesting to investigate whether there was a relationship between a prosocial form of conspicuous behaviour (CVS) and an unethical form of conspicuous behaviour (purchase intention of a counterfeit brand). Just as CVS offers the ‘signalling value’ of doing good, counterfeit goods offer the signalling value of status and belonging to an aspirational group. Therefore, we query whether an individual engaging in CVS on Facebook, as one form of conspicuous consumption, might be also likely to engage in unethical conspicuous consumption behaviour, namely the purchase of a counterfeit luxury brand. We propose the following research questions:

**RQ3a: Is self-oriented CVS on Facebook associated with purchase intention of counterfeit luxury brands?**

**RQ3b: Is other-oriented CVS on Facebook associated with purchase intention of counterfeit luxury brands?**

**Overview of studies**

To provide insights into the relationship between CVS and its antecedents and outcomes, we conducted two studies. Study 1 analysed data from a sample of 234 students based in Ireland. Then, to investigate the generalisability of our results, Study 2 used data from a sample of 296 adults based in the United States. Both studies investigated CVS on Facebook. Grace and Griffin (2009) emphasised that those seeking to engage in CDB would seek out the most conspicuous means possible to do so. Therefore, we considered Facebook an appropriate forum to explore CVS. This is also in line with the literature which examined consumers’ use of brands online (see for example Hollenbeck and Kaikati 2012). Facebook users are visible within their social network and the network’s unique features, including wall posts and public displays of connection, enhance the visibility of brand choice on this network (Hollenbeck and Kaikati 2012). Moreover, Facebook use is associated with creating and maintaining social capital.
(Ellison et al. 2007) and it is often suggested that Facebook owners display idealised characteristics that do not reflect their realities (Back et al. 2010). As such Facebook is a suitable medium to investigate CVS as a form of conspicuous consumption. The process, measures, and results of the two studies are set out below, followed by a general discussion.

**Study 1**

**Participants**

Following a pretest (N = 17) with postgraduate students in Marketing, we conducted a survey of students in an Irish University. An email was circulated to students of the Students’ Union database, with a link to the survey. Screening criteria were i) having a Facebook account accessed in the past month, and ii) mentioning a charity on Facebook in the past 12 months. We received 234 completed responses to the survey who met these criteria. Respondents were active users of Facebook, spending an average of 2.72 hours of a typical day on Facebook, with an average of 570.47 Facebook friends. 71% of respondents were female and their average age was 22.98 years. 80% of respondents were Irish and 80% were undergraduate students. In addition, a number of postgraduate students (11%) and PhD students (8%) also completed the survey. The type of mentions for a charity included ‘Liking’ or reacting to a post or message about the charity (88%) and to a photo or video about the charity (73.5%) (see Appendix 1).

**Measures**

Responses were elicited using Likert scales, and the following measures from the literature (see Appendix 2).

**Need for Uniqueness (NFU)**
NFU was measured using the three dimensions from Tian et al. (2001), and drawing on the shortened version of the scale (7-items) presented in Bian and Forsythe (2012). This version of the scale was selected because it had previously been used in the context of conspicuous consumption (i.e., the purchase intention of a luxury brand) (Bian and Forsythe 2012), and therefore we considered it had relevance for our study. The three dimensions are creative choice counter-conformity (3-item scale, items include “I’m often on the lookout for new products or brands that will add to my personal uniqueness”), unpopular choice counter-conformity (2 items including, “I often dress unconventionally, even when it’s likely to offend others”), and similarity avoidance counter-conformity (2 items including “I dislike brands or products that are customarily purchased by everyone”). Consistent with the literature, items were measured on a 7-point Likert scale with anchors “strongly agree” and “strongly disagree”.

**Attention to Social Comparison Information (ATSCI)**

ATSCI was measured using the 13-item scale from Lennox and Wolfe (1984). The scale items are particularly relevant to this study, as they measure the general tendency to conform and respond to the reactions of others and they capture the individual’s need to effectively socially integrate and adjust to what is situationally appropriate (Bearden et al. 1989). A further advantage of this scale in the context of a study about Facebook is its strong relationship with social anxiety (Bearden and Rose 1990). Scale items include “It’s important for me to fit into the group I’m with”. Consistent with the literature, items were measured on a 5-point Likert scale with anchors “always false” and “always true”.

**Conspicuous Virtue Signalling (CVS)**

CVS on Facebook was measured with 7 items adapted from the CDB scale developed by Grace and Griffin (2009). As an example, the ‘conspicuous donation’ act of wearing merchandise or
charity ribbons presented in Grace and Griffin’s (2009) original measure was replaced with the conspicuous virtue signalling act of mentioning the charity on Facebook. For example, the item “It increases my self-respect when I wear merchandise that benefits charities” was presented as “It increases my self-respect when I mention this charity on Facebook” on a 7-point Likert scale (1 = “strongly disagree”; 7 = “strongly agree”). In line with the CDB literature, we measured CVS as a multidimensional construct, with two factors: 4 items measured self-oriented CVS that provides intrinsic benefits, and 3 items measured other-oriented CVS that has the goal of making an impression on others. This approach is consistent with Grace and Griffin’s (2009) measure of self- and other-oriented CDB constructs.

**Self-esteem**

Self-esteem was measured using the scale developed by Rosenberg (1965). However, following the initial pretest, the scale item “I certainly feel useless at times” was removed, as participants had strong reservations about answering the scale item, and we had concerns that it would introduce bias or avoidance in responses. Therefore, 9 items were used. The scale includes statements such as “I feel that I am a person of worth”. Consistent with Rosenberg (1965) each item was presented as a 5-point Likert scale (1 = “strongly disagree”; 5 = “strongly agree”).

**Offline Donation Intention**

Offline donation intention was measured using the 3-item scale from Wheeler (2009), drawing on MacKenzie et al. (1986). Respondents rated the possibility (explained as “something we might do”), likelihood (explained as “something we will more than likely do”) and the probability (explained as “something we will probably do”) of “donating money to this charity” on a 7-point Likert scale (for possibility, 1 = “impossible”; 7 = “possible”, for likelihood 1 =
“unlikely”; 7 = “likely”, and for probability 1 = “improbable”; 7 = “probable”). We measured intentions rather than requesting information about actual donations, as we wished to ensure that participants would be truthful in responding. Moreover, our measure of intention rather than behaviour is in line with the recommendations of Basil et al. (2006) who found that it is easier and less expensive to conduct charitable-donations research using intention, as self-reported intention can serve as a measure of actual donations.

**Purchase Intention of Counterfeit Luxury Brands**

We measured purchase intention of counterfeit luxury brands by presenting a scenario to respondents. In line with Kastanikas and Balabanis (2012), a watch was chosen as the counterfeit good in the scenario, because watches have high symbolic properties and they are stereotypical luxury items for both male and female consumers, and to all age groups. Again, to avoid any dishonest responding, we used a projective approach to elicit intention to purchase, rather than asking respondents to self-disclose purchases of counterfeit goods. Moreover, to avoid introducing any brand-related bias, we did not name the brand of watch in the scenario provided. As such, purchase intention of counterfeit luxury brands was measured by presenting respondents with the following text: “Consider a scenario where you could buy a very realistic-looking, good quality, but counterfeit (fake), version of a luxury brand of watch (either a ladies’ or a gent’s watch). You would pay a substantially lower price for the counterfeit version of that watch”. Respondents were asked to think about the scenario and respond to a set of 4 scale items from Dodds et al. (1991). Items included “The likelihood of me purchasing this product is…” measured on a 5-point Likert scale with anchors “very low” and “very high”, and “I intend to buy this product” measured on a 5-point Likert scale with anchors “strongly disagree” and “strongly agree”.
Results

Confirmatory factor analysis

Confirmatory factor analysis (CFA) using EQS 6.2 and the robust maximum-likelihood estimation method was performed to assess the reliability, dimensionality and validity of the scales. Results suggested the deletion of six items of the ATSCI measure, one item of the other-oriented CVS construct and three items of the self-esteem construct, since their standardised parameter estimates were below 0.5, indicating weak factor loadings. The two items measuring unpopular choice counter-conformity from the measure of NFU were also dropped because of low factor loadings. After these deletions, CFA produced an acceptable fit to the data: S-B $\chi^2$ (406) = 563.47, $p < 0.001$; NNFI = 0.954; CFI = 0.960; IFI = 0.961; RMSEA = 0.041 (Hair et al. 2006). In addition, all standardised factor loadings exceed 0.5 and were statistically significant which suggested the convergent validity of the factors. The average variance extracted (AVE) and composite reliability (CR) values were greater than 0.5 and 0.7, respectively. Discriminant validity was also supported. In all cases the AVE for any two constructs was always greater than the squared correlations. See Appendix 2 for full details of the measurement model results.

Hypotheses and research question testing

To test the hypotheses and answer the research questions structural equation modeling was used. The study employed averaged indicators of the NFU dimensions (Bian and Forsythe 2012). The analysis revealed an acceptable model fit (S-B $\chi^2$ (339) = 489.87, $p < 0.001$; NNFI = 0.950; CFI = 0.955; IFI = 0.955; RMSEA = 0.044). The results of all hypotheses tests and research questions are summarised in Figure 2. The results indicate NFU was positively and significantly associated with both self-oriented and other-oriented CVS ($\beta = .307$, $t = 3.05$; $\beta = .269$, $t = 2.71$), providing support for both H1a and H1b. ATSCI was related to other-oriented
CDB (β = .196, t = 2.57). However, the relationship between ATSCI and self-oriented CDB was not significant (β = .013, t = .16). Therefore, H2a was not supported, but H2b was supported.

In response to RQ1a, higher self-oriented CVS was positively associated with self-esteem (β = .222, t = 2.22). However, the relationship between other-oriented CVS and self-esteem (RQ1b) was not significant (β = -.065, t = -.69). Findings for RQ2a show self-oriented CVS was positively related to offline donation intention (β = .356, t = 3.52). However, for RQ2b, other-oriented CVS was negatively and significantly associated with offline donation intention (β = -.183, t = -1.76). Finally, the relationship between self-oriented CVS and purchase intention of counterfeit luxury brands (RQ3a) was not significant (β = -.124, t = -1.31). By contrast, investigating RQ3b, other-oriented CVS was positively associated with purchase intention of counterfeit luxury brands (β = .194, t = 2.03). These results of Study 1 are discussed with the results of Study 2, in the general discussion below.

While these findings contribute to the extant literature, it is noted that the sample in Study 1 is a student group, with a large number of Facebook friends. We queried whether these results would also emerge if the survey population comprised of adults. To further test our model, we undertook a second study.

**Study 2**

**Participants**

For our second study, we recruited a general adult sample of 300 individuals via Amazon’s Mechanical Turk (MTurk). This is an online marketplace where people sign up to participate in tasks such as surveys and receive compensation for tasks completed. MTurk offered an
advantage in generalising our study beyond a student sample, as studies have found that MTurk provides a more diverse pool of participants than student samples (Behrend et al. 2011; Buhrmester et al. 2011; Gosling et al. 2004). Further reassurance is provided by previous research which suggests that MTurk samples are reliable and comparable to traditional samples (Behrend et al., 2011; Buhrmester et al. 2011; Gosling et al. 2004).

The survey pretest and Study 1 had both indicated that the average completion time for the survey was 10 minutes. Therefore, each participant was paid $1.10 for their participation, based on this completion time. To ensure accurate responding, an attention check (i.e., one instructed response question requested that participants would select ‘strongly disagree’ on a Likert scale) was included (Meade and Craig 2012). Four participants were removed for incorrectly answering this attention check. The deletion of these cases resulted in a final sample size of 296. All of the participants met the requirements of the study, namely i) they had a Facebook account that they had accessed in the month prior to the study, and ii) they had mentioned a charity on their Facebook account in the past year.

The MTurk sample mean age was older than the student sample, at 37.14 years. 57.8% of the sample were female. Almost all of the sample (294 respondents) were born in the US. There were two exceptions to this: one respondent was Indian, and one respondent was Canadian, but both of these participants were living in the US. Similarly, almost all of the sample were employed, with 66.2% working full time for an employer, 7.4% working part time for an employer, 8.1% working full time for themselves, and 4.7% working part-time for themselves. 6.8% of respondents were homemakers. 69.2% of the sample had achieved at least University undergraduate education. The sample had a high number of Facebook friends (average 346.14 friends), and spent 1.93 hours per day on Facebook. They mentioned charities mainly through ‘Likes’ or reactions to posts or messages about the charity (81.1%). Full details of the sample used in Study 2 are presented in Appendix 1.
Measures

Respondents completed the same survey scales as in Study 1 (see Appendix 2).

Results

Confirmatory factor analysis

We conducted a CFA, in line with Study 1. Results suggested the deletion of six items of the ATSCI measure and one item of the other-oriented CVS construct, since their standardised parameter estimates were below 0.5, indicating weak factor loadings. After these deletions, CFA produced an acceptable fit to the data: S-B $\chi^2$ (558) = 970.33, p < 0.001; NNFI = 0.927; CFI = 0.936; IFI = 0.936; RMSEA = 0.050 (Hair et al. 2006). As with Study 1, scales had acceptable psychometric properties in terms of reliability, convergent validity and discriminant validity (see Appendix 2).

Hypotheses and research question testing

Structural equation modeling was used again to test the hypotheses and answer the research questions. The study employed averaged indicators of the NFU dimensions (Bian and Forsythe 2012). The analysis yielded an acceptable model fit (S-B $\chi^2$ (453) = 913.06, p < 0.001; NNFI = 0.907; CFI = 0.915; IFI = 0.916; RMSEA = 0.059). Results were mainly consistent with Study 1 (see Figure 3). The results indicate NFU was positively and significantly associated with both self-oriented and other-oriented CVS ($\beta = .457$, t = 6.32; $\beta = .268$, t = 3.95), providing support for both H1a and H1b. Likewise, ATSCI was related to both self-oriented CVS ($\beta = .417$, t = 6.07) and other-oriented CVS ($\beta = .292$, t = 4.59). Therefore, both H2a and H2b were supported.
In relation to RQ1a, the results show that higher self-oriented CVS was positively associated with self-esteem ($\beta = .197, t = 1.98$). In addition, in response to RQ1b, higher other-oriented CVS was negatively associated with self-esteem ($\beta = -.146, t = -1.67$). Findings investigating the relationship between CVS and donation intention were consistent with Study 1. Findings for RQ2a show self-oriented CVS was positively related to offline donation intention ($\beta = .559, t = 6.10$). However, for RQ2b, as with Study 1, other-oriented CVS was negatively and significantly associated with offline donation intention ($\beta = -.299, t = -4.19$). Finally, investigating RQ3, a positive relationship was revealed between self-oriented CVS and purchase intention of counterfeit luxury brands ($\beta = .187, t = 2.18$). In contrast to Study 1, the relationship between other-oriented CVS and purchase intention of counterfeit luxury brands was not significant ($\beta = .067, t = 0.82$). These results are discussed in the general discussion below, along with the results for Study 1.

<Please place Figure 3 about here>

**General discussion**

These findings of our two studies contribute to the extant literature on CDB, conspicuous consumption, and charitable behaviour. By considering CVS as a ‘virtual’ form of donation behaviour, our research advances extant research which asserts that individuals can consume virtually on Facebook, for the purpose of identity construction in a virtual world, with no requirement for consumption in the material world (Schau and Gilly 2003). Just as an individual can virtually ‘consume’ a brand on their Facebook page to reflect their actual or ideal selves (Hollenbeck and Kaikati 2012), we show that people ‘consume’ donation behaviour in the same way.

Across both studies, our findings extend the concept of offline CDB to online CVS, and we reveal insights into the antecedents of CVS on Facebook. Moreover, we show that the two-
component structure of CDB is also relevant for CVS, as self-oriented and other-oriented CVS differ in their prediction of self-esteem, intention to donate, and purchase intention of counterfeit luxury goods.

First, a positive relationship has been identified between NFU and CVS. This relationship was significant for both samples, and NFU predicted both forms of CVS (self- and other-oriented). The literature suggests that consumers’ NFU reflects both self-image and social image enhancement processes (Tian et al. 2001). Our findings support this theory. Consistent with the literature that suggests a relationship between NFU and self-expression and self-presentation (Bian and Forsythe 2012), we find that NFU predicts people’s use of a charity brand to express themselves on Facebook. Moreover, NFU also predicts other-oriented CVS. Benabou and Tirole (2006, p. 1673) explain “holier than thou competition”, where competition between individuals may induce participation in prosocial activities that may have little public benefit but high public visibility. As NFU indicates a desire to avoid similarity, it is suggested that its influence on other-oriented CVS may be explained by individual’s desire to impress others yet stand apart from them.

Furthermore, our findings support Ruvio (2008, p. 445) who asserted that NFU “enables consumers to satisfy their needs for assimilation and differentiation simultaneously”. That is, uniqueness is only sought to the point of avoiding social isolation of disapproval. We suggest that CVS may be a ‘safe’ form of conspicuous consumption on Facebook, as NFU is achieved by mentioning a charity brand on one’s Facebook profile, and at the same time, by mentioning a charity rather than another form of conspicuous good, any risk of social isolation and disapproval from others is avoided.

We note that the literature suggests that NFU creates a ‘catch 22’ for marketers, as consumers seeking to be different enhance the success of a product, which in turn increases its marketing activity and limits its specialness (Tian et al. 2001). Tian et al. (2001) caution that
consumers might dispose of goods which become popular. In the same way, if NFU informs a person’s mention of a charity on Facebook, they may ‘move on’ when they believe many people are also mentioning the same charity, seeking something new and more unique to exhibit. It would be interesting for a longitudinal study to investigate the relationship between NFU and CVS, since mentions that are ‘special’ now, may not appeal over time, and other forms of conspicuous consumption may replace charitable mentions. In addition, Ruvio (2008) suggests that NFU provides a dual role, incorporating need for differentiation and need for assimilation.

To further consider the impact of NFU on conspicuous behaviours on Facebook, we suggest that further research might consider the dual role of NFU, and its influence on CVS. Moreover, further research should explore the relationship between NFU and offline CDB.

Second, we explored ATSCI as an antecedent of online CVS. Findings from Study 1 indicate high ATSCI is positively associated with other-oriented CVS. This suggests that students who are cognisant of the views of others are likely to present an idealised self on Facebook and may use CVS in order to do this. We note that the student sample had a high number of Facebook friends. Extant literature exploring the ‘bandwagon effect’ of status consumption suggests that susceptibility to others influences consumers’ sense of interdependence on others and reinforces their consumption of popular luxuries (Kastanakis and Balabanis 2012). We suggest that those students with high ATSCI are more interdependent on their social networks and, due to their strong desire to fit in, they are more likely to mention a charity brand that they believe will make a popular impression among others.

For the adult sample (Study 2), findings indicate that ATSCI influences both self- and other-oriented CVS. We suggest that for this group, ATSCI has a normative effect, and although self-oriented CVS is focused on the value of the charitable mention for the self, such CVS also allows the individual to reveal a self which is more socially acceptable to others, if they are cognisant of others’ views on their social network. Further research could investigate
the generational differences in the influence of ATSCI on CVS, and on self-oriented CVS in particular. Moreover, research could investigate the relationship between ATSCI and other conspicuous ‘consumption’ on Facebook, for example individuals’ use of luxury brands in their Facebook profiles. This research would advance extant literature that suggests social approval sought for consumption of popular conspicuous goods, such as luxury goods, is influenced by desire for rewards and avoidance of punishment from a social group (Kastanakis and Balabanis 2012).

Third, the study provides new insights into the influence of two components of CVS on outcomes. These influences were evident in both studies. Grace and Griffin (2009) explained that the self-oriented component of CDB is motivated by people’s desire to seek intrinsic benefits, whereas the other-oriented component of CDB is motivated by their desire to make an impression on others. Interestingly, the findings relating to CVS in our study indicate that the two components: self-oriented CVS, and other-oriented CVS, are influenced by different traits and have different outcomes. To our knowledge, this is the first study to provide insights into these components of CVS.

Fourth, our study provides insights into the relationship between CVS and self-esteem. Findings from both the student and adult samples reveal a significant positive relationship between self-oriented CVS and self-esteem. These findings suggest that this relationship is explained by the self-enhancing role of CVS. When people mention a charity that has personal meaning for them, this is associated with greater self-esteem. In the context of other conspicuous goods, such as luxuries, extant literature suggests consumers with an independent self-concept may demonstrate a personal orientation in their consumption, thinking of themselves as unique (Kastanakis and Balabanis 2012). We suggest that, for independent consumers, engaging in self-oriented CVS on Facebook may enhance their self-esteem as it allows them to reaffirm to themselves that they are unique, and standing apart from others.
Moreover, in investigating the relationship between CVS and self-esteem, we advocate that further research would consider social identity theory (Tajfel and Turner 1979) in the following way. Extant literature has suggested that individuals’ choices (for example, their musical preference, see Tarrant et al. 2009), may encourage in-group favouritism, group discrimination, and subsequent self-esteem. While intergroup processes of individuals regarding charity mentions on Facebook was outside of the scope of this study, it would be interesting to investigate its role in maintaining positive social identity, and self-esteem, through in-group favouritism.

We suggest that the participants in our study may have experienced fear of rejection, and therefore their self-oriented CVS was a mechanism to bolster their self-concept, enhancing their self-esteem. We find that when CVS is self-oriented, self-esteem may be increased. By contrast, in the adult sample, other-oriented CVS was associated with lower levels of self-esteem. While this relationship was not significant for the student sample, we note that the direction of the relationship between other-oriented CVS and self-esteem was also negative.

We draw upon extant research to explain these findings. Research on Facebook friends suggests that having responsive friends (for example a friend ‘Liking’ or sharing one’s post) enhances one’s self-esteem more than having a large number of Facebook friends (Greitemeyer et al. 2014). We suggest that self-oriented CVS may encourage a greater number of ‘Likes’ and other responses from Facebook friends than other forms of postings. One reason for this is that ones’ Facebook friends may acknowledge that the charity has personal meaning for the poster. In achieving positive responses from friends for self-oriented CVS, self-esteem may be enhanced. However, mentioning a charity which is solely for the purposes of impressing others may reduce self-esteem, as it has no personal meaning. We suggest that this individual may be cognisant that they are posting in order to achieve responses from others, which may reduce their own self-esteem. Further research should investigate the relationship between CVS and
self-esteem on social media, to further investigate these findings and to consider Facebook reactions from friends as mediator of the relationship between CVS (self- and other-oriented) and self-esteem.

Fifth, our study explores the relationship between CVS and offline donation intentions. The literature suggests that consumers seek to create an idealised self on social networks (Hollenbeck and Kaikati 2012) and may associate with brands which are outside their material reality to do so (Schau and Gilly 2003). We questioned whether individuals engage in CVS on Facebook as a means of identity construction, consuming ‘good’ to impress others, yet have little intention to donate in the real, offline world. Our findings offer new insights into the relationship between online posts and offline donation intentions, as a positive relationship was observed between CVS and people’s intention to donate money, but this relationship existed only where the CVS was self-oriented. By contrast, we found a negative relationship between individuals’ other-oriented CVS and their intention to donate. Moreover, this finding was significant across both student and adult samples. This finding reveals that people who mention a charity to impress others are less likely to donate money to that charity than other people. For such individuals, we suggest that CVS is a form of conspicuous behaviour with the purpose of managing impressions given to others. We recommend that further research investigate the relationship between CVS on Facebook and donation intentions, to explore this finding.

Sixth, we reveal a relationship between CVS and unethical behaviour intentions. Our findings show that, for the student sample, those who engage in other-oriented CVS are also more likely to buy a counterfeit good than others. These findings indicate that other-oriented CVS is simply another form of conspicuous consumption and does not indicate any prosocial intent. The findings in relation to counterfeit brands suggest that these individuals use any socially visible means to impress others, regardless of the ethics of the act. We refer to research on counterfeit consumption by Generation Y which suggested that counterfeits provide a means
of ‘cool consumption’ (Francis et al. 2015). We suggest that younger consumers engaging in other-oriented CVS are also engaging in ‘cool consumption’, mentioning charity brands that are ‘fashionable’ to mention, to enhance others’ opinions of them. In the same way, these individuals who engage in other-oriented CVS may be inclined to engage in counterfeit purchases as a form of ‘cool consumption’, to show others that they are willing to buy a counterfeit good.

We note that for the adult sample (Study 2), purchase intention of counterfeit luxury brand is predicted by self-oriented CVS. Again, this finding indicates that one form of conspicuous consumption (CVS) is associated with another (purchase intention of counterfeit). However, unlike the student sample, the relationship was significant and positive only for self-oriented CVS. We offer an explanation for this finding. The example provided in our study was a counterfeit luxury watch. Unlike the student, the adult purchaser may be less concerned about ‘cool consumption’. Rather, for this group, the counterfeit luxury good may offer a conspicuous form of self-expression, as well as performing a highly functional role, and consequently offer greater intrinsic value than other forms of counterfeit goods. Therefore, just as the self-oriented CVS offers intrinsic value, the conspicuous consumption of a counterfeit luxury watch also has an intrinsic value. We suggest that our findings may indicate that the social motivation for counterfeit consumption for younger consumers allows them to enhance their social standing (Wilcox et al. 2009). By contrast, for older consumers, it is possible that the counterfeit watch has a self-expressive function. Just as a self-oriented CVS allows the individual to show their true selves to others, the counterfeit watch allows them to demonstrate their values and preferences to others. As these are new findings, we advocate that further research would explore the relationship between CVS on Facebook and counterfeit purchase intention, as two forms of conspicuous consumption, across different product categories of luxury good and different age cohorts.
Limitations and future directions

As with all research, there are limitations to this study. While we provide new and interesting insights into the relationship between CVS and its outcomes, we do not know whether consumers behave more or less ethically offline or online. The focus of our study was CVS in relation to charity brands mentioned on Facebook. However, we cannot compare the findings of our study with potential outcomes of offline CDB. We advocate further research to explore our conceptual framework among individuals who engage in both CDB and CVS, to determine whether consumers behave more/less ethically when engaging with charities off/online, and when their charitable act is real (such as wearing ribbons following an offline donation), or merely virtual (mentioning a charity on Facebook).

Our study investigated intention to donate, rather than actual donations. As noted earlier, we investigated intention to donate in response to the specific recommendations of Grace and Griffin (2009). We provide reassurance for our approach from the research of Basil et al. (2006) who found that self-reported donation intention serves as an accurate measure of actual donations. Our study also investigated intention to purchase counterfeit brands, rather than actual purchases of counterfeit brands. Our measure of intention rather than actual behaviour also avoided exaggeration or dishonest reporting behaviour by respondents. Furthermore, it was not feasible to follow through on whether these individuals donated to the charity, or to investigate the extent to which they purchase counterfeit goods. We advocate a longitudinal study to explore the relationship between intention to donate following a charitable Facebook post and actual donation behaviour, and to investigate the relationship between intention to purchase counterfeit goods among this group and actual purchase of counterfeit goods.

The study uses a cross-sectional design. In addition, the measures used in the study are self-reported in nature. While this approach is common to the literature investigating the
constructs in our study, we have also taken steps to avoid bias in responding, such as reassuring respondents regarding their anonymity, and adding attention checks in the questionnaire, to ensure honest answering.

We included two samples, of different ages and life stages, to overcome any limitations regarding generalisability. These studies were conducted on populations in Ireland and in the US. Our MTurk study is based in the US, as MTurk is well established there, relative to MTurk in Ireland. We acknowledge that there may be an effect due to country culture, and we advocate that further studies would investigate the conceptual framework across other samples, and in other countries. However, results in our study are reassuring, as our findings across these two studies are relatively consistent (see Figures 2 and 3). Furthermore, we offer explanations where a relationship is significant for one sample, but not for the other sample. We advocate that further research investigate in particular the relationship between ATSCI and CVS, between other-oriented CVS and self-esteem, and between CVS and purchase intention of counterfeit goods.

We also note that, in our study, charity mentions on Facebook by the student sample were more likely to include or involve photographs. By contrast, the adult sample were less likely to utilise photographs. We suggest that the student sample is more reliant on visual images when engaging in CVS, and we suggest that further research could explore the visual nature of the Facebook mention and its impact on CVS and its outcomes.

Finally, both sample profiles are skewed towards females. Further research could explore both male and females’ attitudes to offline CDB and online CVS. In doing so, this could provide a broader insight into CVS, its influences, and the outcomes for charity brands for the self, and for unethical conspicuous consumption.
Compliance with Ethical Standards

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

References


### Appendix 1: Profile of survey respondents (Study 1 and Study 2)

<table>
<thead>
<tr>
<th>Category</th>
<th>Study 1 (N = 234)</th>
<th>Study 2 (N = 296)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>71.2% = Female</td>
<td>57.8% = Female</td>
</tr>
<tr>
<td></td>
<td>28.8% = Male</td>
<td>42.2% = Male</td>
</tr>
<tr>
<td>Age</td>
<td>Mean = 22.98 years, SD = 6.05</td>
<td>Mean = 37.14 years, SD = 11.17</td>
</tr>
<tr>
<td>Nationality</td>
<td>80.3% = Irish</td>
<td>99.3% = US</td>
</tr>
<tr>
<td></td>
<td>19.7% = Other</td>
<td>0.7% = Other</td>
</tr>
<tr>
<td>Employment status</td>
<td>43.8% = Yes, 56.2% = No</td>
<td>86.4% = Yes</td>
</tr>
<tr>
<td></td>
<td>Others include retired (2%), unemployed (2%), homemaker (6.8%), student (2.4%).</td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>Current level of education:</td>
<td>Final level of education attained:</td>
</tr>
<tr>
<td></td>
<td>80.3% = Undergraduate Student</td>
<td>4.7% Primary</td>
</tr>
<tr>
<td></td>
<td>5.1% = Higher Diploma</td>
<td>24.3% Secondary</td>
</tr>
<tr>
<td></td>
<td>6% = Masters student</td>
<td>53.7% University Undergraduate degree</td>
</tr>
<tr>
<td></td>
<td>8.1% = Doctoral student</td>
<td>15.5% University Postgraduate degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7% Other</td>
</tr>
<tr>
<td>Has a Facebook account, accessed in past month</td>
<td>100% = Yes</td>
<td>100% = Yes</td>
</tr>
<tr>
<td>Has mentioned a Charity brand on Facebook in the past year</td>
<td>100% = Yes</td>
<td>100% = Yes</td>
</tr>
<tr>
<td>Type of mention*</td>
<td>41.9% = Profile activities/interests</td>
<td>34.8% = Profile activities/interests</td>
</tr>
<tr>
<td></td>
<td>88% = 'Liked' or reacted to a post or message about the Charity</td>
<td>81.1% = 'Liked' or reacted to a post or message about the Charity</td>
</tr>
<tr>
<td></td>
<td>73.5% = 'Liked' or reacted to a photo or video about the Charity</td>
<td>48.3% = 'Liked' or reacted to a photo or video about the Charity</td>
</tr>
<tr>
<td></td>
<td>21.8% = 'Liked' or reacted to a post by a celebrity about the Charity</td>
<td>11.5% = 'Liked' or reacted to a post by a celebrity about the Charity</td>
</tr>
<tr>
<td></td>
<td>35% = Shared stories about the Charity from friends</td>
<td>20.6% = Shared stories about the Charity from friends</td>
</tr>
<tr>
<td></td>
<td>37.6% = Shared stories about the Charity, from the Charity itself</td>
<td>24% = Shared stories about the Charity from the Charity itself</td>
</tr>
<tr>
<td></td>
<td>8.1% = Shared stories about the Charity, from a celebrity</td>
<td>4.4% = Shared stories about the Charity, from a celebrity</td>
</tr>
<tr>
<td></td>
<td>30.3% = Shared a photo or video of myself involved in activities in relation to the Charity</td>
<td>8.4% = Shared a photo or video of myself involved in activities in relation to the Charity</td>
</tr>
<tr>
<td></td>
<td>26.1% = Shared a photo or video from a friend about the Charity</td>
<td>10.8% = Shared a photo or video from a friend about the Charity</td>
</tr>
<tr>
<td></td>
<td>7.7% = Shared a photo or video from a celebrity about the Charity</td>
<td>3.7% = Shared a photo or video from a celebrity about the Charity</td>
</tr>
<tr>
<td></td>
<td>34.2% = Shared a photo or video from the Charity itself</td>
<td>15.2% = Shared a photo or video from the Charity itself</td>
</tr>
<tr>
<td></td>
<td>27.4% = Tagged a friend in a story or post about the Charity</td>
<td>6.4% = Tagged a friend in a story or post about the brand</td>
</tr>
<tr>
<td></td>
<td>4.7% = Other</td>
<td>4.4% = Other</td>
</tr>
</tbody>
</table>
| Number of Facebook friends | Mean = 570.47 friends  
SD = 372.02 | Mean = 346.14 friends  
SD = 382.16 |
|---------------------------|-----------------|-----------------|
| How long do they spend on Facebook on a typical day? | Mean = 163.43 minutes  
SD = 112.5 | Mean = 115.8 minutes  
SD = 152.8 |

Note: SD = Standard deviation from the mean. * Percentages sum to greater than 100, as some respondents engaged in more than one type of mention.
Appendix 2: Scale items and measurement model results

<table>
<thead>
<tr>
<th>Need for uniqueness (NFU)</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creative choice counter-conformity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m often on the lookout for new products or brands that will add to my personal uniqueness</td>
<td>.85</td>
<td>.91</td>
</tr>
<tr>
<td>Having an eye for products that are interesting and unusual assists me in establishing a distinctive image</td>
<td>.93</td>
<td>.91</td>
</tr>
<tr>
<td>I often try to find a more interesting version of run-of-the-mill products because I enjoy being original</td>
<td>.70</td>
<td>.85</td>
</tr>
<tr>
<td><strong>Unpopular choice counter-conformity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often dress unconventionally even when it’s likely to offend others *</td>
<td>-</td>
<td>.73</td>
</tr>
<tr>
<td>If someone hinted that I had been dressing inappropriately for a social situation, I would continue dressing in the same manner *</td>
<td>-</td>
<td>.72</td>
</tr>
<tr>
<td><strong>Similarity avoidance counter-conformity</strong></td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>I dislike brands or products that are customarily purchased by everyone</td>
<td>.84</td>
<td>.83</td>
</tr>
<tr>
<td>I often try to avoid products or brands that I know are bought by the general population</td>
<td>.96</td>
<td>.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attention to social comparison information (ATSCI)</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is my feeling that if everyone else in a group is behaving in a certain manner, this must be the proper way to behave * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I try to make sure that I am wearing clothes that are in style * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>At parties I usually try to behave in a manner that makes me fit in</td>
<td>.74</td>
<td>.73</td>
</tr>
<tr>
<td>When I am uncertain how to act in social situations, I look to the behaviour of others for cues</td>
<td>.73</td>
<td>.67</td>
</tr>
<tr>
<td>I try to pay attention to the reactions of others to my behaviour to avoid being out of place</td>
<td>.72</td>
<td>.80</td>
</tr>
<tr>
<td>I find that I tend to pick up slang expressions from others and use them as part of my own vocabulary * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I tend to pay attention to what others are wearing * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The slightest look of disapproval in the eyes of a person with whom I am interacting is enough to make me change my approach</td>
<td>.68</td>
<td>.67</td>
</tr>
<tr>
<td>It’s important for me to fit into the group I’m with</td>
<td>.69</td>
<td>.75</td>
</tr>
<tr>
<td>My behaviour often depends on how I feel others wish me to behave</td>
<td>.64</td>
<td>.67</td>
</tr>
<tr>
<td>If I am the least bit uncertain as to how to act in a social situation, I look to the behaviour of others for cues</td>
<td>.82</td>
<td>.74</td>
</tr>
<tr>
<td>I usually keep up with clothing style changes by watching what others wear * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>When in a social situation, I tend not to follow the crowd, but instead I behave in a manner that suits my mood at the time (r) * *</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conspicuous virtue signalling (CVS)</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-oriented conspicuous virtue signalling</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I mention this charity on FB, I feel like I have made a difference</td>
<td>.65</td>
<td>.72</td>
</tr>
<tr>
<td>It increases my self-respect when I mention this charity on FB</td>
<td>.86</td>
<td>.77</td>
</tr>
<tr>
<td>Mentioning this charity on FB makes me feel good</td>
<td>.82</td>
<td>.76</td>
</tr>
<tr>
<td>I like to remind myself of this charity I support through mentioning it on FB</td>
<td>.68</td>
<td>.74</td>
</tr>
<tr>
<td><strong>Other-oriented conspicuous virtue signalling</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to mention this charity on FB because I get to show something about my support * *</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I like to mention this charity on FB so that people know I am a good person</td>
<td>.93</td>
<td>.88</td>
</tr>
<tr>
<td>I like to mention this charity on FB because it makes me look good</td>
<td>.79</td>
<td>.96</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Offline donation intention</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impossible / Possible</td>
<td>.87</td>
<td>.90</td>
</tr>
<tr>
<td>Unlikely / Likely</td>
<td>.85</td>
<td>.94</td>
</tr>
<tr>
<td>Improbable / Probable</td>
<td>.89</td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td>Study 1</td>
<td>Study 2</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>(\lambda)</td>
<td>AVE (\text{CR})</td>
</tr>
<tr>
<td><strong>Self-esteem</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On the whole, I am satisfied with myself</td>
<td>.71</td>
<td>.82</td>
</tr>
<tr>
<td>At times I think I am no good at all (r)</td>
<td>-</td>
<td>.66</td>
</tr>
<tr>
<td>I feel that I have a number of good qualities</td>
<td>-</td>
<td>.67</td>
</tr>
<tr>
<td>I am able to do things as well as most people</td>
<td>-</td>
<td>.67</td>
</tr>
<tr>
<td>I feel that I have much to be proud of</td>
<td>.69</td>
<td>.68</td>
</tr>
<tr>
<td>I feel that I am a person of worth</td>
<td>.78</td>
<td>.81</td>
</tr>
<tr>
<td>I have a lot of respect for myself</td>
<td>.68</td>
<td>.88</td>
</tr>
<tr>
<td>All in all, I am inclined to think I am a success</td>
<td>.77</td>
<td>.88</td>
</tr>
<tr>
<td>I take a positive attitude toward myself</td>
<td>.78</td>
<td>.87</td>
</tr>
<tr>
<td><strong>Purchase intention counterfeit luxury brands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The likelihood of me purchasing this product</td>
<td>.93</td>
<td>.96</td>
</tr>
<tr>
<td>The probability that I would consider buying this product</td>
<td>.92</td>
<td>.95</td>
</tr>
<tr>
<td>I intend to buy this product</td>
<td>.88</td>
<td>.89</td>
</tr>
<tr>
<td>At the substantially lower price, I would consider buying the product</td>
<td>.90</td>
<td>.91</td>
</tr>
</tbody>
</table>

Note: \(\lambda\): standardised factor loading; AVE: average variance extracted; CR: composite reliability; FB: Facebook; r: reverse item; a: item deleted in study 1; b: item deleted in study 2.
**Figure 1.** Conceptual framework

**Figure 2.** Structural model results: Study 1

Note: *p<0.1; **p<0.05
Figure 3. Structural model results: Study 2

Note: *p<0.1; **p<0.05