'What if My Mum Sees It?': Examination of visible brand interaction in the presence of a wider network
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Abstract

Purpose - It is known that to encourage people to interact (e.g. sharing) with brands through social media businesses create content inline with the expectations of their target audience. On these sites however such interaction by consumers is visible contributing to their self-presentation, which can by their wider network; some of whom will find it appropriate, others may not. Currently, little is known about the effects of consumers’ own diverse set of audiences’ on behavioral intention towards brand interaction and emotional effect.

Design/methodology/approach - Survey methodology ($n = 386$) was adopted to examine intention to interact with real brand posts.

Findings - Results show that brand interaction is associated with social anxiety when it is felt that visible evidence of such actions are discrepant from audience expectations. This then constrains behavioral intention to interact with brands online.
**Practical implications** – For businesses to maximize brand interactions and minimize social anxiety, they must be mindful of not just the expectations of their target but also consider their target’s own network. For site designers, this research urges for greater refining of privacy tools and suggests the addition of a ‘Secret Like’ option.

**Originality / value** - Encouraging visible brand interaction through social media is paramount for businesses. Managers focus only on their target audience when designing content but neglect to consider the self-presentational implications of interacting with branded content to wider networks. This paper shows this must be considered to increase success and maintain ethical practice. This is of value for multiple-stakeholders, managers, users, site designers and academics.

**Keywords:** social media, brands, self-presentation, anxiety, Facebook, impression management
Introduction

Jack is a final year undergraduate student studying away from home. He is a member of various sports clubs and societies and spends a lot of time at their social events, which often include heavy drinking and risqué behavior. He and his friends are avid Facebook users, sharing and tagging photos from nights out and ‘liking’ brand content. However, since his parents have ‘friended’ him on Facebook and he didn’t have the heart to decline their request, he has become anxious that they will disapprove of his lifestyle and the brands he ‘likes’. Furthermore, having heard reports that employers try to look at the profiles of candidates during recruitment, Jack no longer interacts with certain brand content he otherwise would have in fear that it may be perceived as controversial.

Millions of social media users, like Jack, interact with brands on a daily basis, ‘posting’, ‘liking’, ‘tweeting’, and ‘pinning’ so much so that business in this domain has been discussed as a ‘Like economy’ (Gerlitz and Helmond, 2013). These actions may occur for hedonic, utilitarian or social reasons (Cocosila and Igonor, 2015). While academics and practitioners advocate the importance of building relationships through such interactions with brands (Bianchi and Andrews, 2015; Kim and Ko, 2012; Trainor, Andzulis, Rapp and Agnihotri, 2014), it is also acknowledged that this endeavour can be challenging (Singh and Sonnenburg, 2012). This paper examines one possible challenge, that the impression management enacted by consumers with respect to their audiences, hinders brand interactions (e.g., ‘liking’, ‘posting’).

It is well understood that online brand interactions contribute visibly to the digital persona of consumers (see Belk, 2013) and these persona are scrutinized by their online audiences (Schau and Gilly, 2003). Moreover, brand interaction within social media platforms ‘has excited practitioners with its potential to better serve
customers and satisfy their needs’ (Sashi, 2012, p.254). However, when it is perceived that brand affiliation will reflect an undesired image to others, consumers may refrain from association (Hollenbeck and Kaikati, 2012). We propose that Social Network Sites (SNSs) present a novel environment for consumers’ to visibly affiliate with brands. This is because through SNSs consumers self-present to multiple audiences simultaneously (e.g., parents, extended family, potential employers), who are perceived to hold heterogeneous expectations of what is deemed a desireable projected image (see Labrecque, Markos, and Milne, 2011; Marder, Joinson, and Shankar, 2012).

The presence of multiple audiences, and thus multiple standards, increases the chance of negative affect and the need for impression management (Binder, Howes and Sutcliffe, 2009; Marder et al., 2012;). The latter involves actions aimed at avoiding disclosure that would be undesirable (e.g., censoring posts or deleting photographs). It follows that heterogeneity of audiences may too impact on the potential for visible brand interactions, if it is perceived that affiliation would cast a negative image to one or more audiences. This is a particularly pressing issue when businesses leverage risqué content in SNS, a common strategy used within viral marketing campaigns (Huang, Su, Zhou, and Liu, 2013). Currently, no existing research addresses the issue of audience multiplicity on brand interaction intention and negative emotions that may arise. The little related work that exists contends with online audiences as single entity, often under the umbrella term, ‘public’ (see Hollenbeck and Kaikati, 2012; Simmons, 2008).

Through the lens of Self-presentation theory (Leary, 1996; Goffman, 1973) we will address this gap. Specifically, the association of audience multiplicity with social anxiety, and the intention to interact visibly with brand content. The core issue is illustrated within the above vignette, showing that although businesses have
succeeded in creating content with which Jack (i.e., their target audience) would like to interact (e.g., share or ‘like’ with his peers), he nonetheless manages impressions by choosing to not interact as he feels anxious that his parents or employers will disapprove.

We proceed with a review of the literature relating to impression management, online multiple audiences, and visible brand affiliation through SNSs to derive the research questions. This is followed by a description of the research methods and results, before conclusions, implications for businesses and designers as well as study limitations are considered. Facebook is the focal site for this research as it is currently the most widely adopted SNS boasting over 1.35 billion monthly active users (Facebook, 2015; Yang and Lin, 2014).

**Theoretical background**

*Self-presentation and Social anxiety*

Self-presentation or similarly impression management theory is widely used to study people and information technology (Panteli and Duncan, 2004; Magnusson and Bygstad, 2013). Self-presentation is the process whereby people try to manage and control the impression they give to others (Leary and Kowalski, 1990). People are motivated to self-present for economic and social gains, to contribute to identity projects and to increase self-esteem (Leary, 1996). The level of motivation is determined by the discrepancy between the current and desired impression and the importance and relevance of that desired impression. Discrepancies result in self-presentational predicaments, defined as “situations in which events have undesirable implications for identity-relevant images that actors have claimed or desire to claim in front of real or imagined audiences” (Leary, 1996, p.118).
Such circumstances will result in social anxiety (Leary and Kowalski 1995). Social anxiety is distinct from other forms of anxiety in that it is associated with the effects of actual or potential ‘social’ interaction. Schlenker and Leary (1982) state that anxiety, “is a cognitive and affective response characterized by apprehension about an impending, potentially negative outcome that one thinks one is unable to avert” (p.248) and social anxiety is when this occurs in conjunction with interpersonal evaluation. Thus if it is perceived that the expected self-presentation standards of an audience have been met or exceeded, then the individual will feel satisfied. However, if it is perceived that these standards have not or will not be met, then social anxiety results.

When social anxiety arises impression management results to defend against an undesired image, whether this is current or potential (Arkin and Sheppard, 1990). Although nuanced differences exist, this process of comparison, negative affect, and behavioral change is consistent for several longstanding social psychological theories including self-discrepancy theory (Higgins, 1987) and self-regulation theory (Carver and Scheier, 2001). As such, these theories should be viewed as complementary rather than competing. Self-presentation theory is adopted here as SNS are upheld as a predominantly social (public facing) phenomenon (Mehdizadeh, 2010) congruent with the raison d'être for the theory, in contrast to others that also combine to explain non-socially based phenomenon.

*Online multiple audience problem*

Unlike offline or more traditional online domains (e.g., forums), users of SNSs self-present to multiple audiences (e.g., family, colleagues, friends and partners), who are simultaneously able to watch performances. This circumstance has been referred
to in a number of ways including the problem of conflicting social spheres (Binder et al., 2009) and managing multiple online personas (Labrecque et al., 2011). Although the terms used differ, the underlying principle is consistent. SNSs provide a situation in which “many groups important to an individual are simultaneously present in one context and their presence is salient for the individual” (Lampinen et al., 2009, p.1).

Multiple audiences create a problem as SNS users simultaneously and continuously present a “verifiable, singular identity” making it nearly impossible to cater to specific audiences (Marwick and Boyd, 2011, p.122). The key issue is that audiences are heterogeneous in their expectations (Marder et al., 2012). Consequently, presenting in SNS is likely to be linked with a greater chance of a self-presentational predicament and thus social anxiety and need for impression management as it is difficult, if not impossible, to maintain congruence with multiple and often conflicting expectations. This multiple audience problem has been found to be especially challenging during life changes when individuals come into contact with new social spheres, such as the transition from university to the workplace (Labrecque et al., 2011).

The presence of multiple audiences have been associated with negative emotional and relational effects (Binder et al., 2009; Marder et al., 2012), as well as self-censoring impression management strategies where “individuals only post things they believe their broadest group of acquaintances will find non-offensive” (Marwick and Boyd, 2011, p.122). Akin with the practice of ‘region behavior’ (see Goffman, 1973) SNS offer some ability to segregate audiences through privacy tools. Yet these are largely underutilized with only a third of users opting to group their audiences (Marder et al., 2012), mirroring the lack of privacy strategy adoption seen in other engagement phenomena (Dommeyer and Gross, 2003).
Interacting with brand content in the presence of multiple audiences

In SNS, brand interactions are encouraged (e.g., liking and posting) by providing content consumers are motivated to affiliate with their online self-presentations (Belk, 2013; Kaplan and Haenlein, 2010). Gaining insight into these practices is paramount for business practitioners and academics whose aim is to understand consumers in this novel arena. This is particularly important given the domain “provides unique and interesting conditions for investigating the interaction of multiple selves and the incorporation of brands in consumer self-expression” (Hollenbeck and Kaikati, 2012, p 396). Broadly it has been found that consumers interact with and thus affiliate with brands to project a desired self-presentation and avoid those that are incongruent (ibid).

Research in this area has, until now, largely assumed the audience is a single entity, often under the umbrella term of the ‘public’ or specifically as a set of individuals with largely homogeneous views (e.g., a brand tribe; see Simmons, 2008). As discussed, multiple audiences with heterogeneous expectations provide a problematic environment for self-presentation. Certain content affiliation may be viewed as desirable by peers who are also members of the target market but not by other audiences such as parents and employers, causing self-presentational predicaments. Thus, it is imperative that brands which create content that will contribute to consumers’ self-presentations in this domain understand the issue of multiple salient expectations, and the social anxiety and impression management that may arise. Advice to businesses has long been to understand their target audience (Singh and Sonnenburg, 2012). However, given the unique consumer environment of
SNS, this research aims to investigate the necessity with which businesses should recognize their audience’s audience.

Research aims

The key contribution of the present research is in its investigation of visible brand interaction in the presence of multiple audiences in SNS, and the resultant social anxiety and impression management that may hinder the potential for such interaction. Specifically, we first aim to establish the association, if any, of social anxiety with discrepant presentations and how this differs across audiences for both general and brand related content. It is necessary to consider the association of general attributes (e.g., unattractiveness, evidence of alcohol use) with social anxiety as this can guide the creation of content that will minimize any associated detrimental effects.

\[ H1a: \text{The level of social anxiety experienced with general discrepancies (DV) differs depending on which audience can view the content (IV).} \]

\[ H1b: \text{The level of social anxiety experienced with visible brand interaction (DV) differs depending on which audience can view the content (IV).} \]

Second, we provide support for the process whereby discrepancies from audience expectations are associated with impression management (i.e., a reduction in the intention of consumers to interact with the brand) and that this relationship is
mediated by social anxiety. Expectational level is used here as a proxy for discrepancy with the intuition that the higher the expectational level of the audience the greater the discrepancy, the rationale for this is supported within the methodology. The valence of the relationship predicted is based on assertions within previous literature (see Leary, 1996; Higgins, 1987; Hollenbeck and Kaikati, 2012).

\textit{H2: Greater expectations (related to the sentiment of the brand content) of each audience (IV) are associated with a reduction in intention to interact with the brand (DV), when mediated by social anxiety (M).}

Next, the issue of multiplicity in audience expectations will be addressed directly. For this, we draw insight from Marwick and Boyd’s (2011) notion of the ‘lowest common denominator’ of presentation, i.e., that which obeys by the expectation of the strictest audience. Thus it is predicted that the greater the range of expectations held by multiple audiences, the higher the social anxiety felt, which is associated with a reduced intention to interact with brand content.

\textit{H3: A greater range in the expectations (related to the sentiment of the brand content) (IV) of multiple audiences is associated with a reduction in intention to interact with the brand (DV), when mediated by social anxiety (M).}
The range of expectations is argued here to be the most important variable to consider, not just the expectations of the strictest audience. This is because it is the difference in expectations that captures the essence of the multiple audience problem. That is, the range represents the loss of self-presentational freedom incurred by ‘friending’ multiple audience types. For example, if a user was only connected with a tolerant audience (e.g., close friends), they will have a broader scope to interact with more risqué brand content. However, if also connected with a stricter audience (e.g., employer), the level of anxiety felt is likely to increase and intention to interact with this content is likely to fall in proportion with the increased range of present expectations.

Method

Research design

To address the proposed hypotheses the measurement of three key concepts is required: 1) Social anxiety associated with visible brand interactions with respects to different audiences; 2) intention to interact with brands; and 3) perceived expectations of audiences. In order to measure the first two concepts, Facebook posts from two brands were shown to participants: one that should not cause a negative image and one that may. Following a focus group of 5 participants aged 18-21 it was decided on a soft drink brand (Coke), and a condom brand (Durex). All posts included a brief statement attached to an image and were sourced from the brands’ official Facebook pages in September 2013 (see Appendix). The use of the condom in being associated with presentational concern for a young adult population is supported by pervious literature (see Marder et al., 2012; McLaughlin and Vitak, 2011). A soft drink brand was used as a contrast as it was deemed unlikely to cause concern when presented to
different audiences. The data collected with regard to the condom brand will be used to address H2 and H3, as it is assumed in the literature that a discrepancy must exist (potential/actual) for expectations to lead to impression management (see Leary, 1996).

The audiences examined were close friends, guardians, partners and employers. Guardians and employers were selected as audience groups because they are considered to be particularly concerning for young users (Binder et al., 2009; Marder et al., 2012; McLaughlin and Vitak, 2011). Close friends and partners were also chosen as they represent audience connections akin to Facebook’s original design and user base (see Ellison, Steinfield and Lampe, 2007; McLaughlin and Vitak, 2011).

Data collection and sample

The research adopted a purposeful sample focusing on millennial Facebook users - those born after 1982 (Howe and Strauss, 2009) - as these are high adopters of social media (see Pew, 2014). An online survey was employed, with data collected by sending a link via the mailing lists of two UK universities. Participants were also encouraged to share the link via their social media accounts. This snowball sampling technique was selected to encourage further participation from the target demographic of younger users, a common strategy in this field of research (e.g., Hollenbaugh and Ferris, 2014; Kirschner and Karpinski, 2010; Zheng, Cheung, Lee and Lang, 2015). The limitations of the sampling approach adopted here are acknowledged, but also that probabilistic techniques are largely infeasible as it is practically impossible to create a definitive list of SNS users from which to randomly select a sample (Tow et al., 2010). Research has highlighted an alternative sampling method using Facebook
advertising campaigns (see Näsi, Räsänen, Hawdon, Holkeri and Oksanen, 2015). Although this method has merit for research on SNS users more generally, given the focus of this research is brand interaction intention it was potentially problematic. This is because those who click on Facebook adverts are the minority (see Curran, Graham and Temple, 2011; Tucker, 2014) and therefore a sample of such users is likely to be uncharacteristically high in intention to engage with marketing communications.

Participation was incentivized with a small monetary donation on their behalf to a choice of three well-known charities. The sample ($n = 386$) had a mean age of 23 (SD =5.9) years, 24 participants were born before 1982. The sample comprised 268 (69.4%) females and 118 males (30.6%), who were from 18 different countries (79.5% UK). Participants were asked to select one category of current employment that best described their current status, thus 65.3% were in undergraduate education, 20.2% in postgraduate education, 13.5% in employment and 1% ‘other’.

Measures

General discrepancies, social anxiety and multiple audiences

To assess social anxiety level linked to general discrepancies participants were asked how worried they were about being seen on Facebook in six ways (looking drunk, appearing sexual, using swear words, looking physically unattractive, appearing unintelligent, appearing reckless), to each of the four audiences. Responses were given using a 7-point scale from ‘not at all worried’ (1) to ‘extremely worried’ (7). These six general self-discrepancies were chosen based on previous research that raised them as key concerns for Facebook users (see Marder et al, 2012; McLaughlin and Vitak, 2011).
For social anxiety related to brand interaction, participants were asked how worried they were about being seen sharing the posts of the two selected brands to each of the four audiences. Responses were given using a 7-point scale from ‘not at all worried’ (1) to ‘extremely worried’ (7). For both measures of social anxiety within this section it is important to account for the situation where participants were not connected to these audience groups on Facebook, or where they had applied privacy setting restrictions limiting access to key content (e.g., photographs or written posts), as these may minimize any cause for social anxiety. Participants were therefore given the option to select ‘not-friended’ or ‘privacy settings restrict visibility’, and if either option was selected the response was excluded from the analyses.

**Brand interaction intention**

A 4-item measure was used to ascertain the intention for brand interaction associated with the condom brand post. With interaction forming a key part in the development of customer loyalty through social media (see Sashi 2012), it is important to measure a customer’s intention to interact in order to understand the barriers that exist between such intention and behavior. Participants were asked, related to this content, how likely it would be that they would share the content on their own timeline, share the content on the timeline of others, ‘like’ the post, and ‘like’ the brand page. A 7-point scale from ‘very unlikely’ (1) to ‘very likely’ (7) was provided along with a ‘rather not say’ option. Strong reliability was demonstrated for this scale (Cronbach’s $\alpha = .894$).

**Perceived expectations of audiences**
Participants completed an adapted version of the Self-Attributes Questionnaire (SAQ; Pelham and Swann, 1989). This is a measure of the self-concept where self-attributes of participants are scored on a 10-point scale in comparison to their peers. Participants were asked how they ‘ought’ to be in relation to the attribute ‘sexual openness’ akin with the expectations of an audience (guardians, partners, employers, close friends). If participants were not currently employed or in a relationship, they were asked to respond based on their perception of potential employers or relationship partners. As such, those responses given with a potential partner or employer in mind would not have the person added as a Facebook friend, and so any analyses relating to social anxiety will have these cases removed (pairwise removal; see participant numbers for each test). A ‘rather not say’ option was also included. This attribute was included as norms related to ‘sexual openness’ are associated with the choice to interact with the condom brand (see Whitaker, Miller, May and Levin, 1999).

Audience expectation level was used as a proxy for discrepancy between predicted actual self and desired self (in the eyes of the audience), as measuring discrepancies would have been problematic in this context. Individuals may feel that in general they are not discrepant, but may worry that discrepant information can be revealed online. For example, a person who may only consume alcohol very occasionally may not perceive himself or herself to be discrepant from audience standards, but may worry if a number of pictures of them drinking appear online, as this may be misinterpreted. Support for this exaggeration effect of online content is found by McLaughlin and Vitak (2011). Thus, this paper assumes that higher expectations are related to a greater chance that a discrepancy will exist, as it will be more difficult to meet such high expectations.
This paper focuses on negative discrepancies where expectations are greater than the perceived actual self; it is acknowledged here that there are circumstances where discrepancies may be positive (i.e., the actual self is perceived to exceed expectations), in which case the individual would feel a positive emotion and no urgent need to reduce this discrepancy (see Carver and Scheier, 2001). As negative discrepancies are more common \textit{(ibid)}, and the motivation of this research is to understand social anxiety and discrepancy reducing behavior (e.g., choosing to not share brand content), the assumption is made that higher expectations are associated with negative discrepancies.

\textit{Range in perceived expectations.}

The range in expectations, used to examine the effect of multiplicity in audience expectations on social anxiety and impression management, is calculated by subtracting the minimum expectation score from the maximum expectation for the ‘self’ trait of sexual openness. Other calculations such as the variance and skew of expectations were contemplated to examine this phenomenon. However, when considered with the findings of previous research, they were found to be less appropriate (see Lampinen et al., 2011; Marwick and Boyd, 2011). The crux of the multiple audience problem, or the reduction of freedom to present, is the difference between what users feel they are able to post to their least concerning audience compared with posting to their most concerning.

\textit{Covariates.}

Fenigstein, Scheier and Buss’s (1975) 7-item public self-consciousness scale was also included, 1 – Low, 7 - High ($\alpha = .87$) to be used as a covariate for the
mediated relationships in H2 and H3. This was included to control for the trait effects of public self-consciousness when investigating social anxiety, as users who are more self-conscious are arguably more likely to experience social anxiety (see Leary, 1996; Mor and Winquist, 2002).

Results

Social anxiety associated with brand interaction across audiences

Six repeated ANOVAs, one for each of the six general discrepancies (looking drunk, appearing sexual, using swear words, looking physically unattractive, appearing unintelligent, appearing reckless), were conducted to examine the differences in social anxiety associated with the four different audiences (partner, close friend, employer, guardian). The Huynh-Feldt and Bonferroni corrections were applied throughout. The within-subjects tests revealed significant differences across all audience groups for the six general discrepancies ($p < .001$ – Bonferroni corrected significance value = 0.05/6; see Table 1). Pairwise comparisons show significant differences between audiences to a 99.9% confidence interval, each of which are indicated through superscripts in Table 1.

Table 1: Differences in social anxiety for each general discrepancy across audiences

[Insert Table 1]
The data showed that with regard to these general discrepancies the level of social anxiety across audience groups were overall each significantly different. The pairwise-tests revealed that in general participants worried least about posts being seen by their close friends. However, employers were the most worrying group for five general discrepancies, but for ‘looking unattractive’ partners were the most worrying. Overall the results illustrate that these general discrepancies associate with moderate levels of anxiety with \((\text{Mean} = 3.24; \text{min.} = 1.64; \text{max.} = 5.08)\), thus H1a is supported.

Two repeated ANOVAs, one for each brand (soft drink and condom), were conducted to examine the differences in social anxiety linked to brand interaction across the four different audiences (partner, close friend, employer, guardian), and address H1b. The Huynh-Feldt and Bonferroni corrections were applied throughout. The within-subjects tests revealed significant differences across all audience groups for the two brands \((p < .025 – \text{Bonferroni corrected significance value} = 0.05/2;\) see Table 2). Pairwise comparisons show significant differences between audiences to a 99.0% confidence interval (all \(p’\)s < .01), each of which are indicated through superscripts in Table 2.

Table 2: Within-subjects differences for social anxiety associated with brand interaction for each brand across the different audience groups.

[Insert Table 2]

The data show that in relation to the condom posts participants found interacting with this brand would be more worrying if seen by employers and
guardians than close friends or partners. While there was a significant difference across audience groups for soft drink, mean anxiety levels were extremely low overall ranging from 1.24 (guardians) to 1.41 (employers). As predicted this supports that the soft drink brand is perceived largely not to be associated with projecting a discrepant image. Overall, the results show that brand interaction is associated with different levels of social anxiety across audience groups for the different brands. Thus H1b is supported.

Audience expectations, social anxiety, and brand interaction intention

The paper will next examine the association between audience expectation level and degree of impression management, where social anxiety is a mediator. This process is only activated when individuals consider they have, or will become, discrepant with audience expectations. Therefore, the condom brand content will be used for the following analyses. A pairwise t-test confirmed a significant difference between mean anxiety score (across the four audiences) for the condom and soft drink brand (Mean Difference = 3.02, SD = 1.96, t = 29.30, p < .001, d = 1.99).

To examine the self-presentational process with branded content (H2), mediation analyses were conducted using the Preacher and Hayes (2008) model of bootstrapped mediation, a validated method of analysis within the discipline (see Van Noort, Voorveld, and van Reijmersdal, 2012). Using this model the effect of the indirect path (ab) is assessed by means of the confidence interval (see Figure 1), ensuring that the lower and upper bounds do not cross zero, and a bootstrap test rather than the Sobel test is used (for full details see Preacher and Hayes, 2004; Zhao, Lynch and Chen, 2009). Using this approach the significance of the indirect effect is the only necessary condition to establish mediation, and insight from the Baron and Kenny
(1986) method is used to categorize the type of mediation (Zhao et al., 2009). The pathways and variables of the mediations are shown in Figure 1, with full details in Table 3.

Four mediation analyses were conducted, one for each audience group. All reported coefficients are standardized, bootstrap resampling was set to 10,000 and the Bonferroni correction applied to account for the four conditions tested (thus accepted $p =< .0125$). The IV is the individual audience expectation level. The mediator is the social anxiety score linked to interacting with condom brand content. The DV is brand interaction intention where high scores represent higher intention to interact with the brand. Public self-consciousness was entered as a covariate.

[Insert Figure 1]

Figure 1: Mediation analyses for partners ($\beta_1$), close friends ($\beta_2$), employers ($\beta_3$) and guardians ($\beta_4$).

A total effect was found for all four audiences ($p < .05$). Audience expectation was directly related to brand interaction intention in absence of a mediator. After applying the Bonferroni correction the total effect held significance for close friends, partners and guardian audiences, but became non-significant for employer audiences ($p = .025$). Given the direction and significance of the analyses for the three remaining audiences, the tendency for Bonferroni to be overly conservative (Hochberg and Benjamini, 1990) and the significance to still hold to a 97.5% confidence interval, the trend is supported, but caution is recommended in its generalization.
Table 3: Mediation results for condom brand content for each audience

Insert Table 3

For all four audiences indirect mediation was established. An indirect mediation means that $ab$ (the indirect path) is significant but that $c'$ (the direct path) is not significant, suggesting that the hypothesized mediator, social anxiety, is the only contributor to the effect observed. For the indirect path the provided output of the SPSS mediation plugin does not produce significance values so a Bonferroni significance correction cannot be determined to $p \leq .0125$. Therefore, a 99.0% confidence interval is used for the indirect path to ensure that for $p \leq .01$ the coefficient value does not cross zero, i.e., is significant in the direction reported and meets stricter criteria than a Bonferroni adjustment. Thus, social anxiety mediates the relationship between the expectations of all four audiences and brand interaction intention, such that greater audience expectations result in greater social anxiety felt, which reduces the likelihood of individuals posting brand content. H2 is therefore supported.

Audience multiplicity, social anxiety and brand interaction intention

To test the effects of audience multiplicity on social anxiety and brand interaction intention (H3) a bootstrapped mediation analysis was conducted using the range of expectations across all four audiences as the IV, total social anxiety (across all four audiences) as the mediator and brand interaction intention as the DV. Bootstrap sampling was set to 10,000 and public self-consciousness was entered as a covariate. The mediation pathways and results are shown in Figure 2.
Figure 2: Mediation results for range of audience expectations on brand interaction intention, mediated by social anxiety

A total effect was not found for range of audience expectations on brand interaction intention, but an indirect mediation was evident when social anxiety was entered as the mediator. This suggests that the range of audience expectations is not directly related to changes in brand interaction intention, but social anxiety is necessary for changes to occur. The negative relationship between social anxiety and brand interaction intention suggests that greater anxiety results in a reduction in brand interaction. Thus, the greater the range of audience expectations the greater the social anxiety felt and the less likely individuals are to post brand content. Therefore H3 is supported.

Discussion

Overall, the results demonstrate that brand interaction intention in the presence of multiple audiences presents a challenge for consumers and is an issue that needs to be considered by those who create brand content for the purpose of consumer interaction.

The level of anxiety related to general discrepancies and that associated with brand interaction differed significantly across the four audience groups. Largely, parent and employer audiences were found to cause the most worry for participants. This is supported by previous literature that maintains these audience groups to be of high concern (Binder et al., 2009; Marder et al., 2012). Further support for higher social anxiety associated with the visibility of brand interaction to employers for the
condom brand content is found in media sources, which describe employers’ Facebook ‘turn offs’, one of which is sexual references (Hale, 2009; Telegraph, 2010). Conversely, close friends and partners were generally the least worrying groups. This is understandable as such audiences are typically of a similar age, lifestyle and background to one another (see McPherson, Smith-Lovin, and Cook, 2001), and therefore prone to be more sympathetic to the visibility of more risqué content.

For the soft drink post, while an overall significant difference in social anxiety across audiences was found, social anxiety recorded for each was minimal. This suggests that even for what would be an innocuous brand post some incongruence was felt. It is probable that the depiction of various ‘soft toy animals’ in the brand post may be perceived as ‘uncool’ or unprofessional by certain audiences, and caused a small amount of anxiety. The least anxiety was related to visibility by guardians. Again, the use of an image depicting soft toy animals may be viewed by guardians as congruent with childhood, but such an image is not generally well-aligned with peer or workplace expectations.

The findings support the existence of a challenge faced by those aiming to encourage brand interaction when their target audiences have audiences themselves. The mediation analyses showed that greater expectations of audiences are positively related to the level of social anxiety and this anxiety was negatively related to intention to interact with the brand. In other words, there exists a negative association between the expectations of audiences and brand interaction intention (for discrepant brand content), when mediated by social anxiety. These results support the process outlined within the self-presentation literature (Carver and Scheier, 2001; Higgins,
1987; Leary, 1996) in explaining brand-related behavior in SNS with regards to singular audiences.

The mediation effects (Figure 1) were relatively similar for the four audiences. However, guardians emerge with the strongest indirect effect and, along with employers, provide the strongest relationship between social anxiety and brand interaction intention. These findings support previous literature that upheld these two audience groups to be particularly pressing for users (see Marder et al., 2012), and now businesses with a social media presence. This also offers some insight into the recent migration of teens from Facebook (Kiss, 2013; Matthews, 2014). Befriending guardians is worrying and acts as a constraint on presentational freedom; this is particularly relevant given the young sample used within the present study. Although the findings show that this process holds for multiple audiences individually and there are differences in the strengths of pathways across audiences, it does not directly address the issue of multiplicity.

Last, the findings show that the range of audience expectations is positively associated with the total social anxiety and that this in turn was negatively related to intention to interact with the brand. This contributes knowledge to the existing discussion of behavioral processes, in the circumstance where multiple audiences (with heterogeneous expectations) can simultaneously view self-presentations. Hollenbeck and Kaikati (2012) found that to avoid undesired self-presentations, consumers might choose to avoid linking with brand content. This study provides support for this, showing that the intention to avoid brand content is related to multiplicity in audience expectations, mediated by social anxiety.

Furthermore, the present study maintains and supports Marwick and Boyd’s (2011) statement that sharing is limited, “to topics that are safe for all possible readers
[...] where the strictest standards apply” (p.126), but also provides needed insight into the psychological process leading to the lowest common denominator effect. It is the range of expectations that predicts negative affect and consequent impression management. Beyond the context of SNS, this finding may help to explain negative affect and behavior in other, albeit less common, circumstances where individuals present to multiple audiences offline (e.g., political speeches, wedding speeches or teaching culturally diverse classes).

**Implications for content and site design**

The findings herein suggest that to reduce anxiety and increase interaction, brands should consider the suitability of content in order to avoid contributing to discrepant self-presentations by their consumers and the consequent impression management that hinders brand interaction. This advice is somewhat at odds with previous research that endorses the use of risqué content to increase the chance that it will go viral (see Huang, Su, Zhou, and Liu, 2013). The present research proposes that for more risqué content caution should be exercised as this may cause discrepancies leading to anxiety (e.g. appearing sexual) assessed here in H1a. Brands need to assess the ‘extrinsic congruence’ (Hogg et al., 2000) of content asking themselves, “would I share this with my boss?” If the answer is “probably not”, then it should be reconsidered.

More general advice for businesses aiming to maximize interaction with their content is to gain a real understanding of the self-presentational environment of individual sites. Different sites will provide different parameters within which to operate (see Smith, Fischer, and Yongjian, 2012). For sites such as Facebook and Twitter where adoption is ubiquitous, there is a need to be more cautious of audience
multiplicity. However, with more niche sites, such as Instagram, Pinterest, and LinkedIn, audiences tend to be less varied, as user bases are made of a more concentrated demographic. Therefore, the issue of multiplicity is less pressing, and brands are freer to cater content specifically for their target audience (see Duggan and Smith, 2013)

For site designers the core issue is to maintain ethical practice (see Light and McGrath, 2010) by reducing their users social anxiety associated with the site but also to maximize interactions. Firstly, site designers should endeavour to make audience segregation tools such as grouping easier to use to increase the current low levels of adoption. Secondly, with regards to being seen ‘Liking’ a brand, a key gateway interaction for businesses, currently it is not possible to ‘Like’ a brand secretly or out of the view of certain audience members. The option to restrict visibility of connection with specific ‘Liked’ pages to all or some audience should be considered.

Limitations and Future Research

The present paper has several strengths. First, it applied well-established psychological theories to examine a phenomenon of timely interest to businesses engaging with consumers through social media. Second, it used a sample of actual SNS users who were familiar with the site, akin to Pagani et al. (2011). Third, the age of the sample reflects the age of a high proportion of SNS users. However, several limitations are also acknowledged. First, although the results of H2 and H3 provide significant indirect effects, closer inspection of the mediation analyses suggest further avenues for discussion and empirical exploration.

Second, for H2, if the Bonferroni calculation is ignored (given the arbitrary nature of significance), the results suggest that close friend and partner audiences
form complementary mediation, i.e., that mediators other than social anxiety may be significant between expectations and brand interaction intention. Thus, given there is room for further explanatory variables, of which there are numerous potential mediators, it is recommended that further research be conducted in order to gain insight into these. Potential areas may include examining the social / economic gains and losses associated with brand interaction, following Leary’s (1996) discussion on motivations to self-present.

In addition, the scales used to measure expectations and social anxiety associated with each audience, were single item measures. Multiple items would have increased survey length significantly, having to repeat each group of items for each audience and each brand condition. To maintain validity, the wording and meaning of these questions were piloted to ensure they were understood equivocally and without ambiguity, and by doing so “there is no need for multiple item measures” (Alexandrov, 2010, p.1; see also Gardner, Cummings, Dunham and Pierce, 1998; Rossiter, 2008).

It is acknowledged that the sample size of the present study (n = 386) is modest given the proportion of millennial Facebook users, however the size is adequate for the number of constructs within the analyses (see Kotrlik and Higgins, 2001). Furthermore the sample comprised predominately millennial aged native English speakers studying at UK universities, therefore the generalizability of this research is thus limited beyond this demographic. Future research should examine older users and those from other cultures. The importance of the latter we propose is that social anxiety and reduction in intention to interact with brands may be more pronounced in cultures with more traditional, or stricter standards, since culture has
been demonstrated to moderate electronic word-of-mouth processes (Christodoulides, Michaelidou and Argyriou, 2010).

**Conclusion**

Overall this research asserts that the presence of multiple audiences is not just an issue for people navigating the assimilation of brand content, but also for businesses and site designers that wish to maximize brand interaction and maintain ethical practice.
References


Appendix

The following images were used as the content for the Brand Interaction (i.e. to measure whether participants would ‘like’ or share such content) and were presented as stimuli to research participants. The first (1) was used as the Soft Drink stimulus; the second (2) was used as the Condom stimulus.

(1) Soft Drink Branded Stimulus

(2) Condom Branded Stimulus
### Tables and Figures

#### Table 1

<table>
<thead>
<tr>
<th></th>
<th>Partner</th>
<th>Close Friend</th>
<th>Employer</th>
<th>Guardian</th>
<th>N</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drunk</td>
<td>2.92$^a$</td>
<td>1.73$^b$</td>
<td>5.08$^c$</td>
<td>3.63$^d$</td>
<td>142</td>
<td>149.05</td>
<td>2.90</td>
<td>.001</td>
<td>.51</td>
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<tr>
<td>Sexual</td>
<td>3.84$^a$</td>
<td>2.48$^b$</td>
<td>4.18$^a$</td>
<td>3.81$^a$</td>
<td>145</td>
<td>48.86</td>
<td>2.89</td>
<td>.001</td>
<td>.25</td>
</tr>
<tr>
<td>Unattractive</td>
<td>3.64$^a$</td>
<td>2.74$^b$</td>
<td>2.86$^b$</td>
<td>1.92$^c$</td>
<td>164</td>
<td>47.24</td>
<td>2.72</td>
<td>.001</td>
<td>.23</td>
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<tr>
<td>Unintelligent</td>
<td>3.23$^a$</td>
<td>2.73$^b$</td>
<td>4.34$^c$</td>
<td>2.80$^b$</td>
<td>162</td>
<td>63.12</td>
<td>2.42</td>
<td>.001</td>
<td>.28</td>
</tr>
<tr>
<td>Swear words</td>
<td>2.33$^a$</td>
<td>1.64$^b$</td>
<td>4.28$^c$</td>
<td>3.35$^d$</td>
<td>148</td>
<td>100.34</td>
<td>2.30</td>
<td>.001</td>
<td>.40</td>
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<td>Reckless</td>
<td>3.24$^a$</td>
<td>2.19$^b$</td>
<td>4.87$^c$</td>
<td>3.96$^d$</td>
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<td>110.15</td>
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#### Table 2

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<tr>
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<th>Guardian</th>
<th>N</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>$\eta^2_p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft drink</td>
<td>1.32$^a$</td>
<td>1.30$^a$</td>
<td>1.41$^{ab}$</td>
<td>1.24$^{ac}$</td>
<td>195</td>
<td>4.18</td>
<td>2.36</td>
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<td>.02</td>
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<tr>
<td>Condom</td>
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<td>3.72$^b$</td>
<td>5.44$^c$</td>
<td>5.30$^c$</td>
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<td>.32</td>
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#### Table 3

<table>
<thead>
<tr>
<th>Audience</th>
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<th>Direct Model $R^2$</th>
<th>Direct Model $F$</th>
<th>Direct Model Sig.</th>
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<td>335</td>
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<td>Close</td>
<td>353</td>
<td>.050</td>
<td>21.058</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employer</td>
<td>225</td>
<td>.143</td>
<td>12.341</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Guardian</td>
<td>209</td>
<td>.128</td>
<td>10.010</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>
Figure 1

\[
\begin{align*}
\beta_1 &= 189^{***} \\
\beta_2 &= 245^{***} \\
\beta_3 &= .162^{**} \\
\beta_4 &= 285^{***} \\
abla \beta_1 &= .047^{**} \\
\nabla \beta_2 &= .083^{**} \\
\nabla \beta_3 &= .066^{**} \\
\nabla \beta_4 &= .103^{**} \\
N_1 &= 335 \\
N_2 &= 353 \\
N_3 &= 225 \\
N_4 &= 209
\end{align*}
\]

Audience Expectation \( \rightarrow \) Social Anxiety \( \rightarrow \) Brand Interaction Intention

\[
\begin{align*}
\beta_3 &= .159^{**} / \beta_4 = .112^{*} \\
\beta_5 &= 198^{***} / \beta_6 = .116^{*} \\
\beta_7 &= .154^{*} / \beta_8 = .088^{*} \\
\beta_9 &= 199^{**} / \beta_{10} = .096^{*} \\
\abla \beta_1 &= .248^{***} \\
\abla \beta_2 &= 338^{***} \\
\abla \beta_3 &= .410^{***} \\
\abla \beta_4 &= .362^{***}
\end{align*}
\]

\( \quad \)

\( ^{*} = \text{n.s.}(p>.0125), \ *p<.0125 \text{ (Bonferroni Corrected)}; \ **p<.01, \ ***p<.001 \)

Figure 2

Direct Model \( R^2 = .118 \)

Direct Model \( F = 8.125^{***} \)

\( N = 311 \)

\[
\begin{align*}
\beta &= .108^{*} \\
\nabla \beta &= .036^{*} \\
\beta &= .333^{***} \\
\nabla \beta &= .056^{*} / \beta = .092^{*}
\end{align*}
\]

\( ^{*} = \text{n.s.}(p>.05), \ *p<.05, \ **p<.01, \ ***p<.001 \)