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# Brands, Friends, & Viral Advertising: A Social Exchange Perspective on the Ad Referral Processes

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**Abstract**

Advertisers worldwide are designing advertising with an eye toward viral activity particularly within social networking sites such as Facebook. Yet, little is known about the social processes at play when ads are shared. Taking a consumer-centric approach, this study investigates the social processes central to ads going viral within the Social Web. Conducting a national online experiment, the intertwining roles of brand relationships, interpersonal relationships, and sharing motivations in the social exchange of advertising are explored by testing two proposed referral decision-making processes: referral and referral acceptance. Results suggest that brand relationships and interpersonal relationships impact referral of ads within SNSs, and brand relationships interact with sharing motivations to impact decisions; specifically, brand relationships are conduits for ensuring reciprocal altruism in exchange, but their influence is tempered within stronger interpersonal relationships. Practical and theoretical implications are discussed.


*Keywords:* Viral advertising; Viral video; Viral video advertising; Brand relationships; Interpersonal relationships

## Introduction

Viral video (VV) advertising offers brands the ability to create brand messages and seed them through trusted personal contacts (e.g., Facebook fans; Dobele, Toleman, and Beverland 2005; Godes and Mayzlin 2004). With this in mind, advertisers worldwide are designing campaigns with an eye toward encouraging viral activity for their brands (Southgate, Westoby, and Page 2010). For example, *Advertising Age's Top Viral Video Ad Campaigns* chart in 2014 included brands from 22 countries ranging from global brands like *Coca-Cola* to regional brands such as *Thai Life Insurance* (see Visible Measures 2014).

Social networking sites (SNSs) are particularly important VV advertising platforms for two reasons: (1) SNSs contain the interactive, network-based channels for brand video dissemination, and (2) trustworthy consumer–brand relationships can be developed through engagement between consumers, their friends, and brands (Kaplan and Haenlein 2010; Mangold and Faulds 2009). Greater social emphasis by marketers heightens the need to understand the social processes at play when ads "go viral."

In contrast to traditional paid media advertising (e.g., television commercials), the VV earned media environment is characterized by viewer pull and control rather than advertiser push (Hsiao and Chuang 2009). While it is well-documented that interesting content enhances sharing intentions (e.g., Southgate, Westoby, and Page 2010), the literature provides little insight into the role of the brand that originates the content or the interpersonal ties through which the brand content is shared. Interpersonal relationships have been touted by several scholars as important influencers of viral activity (e.g., Chiu et al. 2007), yet VV advertising studies have yet to empirically

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address this in the published literature. Likewise, brands have been widely accepted as active, social actors participating in reciprocal exchange relationships with consumers (e.g., Fournier 1998). However, literature examining the role of consumer–brand relationships in viral advertising is sparse. Specific questions arise including: (1) how does the brand factor into the decision to refer ads to others and accept ads from others? (2) how do interpersonal relationships impact the decision? and (3) do brand and interpersonal relationships interact to influence social processes? Understanding how viral sharing works will help advertisers facilitate viral activity through better program design, more appropriate content creation, and a more informed seeding strategy.

Published viral advertising research to date has focused primarily on creative message effects (Berger and Milkman 2012; Brown, Bhadury, and Pope 2010; Dobele 2007; Golan and Zaidner 2008; Southgate, Westoby, and Page 2010; Teixeira 2012), sharing motivations (Chiu et al. 2007; Phelps et al. 2004), delivery platform effects (Moran and Gossieaux 2010; Woerndl et al. 2008), and reach comparisons to traditional paid media advertising audiences (Nelson-Field, Riebe, and Sharp 2012). These studies exclude two vital actors in the VV advertising social process: the brand and the consumer.

We posit that viral sharing decisions involve two separate social processes: referral and referral acceptance. Referral is the decision to introduce an advertisement to one's online network via posting; referral acceptance is choosing to expose one's self to a referred ad by electing to click on and consume the content. When considering whether or not to refer an ad to his or her online network, the potential referrer's motivations for sharing content and his or her relationship with the featured brand are proposed to impact the decision. However, referral acceptance is equally important in the process. When receiving a referral, consumers must decide whether or not to view content by taking into account the personal contact that is referring the brand content (interpersonal relationship) as well as their own relationship with the brand featured.

## Conceptual Framework & Hypotheses

### *Social Exchange Theory*

Social exchange theory (SET) provides a useful lens for examining viral advertising decision processes because of its application across three key areas: (1) interpersonal relationships, (2) consumer–brand relationships, and (3) content and information sharing. As viral advertising involves brand-generated information dissemination within online interpersonal networks, SET is particularly well suited to conceptualize the phenomenon (see also Hayes and King 2014).

As a social psychology theory, SET's seminal purpose is the conceptualization of how interpersonal relationships are constructed and maintained. Relationships develop over a series of satisfactory interactions between actors wherein reciprocal gift-giving occurs and participating parties equitably benefit (Cook and Yamagishi 1992). In the Facebook context, for example, Actor 1 may post content that Actor 2 "likes" or positively responds to via a comment; subsequently, Actor 2 may post content to which Actor 1 provides positive affirmation and so forth.

From the SET perspective, each exchange, such as this example, entails a perceived cost–benefit analysis whereby social actors evaluate the expected value of the potential exchange based upon their relationships with potential exchange partners (e.g., Frenzen and Nakamoto 1993). Costs and benefits can be both tangible (e.g., future quid pro quo) and intangible (e.g., reputation, self-worth) in nature (Blau 1964). An overall positive and equitable cost–benefit ratio over a series of interactions between Actor 1 and Actor 2 allows each of these people to develop an emotional attachment to their exchange partner generating trust in the relationship (e.g., Molm 1990). Further, each person assigns intrinsic value to their exchange relations using interactions to express themselves (Lawler, Thye, and Yoon 2000). Trust leads to commitment to the relationship as a mechanism to mitigate risk associated with the uncertainty of interacting with unknown exchange partners and to secure continued benefits (Molm, Takahashi, and Peterson 2000).

SET has also been extended to conceptualize brand relationships. The consumer–brand relationship (hereafter CBR) perspective conceptualizes brands as social entities taking on human characteristics and fostering relationships with consumers. Brands are viewed as active relationship partners engaging in reciprocal exchanges creating interdependence with consumers (Fournier 1998). Similar to interpersonal relationships, building CBRs requires multiple satisfactory interactions; brand satisfaction is an antecedent to brand trust through which personal connections to the brand occur. Brand satisfaction and brand trust, then, combine to determine the level of commitment the consumer has to the brand (Hess and Story 2005). Humans anthropomorphize brands and often use brands as a source of self-expression and definition as seen in interpersonal relationships (Bourdieu 1984; Brown 1991). So, just as interpersonal exchanges are functions of a perceived cost–benefit ratio, interactions with brands also involve analysis based upon previous interactions wherein the consumer seeks to maximize benefit and reduce uncertainty (Hess and Story, 2005; Morgan and Hunt 1994).

Brands are more active than ever in CBRs using channels such as Facebook and Twitter to frequently communicate with their customers. As active social partners, the brand and customer collaborate in the initiation, maintenance, and even destruction of the relationship creating interdependence (Fournier 1998). Brand relationships are likely to figure prominently into VV advertising sharing decisions.

The content shared is also crucial to consider. Constant, Kiesler, and Sproull (1994) draw upon SET in proposing an exchange and expressive theory of information sharing. The theory holds that the decision to share information (e.g., online video ad) within a technology-driven environment also involves a cost–benefit analysis wherein sharers seek self-expression and reciprocal benefits provided by relational partners.

In order to maintain relational equity (ensuring future sharing), the person sharing provides content beneficial to the receiver and the receiver supplies the sharer with tangible and intangible benefits. Information exchange is driven by reciprocity and the

acquisition of social benefits as interdependent sharing partners seek to achieve their individual goals. Goals are both pragmatic and self-expressive in nature. General knowledge information content is shared for reciprocal benefits (e.g., future quid pro quo), while expertise is shared to acquire social benefits provided by relational partners (e.g., identity, self-worth; Constant, Kiesler, and Sproull 1994).

As such, Figs. 1 and 2, respectively, illustrate proposed social exchange decision processes for referral and referral acceptance. We conceptualize VV advertising sharing processes as cost–benefit exchange functions. Ad sharing is a pragmatic and expressive behavior wherein interpersonal relationships and brand relationships intertwine with sharing motivations to influence decisions. Referrers and recipients weigh expected intrinsic and extrinsic benefits when making exchange decisions. Interpersonal and brand relationships are each imbued with a level of trust that can help ease uncertainty and strengthen the perception that viral advertising exchanges will be beneficial. In order to understand the process by which brand advertising achieves viral status, it is important to examine both the initial referral process and the acceptance of this referral by the person to whom it is being referred.

### *The Referral Process*

If an ad is to go viral, someone must make the initial decision to refer the ad to an online social network. On Facebook, referral is the act of introducing an ad to the online network from an off-site location (e.g., clicking "share" from the brand's website) or by sharing a brand-sponsored newsfeed ad. Most viral advertising literature to date has focused on passing along viral ads to the exclusion of the initial referral decision (e.g., Chu 2011; Ho and Dempsey 2010; Phelps et al. 2004). The proposed referral decision model posits that the referrer's sharing motivations and relationship with the advertised brand influence the decision to refer the advertisement to his/her online social network (see Fig. 1).

Literature suggests that ad referral is driven by reciprocal altruism wherein the person sharing the ad seeks to help others, but must receive benefits in return (see Kiyonari, Tanida, and Yamagishi 2000). Recipients must receive positive outcomes in terms of content value if referrer reciprocal benefits are to be warranted (e.g., Hsu and Lin 2008). This creates equity and commitment to the relationship greatly facilitating continued sharing behavior (Hennig and Phillips 2012).

Motivation is a key determinant of sharing behavior. Kankanhalli, Tan, and Wei (2005) report that the intrinsic (e.g., enjoyment of helping others) and extrinsic (e.g., reciprocity) benefits people expect to garner as an outcome of sharing content impact sharing behavior. Sharing motivations, then, factor into the cost–benefit analysis of referral decisions. Altruism is well-established within the electronic word-of-mouth literature (hereafter eWOM) as a driver of brand-related sharing (e.g., Smith et al. 2007); however, Hennig-Thurau et al. (2004) note that sharers seek tangible and intangible benefits as well. For example, Taylor, Strutton, and Thompson (2012) illustrate that consumers refer VV ads for self-expression and self-enhancement purposes. The referrer sacrifices time and psychological costs (e.g., concern over negative referral consequences) when referring content; reciprocal benefits must be garnered to balance the exchange and the relationship. Examining knowledge-sharing within blogs, Hsu and Lin (2008) identified four knowledge sharing motivations that intertwine with altruism to impact sharing: *expected reciprocal benefits*, *reputation*, *trust*, *and expected relationships*. These five motivations are likely to impact ad referral decisions. Therefore,

**H1**. The likelihood of referral is positively influenced by the potential referrer's…

**a.** level of *altruistic inten*t in posting
**b.** *expectation of reciprocal benefits*
**c.** desire for *reputational benefits*
**d.** *trust* in their SNS network
**e.** *expectation of relationships.*

Brands are treated as active participants within the Social Web creating messages and communicating regularly with consumers (Mangold and Faulds 2009). Through consistent satisfactory exchanges, consumers develop brand trust which leads to commitment to the CBR (Hess and Story 2005). CBRs are integral to disseminating brand-messages within SNSs as offline trust transfers online thereby enhancing experiences (Ha 2004). Moreover, brand–consumer collaboration has proven to be the most effective approach to message circulation for viral email and SNS environments (Chatterjee 2001; Cho, Huh, and Faber 2014). Within the cost–benefit analysis, strong CBRs

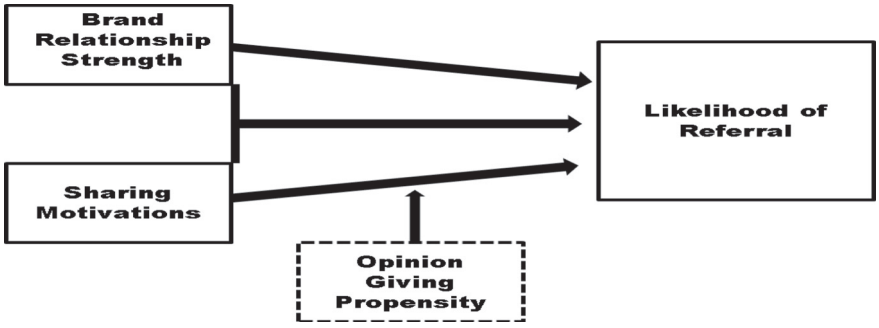


Fig. 1. Referral decision process.

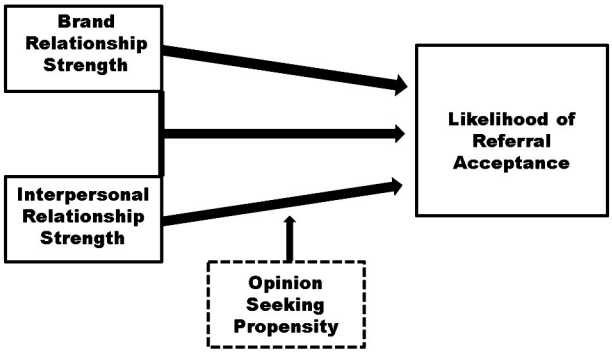


Fig. 2. Referral acceptance decision process.

should induce greater trust that positive outcomes will result from sharing brand content than with weak CBRs. Further, brand relationships are resources of self-definition and expression (Bourdieu 1984). Interaction effects between brand relationship strength and sharing motivations seem likely since brand relationships are resources for such benefits.

**H2**. The strength of the referrer–brand relationship is positively related to likelihood of referral.

**RQ1**. Do referrer–brand relationship strength and sharing motivations interact to affect likelihood of referral?

High proclivity toward opinion-giving behavior has been viewed as an important dimension of traditional word-of-mouth (hereafter WOM) and eWOM (Chu and Kim 2011; Clark and Goldsmith 2005; Feick and Price 1987; Flynn, Goldsmith, and Eastman 1996). Goldsmith and Clark (2006) report a significant relationship between level of market mavenism – the tendency to gather and share product-related information and advice – and online advice giving. Walsh, Gwinner, and Swanson (2004) found that mavenism level is associated with altruism and self-gratification. Reputational benefits are also cited as drivers for opinion-giving (Hsu and Lin 2008; Wasko and Faraj 2005; Zhang and Lee 2012). Within the social media environment, Chu and Kim (2011) found significant relationships between opinion-giving and social network trust, tie strength, and interpersonal normative influence.

From a SET perspective, then, it is logical that the individual's level of opinion-giving propensity (hereafter OGP) moderates the impact of sharing motivations on the referral decision. As the potential referrer weighs the costs and benefits of referral, the importance of influence of each motivation is likely to increase for high OGP referrers. Further, the level of trust embedded within the brand relationship takes on greater influence in a cost–benefit analysis reducing uncertainty regarding exchange outcomes. Therefore, for higher OGP referrers who are arguably more motivated by sharing motivations, brand relationship strength should carry more weight. Thus:

**H3**. The referrer's opinion-giving propensity will moderate the relationship between sharing motivations and likelihood of referral such that sharing motivations will more positively influence likelihood of referral as opinion-giving propensity increases.

**H4**. The referrer's opinion-giving propensity will moderate the relationship between brand relationship strength and likelihood of referral such that brand relationship strength will more positively influence likelihood of referral as opinion-giving propensity increases.

### *The Referral Acceptance Process*

To complete the exchange, the referral must be accepted. Referral acceptance is the decision to choose to expose one's self to a referred ad by clicking on the ad. It is proposed that the recipient–brand relationship and the referrer–recipient relationship intertwine to influence referral acceptance (see Fig. 2). The recipient likely considers his/her relationship with the brand. Brand satisfaction and trust (or lack thereof) derived from prior exchanges will inform the cost–benefit analysis (Hess and Story 2005). Stronger CBRs should enhance perceived outcomes encouraging acceptance as uncertainty is reduced and greater intrinsic and expressive value is ascribed to the brand. Cho, Huh, and Faber (2014) found that advertiser trust influenced pre-exposure ad perceptions and had an indirect impact on attitude toward viral email content and toward the brand. However, a complete view of the CBR influence on referral acceptance is necessary. Hence,

**H5**. The strength of the recipient–brand relationship is positively related to the likelihood of referral acceptance.

Interpersonal relationships are integral to viral advertising effectiveness. Seeding brand messages through personal contacts gives the message more credibility (e.g., Harrison-Walker 2001); this leads to greater influence on consumer expectations (e.g., Anderson and Salisbury 2003), consumer suggestion formation, purchasing decisions (e.g., Richins 1983), brand attitude, and brand judgment (e.g., Godes and Mayzlin 2004).

Residing within interpersonal relationships, tie strength (DeBruyn and Lilien 2008) and trust (Chiu et al. 2007) are interrelated determinants of viral activity. Studies have returned conflicting reports in reference to tie strength and referral acceptance. van Noort, Antheunis, and van Reijmersdal (2012) reported that viral referrals from strong interpersonal ties engendered more positive brand and campaign attitudes among SNS members. However, DeBruyn and Lilien (2008) found that

tie strength impacted message awareness not message consumption in the viral email context.

Trust is integral to information exchange and integration (Jarvenpaa, Knoll, and Leidner 1998) as well as in judging value in peer-to-peer exchanges (Zeng and Reinartz 2003). Trust has been shown to mediate recommender influence effectiveness. The strength of the tie between sender and receiver lends trust and perceived value to the message greatly influencing referral acceptance and passing (Chiu et al. 2007; Phelps et al. 2004). For example, Cho, Huh, and Faber (2014) found that sender trust influenced attention to viral email messages and pre-exposure ad perceptions and indirectly influenced voluntary exposure and attitudes toward content and the brand.

For referral acceptance, the recipient must consider the strength of his/her relationship with the referrer. From a SET standpoint, interpersonal relationship strength (tie strength) is defined by the extent to which a relational partner trusts the other and is, thus, committed to continued exchange with the other. Trust and commitment are borne out of multiple positive reciprocal interactions (Molm 1990). Current research defines interpersonal relationship strength in terms of the level of trust and commitment one partner ascribes to the potential exchange partner. Uncertainty and risk associated with brand information are reduced when the information is transmitted from a close interpersonal source due to a history of satisfactory interactions and perceived similarity (Price, Feick, and Guskey 1995). People are more trusting of and committed to strong interpersonal relationships as exchange partners; cognitive costs are mitigated while emotional attachment grows (Lawler and Thye 1999). Thus, it is likely that recipients are more apt to accept an ad referred from someone with whom they have a strong interpersonal relationship.

**H6**. The strength of the referrer–recipient relationship is positively related to likelihood of referral acceptance.

Cho, Huh, and Faber (2014) report that sender and advertiser trust can supplement one another to aid viral email messaging. Specifically, strong sender trust can influence viral activity regardless of the level of advertiser trust. When trust in the sender is low, however, trust in the advertiser can supplement facilitating viral sharing. Interpersonal and brand relationships likely intertwine to affect referral acceptance.

**RQ2**. Do the recipient–brand relationship and referrer–recipient relationship interact to affect likelihood of referral acceptance?

Opinion-seeking is the co-phenomenon to opinion-giving (Schiffman, Dash, and Dillon 1975); while OGP likely influences referral, opinion-seeking propensity (hereafter OSP) likely influences referral acceptance. Consumers seek opinions to gain information for reducing risk in purchase decisions and to improve standing within social groups (Flynn, Goldsmith, and Eastman 1996). Specifically, Goldsmith and Horowitz (2006) found that people seek opinions in order to maximize product benefits versus cost and gather thoughts from peers to reduce risk. Further, Chiu et al. (2007) found that a recipient's OSP impacts acceptance of eWOM referrals. In terms of SET, OSP of the potential recipient should positively affect the influence of the brand and interpersonal contact on acceptance since relationships are maintained in order to reduce risk (Hess and Story 2005; Molm, Takahashi, and Peterson 2000; Morgan and Hunt 1994). Therefore:

**H7**. The recipient's opinion-seeking propensity moderates the effect of the recipient–brand relationship on likelihood of referral acceptance; the recipient–brand relationship strength will more positively influence likelihood of referral acceptance as opinion-seeking propensity increases.

**H8**. The recipient's opinion-seeking propensity moderates the effect of the referrer–recipient relationship on likelihood of referral acceptance; the referrer–recipient relationship strength will more positively influence likelihood of referral acceptance as opinion-seeking propensity increases.

### *Perceived Risk and Sharing Processes*

Perceived risk may be an important aspect of viral advertising sharing that may affect the brand relationship strength and sharing motivations. All exchanges, social or economic, may be hampered by varying amounts of uncertainty and risk (Corritore, Kracher, and Wiedenbeck 2003; Molm, Takahashi, and Peterson 2000). In the context of VV advertising sharing, brand-generated advertising designed to persuade audiences to purchase a particular product is exchanged. Certain product-classes inherently hold more perceived risk – that is, the innate amount of conflict – than others (Bettman 1973). Consumers commit to trusted exchange partners in order to (1) reduce perceived risk in the exchange environment and (2) preserve the relationship, thus securing safer exchanges in the future (Kollock 1994; Morgan and Hunt 1994; Rice 2002). This has implications for both brand relationships and interpersonal relationships as it related to perceived risk and VV advertising sharing processes.

The marketing literature holds that greater perceived risk in choices yields a greater propensity for the consumer to be loyal to a trusted brand (Sheth and Parvatlyar 1995). More specifically, Chaudhuri and Holbrook's (2002) findings show that perceived product risk is directly related to brand trust that is, in turn, linked to brand outcomes through brand commitment. While no hypothesis is considered related to perceived risk, perceived risk was measured in this study to determine whether it impacted the main independent variables' effect on likelihood of referral.

## Method

### *Experimental Design*

#### *Stimuli Development*

Following Bhatnagar, Misra, and Rao (2000), computers and chocolate candy respectively were chosen as high and low risk product categories. Ad stimuli were created by editing previously viral YouTube videos into 30-second commercials. Stimuli were edited identically such that brand identification occurred only in the final shots (see Fig. 3). Videos at least four years old were selected to reduce likelihood of recall from previous exposure.


Fig. 3. Final shots of ad stimuli videos.

Two pretests were conducted to identify strong–weak brand relationship pairs and ad stimuli. In line with Hess and Story (2005), brand relationship strength (BRS) in this study is defined in terms of brand satisfaction and brand trust; thus, BRS was measured and computed as a composite of brand satisfaction and brand trust. In pretest 1 undergraduates (N = 212) at a large Southeastern university were surveyed. Ad stimuli for the high and low risk categories were found to produce adequate $A_{Ad}$ and likelihood of referral. Apple (M = 5.45) and Acer (M = 3.67) were identified as the strong–weak brand pairing for the high risk category ($t(56) = 11.16$, $p < .000$). Failure to identify an appropriate brand pairing for lower risk products prompted pretest 2 wherein a sample of undergraduates (N = 62) identified Hershey (M = 4.57) and Chase Candy (M = 3.85) as an appropriate strong–weak brand pairing for the lower product risk category ($t(62) = 5.363$, $p < .000$). Noteworthy is that familiar brands were used. As brand relationships develop through multiple interactions, familiar brands are necessary in order to capture strong and weak relationships. Pretesting and manipulation checks were employed to verify appropriate brand relationship strengths within conditions.

Facebook news feed notifications were developed for each ad stimulus within Facebook for authenticity. Notifications included a thumbnail brand logo, video title, and a standardized description reading "*Check out this [Brand X] commercial.*" The referring party's name (the strong/weak interpersonal relationship strength; hereafter IRS) was displayed in the question text directly above the notification.

*Design and Participants*

For the main study, U.S. Facebook users ages 18–34 (M = 27.9; N = 404; 58% female) were recruited to participate in a 2 (perceived risk) × 2 (brand relationship strength) × 2 (interpersonal relationship strength) online experiment via a national panel. Panelists opted to participate through vendor homepages and third-party lists and were paid a cash incentive of $0.80 based upon questionnaire length and sample characteristics. Panelists were screened for regular Facebook and product category use. After discarding incomplete sessions, the adjusted response rate was 24.5%. Kwak and Radler (2002) report 18% average response for the initial mailing of web-based questionnaires making the current response rate above average.

*Procedure*

After opting in, participants were redirected to the online questionnaire. Seven-point Likert-type scales were used to measure sharing motivations and opinion-giving and -seeking propensities (see Table 1 for major factors and alphas). Participants were next randomly assigned to a strong or weak interpersonal relationship condition and subsequently prompted to identify a strong or weak interpersonal relationship partner with whom they have appropriate amounts of repeated interaction, reciprocity, and emotional attachment (Hinde 1995). Composite scores of dyadic trust and interpersonal commitment scales constituted IRS (Larzelere and Huston 1980; Rusbult, Martz, and Agnew 1998).

After a brief distraction task, subjects were randomly and evenly assigned into one of four brand–risk conditions within respective IRS conditions counterbalancing perceived risk and brand relationship strength. They were shown a Facebook notification and asked to rate their likelihood of clicking on the video supposing the strong/weak IRS shared it via Facebook news feed. In a separate section, participants were asked to watch an embedded ad stimulus within an assigned brand condition and rate the likelihood of posting the video ad on Facebook. The product category for this section was the opposite product

Table 1
Major factor scales.

| Factors | Items | Source |
|---|---|---|
| Brand relationship strength | | |
| Brand satisfaction | I feel I know what to expect from Brand X. | Hess and Story (2005) |
| (α = .81 to .92) | I am usually/feel that I would be satisfied with Brand X products. | |
| | I am usually satisfied with my experience with Brand X/I feel that I would be satisfied with my experience with Brand X. | |
| Brand trust | Brand X is primarily interested in its own welfare. [a] | Larzelere and Huston (1980) |
| (dyadic trust) | There are times when Brand X cannot be trusted. [a] | (adapted) |
| (α = .80 to .94) | Brand X is perfectly honest and truthful. | |
| | I feel that I can trust Brand X completely. | |
| | Brand X is truly sincere in its promises. | |
| | I feel that Brand X does not show me enough consideration. [a] | |
| | Brand X treats me fairly and justify. | |
| | I feel that Brand X can be counted on to help me. | |
| Interpersonal relationship strength | | |
| Interpersonal commitment | I am committed to maintaining my relationship with Person X. | Rusbult, Martz, and Agnew (1998) |
| (α = .89/.86) | I want our relationship to last for a long time. | |
| | I feel very strongly linked to Person X. | |
| | It is likely that I will delete this person as a Facebook friend within the next year. | |
| | I would not feel very upset if our relationship were to end in the near future. | |
| | I want our relationship to last forever. | |
| | I am oriented toward continuing this relationship long-term. | |
| | Our relationship is likely to end in the near future. | |
| Dyadic trust scale | Person X is primarily interested in his (her) own welfare. | Larzelere and Huston (1980) |
| (α = .89/.86) | There are times when Person X cannot be trusted. | |
| | Person X is perfectly honest and truthful with me. | |
| | I feel that I can trust Person X completely. | |
| | Person X is truly sincere in his (her) promises. | |
| | I feel that Person X does not show me enough consideration. | |
| | Person X treats me fairly and justify. | |
| | I feel that Person X can be counted on to help me. | |
| Referrer sharing motivations | | |
| Altruism [a] | Posting and commenting on content is helpful to others with similar interests. | Hsu and Lin (2008) |
| (α = .86, r = .758) | I enjoy helping others by posting and commenting on content. | |
| Expected benefits [a] (reciprocity) | I find that posting and commenting on content can be mutually helpful. | |
| (α = .88) | I find my participation on SNSs can be advantageous to me and my contacts. | |
| | I think that posting and commenting on people's content increases the likelihood of people do the same for me. | |
| Reputation | I earn respect from others by posting and commenting. | |
| (α = .80, r = .871) | Posting/commenting would harm my personal reputation in the SNS. | |
| | Posting and commenting would improve my status on the SNS. | |
| Trust | I trust SNSs content to be true. | |
| (α = .90, r = .814) | People on SNSs are trustworthy. | |
| Expected relationships | Sharing content and opinions on SNSs would strengthen the tie between other | |
| (α = .92) | SNS users and me. | |
| | Sharing content and opinions on SNSs would create new relationships with new friends on SNSs. | |
| | My content and opinion sharing would expand the scope of my association with other users on SNSs. | |
| | My content and opinion sharing would create strong relationships with members who have common interests. | |
| Likelihood of referral | Unlikely/likely | Sohn (2009) |
| (α = .73 to .87) | Improbable/probable | (adapted) |
| L/0 referral acceptance | Doubtful/doubtless | |
| (α = .70 to .89) | Unpromising/promising | |
| Opinion giving propensity | I often persuade my contacts on the SNS to buy products that I like. | Chu and Kim (2011) |
| (α = .94) | My contacts on the SNS pick their products based on what I have told them. | (Adapted from Flynn, Goldsmith, |
| | On the SNS, I often influence my contacts' opinions about products | and Eastman 1996) |
| Opinion seeking propensity | When I consider new products, I ask my contacts on the SNS for advice. | Chu and Kim (2011) |
| (α = .85) | I like to get my contacts' opinions on the SNS before I buy new products. | (Adapted from Flynn, Goldsmith, |
| | I feel more comfortable choosing products when I have gotten my contacts' opinions on them on the SNS. | and Eastman 1996) |

[a] Combined into reciprocal altruism.

Table 2
Descriptive statistics and correlations between independent variables in the referral and referral acceptance processes.

| Variable | M | S.D. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|
| 1. BRS | 4.51 | 1.09 | **.28** | | | | | | |
| 2. Altruism | 5.00 | 1.19 | .27 | **.58** | | | | | |
| 3. Expected benefits | 5.05 | 1.23 | .25 | .83 | **.59** | | | | |
| 4. Reputation | 4.42 | 1.34 | .26 | .64 | .71 | **.48** | | | |
| 5. Trust | 3.97 | 1.41 | .29 | .48 | .45 | .56 | **.47** | | |
| 6. Expected relationships | 4.73 | 1.17 | .27 | .73 | .74 | .74 | .63 | **.60** | |
| 7. IRS | 4.93 | 1.33 | .21 | .28 | .21 | .07 | .12 | .16 | **.22** |

*Notes*: The square root of the average variance explained (AVE) is reported on the diagonals. BRS = brand relationship strength, IRS = interpersonal relationship strength.

category of the category assigned in the previous referral acceptance section. Within all conditions, brand relationship strength was manipulated using strong and weak brand relationship strength pairs identified in pretesting; BRS was computed as a composite score of brand satisfaction and brand trust (Hess and Story 2005; Larzelere and Huston 1980). Table 2 reports means and standard deviations for as well as correlations between variables; the square root of the average variance explained (AVE) is reported on the diagonal (Fornell and Larcker 1981). Average sessions lasted just under 20 minutes.

## Analysis and Results

### *Manipulation Checks*

#### *Brand Relationship and Interpersonal Relationship Strength*

Independent samples t-tests indicated that statistically significant brand relationship strength differences were present: Apple (M = 4.78)–Acer (M = 4.09; t (204) = 4.468, p < .001), Hershey (M = 5.17)–Chase Candy (M = 3.95; t (196) = 10.278, p < .001). For interpersonal relationship strength, identified strong relationships (M = 5.80) were significantly stronger than weak identified relationships (M = 4.09; t (402) = 16.829, p < .001).

#### *Perceived Risk*

Within the referral process, MANOVA results revealed no main effects for perceived risk on the influence of brand relationship strength or sharing motivations (Wilks' λ = .987, F (6, 397.000) = .865, p = .521). Similarly, MANOVA results indicated that perceived risk failed to produce a significant multivariate effect on BRS and IRS within the referral acceptance process (Wilks' λ = .996, F (2, 401.000) = .743, p = .476). (Please see appendices A–C.) Therefore, perceived risk was not included as a variable in subsequent analyses, and data were collapsed across risk categories.

Table 3a
Final regression analysis: main effects of brand relationship strength, sharing motivations, and opinion-giving propensity on likelihood of referral.

| Predictors | *B* | *SE B* | β | t |
|---|---|---|---|---|
| Opinion giving propensity | .291 | .050 | .276 | 5.769* |
| Brand relationship strength | .526 | .072 | .341 | 7.276* |
| Reciprocal altruism | .328 | .068 | .233 | 4.286* |
| Reputation | .290 | .061 | .230 | 4.743* |
| Trust | .364 | .057 | .305 | 6.426* |
| Expected relationships | .381 | .096 | .266 | 5.527* |

*Notes*: * denotes values wherein p < .05.

### *The Referral Process*

Regression analyses were employed to examine the remainder of the referral process. All variables were centered prior to analyses. Additionally, a confirmatory factor analysis was conducted to test for discriminant validity using AMOS; scales appropriately discriminated with the exception of altruism and expected benefits (TLI = .957, CFI = .963, RMSEA = .035). The correlation of altruism and expected benefits (r = .83, p < .001) was interpreted as illustrating the previously mentioned influence of reciprocal altruism on referral decisions (Kiyonari, Tanida, and Yamagishi 2000). As such, the two variables were combined in a new reciprocal altruism variable which was tested for its influence on the referral process. Table 3a reports regression statistics for the direct independent variable relationships with LoR within the referral process. Brand relationship strength ($R^2$ = .116) and sharing motivations exhibited significant relationships with likelihood of referral: reciprocal altruism ($R^2$ = .054), reputation ($R^2$ = .053), trust ($R^2$ = .093), and expected relationships ($R^2$ = .071). The proposed moderator, opinion-giving propensity was also significantly and positively related to LoR ($R^2$ = .074). H1a–e was supported with the caveat that altruism and expected benefits were combined; H2 was supported.

Hierarchical multiple regression analyses were employed to investigate OGP moderation and hypothesized interactions between BRS and sharing motivations; subsequently, spotlight analysis was employed to probe significant interactions. Table 3b reports hierarchical regression and spotlight analysis statistics.

OGP moderation indicated that OGP significantly moderated relationships between LoR and brand relationship strength and trust, respectively. Interactions were probed per Aiken, West, and Reno (1991) examining regression models at −1 standard deviation (low) and +1 standard deviation (high) from the moderator mean (see also Irwin and McClelland 2003). Findings show that if the potential referrer has a strong relationship with the brand, opinion-giving propensity makes little difference in the decision to refer ads; however, when brand relationship strength is weak, the propensity of the potential referrer to give their opinion garners more influence in the referral decision (see Fig. 4). A comparison of the slopes from both models supports this interpretation (z = 1.8767, p < .001). For trust, the models indicated that low OGP had negligible impact on the trust–LoR relationship whereas trust's influence on referral significantly increased when OGP was high (see Fig. 5; z = 4.2756, p < .001). H3 was partially supported as only the trust–LoR relationship was moderated. H4 was supported.

RQ1 asked if interactions between brand relationship strength and sharing motivations affect likelihood of referral. BRS significantly interacted with three sharing motivations to impact LoR: reciprocal altruism, reputation, and expected relationships.

Table 3b
Summary of final regression analyses examining the interaction between sharing motivations and brand relationship strength (BRS), and with opinion-giving propensity (OGP) on likelihood of referral.

| Predictors | *B* | *SE B* | β | T | Tolerance | VIF |
|---|---|---|---|---|---|---|
| Constant | −.057 | .088 | | −0.655 | | |
| Reciprocal altruism* | .215 | .080 | .152 | 2.690 | .705 | 1.419 |
| RecAlt × OGP | .062 | .039 | .078 | 1.581 | .925 | 1.081 |
| Constant | −.062 | .090 | | −.693 | | |
| Reputation* | .157 | .074 | .125 | 2.119 | .658 | 1.521 |
| REP × OGP | .052 | .034 | .074 | 1.519 | .967 | 1.034 |
| Constant | −.130 | .087 | | −1.495 | | |
| Trust* | .243 | .066 | .203 | 3.677 | .705 | 1.418 |
| TR × OGP* | .107 | .031 | .160 | 3.422 | .991 | 1.009 |
| High* | .415 | .079 | .347 | 5.225 | | |
| Low | .071 | .086 | .060 | 0.825 | | |
| Constant | −.073 | .088 | | −.827 | | |
| Expected relationships* | .259 | .082 | .180 | 3.144 | .684 | 1.463 |
| REL × OGP | .071 | .037 | .092 | 1.913 | .974 | 1.026 |
| Constant | −.041 | .079 | | −.525 | | |
| Brand relationship | | | | | | |
| Strength* | .430 | .073 | .279 | 5.891 | .927 | 1.078 |
| BRS × OGP* | .094 | .041 | .106 | 2.312 | .987 | 1.013 |
| High* | .524 | .080 | .340 | 6.541 | | |
| Low* | .337 | .087 | .218 | 3.876 | | |
| Constant | −.063 | .078 | | −.801 | | |
| BRS* | .414 | .073 | .269 | 5.643 | .903 | 1.107 |
| Reciprocal altruism | .145 | .075 | .102 | 1.916 | .717 | 1.394 |
| BRS × RecAlt* | .177 | .053 | .152 | 3.307 | .972 | 1.029 |
| High* | .524 | .080 | .340 | 6.541 | | |
| Low* | .337 | .087 | .218 | 3.876 | | |
| Constant | −.071 | .078 | | −.918 | | |
| BRS* | .417 | .073 | .271 | 5.739 | .913 | 1.096 |
| REP | .093 | .070 | .074 | 1.329 | .663 | 1.508 |
| BRS × REP* | .189 | .048 | .179 | 3.948 | .993 | 1.007 |
| High* | .706 | .094 | .458 | 7.503 | | |
| Low | .185 | .101 | .120 | 1.838 | | |
| Constant | −.038 | .079 | | −.480 | | |
| BRS* | .401 | .074 | .260 | 5.449 | .900 | 1.111 |
| TR* | .182 | .066 | .152 | 2.763 | .677 | 1.476 |
| BRS × TR | .084 | .047 | .082 | 1.778 | .978 | 1.023 |
| Constant | −.071 | .078 | | −.920 | | |
| BRS* | .410 | .073 | .266 | 5.643 | .909 | 1.100 |
| REL* | .223 | .080 | .156 | 2.799 | .653 | 1.531 |
| BRS × REL* | .206 | .053 | .180 | 3.928 | .958 | 1.044 |
| High* | .688 | .092 | .447 | 7.483 | | |
| Low | .170 | .098 | .110 | 1.740 | | |

*Notes*: SMs = sharing motivations, BRS = brand relationship strength, OGP = opinion-giving propensity, OSP = opinion-seeking propensity, IRS = interpersonal relationship strength, LoR = likelihood of referral.
All data based upon centered variables; *p < .05.

Interactions were again probed. Figs. 6–8 illustrate the interactions. With respect to reciprocal altruism, the effect of BRS was significantly stronger at high levels relative to low levels (z = 3.7520, p < .001). Interestingly, the inverse is true for reputation and expected relationship sharing motivations; BRS exerted significantly more influence on referral when building and maintaining reputation and relationships was less of a driver than when doing so was more important to potential referrers (REP: z = 5.2985, p < .001; REL: z = 5.2462, p < .001). Thus, RQ1 was answered with mixed results.

Findings suggest that reciprocal altruism is a driver for referring product advertising. Further, the brand relationship

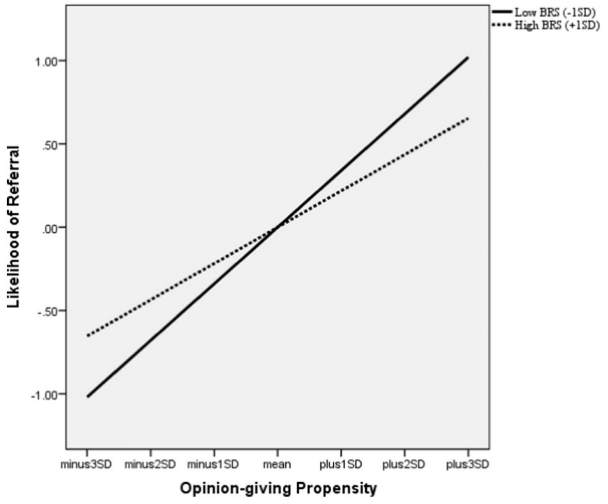


Fig. 4. Two-way interaction between brand relationship strength and opinion-giving propensity on likelihood of referral.

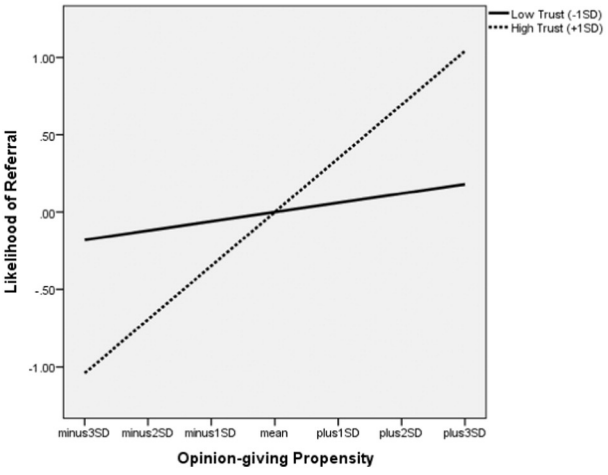


Fig. 5. Two-way interaction between trust and opinion-giving propensity on likelihood of referral.

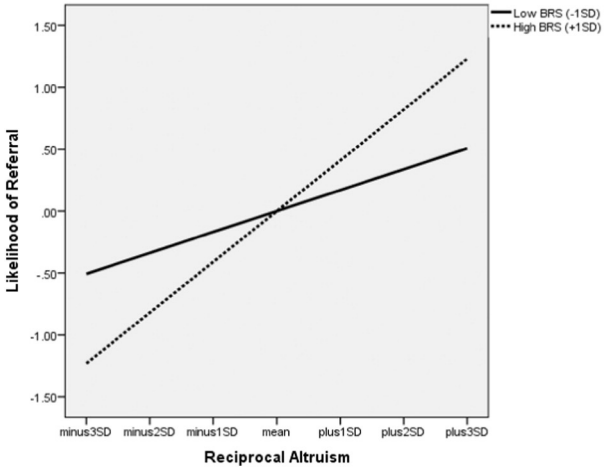


Fig. 6. Two-way interaction between brand relationship strength and reciprocal altruism on likelihood of referral.

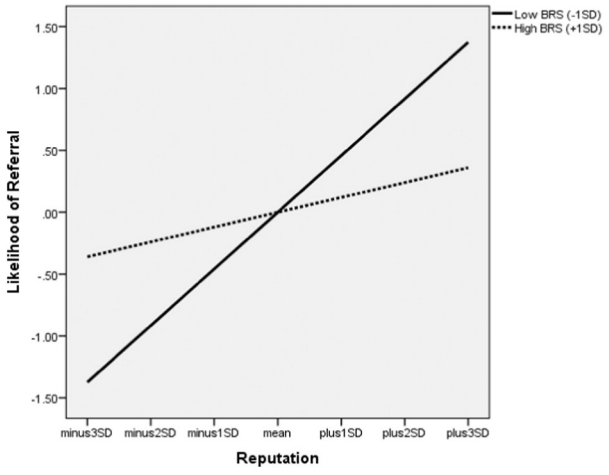


Fig. 7. Two-way interaction between brand relationship strength and reputation on likelihood of referral.

not only directly impacts referral, but is part of the value analysis interacting with sharing motivations. The additional finding that perceived risk had no significant impact speaks to the robustness of the results regarding brand relationship strength and sharing motivations.

### *The Referral Acceptance Process*

MANOVA yielded positive, statistically significant relationships with LoRA for BRS and IRS; H5 and H6 were supported. While OSP was positively, significantly related to LoRA, no significant OSP moderation was present. H7 and H8 were rejected. Table 4 reports regression coefficients; direct independent variable results are displayed followed by hierarchical multiple regression analysis statistics from hypothesis tests for proposed interaction and moderation effects. Subsequently, an ANCOVA analysis illustrated main effect for brand relationship strength and interpersonal relationship strength on likelihood of referral acceptance; however, no significant BRS × IRS interaction was found (RQ2). Table 5 contains ANCOVA results.

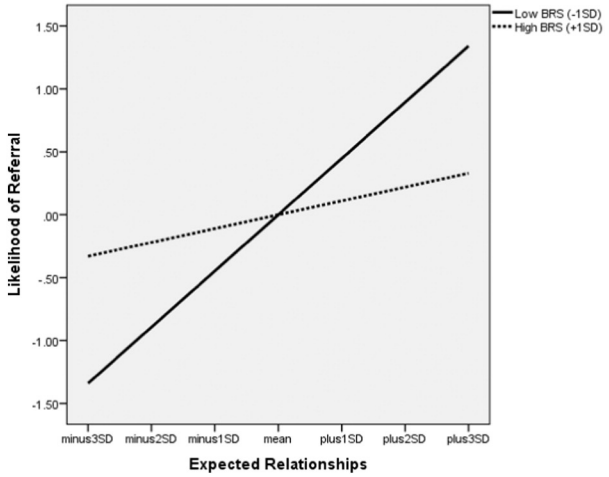


Fig. 8. Two-way interaction between brand relationship strength and expected relationships on likelihood of referral.

Table 4
Final multiple regression analyses: likelihood of referral acceptance.

| IVs & interaction terms | *B* | *SE B* | β | T | Tolerance | VIF |
|---|---|---|---|---|---|---|
| OSP | .285 | .051 | .268 | 5.576 * | | |
| BRS | .566 | .073 | .359 | 7.704 * | | |
| IRS | .522 | .059 | .405 | 8.874 * | | |
| Constant | .002 | .082 | | .021 | | |
| Brand relationship strength | .480 | .076 | .304 | 6.282 * | .899 | 1.112 |
| BRS × OSP | −.003 | .040 | −.004 | −.080 | .997 | 1.003 |
| Constant | −.005 | .077 | | −0.64 | | |
| Interpersonal relationship strength | .484 | .058 | .375 | 8.367 * | .981 | 1.020 |
| IRS × OSP | .016 | .035 | .021 | .470 | .996 | 1.004 |

*Note*: OSP = opinion seeking propensity, BRS = brand relationship strength, IRS = interpersonal relationship strength.
* $p < .05$.

## Summary and Discussion

Viral advertising is a global phenomenon that is not yet fully understood by brands and researchers. The current research tests two models of sharing decisions vital to viral advertising:

Table 5
Summary of analysis of covariance (ANCOVA): likelihood of referral acceptance.

| Source | Sum of squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Corrected model | 264.902 | 4 | 66.225 | 28.410 | .000 |
| Intercept | .003 | 1 | .003 | .001 | .971 |
| OSP | 71.866 | 1 | 71.866 | 30.830 | .000 * |
| IRS | 152.635 | 1 | 152.635 | 65.480 | .000 * |
| BRS | 25.800 | 1 | 25.800 | 11.068 | .001 * |
| IRS × BRS | .000 | 1 | .000 | .000 | .992 |
| Error | 930.083 | 399 | 2.331 | | |
| Total | 1194.984 | 404 | | | |
| Corrected total | 1194.984 | 403 | | | |

*Notes*: OSP = opinion seeking propensity, BRS = brand relationship strength, IRS = interpersonal relationship strength.
$R^2 = .222$.
* $p < .05$.

Table 6
Summary of overall results.

| Decision process | Hyp. | Description | Results |
|---|---|---|---|
| Referral process | H1a–e | SMs? ➡ LoR | Supported |
| | H2 | BRS ➡ LoR | Supported |
| | RQ1 | BRS × SMs ➡ LoR? | Partially affirmed (ALT, EB, REP, REL) |
| | H3 | SMs × OGP ➡ LoR | Partially supported TR only |
| | H4 | BRS × OGP ➡ LoR | Supported |
| Referral acceptance process | H5 | BRS ➡ LoRA | Supported |
| | H6 | IRS ➡ LoRA | Supported |
| | RQ2 | BRS × IRS ➡ LoRA | Not affirmed |
| | H7 | BRS × OSP ➡ LoRA? | Not supported |
| | H8 | IRS × OSP ➡ LoRA | Not supported |

*Notes*: SMs = sharing motivations, BRS = brand relationship strength, OGP = opinion-giving propensity, OSP = opinion-seeking propensity, IRS = interpersonal relationship strength, LoR = likelihood of referral, LoRA = likelihood of referral acceptance.

referral and referral acceptance. Table 6 summarizes the results. The results provide evidence that ad referral is a process driven by reciprocal altruism wherein consumers seek to help others by sharing, but engage in a cost–benefit analysis ensuring tangible and intangible benefits will be returned. Brand relationships play an active role in the cost–benefit assessment impacting referral directly and by intertwining with sharing motivations. In terms of referral acceptance, brand relationships and interpersonal relationships directly influence acceptance of viral ad referrals. Further, perceived risk associated with the product category did not significantly impact either process speaking to the robustness of the models.

### *The Referral Process*

Brand relationship strength was found to consistently impact the decision to refer an ad to the online social network via posting. Sharing motivations also factored in directly influencing referral decision as well as through interactions with BRS. In general, brand relationships and reciprocal altruism drive ad referral decisions directly and intertwine to significantly strengthen influence on those decisions. However, BRS takes on a lesser role when building and maintaining reputation and relationships motivates referrers.

Four sharing motivations positively and directly influenced the likelihood of referring an ad within Facebook networks: reciprocal altruism, reputation, trust, and expected relationships. This combination of motivations suggests that viral advertising sharing behavior is partially a function of reciprocal altruism consistent with previous eWOM findings (e.g., Hemetsberger 2001). While participants shared ads to help others, they also expect tangible and intangible rewards from the online social network in return. Further, ad referrals were used to build and maintain relationships. It is not surprising, then, that trust weighed heavily into the willingness to refer an ad. Trust is paramount when reciprocity is expected and is a precursor and principal component of relationships (e.g., Molm, Takahashi, and Peterson 2000). As evidence, trust was significantly more important for referral when potential referrers exhibit high propensity for giving opinions; the online network must be trusted to return benefits. These findings lend credibility to social exchange theory as a lens for examining viral advertising.

The impact of the brand relationship on referral likelihood is moderated by potential referrers' driving motivation for sharing. On the one hand, referral is driven by reciprocal altruism. Stronger brand relationships induced higher trust in the ad referral's ability to produce mutually beneficial outcomes for the referrer and recipient. Thus, the referrer was more inclined to share an ad with his/her online social network if the brand relationship was strong. The findings suggest that brand relationship strength was more influential when reciprocal altruism was considered. Brand relationships, then, help ensure positive outcomes for receiver and recipient.

However, when reputational and relational motivations become important, the brand relationship impact is tempered. From social exchange and consumer–brand relationship perspectives, perhaps people share ads for which strong brand relationships exist in order to generate positive initial interactions within their network; once those interactions build into a more cohesive relationship, though, the brand relationship effect is slightly diminished as other factors are taken into account to protect the referrer's reputation and relationships. The practical implication would be that loosely-knit social networking platforms (e.g., Twitter) should be used for awareness whereas tighter-knit SNSs (e.g., Facebook) may be better for higher order persuasion effects. Being outside of the scope of the present research, future research should probe this further.

### *The Referral Acceptance Process*

The referral acceptance process is arguably the more important of the two processes for viral advertising. If the referral is not accepted, the viral chain stops. Regardless of perceived risk, interpersonal relationships and brand relationships strongly, positively impacted the decision to accept viral advertising referrals within SNSs. OSP also influences acceptance.

The study represents the first study to examine and establish significant links between brand and interpersonal relationships and viral advertising acceptance. Cho, Huh, and Faber (2014) examined the impact of sender and advertiser trust on acceptance of viral email finding only indirect effects for sender trust on voluntary message exposure. The present research takes into account the whole of each relationship type; the results indicate positive, direct effects for each on the acceptance decision.

In terms of the brand, the difference in findings between studies might be due to the inclusion of the brand satisfaction factor along with brand trust in our study versus the Cho, Huh, and Faber (2014) study. Brand satisfaction is functionality driven whereas brand trust is emotion-based (Hess and Story 2005). Perhaps each influences the referral decision. Noteworthy also is that Cho, Huh, and Faber (2014) used a tax preparation service as the object brand in the study; since brand trust is emotion-based, it is plausible that a different product category would have elicited more emotion and increased the impact of brand trust on message acceptance.

In addition, interpersonal relationships have long been assumed to influence viral advertising acceptance. Extant research has yet to examine totality of the interpersonal relationship, though. Cho, Huh, and Faber (2014) find indirect sender trust effects on message acceptance; however, the research excludes interpersonal commitment on the part of the potential recipient to the relationships with the sender. It is possible that, when referral recipients are committed to maintaining a relationship with the referring party there is a greater sense of obligation to consume the content in order to maintain relational equity and ensure future content exchanges with the referrer (see Molm 1990). The sharing environment may also impact acceptance in terms of both relationship types. In a SNS versus an email environment, the disparate associated uses and gratifications and communication dynamic (e.g., one-to-many versus one-to-one) may alter acceptance decisions. Further research is needed to explicate.

*Theoretical and Managerial Implications*

The findings of this research have several theoretical and managerial implications. From a theoretical standpoint, current research takes an important step in disentangling how brand relationships, interpersonal relationships, and sharing motivations intertwine in the viral advertising decision-making processes of referrers and recipients. For managers, findings provide key insights into how and when each of these factors impacts viral activity allowing for a better understanding of how to approach campaigns when viral success is a goal.

This study provides evidence that the social processes of viral video advertising within SNSs are consistent with social exchange relationships. In the referral decision-making process, reciprocal altruism and reputation enhancement are important indicators; however, expected relationships and trust are as well. The implication is that the referring party is aware of the outcomes for the recipient as well as him/herself. Referring ads perceived as helpful to the recipient creates equity in the transaction which leads to trust and, in turn, a committed relationship. Even when opinion-giving propensity outweighs these benefits, trust is even more important as is the desire to strengthen relationships.

This research extends social exchange theory by illustrating that social exchange principles are legitimate in the one-to-many communication exchange environment of SNSs. Evidence provided shows that people refer ads on SNSs for the purpose of positively affecting relationships with interpersonal ties. The power of those interpersonal ties comes to fruition in referral acceptance where they have significant impact even if the recipient is not prone to seeking opinions via SNSs.

Findings support the customer–brand relationship perspective in the viral advertising context. Brand relationships are impactful for referral and referral acceptance decisions. Implications are that (1) brand relationships are active in cost–benefit analyses, (2) brand relationship strength influences the perceived value of the ad, (3) strong brand relationships alleviate ad referral risks communicating altruistic intent and ensuring reciprocal benefits, and (4) the impact of brand relationships on viral sharing is tempered by reputational and relational concerns.

Constant, Keisler, and Sproull's (1994) notion of an exchange and expressive theory of information sharing is supported by the present findings. The conceptualization posits that information sharing is a form of exchange which closely follows the propositions of social exchange theory. Through information sharing, value is created for both parties and sharing relationships are built on successful exchanges wherein both the referrer and recipient garner equitable value (Hall 2001). Information sharing involves rational economic benefits and social benefits. Altruism and expected benefits were key determinants of referral. Brand information sharers appear to take into account their personal exchange outcomes as well as those of their partners. Economic (expected benefits) and social benefits (reputation) impact the cost–benefit analysis of viral advertising within the Social Web.

There are several managerial implications from this research. First and most importantly, it is clear that brand relationships matter in viral advertising for both the decision to refer and to accept ads. Brands should work to build and maintain strong relationships with consumers in the Social Web through ongoing, reciprocal exchanges (e.g., continual posting of valued content). If multiple beneficial exchanges can be orchestrated, relationships can be developed and leveraged for viral advertising purposes. Specifically, with an understanding of the roles the brand and sharing motivations play in ad referral, advertisers should craft social media brand promotions that encourage sharing by targeting those tangible and intangible benefits for the referrers. Also important is that advertisers create content containing value for the referrer and his/her online social network. This value could range from humorous/entertaining content to unique product demonstrations and entertainment depending on the target audience. Doing so will engender greater trust and, hence, greater likelihood of sharing future brand content. This suggests that advertisers should invest resources to identify and understand their loyal target audiences in order to create value for these audiences to turn them into brand advocates.

Initial seeding of potential viral campaigns should take into account how brand relationships intertwined with sharing motivations. Brand relationships carried more weight in referral decisions when reciprocal altruism was a primary influence; however, when reputation and relationship building were priorities, brand relationship influence lessened. This suggests that more loosely-knit sharing environments (e.g., Twitter) should be used for viral dissemination when exposure and awareness are objectives. On the other hand, more closed networks (e.g., Facebook, online brand communities) should be employed when higher-order persuasion is needed.

These findings raise a variety of questions to be addressed in future research. Since brand and interpersonal relationships impact viral advertising sharing, future research must begin exploring the implications for each. What positive and negative effects does sharing viral advertising have on each type of relationship? How does the intertwining of the two impact each? What does this mean for brand managers and marketing communication practitioners? This new area consumer–brand relationship research should continue to be explored.

## Limitations

As with all studies, the findings of this research have limitations. First, participants for the study were adult Facebook users age 18–34. While appropriate for this study, future research should replicate the findings across age groups and platforms.

A difficulty of research in the SNS domain is gaining access necessary to observe actual sharing behavior rather than self-report data as used in this study. Future research should include a longitudinal field experiment similar to the e-mail-based experiment of Cho, Huh, and Faber (2014) to capture behavior and motivations. A more realistic setting and possible unforeseen insights would be possible.

In order to identify ad stimuli worthy of sharing, videos that had previously gone viral were edited and used as the basis for new ad stimuli. Novelty is an important factor in the decision to share an ad (Hennig and Phillips 2012). If the edited stimuli seemed familiar to the participants, their likelihood of referral

may have been decreased. However, it should be noted that such a case would not influence the effects of independent variables on referral intentions.

Demographic differences in referral propensities should also be explored in future research. For example, gender differences may have some effect on referral propensities as found in Hennig and Phillips (2012). It is possible that ad sharing behavior may also follow this pattern.

Finally, the models should be further explored to understand how the processes interact within one another and how model elements interact with creative determinants. It is plausible that, for example, outcomes of referral acceptance may provide feedback that influences further referral and referral acceptance decisions. Further, creative factors were controlled for presently to isolate the focal effects of brand relationship strength and interpersonal relationship on referral and acceptance. However, the factors may influence one another in a variety of ways. For example, great creative may supplement shortcomings of the brand relationship or interpersonal relationship. The brand may influence how the creative is perceived as well.

Despite limitations, the insights provided are valuable to the understanding of how brands and friends intertwine in the social processes involved in viral advertising sharing. Brand and interpersonal relationships are both integral parts of "going viral." Distinct viral processes are investigated. This study provides a first look into these issues.

## Appendix A. Descriptive statistics associated with the manipulation checks of brand relationship strength (BRS) and interpersonal relationship strength (IRS) by risk level

| | High perceived risk | | Low perceived risk | |
|---|---|---|---|---|
| | M | SD | M | SD |
| BRS | 4.45 | 1.15 | 4.57 | 1.03 |
| IRS | 4.95 | 1.34 | 4.91 | 1.33 |

## Appendix B. Multivariate analysis of variance (MANOVA): effect of perceived risk on influence of brand relationship strength and sharing motivations on the referral process

| Effect | Value | F | Hyp. df | Error df | Sig. | Partial eta squared | Observed power |
|---|---|---|---|---|---|---|---|
| *Intercept* | | | | | | | |
| Pillar's trace | .966 | 1883.633 | 6.000 | 397.000 | .000 | .966 | 1.000 |
| Wilks' lambda | .034 | 1883.633 | 6.000 | 397.000 | .000 | .966 | 1.000 |
| Hotelling's trace | 28.468 | 1883.633 | 6.000 | 397.000 | .000 | .966 | 1.000 |
| Roy's largest root | 28.468 | 1883.633 | 6.000 | 397.000 | .000 | .966 | 1.000 |
| *Risk* | | | | | | | |
| Pillar's trace | .013 | .865 | 6.000 | 397.000 | .521 | .013 | .343 |
| Wilks' lambda | .987 | .865 | 6.000 | 397.000 | .521 | .013 | .343 |
| Hotelling's trace | .013 | .865 | 6.000 | 397.000 | .521 | .013 | .343 |
| Roy's largest root | .013 | .865 | 6.000 | 397.000 | .521 | .013 | .343 |

## Appendix C. Multivariate analysis of variance (MANOVA): effect of perceived risk on influence of brand relationship strength and interpersonal relationship strength on the referral acceptance process

| Effect | Value | F | Hyp. df | Error df | Sig. | Partial eta squared | Noncent. parameter | Observed power |
|---|---|---|---|---|---|---|---|---|
| *Intercept* | | | | | | | | |
| Pillar's trace | .962 | 5096.883 | 2.000 | 401.000 | .000 | .962 | 10,193.767 | 1.000 |
| Wilks' lambda | .038 | 5096.883 | 2.000 | 401.000 | .000 | .962 | 10,193.767 | 1.000 |
| Hotelling's trace | 25.421 | 5096.883 | 2.000 | 401.000 | .000 | .962 | 10,193.767 | 1.000 |
| Roy's largest root | 25.421 | 5096.883 | 2.000 | 401.000 | .000 | .962 | 10,193.767 | 1.000 |
| *Risk* | | | | | | | | |
| Pillar's trace | .004 | .743 | 2.000 | 401.000 | .476 | .004 | 1.486 | .176 |
| Wilks' lambda | .996 | .743 | 2.000 | 401.000 | .476 | .004 | 1.486 | .176 |
| Hotelling's trace | .004 | .743 | 2.000 | 401.000 | .476 | .004 | 1.486 | .176 |
| Roy's largest root | .004 | .743 | 2.000 | 401.000 | .476 | .004 | 1.486 | .176 |

## References


Aiken, Leona, Stephen G. West, and Raymond R. Reno (1991), *Multiple Regression: Testing and Interpreting Interactions*. Sage.

Anderson, Eugene W. and Linda C. Salisbury (2003), "The Formation of Market-level Expectations and its Covariates," *Journal of Consumer Research*, 30, 1, 115–24.

Berger, Jonah and Katherine L. Milkman (2012), "What Makes Online Content Viral?" *Journal of Marketing Research*, 49, April, 192–205.

Bettman, James R. (1973), "Perceived Risk and its Components: A Model and Empirical Test," *Journal of Marketing Research*, 10, 184–9.

Bhatnagar, Amit, Sanjog Misra, and H. Raghav Rao (2000), "On Risk, Convenience, and Internet Shopping Behavior," *Communications of the ACM*, 43, 11, 98 (November).

Blau, Peter M. (1964), *Exchange and Power in Social Life*. New York, NY: Wiley.

Bourdieu, Pierre (1984), *Distinction: A Social Critique of the Judgement of Taste*. Bungay, Suffolk: Harvard Univ Press.

Brown, Donald E. (1991), *Human Universals*. Temple University Press.

Brown, Mark R., Roop K. Bhadury, and Nigel K. Ll Pope (2010), "The Impact of Comedic Violence on Viral Advertising Effectiveness," *Journal of Advertising*, 39, 1, 49–66.

Chatterjee, Patrali (2001), "Online Reviews: Do Consumers Use Them?" *Advances in Consumer Research*, 28, 129–33.

Chaudhuri, Arjun and Morris B. Holbrook (2002), "Product-class Effects on Brand Commitment and Brand Outcomes: The Role of Brand Trust and Brand Affect," *Journal of Brand Management*, 10, 1, 33–58.

Chiu, Hung- Chang, Yi-Ching Hsieh, Ya-Hui Kao, and Monie Lee (2007), "The Determinants of Email Receivers' Disseminating Behaviors on the Internet," *Journal of Advertising Research*, 47, 4, 524–34.

Cho, Soyoen, Jisu Huh, and Ronald J. Faber (2014), "The Influence of Sender Trust and Advertiser Trust on Multi-stage Effects of Viral Advertising," *Journal of Advertising*, 43, 1, 100–14.

Chu, Shu-Chuan (2011), "Viral Advertising in Social Media: Participation in Facebook Groups and Responses Among College-aged Users," *Journal of Interactive Advertising*, 12, 1, 30–43.

——— and Yoojung Kim (2011), "Determinants of Consumer Engagement in Electronic Word-of-Mouth (eWOM) in Social Networking Sites," *International Journal of Advertising*, 30, 1, 47–75.

Clark, Ronald A. and Ronald E. Goldsmith (2005), "Market Mavens: Psychological Influences," *Psychology and Marketing*, 22, 4, 289–312.

Constant, David, Sara Kiesler, and Lee Sproull (1994), "What's Mine Is Ours, or Is It? A Study of Attitudes About Information Sharing," *Information Systems Research*, 5, 4, 400–21.

Cook, Karen S. and Toshiro Yamagishi (1992), "Power in Exchange Networks: A Power-dependence Formulation," *Social Networks*, 14, 3–4, 245–65.

Corritore, Cynthia L., Beverly Kracher, and Susan Wiedenbeck (2003), "On-line Trust: Concepts, Evolving Themes, a Model," *International Journal of Human-Computer Studies*, 58, 737–58.

DeBruyn, Amanda and Gary L. Lilien (2008), "A Multi-stage Model of Word-of-Mouth Influence Through Viral Marketing," *International Journal of Research in Marketing*, 25, 3, 151–63.

Dobele, Angela, David Toleman, and Michael Beverland (2005), "Controlled Infection! Spreading the Brand Message Through Viral Marketing," *Business Horizons*, 48, 2, 143–9.

———, ———, and ——— (2007), "Why Pass on Viral Messages? Because They Connect Emotionally," *Business Horizons*, 50, 4, 291.

Feick, Lawrence F. and Linda L. Price (1987), "The Market Maven: A Diffuser of Marketplace Information," *Journal of Marketing*, 51, 1, 83–97.

Flynn, Leisa R., Ronald E. Goldsmith, and Jacqueline Eastman (1996), "Opinion Leaders and Opinion Seekers: Two New Measurement Scales," *Journal of the Academy of Marketing Science*, 24, 2, 137.

Fornell, Claus and David F. Larcker (1981), "Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics," *Journal of Marketing Research*, 18, August, 382–8.

Fournier, Susan (1998), "Consumers and their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24, 4, 343–53.

Frenzen, Jonathan and Kent Nakamoto (1993), "Structure, Cooperation, and the Flow of Market Information," *Journal of Consumer Research*, 360-375.

Godes, David and Dina Mayzlin (2004), "Using Online Conversations to Study Word-of-Mouth Communication," *Marketing Science*, 545-560.

Golan, Guy J. and Lior Zaidner (2008), "Creative Strategies in Viral Advertising: An Application of Taylor's Six-segment Message Strategy Wheel," *Journal of Computer-mediated Communication*, 13, 959–72.

Goldsmith, Ronald E. and Ronald A. Clark (2006), "Market Mavenism and Giving Advice Online," *Proceedings of the Annual Meeting of the Society for Marketing Advances*, November 1–4, Nashville, TN. 51–4.

——— and David Horowitz (2006), "Measuring Motivation for Online Opinion Seeking," *Journal of Interactive Advertising*, 6, 2, 2–14.

Ha, Hong-Youl (2004), "Factors Influencing Consumer Perceptions of Brand Trust Online," *Journal of Product and Brand Management*, 13, 5, 329–42.

Hall, Hazel (2001), "Social Exchange for Knowledge Exchange," *Presented at Managing Knowledge: Conversations and Critiques, University of Leicester Management Centre, April 10*.

Harrison-Walker, L. Jean (2001), "The Measurement of Word-of-Mouth Communication and an Investigation of Service Quality and Customer Commitment as Potential Antecedents," *Journal of Service Research*, 4, 1, 60–75.

Hayes, Jameson L. and Karen W. King (2014), "The Social Exchange of Viral Ads: Referral and Coreferral of Ads Among College Students," *Journal of Interactive Advertising*, 14, 2, 98–109.

Hemetsberger, Andrea (2001), "Fostering Cooperation on the Internet: Social Exchange Processes in Innovative Virtual Consumer Communities," *Advances in Consumer Research*, 29, 354–6.

Hennig, Devon and Barbara J. Phillips (2012), "Understanding Viral Video Mavens," *Conference Proceedings of the 2012 American Academy of Advertising*, March 16–19, SC: Myrtle Beach.

Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh, and Dwayne D. Gremler (2004), "Electronic Word-of-Mouth via Consumer-opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?" *Journal of Interactive Marketing*, 18, 1, 38–52.

Hess, Jeff and John Story (2005), "Trust-based Commitment: Multidimensional Consumer–Brand Relationships," *Journal of Consumer Marketing*, 22, 6, 313–22.

Hinde, Robert A. (1995), "A Suggested Structure for a Science of Relationships," *Personal Relationships*, 2, 1, 1–15.

Ho, Jason Y.C. and Melanie Dempsey (2010), "Viral Marketing: Motivations to Forward Online Content," *Journal of Business Research*, 63, 9–10, 1000–6.

Hsiao, Ten-Tai and Shu-Ting Chuang (2009), "The Role of Virtual Community in Disseminating Electronic Word of Mouth," *Paper presented at the 2009 Joint Conference on Pervasive Computing (JCPC)*.

Hsu, Chin-Lung and Judy C.C. Lin (2008), "Acceptance of Blog Usage: The Roles of Technology Acceptance, Social Influence and Knowledge Sharing Motivation," *Information and Management*, 45, 1, 65–74.

Irwin, Julie R. and Gary H. McClelland (2003), "Negative Consequences of Dichotomizing Continuous Predictor Variables," *Journal of Marketing Research*, 40, 3, 366–71.

Jarvenpaa, Sirkka L., Kathleen Knoll, and Dorothy E. Leidner (1998), "Is Anybody Out There? Antecedents of Trust in Global Virtual Teams," *Journal of Management Information Systems*, 14, 4, 29–64.

Kankanhalli, Atreyi, Bernard C.Y. Tan, and Kwok-Kee Wei (2005), "Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation," *MIS Quarterly*, 113-143.

Kaplan, Andreas M. and Michael Haenlein (2010), "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Business Horizons*, 53, 1, 59–68.

Kiyonari, Toko, Shigehito Tanida, and Toshio Yamagishi (2000), "Social Exchange and Reciprocity?: Confusion or a Heuristic?" *Evolution and Human Behavior*, 21, 411–27.

Kollock, Peter (1994), "The Emergence of Exchange Structures: An Experimental Study of Uncertainty, Commitment, and Trust," *American Journal of Sociology*, 313-345.

Kwak, Nojin, and Barry Radler (2002),"A Comparison Between Mail and Web Surveys: Response Pattern, Respondent Profile, and Data Quality," Journal of Official Statistics, 18 (2), 257–273

Larzelere, Robert E. and Ted L. Huston (1980), "The Dyadic Trust Scale: Toward Understanding Interpersonal Trust in Close Relationships," *Journal of Marriage and the Family*, 595-604.

Lawler, Edward J. and Shane R. Thye (1999), "Bringing Emotions into Social Exchange Theory," *Annual Review of Sociology*, 217-244.

———, ———, and Jeongkoo Yoon (2000), "Emotion and Group Cohesion in Productive Exchange," *The American Journal of Sociology*, 106, 3, 616–57.

Mangold, W. Glynn and David J. Faulds (2009), "Social Media: The New Hybrid Element of the Promotion Mix," *Business Horizons*, 52, 4, 357–65.

Molm, Linda D. (1990), "Theories of Social Exchange and Exchange Networks," *Handbook of Social Theory*. 260–72.

———, Nobuyuki Takahashi, and Gretchen Peterson (2000), "Risk and Trust in Social Exchange: An Experimental Test of a Classical Proposition," *American Journal of Sociology*, 1396-1427.

Moran, Edward and Francois Gossieaux (2010), "Marketing in a Hyper-social World," *Journal of Advertising Research*, 50, 3, 232–9.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment–Trust Theory of Relationship Marketing," *Journal of Marketing*, 58, 3, 20–38.

Nelson-Field, Karen, Erica Riebe, and Byron Sharp (2012), "What's not to 'Like?' Can a Facebook Fan Base Give a Brand the Advertising Reach it Needs?" *Journal of Advertising Research*.

Phelps, Joseph E., Regina Lewis, Lynne Mobilio, David Perry, and Niranjan Raman (2004), "Viral Marketing or Electronic Word-of-Mouth Advertising: Examining Consumer Responses and Motivations to Pass Along Email," *Journal of Advertising Research*, 44, 4, 333–48.

Price, Linda L., Lawrence F. Feick, and Audrey Guskey (1995), "Everyday Market Helping Behavior," *Journal of Public Policy and Marketing*, 255-266.

Rice, Eric (2002), *The Effect of Social Uncertainty in Networks of Social Exchange.* Unpublished Ph.D. dissertation.

Richins, Marsha L. (1983), "Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study," *Journal of Marketing*, 47, 1, 68–78.

Rusbult, Caryl E., John M. Martz, and Christopher B. Agnew (1998), "The Investment Model Scale: Measuring Commitment Level, Satisfaction Level, Quality of Alternatives, and Investment Size," *Personal Relationships*, 5, 4, 357–87.

Schiffman, Leon G., Joseph F. Dash, and William R. Dillon (1975), "Interpersonal Communication: A Opinion Leadership/Opinion Seeking Composite Approach," *Marketing in Turbulent Times and Marketing the Challenges and the Opportunities*, 37, 228–32.

Sheth, Jagdish N. and Atul Parvatlyar (1995), "Relationship Marketing in Consumer Markets: Antecedents and Consequences," *Journal of the Academy of Marketing Science*, 23, 4, 255–71.

Smith, Ted, James R. Coyle, Elizabeth Lightfoot, and Amy Scott (2007), "Reconsidering Models of Influence: The Relationship Between Consumer Social Networks and Word-of-Mouth Effectiveness," *Journal of Advertising Research*, 47, 4.

Sohn, Dongyoung (2009), "Disentangling the Effects of Social Network Density on Electronic Word of Mouth (eWOM) Intention," *Journal of Computer Mediated Communication*, 14, 2, 352–67.

Southgate, Duncan, Nikki Westoby, and Graham Page (2010), "Creative Determinants of Viral Video Viewing," *International Journal of Advertising*, 29, 3, 349–68.

Taylor, David, David Strutton, and Kenneth Thompson (2012), "Self-enhancement as a Motivation for Sharing Online Advertising," *Journal of Interactive Advertising*, 12, 2, 13–28.

Teixeira, Thales (2012), "The New Science of Viral Ads," *Harvard Business Review*, 90, 3, 25–7.

van Noort, Guda, Marjolijn L. Antheunis, and Eva A. van Reijmersdal (2012), "Social Connections and the Persuasiveness of Viral Campaigns in Social Network Sites: Persuasive Intent as the Underlying Mechanism," *Journal of Marketing Communications*, 18, 1, 39–53.

Visible Measures (2014), "Top Viral Video Ad Campaigns," Available online at: http://www.visiblemeasures.com/insights/charts/?chart_type=2&chart_id=1977 (accessed 2 July 2014).

Walsh, Gianfranco, Kevin P. Gwinner, and Scott R. Swanson (2004), "What Makes Mavens Tick? Exploring the Motives of Market Mavens' Initiation of Information Diffusion," *Journal of Consumer Marketing*, 21, 2, 109–22.

Wasko, Molly M. and Samer Faraj (2005), "Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice," *MIS Quarterly*, 29, 1, 35–57.

Woerndl, Maria, Savvas Papagiannidis, Michael Bourlakis, and Feng Li (2008), "Internet-induced Marketing Techniques: Critical Factors in Viral Marketing Campaigns," *Journal of Business Science and Applied Management*, 3, 1.

Zeng, Ming and Werner Reinartz (2003), "Beyond Online Search: The Road to Profitability," *California Management Review*, 45, 2, 107–30.

Zhang, Jie and Wei-Na Lee (2012), "Psychological Tendencies, Moderator Effects, and eMavenism," *Paper presented at the Annual Conference of the American Academy of Advertising, March 16–19*, SC: Myrtle Beach.