
Corporate communication on Twitter: Relationship effects on audience behaviour

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Abstract

Grounded in a relationship management perspective, this study explored how relationship indicators on Twitter messages can affect the audience's behavioural intention. A 2×3 experimental study was conducted with 182 undergraduate students at a large state university. The between-subject design tested how the relationship types and response cues (i.e., retweets) of messages affect audiences' intention to engage with messages. This study also explained how people use Twitter and how they evaluate it as a medium. Our findings suggest a significant correlation between the type of relationship indicator on Twitter messages and audiences' behavioural intentions to communicate on Twitter.

Introduction

Relationship management has been one of the major theoretical perspectives in the public relations field as scholars have tried to define the concept of relationship and measure the consequences of relationship. Repeated purchasing intention or commitment has been explored to evaluate the consequences of relationships, and these relationship outcomes have been emphasised as indicators for the effectiveness of public relations practices.

In the communication field, in particular, publics' communicative behavioural intentions have been explored as one of the major consequences of relationship outcomes (Foster & Jonker, 2005). Communicational behaviour, such as word of mouth, refers to conveying information to others to share attitudes or opinions toward an object (Jansen, Zhang, Sobel, & Chowdhury, 2009). With the Internet, the potential for communicational effects is greatly expanded,

and the Internet has become a useful tool for public relations professionals to build relationships between organisations and their publics. Scholars have emphasised dialogic communication strategies to monitor public opinion and communicate interactively with the public (Kent & Taylor, 1998).

More recently, the relationship management framework has expanded into the social media context—such as blogs, Facebook, or Twitter—and the influence of emerging social media on the public and society has been studied in various communication fields (i.e., Das, 2010; Kent, 2008). Moreover, behavioural intention has been explored in terms of online communication, comments, or word of mouth (i.e., Foster & Jonker, 2005; Shanahan, 2010; Yang & Kang, 2009). Twitter was launched in 2006, and has grown to become one of the most popular social media venues. Surprisingly, few empirical studies have been conducted about the site.

Hence, the purpose of this current study is to explore, from a relationship management perspective, the effect of corporate Twitter on customers' communication behaviours—in particular, corporate messages manipulated in terms of the type of relationship and interactivity indicators in an experimental setting. Based on the research findings, Twitter's potential as a persuasive communication tool is discussed.

Literature review

Relationship management

Ledingham and Bruning (1998) defined *relationship* as “the state which exists between an organisation and its key publics in which the actions of either entity impact the economic,

social, political and/or cultural well-being of the other entity” (p. 62). The concept of relationship has been one of the most important perspectives in the public relations field (Ferguson, 1984; Ehling, White, & Grunig, 1992; Ledingham & Bruning, 2000).

Thomlison (2000) defined *relationship* as “a set of expectations two parties have for each other’s behavior based on their interaction patterns” (p. 178). As the central unit of public relations study, the value of a long-term relationship between an organisation and its public to meet the organisation’s goal has been studied by scholars (i.e., Ferguson, 1984; Grunig, 1993). The following items were highlighted by Grunig (1993) as elements of organisation–public relationships: reciprocity, trust, credibility, mutual legitimacy, openness, mutual satisfaction, and mutual understanding (p. 137). Ledingham and Bruning (1998) suggested five dimensions of relationships: trust, openness, involvement, investment, and commitment.

Emphasising the management function of public relations, Cutlip, Center, and Broom (2000) explained the function of public relations as establishing and maintaining “mutually beneficial relationships between an organisation and the various publics on which its success or failure depend” (p. 6). The effectiveness of public relations is determined by the quality of relationships between organisations and their publics (Grunig, 1993; Grunig, Grunig, & Dozier, 2002; Ledingham, 2001; Ledingham & Bruning, 1998, 2000).

Broom, Casey, and Ritchey (1997) considered a relationship as an intervening concept between its antecedents and consequences. According to Broom et al., the *antecedents* to a relationship refer to the social and cultural norms, collective perceptions and expectations, need for resources, perceptions of uncertain environment, and legal/voluntary necessity; they further stated that the *consequences* of a relationship can be determined by goal achievement, dependency/loss of autonomy, and routine/institutionalised behaviour (p. 94).

Ledingham and Bruning (1998) also contributed to the relationship management concept by developing the following relationship dimensions: trust, openness, and involvement. These scholars defined the *organisation–public relationship* as “the state which exists between an organization and its key publics in which the actions of either entity impact the economic, social, political, and/or cultural well-being of the other entity” (p. 62).

Broom et al. (1997) emphasised the quality of communication linkage, asserting that it can be determined by the symmetry of the exchange, intensity of the exchange, content of the exchange, frequency of the exchange, valance of the exchange, and the duration of the exchange. In addition, Broom et al. explained that the concept of organisation–public relationships is a measurable term by recognising antecedents to and outcomes of the relationships. Grunig and Huang (2000) also suggested several indicators to measure the quality of relationships: control mutuality, trust, relational satisfaction, and relational commitment.

Hon and Grunig (1999) elaborated on the relationship framework with a guideline to measure organisation–public relations. According to these scholars, the six relationship outcomes are: control mutuality, trust, commitment, satisfaction, communal relations, and exchange relations. From the relationship-building perspective, these outcomes are important assets of an organisation, and practitioners would do well to monitor relationship antecedents and consequences.

To define the nature of relationships, Hung (2005) suggested two types of relationships: communal and exchange relationships. A communal relationship is usually found among friends or family when one concerns the welfare of the counterpart; an exchange relationship is found in a business setting when social and economic returns are expected (i.e., Clark & Mill, 1979; Goffman, 1961). The importance of communal relationships has been emphasised by public relations scholars and practitioners for the long-term success of an organisation. Edman (2010) defined two types of relationships, adopting from Hon and Grunig

(1999), and demonstrated the two types in the manipulated corporate Twitter messages (Edman, 2010). First, a *communal relationship* is defined as the “mutually beneficial relationship where both the organization and its publics give benefits to each other even when they receive nothing in return . . . these posts can include helpful information, directing uses to appropriate people to talk to about complaints” (Edman, 2010, p. 120). Second, an *exchange relationship* is a relationship demonstrating marketing techniques. Obvious promotional or marketing messages were assumed to be describing an exchange relationship (i.e., promotional messages) (Edman, 2010).

Social media and public relations

Emerging social media—blogs, YouTube, Twitter, Facebook, and so on—have changed audiences’ communication patterns of information processing, media consumption, and social interaction, and the effects of these social media venues have been studied in the communication and public relations fields (i.e., Rheingold, 2008; Xifra & Huertas, 2008). The concept of relationship has been also emphasised in the online communication field (i.e., Kent & Taylor, 1998, 2002; Ki & Hon, 2009). Sweetser and Metzgar (2007) stated that social media such as blogs can help organisations communicate with the public immediately, allowing them to personalise their communication style to build a favourable relationship with the public.

Among the several online communication tools, blogs are one of the most well studied social media forms in public relations. Rheingold (2008) defined blog as “a Web page that is updated frequently, with the most recent entry displayed at the top of the page” (p. 103), and public relations professionals suggested that blogs are powerful persuasive communication tools for analysing and monitoring public opinion and trends (i.e., Kent, 2008). The blog has great potential for strategic public relations (i.e., Baran & Davis, 2000; Cohen, 1963; Kent, 2008; McCombs & Shaw, 1976).

Scholars highlighted blogs’ professional uses for managers demonstrating interactive communication and maintaining their relationships with key publics through “human voice” (Kelleher, 2009, p. 172). Using social media, an organisation can customise messages for its target publics to lead to favourable relationship outcomes—for example, trust and satisfaction—of an organisation (Kelleher, 2009). In his recent article, Waters (2009) found that social media benefits nonprofit organisations to develop relationship with their key publics. Social media such as Facebook supports the organisations to educate volunteers and donors and to interact with them (Waters, 2009). Kelleher (2006) also stated that social media can be a useful tool for public relations professionals to advocate their organisations.

Defined as a type of microblogging, Twitter has become a useful tool to exchange ideas and opinions between organisations and their key public (Java, Song, Finin, & Tseng, 2009; Riemer & Richter, 2010). Twitter is an emerging and growing social media, where users can post short messages—limited to 140 characters—about their current status, feelings, or thoughts (Java et al., 2009). Scholars have studied its potential as an online communication and marketing tool to keep the mass public informed with immediate news and interact with the public at once. Even though a few research studies have been conducted in YouTube and Facebook settings (Das, 2010), the impact of these Twitter messages has not been fully explored in regard to public relations.

Interactivity

Scholars have emphasised interactivity as an important characteristic of online social media (i.e., Jo & Kim, 2003; Waters, Burnett, Lamm, & Lucas, 2009). Interactivity of social media allows organisations to develop relationships between organisations and its important publics through dialogue (Lenhart & Fox, 2006). Edelman and Intelliseek (2005) stated, “Blogs represent a paradigm shift that presents new challenges and opportunities for the advertising, public relations and marketing communities—challenges and opportunities

that require quick responses, protocols, and policies” (p. 7). Social media tools such as Facebook enable organisations to interact with their target publics with customised messages through two-way communication (Bernard, 2010; Porter, Sweetser Trammell, Chung, & Kim, 2007).

Prior scholars have defined *interactivity* in several ways: Rogers (1995) stated it is “the degree to which participants in a communication process can exchange roles and have control over their mutual discourse” (p. 314). Ha and James (1998) defined it as “the extent to which the communicator and the audience respond to, or are willing to facilitate, each other’s communication needs” (p. 461). Rafaeli (1988) described interactivity as “an expression of the extent that in a given series of communication exchanges, any third (or later) transmission (or message) is related to the degree to which previous exchanges referred to even earlier transmission” (p. 111). Further, Kiouisis (2002) introduced three dimensions—interactivity of the structure of technology, communication context, and user perception—suggesting the three major components of each dimension. In addition, perceived interactivity was identified with several dimensions of proximity, sensory activation, speed, and telepresence (Bretz, 1983; Chesebro & Bonsall, 1989; Kiouisis, 2002).

Contemplating the context of a political election, scholars found that the interactivity of a candidate’s campaign website can create favourable impressions toward the political candidate (Sundar, Kalyanaraman, & Brown, 2003). Smith (2010) suggested that corporate Twitter pages—along with other social network sites—can enable the corporation to inform the public, interconnect with the public, and engage with social issues through its interactive features (i.e., retweets or hashtags). Through the pages, users can also retrieve and distribute information to the mass public interactively (Smith, 2010).

Behavioural intention on communication

Scholars measure public relationship outcomes to evaluate the impacts of public relations strategies. Public relations outcomes have been measured by various factors, including organisational reputation, community relationships, conflict resolution, and public attitude and behaviour (i.e., Coombs, 2001; Ehling et al., 1992; Plowman, Briggs, & Huang, 2001; Xavier, Patel, & Johnston, 2004).

Communicational behavioural intention—that is, word of mouth—has also been emphasised as an important factor that shapes the effectiveness of public relations practices (i.e., Brown, Broderick, & Lee, 2007; Jansen et al., 2009). This communicational behaviour took a role to convey information from one to the other, letting people share attitudes, opinions, or reactions toward particular brands or organisations (Jansen et al., 2009). Scholars have tried to expand their understanding of online communication phenomena and their powerful impacts on interactive dialogue among the public. These online-based conversations have increased public deliberation and engagement with social, economic, and cultural issues (i.e., Brown et al., 2007; Jansen et al., 2009).

Twitter also contributed to information conveyed between publics and sharing attitudes or opinions toward an organisation. Agrifoglio, Black, and Metallo (2010) suggested that Twitter can be used as both an informal and formal communication tool. Analysing more than 150,000 Twitter messages (tweets), Jansen et al. (2009) found that a large portion of the Twitter messages contain public comments on brands, suggesting that Twitter can be considered an online tool for managers’ branding and marketing communication.

Hence, the purpose of this study was to explore the impacts of corporate Twitter messages on customers’ behavioural intentions from a relationship management perspective. In particular, communicational behavioural intention was explored as a public relations outcome. Corporate messages were manipulated with the type of relationship and

interactivity indicators in an experimental setting.

For the direct relationship between the two independent variables (type of relationships and the perceived level of interactivity) and dependent variable (behavioural intention on communication), the following hypotheses have been proposed.

H1: The type of relationship of corporate tweets will affect customers' behavioural intention on communication toward the corporation.

H2: The perceived level of interactivity of corporate tweets will affect customers' behavioural intention on communication toward the corporation.

Additionally, the following research questions were proposed to explore how the public uses Twitter and how they evaluate the medium:

RQ1: What motivates people to use Twitter as it relates to people's behavioural intention to communicate on Twitter?

RQ2: How do people evaluate Twitter in comparison with other social network media?

Method

Participants and design

A 2×3 between-subjects factorial design was employed with 182 undergraduate students from a large state university. According to Smith & Brenner (2012), about 26% of Internet users were between the ages of 18 and 29, and about 31% of young Internet users were using Twitter.

First, participants read a Twitter page from a local supermarket chain brand created for the study. The experimental stimuli and a questionnaire were prepared as a booklet, and participants read the stimulus (Twitter page) for at least five minutes before they answered the questionnaire. The experimental stimulus page consisted of the standard features of a Twitter page: number of followers, tweets, and a brief introduction of the brand. The experimental conditions had two categories of relationship type (communal and exchange relationship) and three levels of interactivity (low, medium, and high). In a classroom

setting, participants were randomly assigned to each of the six experimental conditions.

Independent variables and measurements

The type of relationship was our first independent variable, and it was manipulated as two categories of communal and exchange relationships (Hon & Grunig, 1999). Messages on the communal condition page included tweets about benefits (i.e., helpful tips) provided to the customer without immediate returns, while messages on the exchange condition page included tweets about the company's marketing and sales promotions (Edman, 2010).

To measure the type of relationship, an 11-item 5-point Likert scale was used, adopted from previous research, including the following items:

- This organisation would not especially enjoy giving others aid;
- This organisation seems to be very concerned about the welfare of people like me;
- I feel that this organisation would take advantage of people who are vulnerable;
- I think that this organisation succeeds by stepping on other people. (i.e., Hon & Grunig, 1999) (see Appendix A).

Our next independent variable was interactivity determined by the functional responsiveness of the company, and it had three conditions: low, medium, and high (Edman, 2010). High interactivity condition pages had more hyperlinks, retweets, and direct responses from customers.

To measure the level of interactivity, the following questions were adopted from previous research studies:

- I would feel that the corporation readily answers to its audience;
- I would feel that the corporation is responsive to me;
- The corporation uses Twitter only for its self-expression;
- The corporation is concerned about the audience and talks to them;
- I would feel that the corporation reacts to customers faster;
- I would feel that the corporation is contributing to information distribution;

- I would use the corporation's Twitter to search information;

- I would feel that the distance between the corporation and me is shorter. (Bretz, 1983; Chesebro & Bonsall, 1989; Kiouisis, 2002; Smith, 2010).

Each question was measured with a 5-point Likert scale.

Dependent variables and measurements

The dependent variable was the participants' behavioural intention on communication, and it was measured by four items on a 5-point Likert scale that were modified from previous research (Brown, Barry, Dacin, & Gunst, 2005; Yang & Kang, 2009):

- How likely would you be to act on the advice that is offered in the message?

- How likely would you be to recommend the advice you've read in the messages to another person?

- How likely would you be to forward the messages to your acquaintances online?

- How likely would you be to retweet the messages on your Twitter?

Further, this current study measured customers' motivation of using Twitter (i.e., Jansen et al., 2009; Zhao & Rosson, 2009):

- I use Twitter to find out about the products or services of a corporation;

- I use Twitter to enquire what other customers think of a corporation;

- I use Twitter to enquire about customer reviews/ratings on the products or services of a corporation.

Using the feeling thermometer scale (0 = cold/unfavourable, 100 = warm/favourable), this study asked participants to rate their feelings toward the each of the following social media brands: Twitter, Digg, YouTube, Flickr, Google, LinkedIn, Facebook, and Engadget. Finally, this current study asked study participants to describe the greatest benefit(s) of communication on Twitter.

Results

Demographics

One hundred eighty-seven undergraduate students participated in this experimental study, of which five responses have been removed due to the large number of missing values. About 81% of the participants were females, and the majority of participants were juniors (41%) and sophomores (37%). Half of the participants had already been using Twitter.

Manipulation checks

In terms of the type of relationship, the participants were assigned into two different conditions of communal and exchange relationships. Between the two groups, the level of communal relationships (communal $M = 26.24$, exchange $M = 23.98$, $t = 4.434$, $df = 179$, $p < .001$) and exchange relationships (communal $M = 8.75$, exchange $M = 8.07$, $df = 178$, $t = -2.25$, $p < .05$) were significantly different.

In addition, the interactivity indicators were perceived significantly different among the three conditions (high $M = 25.58$, medium $M = 24.25$, low $M = 22.76$, $F = 9.556$, $df = 178$, $p < .001$). Cronbach's α was then used to check reliability for dependent measures. The level of the reliability score was satisfactory for the behavioural intention on communication toward the corporation (Cronbach's $\alpha = .84$).

Hypothesis testing

Descriptive analysis of the mean and the standard deviation was reported in Table 1. The average mean score of the behavioural intention of communication was 11.01 out of 20 ($SD = 3.37$), and the mean scores were significantly different between two relationship conditions: The mean score of the communal relationship group ($M = 11.72$, $SD = 3.24$) was higher than the exchange relationship group ($M = 10.33$, $SD = 3.37$) ($t = 2.83$, $df = 179$, $p < .05$).

Table 1. Mean and standard deviation of dependent variable

<i>Dependent variable</i>	<i>Type of relationship</i>	<i>Interactivity</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Behavioural intention on communication	Communal relationship	High	11.67	3.79	33
		Medium	11.74	3.77	27
		Low	11.75	3.79	32
	Exchange relationship	High	10.97	3.36	30
		Medium	10.07	3.10	29
		Low	9.93	3.64	30

The mean scores of behavioural communication intention were not significantly different among the three conditions in terms of the interactivity (Low $M = 10.87$, $SD = 3.03$; Medium $M = 10.88$, $SD = 3.51$; High $M = 11.27$, $SD = 3.60$) ($F = .279$, $df = 2$, $p > .05$).

To test the hypotheses, a two-way univariate analysis of variance (ANOVA) was conducted

using a General Linear Model on SPSS (significance level of .05). The summary of two-way ANOVA on participants' behavioural intention of communicating on Twitter is shown in Table 2. The main effect of the type of relationship ($F = 7.862$, $df = 1$, $p < .05$) was found, while the main effect of the interactivity was not found ($F = .345$, $df = 2$, $p > .05$).

Table 2. Two-way ANOVA for the behavioural intention on communication

ANOVA	
Behavioural intention of communication toward the corporation	
<i>Variables</i>	<i>F</i>
Relationship	7.862*
Interactivity	.345

* $p < .05$

Hypothesis 1 proposed a correlation between the type of relationship of corporate Twitter messages and customers' behavioural intention to communicate on Twitter about the corporation. The significant main effect of the relationship on the communicative behavioural intention was found to support Hypothesis 1 ($F(1, 177) = 7.862$, $p < .05$).

Hypothesis 2 proposed a correlation between the level of interactivity of corporate Twitter messages and customers' behavioural intention to communicate on Twitter about the corporation. However, no significant relationship has been found between the variables ($F(2, 177) = .345$, $p > .05$). Hence, Hypothesis 2 was not supported. Further, our results show that there were no interaction effects of the type of relationship and the level of interactivity on customers' behavioural intention on communication toward the corporation.

Additionally, this current study proposed two research questions about how people use Twitter and how they evaluate it as a communication media. To answer the first research question—how the motivation to use Twitter is related to people's behavioural intention to communicate on Twitter—this current study asked whether people use Twitter to directly communicate with a corporation or to communicate with other customers.

Both motivations were scored lower than a medium level; however, they were strongly correlated with the customers' communicative behavioural intention (see Table 3). The correlation coefficient score between the direct communication motivation with corporation and the communicative intention was higher than the score between the communication motivation with other customers and the communicative intention (see Table 3).

Table 3. Correlations among the direct interact motivation with corporation, direct interact motivation with other customers, and communicative behavioural intent

	1	2	3
1. Direct interaction with corporation^a	-	.857**	.436**
2. Interaction with other customers^b	-	-	.449**
3. Behavioural intention of communicating on Twitter^c	-	-	-

^aResponse was measured by 5-point Likert scale (1 = strongly disagree and 5 = strongly agree) ($M = 2.23$, $SD = 1.14$, $N = 180$).

^bAdditive index of two responses (Cronbach's $\alpha = .95$) ($M = 4.24$, $SD = 1.99$, $N = 180$)

^cAdditive index of four responses (Cronbach's $\alpha = .84$) ($M = 11.01$, $SD = 3.37$, $N = 180$)

** $p < .001$

To answer the second research question—how people evaluate Twitter when comparing other social network media—we asked participants to rate their feelings about the medium and asked an open-ended question about the benefits of Twitter. Among the eight

different popular social media venues, Google (97) and Facebook (91) got the most favourable reviews from the participants, followed by YouTube (88), Twitter (55), and Flickr (38) (see Table 4).

Table 4. Mean and standard deviation of the feeling toward social media

<i>Variable</i>		<i>M</i>	<i>SD</i>	<i>N</i>
Social media^a	Twitter	54.51	32.27	179
	Digg	15.31	25.18	163
	YouTube	87.70	15.85	181
	Flickr	38.25	35.98	177
	Google	96.57	8.23	181
	Linked In	34.99	37.77	167
	Facebook	90.91	13.16	181
	Engadget	15.30	25.95	162

^aResponse was measured by feeling thermometer scale (0 = cold/unfavourable and 100 = warm/favourable)

Answers to the open-ended questions were coded with the following categorical items: quick and easy, efficient and cost less, keep informed, interaction with others, spreading to mass, no benefits (negative opinion), and non-

users. About 37% of participants said that Twitter is a quick and easy to use, 22% said that it can help people interact with others, and 17% said it helps people keep informed with the most recent news and status (see Table 5).

Table 5. Descriptive analysis of the benefits of communicating on Twitter (N = 182)

Variable	%	
Benefits of communicating on Twitter	Quick and easy	37.4
	Interaction with others	22.0
	Keep informed (news)	17.0
	Do not use Twitter	11.5
	Spreading to mass	6.0
	No benefit (negative)	4.9
	Efficient and costs less	1.1
	Total	100.00

Discussion

This current study explored the impact of corporate Twitter messages on audience behaviour. In particular, relationship and interactivity indicators were manipulated in an experimental setting to examine the predictors of the audiences' behaviour intention (i.e., word-of-mouth intention). Evidence from the experiment suggested that relationship indicators play a role as a predictor of behavioural intention, while interactivity indicators on Twitter messages did not show a significant influence on the dependent variable. This finding can be interpreted that the corporations' effort for customer relationship portrayed in the message content has more persuasive power than the functional aspect of message deliverance.

Specifically, the data showed that communal relationship messages have a more positive influence on the intention than the exchange relationship message. The results indicated that the audience is more likely to engage in online conversation when corporations appear to care about their customers' welfare and the quality of the service, not expecting immediate benefits in return. It added supportive evidence that a communal relationship is much more beneficial to building a favourable relationship from a business context.

Corporations use social media—in our study, Twitter—to interact with their audience and engage with social issues. Users search, retrieve, and disseminate information

interactively through retweets or hashtag functions (Smith, 2010). Scholars have suggested that the interactivity of online media can contribute to the favourable impressions of the communicators (Sundar et al., 2003). However, the results of this study did not reveal the main effect of the interactivity indicator on the audiences' behavioural intention. This result suggested that the effect of online/social media communication should be explored together, for both content and function of messages.

Practically, the data indicated that corporate social media messages can enhance positive communication consequences toward the corporation when the corporate messages reflect that the company cares about their customers' needs and wellbeing. Moreover, this current study explored whether the motivations of Twitter users were related to the audiences' behavioural intention. As the correlated results indicated, customers' communication behavioural intention is closely related to their motivation to seek interaction with either the corporation or other customers.

This current study also explored how people evaluate Twitter as a social media vehicle, and our results indicated that Twitter earns moderately favourable evaluations, after Google, Facebook, and YouTube. When compared with other popular social media, Twitter was described using the following attributes: "quick and easy," "interactive," and "keep informed". These results can be used for public relations practitioners when they design strategic communication plans for corporations.

The major theoretical implication of this current study was to extend a relationship management perspective into social media context such as Twitter and Facebook. As demonstrated in the literature, the concept of this relationship is one of the core domains of public relations research (Ferguson, 1984; Ledingham & Bruning, 1998), and the nature of the relationship was explored with its antecedents and outcomes (Ledingham & Bruning, 1998). Multiple-items were developed to measure the relationship outcomes, including trust, commitment, and control mutuality (Hon & Grunig, 1999; Ledingham & Bruning, 1998), and the outcomes can be influenced by the type of relationships (i.e., communal and exchange relationships) (Hung, 2005).

Another theoretical implication of this study was to discuss communication behaviour as the consequence of a relationship management approach online. The dialogic features of social media become critical for organisation–public relationship management. Researchers especially emphasised the potentials of the microblog (or social network site) to enhance a positive relationship between organisations and their key audience (Kent & Taylor, 1998, 2002; Ki & Hon, 2009).

Despite the theoretical and practical implications, there are limitations that need to be addressed: First, this experimental study was not conducted in an online interactive setting. Considering the great potential of interactivity and the dialogic functions of social media, future studies need to be conducted in an interactive communication setting (i.e., actual Twitter brand pages). Even though our manipulation for the level of interactivity was successful, the interactivity scores for all three conditions were somewhat high, and that could be a reason for not finding the main effect of interactivity on the behavioural communication intention. By the nature of the medium, Twitter can be considered a high interactive communication platform. Hence, future research should try to find an effective way to explore the effects of interactivity on Twitter settings.

Also, future experiments may need to be conducted with more general public sectors to

expand the generalisation of the results. The current study recruited undergraduate students who do not use Twitter for business or professional reasons, and only half were current Twitter users. Moreover, participants' age can be associated with their views on corporate social responsibilities, and our young student sampling may have different preferences toward the type of corporate messages. For example, the age group in this study may have greater concerns about their society, so they prefer communal relationship messages over exchange relationship messages. Future study needs to expand the scope of participants. Finally, repeated investigations should be designed with other types of interactive media tools (i.e., Facebook or YouTube) to generalise the correlation between relationship indicators and behavioural intention. These series of investigations will add to our understanding of persuasive roles of online communication, which will help in discussing the potential of strategic online communication for public relations scholars and practitioners.

References

- Agrifoglio, R., Black, S., & Metallo, C. (2010). *Twitter acceptance: The role of intrinsic motivation*. Sprouts: Working papers on Information Systems, retrieved from <http://sprouts.aisnet.org/10-9>.
- Baran, S. J., & Davis, D. K. (2000). *Mass communication theory: Foundation, ferment, and future*. Belmont, CA: Wadsworth Publishing.
- Bernard, M. (2010). *Public relations: The integration of social media tools with traditional PR strategies*. Retrieved from <http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1009&context=jourssp>.
- Bretz, R. (1983). *Media for interactive communication*. Beverly Hills, CA: Sage.
- Broom, G. M., Casey, S., & Ritchey, J. (1997). Toward a concept and theory of organization–public relationships. *Journal of Public Relations Research*, 9(2), 83–98.
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online

- communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 1-20.
- Brown, T. E., Barry, T. E., Dacin, P. A., & Gunst, R. F. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33(2), 123-138.
- Chesebro, J. W., & Bonsall, D. G. (1989). *Computer mediated communication: Human relationships in a computerized world*. Tuscaloosa, AL: University of Alabama Press.
- Clark, M. S., & Mill, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37(1), 12-24.
- Cohen, B. (1963). *The press and foreign policy*. Princeton, NJ: Princeton University Press.
- Coombs, T. (2001). Interpersonal communication and public relations. In R. L. Heath (Ed.) *Handbook of public relations* (pp. 105-114). California: Sage Publications.
- Cutlip, S. M., Center, A. H., & Broom, G. M. (2000). *Effective public relations* (8th Ed.). Upper Saddle River, NJ: Prentice-Hall.
- Das, A. (2010). *Facebook and nonprofit organizations: A content analysis*. Presented at the annual meeting of the International Communication Association, Singapore. Retrieved from http://www.allacademic.com/meta/p404146_in dex.html.
- Edelman, & Intelliseek. (2005). *Trust 'Media': How real people are finally being heard: The 1.0 guide to the blogosphere for marketers & company stakeholders*. Retrieved from <http://www.pria.com.au/knowledgebank/area?command=record&id=282&cid=48#>.
- Edman, H. (2010). *Twittering to the top: A content analysis of corporate tweets to measure organization-public relationships*. Master's thesis, The Louisiana State University.
- Ehling, W. P., White, J., & Grunig, J. E. (1992). Public relations and marketing practices. In J. E. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 357-394). New Jersey: Lawrence Erlbaum Associates.
- Ferguson, M. A. (1984). *Building theory in public relations: Interorganizational relationships*. Paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication. Gainesville, FL.
- Foster, D. & Jonker, J. (2005). Stakeholder relationships: The dialogue of engagement. *Corporate Governance*, 5(5), 51-57.
- Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Garden City, NY: Anchor.
- Grunig, J. E. (1993). Image and substance: From symbolic to behavioral relationships. *Public Relations Review*, 19, 121-139.
- Grunig, J., & Huang, Y. H. (2000). From organizational effectiveness to relationship indicators: Antecedents of relationships, public relations strategies, and relationship outcomes. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management: A relational approach to the study and practice of public relations* (pp. 23-53). Mahwah, NJ: Lawrence Erlbaum Associates.
- Grunig, L. A., & Grunig, J. E., & Dozier, D. M. (2002). *Excellent public relations and effective organizations: A study of communication management in three countries*. Mahwah, NJ: Lawrence Erlbaum.
- Ha, L., & James, E. L. (1998). Interactivity reexamined: A baseline analysis of early business web sites. *Journal of Broadcasting & Electronic Media*, 42(4), 457-474.
- Hon, L. C., & Grunig, J. E. (1999). *Measuring relationships in public relations*. Gainesville, FL: Institute for Public Relations.
- Hung, C. F. (2005). Exploring types of organization-public relationships and their implications for relationship management in public relations. *Journal of Public Relations Research*, 17(4), 393-426.
- Jansen, B. J., Zhang, M., Sobel, K., & Chowdhury, A. (2009). Twitter power: Tweets as electronic word of mouth. *Journal of the American society*

- for information science and technology, 60(11), 2169-2188.
- Java, A., Song, X., Finin, T., & Tseng, B. (2009). Why we twitter: An analysis of a microblogging community. *Advances in Web Mining and Web Usage Analysis*, 5439, 118-138.
- Jo, S., & Kim, Y (2003). The effect of web characteristics on relationship building. *Journal of Public Relations Research*, 15(3), 199-223.
- Kelleher, T. (2006). *Public relations online: Lasting concepts for changing media*. Thousand Oaks, CA: Sage.
- Kelleher, T. (2009). Conversational voice, communicated commitment, and public relations outcomes in interactive online communication. *Journal of Communication*, 59, 172-188.
- Kent, M. L. (2008). Critical analysis of blogging in public relations. *Public Relations Review*, 34, 32-40.
- Kent, M. L., & Taylor, M. (1998). Building dialogic relationship through the world wide web. *Public Relations Review*, 24, 321-334.
- Kent, M. L., & Taylor, M. (2002). Toward a dialogic theory of public relations. *Public Relations Review*, 28, 21-37.
- Ki, E. J., & Hon, L. C. (2009). A measure of relationship cultivation strategies. *Journal of Public Relations Research*, 21(1), 1-24.
- Kiousis, S. (2002). Interactivity: A concept explication. *New Media Society*, 4(3), 355-383.
- Ledingham, J. A. (2001). Government-community relationships: Extending the relational theory of public relations. *Public Relations Review*, 27, 285-295.
- Ledingham, J. A., & Bruning, S. D. (1998). Relationship management in public relations: Dimensions of an organization-public relationship. *Public Relations Review*, 24(1), 55-65.
- Ledingham, J. A., & Bruning, S. D. (2000). A longitudinal study of organization-public relationship dimensions: defining the role of communication in the practice of relationship management. In J. A. Ledingham, & S. D. Bruning (Eds.), *Public relationship as relationship management: A relational approach to the study and practice of public relations* (pp. 55-70). Mahwah, NJ: Lawrence Erlbaum.
- Lenhart, A., & Fox, S. (2006). Bloggers: A portrait of the internet news storytellers. *Pew Internet & American Life Project*, 1-25.
- McCombs, M. E., & Shaw, D. L. (1976). Structuring the 'unseen environment.' *Journal of Communication*, 26(2), 18-22.
- Plowman, K. D., Briggs, W. G., & Huang, Y. (2001). Public relations and conflict resolution. In R. L. Heath (Ed.), *Handbook of public relations* (pp.301-310), California: Sage Publications.
- Porter, L. V., Sweetser Trammell, K. D., Chung, D., & Kim, E. (2007). Blog power: Examining the effects of practitioner blog use on power in public relations. *Public Relations Review*, 33, 92-95.
- Rafaeli, S. (1988). Interactivity: From new media to communication. *Sage Annual Review of Communication Research: Advancing Communication Science*, 16, 110-134.
- Rheingold, H. (2008). Using participatory media and public voice to encourage civic engagement. In W. L. Bennett (Ed.), *Civic life online: Learning how digital media can engage youth* (pp. 97-118), Cambridge, MA: The MIT Press.
- Riemer, K., & Richter, A. (2010). *Tweet inside: Microblogging in a corporate context*. Paper presented 23rd Bled eConference eTrust: Implications for the individual, enterprises and society. Bled, Slovenia.
- Rogers, E. M. (1995). *Discussion of innovations* (4th ed.). NY: Free Press.
- Shanahan, M-C. (2010). *Expertise and intertextuality in online comment spaces*. Paper presented at the annual meeting of the 4S Annual Meeting. University of Tokyo, Tokyo, Japan. Retrieved from http://www.allacademic.com/meta/p_mla_apa_

research_citation/4/2/2/8/1/p422819_index.html.

Smith, A., & Brenner, J. (2012). *Twitter use 2012. Pew Internet & American Life Project*. Retrieved from <http://pewinternet.org/Reports/2012/Twitter-Use-2012/Findings.aspx>.

Smith, B. G. (2010). Socially distributing public relations: Twitter, Haiti, and interactivity in social media. *Public Relations Review*, 36(4), 329-335.

Sundar, S., Kalyanaraman, S., & Brown, J. (2003). Explicating web site interactivity: Impression formation effects in political campaign sites. *Communication Research*, 30(1), 30-59.

Sweetser, K. D., & Metzgar, E. (2007). Communicating during crisis: Use of blogs as a relationship management tool. *Public Relations Review*, 33, 340-342.

Thomlison, T. D. (2000). An interpersonal primer with implications for public relations. In J. A. Ledingham, & S. D. Bruning (Eds.), *Public relationship as relationship management: A relational approach to the study and practice of public relations* (pp. 177-204). Mahwah, NJ: Lawrence Erlbaum.

Waters, R. D. (2009). The use of social media by nonprofit organizations: An examination from the diffusion of innovations perspective. In T. Dumova, & R. Fiordo. (Eds.), *Handbook of research on social interaction technologies and collaboration software: Concepts and trends*. Hershey, PA: IGI Publishing.

Waters, R. D., Burnett, E., Lamm, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, 35(2), 102-106.

Xavier, R., Patel, A., & Johnston, K. (July 2004). *Are we really making a difference? The gap between outcomes and evaluation research in public relations campaigns*. Paper presented in ANZCA annual conference, Sydney.

Xifra, J., & Huertas, A. (2008). Blogging PR: An exploratory analysis of public relations weblogs. *Public Relations Review*, 34, 269-275.

Yang, S. U., & Kang, M. J. (2009). Measuring blog engagement: Testing a four-dimensional scale. *Public Relations Review*, 35(3), 323-324.

Zhao, D., & Rosson, M. B. (2009). *How and why people Twitter: The role that micro-blogging plays in informal communication at work*. Proceeding of the ACM 2009 international conference on supporting group work. New York, NY.

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Appendix A: Type of relationship measurement items

1. This organisation would not especially enjoy giving others aid;
2. This organisation seems to be very concerned about the welfare of people like me;
3. I feel that this organisation would take advantage of people who are vulnerable;
4. I think that this organisation succeeds by stepping on other people;
5. This organisation seems to help people like me without expecting anything in return;
6. I wouldn't consider this to be a particularly helpful organisation;
7. I feel that this organisation would try to get the upper hand;
8. Whenever this organisation gives or offers something to people like me, it would generally expect something in return;
9. Even though people like me have had a relationship with this organisation for a long time, it still would expect something in return whenever it offers us a favour;
10. This organisation seems to compromise with people like me when it knows that it will gain something; and
11. This organisation would take care of people who are likely to reward the organisation (Hon & Grunig, 1999).