

Exploring market-oriented relations in the digital era

A study of public relations and marketing practitioners in Hong Kong

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65

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Abstract

Purpose – Market-oriented relations has been regarded as a kind of public relations practices widely performed by the practitioners of public relations and marketing. This study attempts to discuss market-oriented relations in the digital era in which public relations and marketing practitioners' involvement in managing market-oriented relations was simultaneously related to their perceptions of interactivity effects, value of public relations and benefits of digital media usage in public relations practices.

Design/methodology/approach – A self-administrated online survey targeting 241 practitioners engaged in coordinating public relations activities in Hong Kong was conducted in 2017.

Findings – Structural equation modeling (SEM) analysis showed that practitioners' involvement in market-oriented relations practices had significant positive effects on their perceptions of interactivity effects, value of public relations and benefits of digital media usage. Practitioners' perceptions of interactivity effects and benefits of digital media usage were positively affected by their perceptions of public relations value, particularly public relations effectiveness. Clients' profitability and business intelligence, as well as interactivity effects in terms of involvement and perceived customization were practitioners' key concerns in managing market-oriented relations.

Originality/value – This study explores how practitioners of public relations and marketing perceived and practiced public relations in the digital era. Specifically, the conception of market-oriented relations in regard to the use of digital media was discussed in the proposed structural model.

Keywords Market-oriented relations, Interactivity, Public relations value, Benefits of digital media usage

Paper type Research paper

Introduction

In recent years, the influence of digital media has penetrated organizational practices in various domains, especially public relations and marketing (Papasolomou and Melanthiou, 2012). Research has demonstrated the varying extents to which communication practitioners use digital media, particularly social media, as part of their organizations' day-to-day communication (e.g. Allagui and Breslow, 2016; Coombs and Holladay, 2018; Kelleher, 2008; Kelleher and Sweetser, 2012; Navarro *et al.*, 2018; Wolf and Archer, 2018; Wright and Hinson, 2009). Digital media refers to "information and communication technologies that can integrate different applications, functions, and content productions" while providing "great interactivity among users" (Valentini and Kruckeberg, 2012, p. 5). Past research suggests that

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digital media comprises Web 2.0, Web 3.0, mobile communications, computer-enabled user devices and social media (Valentini and Kruckeberg, 2012). Specifically, social media is defined as the platform “centered around a concept of a read-write Web, where the online audience moves beyond the passive viewing of Web content to actually contributing to the content” (Sweetser and Lariscy, 2008, p. 179). Recent research also concluded that social media has been regarded as a major channel of engagement between the organization and its target stakeholders (Allagui and Breslow, 2016). Despite the complicated relationships between public relations and marketing (e.g. Harris, 1991, 1998; Huang and Hagan, 2011; Hutton, 1999; Kotler and Mindak, 1978), it has been argued that the popularity of social media influencers, such as YouTubers and Instagram celebrities, has blurred the roles of marketing and public relations (Gesualdi, 2019).

Stepping into the digital era, both public relations and marketing studies have examined the significance of interactivity to public relations and the benefits associated with digital media usage (e.g. Guillory and Sundar, 2014; Kelleher, 2009; Saffer *et al.*, 2013; Song and Zinkhan, 2008; Yadav and Pavlou, 2014). Researchers have repeatedly called for examining the recent picture of communication in public relations and marketing (Gesualdi, 2019; Ha and Ferguson, 2015; Huang and Hagan, 2011). Hence, focusing on digital media practices, this study investigates how practitioners performing public relations, including both who worked in the industries of public relations and marketing, perceived and used digital media in the workplace.

The prosperity of public relations industry in Hong Kong has long been recognized since the 1990s (Ngai and Ng, 2015), along with the prevailing use of social media in recent years (Davis, 2018; Reuters Institute for the Study of Journalism, 2019). With the growing concern on managing relationships between organizations and their customers or consumers in public relations and marketing (e.g. Estanyol, 2012; Gesualdi, 2019; Huang and Hagan, 2011), a survey targeting at practitioners engaged in managing market-oriented relations in Hong Kong was conducted to examine the interrelationships among practitioners’ perceptions of interactivity effects, value of public relations and benefits of digital media usage in public relations practices.

From the theoretical perspective of public relations, a structural model illustrating market-oriented relations in the digital era was built based on the past literature and further supported by survey results. In addition to the exploratory discussion on the theoretical conception of market-oriented relations in the digital context, the results illustrate the practices and the perceptions of practitioners performing public relations to build and maintain relationships between organizations and their customers or consumers in the digital era.

Theoretical framework

Market-oriented relations

The relationship between public relations and marketing has long been discussed (e.g. Harris, 1991, 1998; Hutton, 1999; Kotler and Mindak, 1978). Theoretically, marketing and public relations are distinctive concepts. For instance, public relations scholars argued that public relations focuses on building relationships with an organization’s stakeholders, such as the media, government units, employees and investors (J. E. Grunig, 1992), whereas marketing concerns more with the scope of operation, such as product development, pricing and customer service (Hutton, 2001; Huang, 2012). Despite the conceptual differences between public relations and marketing, indeed marketers also practice public relations; for instance, Levens (2012) discussed public relations from the marketing perspective as a way “to achieve specific marketing objectives by targeting consumers with product-focused messages” (p. 233).

It is worth noting that much recent public relations research has addressed public relations and marketing in terms of their contribution to the relationships between organizations and their customers or consumers (e.g. Estanyol, 2012; Gesualdi, 2019; Huang and Hagan, 2011). Recent discussion in marketing also highlights the significance of marketing in building relationships with customers (e.g. Kotler and Armstrong, 2017; Papsolomou and Melanthiou, 2012). Scholars in public relations and marketing have examined public relations practices with reference to the interactions between an organization and its customers (e.g. Gesualdi, 2019; Hong and Yang, 2009; Huang and Hagan, 2011) or consumers (e.g. Grappi and Romani, 2015; Kim, 2011; Lee and Park, 2013; Li and Stacks, 2017; Papsolomou and Melanthiou, 2012; Webster, 1992). Prior research has been investigating public relations practices performed by public relations and marketing practitioners in terms of the extent to which they contribute to organizations' establishment and maintenance of customer, consumer or client relations.

In regard to the discussion on the relationship between organizations and their customers or consumers, Huang and Hagan (2011) noted the conception of market-oriented relationships, which refers to the extent to which practitioners apply public relations practices mainly to build and maintain relationships between organizations and their consumers, customers or clients. It has been argued public relations practitioners apply public relations mainly to fulfill the need for maintaining non-market-oriented relationships, which refers to the positive relationships with different stakeholders or strategic publics, instead of only with consumers, customers or clients (Huang and Hagan, 2011). Contrastingly, marketing practitioners apply public relations generally to maintain market-oriented relationship with consumers or customers (Harris, 1998; Huang and Hagan, 2011; Levens, 2012). As such, practitioners in the industries of public relations and marketing have varying levels of contribution to the establishment and maintenance of market-oriented relationships (Huang and Hagan, 2011).

Based on prior research (e.g. Gesualdi, 2019; Grappi and Romani, 2015; Hong and Yang, 2009; Huang and Hagan, 2011; Kim, 2011; Lee and Park, 2013; Li and Stacks, 2017), this study suggests that the interaction between an organization and its customers or consumers, which refers to the levels of involvement in establishing and maintaining market-oriented relationships, indeed provides a platform for discussing the functions of public relations practices performed by the practitioners of public relations and marketing. As illustrated in the conceptualized model of this study (Figure 1), market-oriented relations is an important variable in the analysis of this study; the interrelationships among market-oriented relations and other variables will be presented in the following sections.

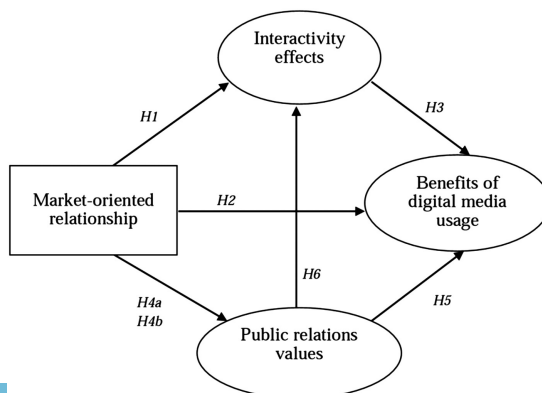


Figure 1. Conceptualized model on perceptions of practitioners

Interactivity of public relations practices

Prior research has extensively discussed the role of digital media, including the use of social media, in the managerial function of public relations (e.g. [Allagui and Breslow, 2016](#); [Coombs and Holladay, 2018](#); [Gesualdi, 2019](#); [Smith, 2013](#)). For example, practitioners used social media, or social networking sites, to establish and maintain relationships with stakeholders (e.g. [Kelleher and Sweetser, 2012](#); [Triantafillidou and Yannas, 2014](#)). The prominent usage of digital media has significant effects on organizational practices, particularly in the fields of public relations (e.g. [Allagui and Breslow, 2016](#); [Gesualdi, 2019](#); [Kent and Saffer, 2014](#); [D. Verčič et al., 2015](#); [Wolf and Archer, 2018](#)) and marketing (e.g. [Cho and Cheon, 2005](#); [Geho and Dangelo, 2012](#); [Gesualdi, 2019](#); [Watkins and Lewis, 2013](#); [Yadav and Pavlou, 2014](#)).

Specifically, the past literature (e.g. [Kelleher, 2009](#); [Pavlik, 1996](#); [Sundar et al., 2003](#); [Rafaeli and Sudweeks, 1997](#); [Valentini et al., 2018](#)) has discussed the influence of digital media in terms of interactivity. [Rafaeli and Sudweeks \(1997\)](#) noted that interactivity is about the manner of the communication process, in which conversational interaction combines both speaking and listening, leading to co-production of meaning. Based on the work of [Pavlik \(1996\)](#) and [December \(1996\)](#), [Sundar et al. \(2003\)](#) also defined interactivity as “a process of reciprocal influence” ([Pavlik, 1996](#), p. 135) in which users have “the potential to be both sources and recipients of content and interaction” ([Sundar et al., 2003](#), p. 32). Previous studies have investigated the effects of interactivity in terms of liking, perceived customization and involvement ([Bhatt, 2004](#); [Guillory and Sundar, 2014](#)). Liking mainly refers to the affectively appealing digital media that would influence users’ experience of the digital media ([Guillory and Sundar, 2014](#)), whereas involvement means users’ “level of cognitive engagement with content” ([Guillory and Sundar, 2014](#), p. 47). Perceived customization is the perception of which the digital media “allows users to customize content to personal specifications and needs” ([Guillory and Sundar, 2014](#), p. 47).

The significance of the interactivity effects has been discussed in relation to functional interactivity and contingency interactivity (e.g. [Kelleher, 2008, 2009](#); [Kelleher and Sweetser, 2012](#); [Sweetser and Lariscy, 2008](#)). Functional interactivity is “basically an interface’s capacity for conducting a dialogue or information exchange between users and the interface” ([Sundar et al., 2003](#), p. 33). Contingency interactivity is “associated with the degree of reciprocity in sending and receiving messages”; in other words, “messages received in such interactive exchanges are contingent upon sent messages” ([Guillory and Sundar, 2014](#), p. 45). It has been argued that functional interactivity favors liking, whereas contingency interactivity favors involvement and the perceived customization ([Guillory and Sundar, 2014](#)).

Prior research has discussed practitioners’ perceptions of using social media and the significance of social media in fostering interaction between organizations and their customers ([Allagui and Breslow, 2016](#)). Past studies also examined the significant effect of interactivity on the relationship between an organization and its consumers (e.g. [Cho and Cheon, 2005](#); [Gesualdi, 2019](#); [Song and Zinkhan, 2008](#); [Yadav and Pavlou, 2014](#)). For example, the interactivity of social media facilitates marketing practitioners to build relationships with consumers via engagement ([Valentini et al., 2018](#)), dialogs and conversations ([Gesualdi, 2019](#)). Overall, it has been argued that interactivity contributes to relationship building ([Nel et al., 1999](#); [Yang and Lim, 2009](#)). Interactivity significantly affects various organizational aspects in terms of public relations practices, such as organization–public relationship ([Saffer, et al., 2013](#)), stakeholders’ perceptions of relational maintenance strategies ([Kelleher, 2009](#)), relationship outcomes ([Kelleher, 2009](#)) and organizations’ reputation ([Guillory and Sundar, 2014](#)). Hence, based on prior research, practitioners’ efforts in managing relationships between organizations and their customers or consumers were related to the significance of interactivity. The following hypothesis is proposed in regard to the extent to which practitioners’ contribution to establish and maintain market-oriented relationships with customers or consumers.

- H1. The extent of practitioners' contribution to market-oriented relations significantly relates to the effects of interactivity.

Benefits of digital media usage in public relations

Papasolomou and Melanthiou (2012) highlighted that the development of the internet has helped organizations to build relationships (Kotler and Armstrong, 2017) and provided benefits in all other areas (Jefkins, 2000). In relation to interactivity, the interactivity of social media may benefit both the organization and its stakeholders (Papasolomou and Melanthiou, 2012). Triantafillidou and Yannas (2014) identified 12 key benefits of digital media usage as perceived by public relations practitioners. These benefits can be categorized into three dimensions, namely business intelligence, clients' profitability and corporate communications management. Business intelligence means the use of social media for conducting research targeting at clients' publics (Triantafillidou and Yannas, 2014). Clients' profitability refers to the role of social media in various domains such as enhancing clients' sales and reputation, achieving communication goals and reducing clients' communication costs (Triantafillidou and Yannas, 2014). Corporate communications management is the use of social media for managing corporate crises, employee and investor relations and corporate communications programs (Triantafillidou and Yannas, 2014).

Overall, prior research has examined the benefits for organizations of interacting with their consumers through digital media (e.g. Papasolomou and Melanthiou, 2012; Song and Zinkhan, 2008; Yadav and Pavlou, 2014). For example, from the perspective of marketing, interaction helps organizations to enhance their consumer visibility and thus to gather and integrate consumer-related information in computer-mediated environments (Yadav and Pavlou, 2014). Social media has also been regarded as a channel for relationship building in a public relations or marketing campaign (Gesualdi, 2019). The above discussion illustrates that practitioners' efforts of managing relationships between organizations and their customers or consumers were related to the significance of interactivity and the benefits of using digital media. Therefore, the following hypotheses are proposed.

- H2. The extent of practitioners' contributions to market-oriented relations significantly relates to the benefits of digital media usage.
- H3. The effects of interactivity significantly relate to the benefits of digital media usage.

Public relations value

The measurement of public relations performance has long been discussed from the organizational perspective (e.g. Dodge and Ramsey, 1981; Hon, 1997; Huang, 2001; Volk and Buhmann, 2019). Volk and Buhmann (2019) highlighted that different evaluation and measurement frameworks (e.g. Cutlip *et al.*, 1985; Lindenmann, 1997) have been developed in public relations for performance evaluation. Particularly, public relations practices performed by practitioners of public relations and marketing have been regarded as having closely related organizational functions and goals (L. A. Grunig *et al.*, 2002; Huang and Hagan, 2011; Ha and Ferguson, 2015; D. E. Schultz and H. F. Schultz, 2004) and have been studied in terms of public relations value (Huang, 2012; Huang and Hagan, 2011). Public relations value represents the measurement of public relations effects to an organization (Huang, 2012). Huang (2012) proposed a two-level framework for understanding and measuring public relations value or effects. This framework measures the value of public relations in terms of its contribution to organizational effectiveness and public relations effectiveness in five dimensions. Public relations effectiveness is measured by media publicity/exposure, organization–public relationship and organizational reputation, whereas organizational effectiveness is measured by revenue generation and cost reduction. In

Huang's (2012) two-level model of public relations value, media publicity/exposure refers to "amount of media exposure and publicity, increase in positive media coverage, and decrease in negative media coverage" (p. 250), whereas organization-public relationship means "building new networks, maintaining important networks, and maintaining and cultivating relationships with stakeholders" (p. 250). Organizational reputation is particularly about public impression on product and service, as well as social and environmental responsibility (Huang, 2012). Being defined in terms of the financial measurement of an organization, revenue generation is represented by "business and sales, stock value, financial performance, return on investment" (Huang, 2012, p. 250), whereas cost reduction refers to "reduction of cost resulting from crises, from public complaints, from lawsuits, and from opposition and activist pressure" (Huang, 2012, p. 250).

Huang and Hagan (2011) reported significant differences in the perceived value of public relations between market-oriented and non-market-oriented practitioners. Specifically, non-market-oriented practitioners placed greater emphasis on revenue generation and cost reduction (i.e. organizational effectiveness) than market-oriented practitioners who prioritized media publicity and exposure (i.e. public relations effectiveness) (Huang and Hagan, 2011). Therefore, the following hypotheses are proposed.

- H4a.* Practitioners who are more market-oriented are more likely to value the contribution of public relations to organizational reputation, the organization-public relationship and media publicity.
- H4b.* Practitioners who are more market-oriented are less likely to value the contribution of public relations to revenue generation and cost reduction.

Apart from the two-level model of public relations value (Huang, 2012), the past literature has discussed public relations effects in relation to digital media usage and interactivity. It has been argued that the usage of digital technologies, in particular social media, contributes to various public relations effects, including developing direct communication with the organization's stakeholders without being mediated by the news media (Kent, 2013; Linke and Zeffass, 2013; Valentini and Kruckeberg, 2012; Wright and Hinson, 2009), providing dialogs and building relationships with stakeholders (Kelleher, 2009; Macnamara and Zeffass, 2012) and enhancing organizational image and visibility (Gilpin, 2010; Yang and Kent, 2014). In addition, the usage of digital media enhances organizational capacity of symmetrical and two-way communications (Coombs and Holladay, 2018; Kelleher, 2009; Macnamara and Zeffass, 2012), and hence illustrates the significant contribution of interactivity in public relations practices. Therefore, the following hypotheses are formulated to indicate how practitioners perceive public relations effects in relation to digital media usage and interactivity.

- H5.* Public relations value as perceived by the practitioners significantly relates to the benefits of digital media usage.
- H6.* Public relations value as perceived by the practitioners significantly relates to the effects of interactivity.

Method

Sample and procedure

A self-administered online survey targeting 242 practitioners engaged in coordinating public relations activities in Hong Kong was conducted from July to October 2017. An invitation to participate in the online survey was sent by e-mail to all members of the Hong Kong Public Relations Professionals' Association Limited (PRPA) and the Hong Kong Digital Marketing Association (HKDMA). The PRPA is an independent organization constituted by public

relations professionals from both the commercial sector and the public sector in Hong Kong. The HKDMA is a non-profit professional body comprising professional marketers from various business fields. A screening question on the practitioners' involvement in managing market-oriented and non-market-oriented relations was included at the beginning of the survey to ensure that all of the participants were involved in organizing public relations activities (Huang and Hagan, 2011). Each participant was offered a gift coupon as an incentive to complete the survey.

Research instrument

The research instrument, which consisted of statements and scales adapted from previous research, was first compiled in English. Next, the researcher, a bilingual speaker, translated the instrument into traditional Chinese, and another bilingual speaker who was unaware of the research hypotheses back-translated it into English. The translated version was compared with the original version and no major discrepancies were found. A pilot study with a convenient sample of 20 participants working in the public relations or marketing industry was conducted before the main study. Each pilot participant received a gift coupon as an incentive for participation. Some of the wording in the Chinese version was modified after the pilot study. These pilot responses were excluded in the main study. The key measures used were detailed below.

Measures

Market-oriented relations. The following question was used to measure the extent of the contribution of public relations in establishing and maintaining market-oriented relations: "in your workplace, how much does public relations contribute to the establishment and maintenance of customer or consumer relations?" (Huang and Hagan, 2011). The participants were asked to respond on a scale from 0 to 10, with "0" indicating that public relations made no contribution to the establishment and maintenance of market-oriented relations in the workplace, and "10" indicating that public relations made a large contribution to the establishment and maintenance of market-oriented relations in the workplace.

Interactivity effects. Interactivity was measured in terms of the effects of interactivity perceived by participants in three dimensions, namely liking, involvement and customization. The items used by Guillory and Sundar (2014) were modified to fit the practitioners' perspective. The participants were asked to indicate to what extent they agree with the statements (see Table I for a description of the ten items) about organizational practices of using digital media. Responses were given on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Benefits of digital media usage in public relations. The benefits associated with digital media usage in public relations fell into three categories: business intelligence, corporate communications management and clients' profitability (Triantafillidou and Yannas, 2014). The participants were asked to indicate to what extent they agree with the statements (see Table I for the 12 items) about the benefits for an organization using digital media. Responses were given on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Public relations value. The question on public relations value measured the extent to which the participants perceived that public relations efforts contribute to revenue generation, cost reduction, media publicity/exposure, organization–public relationship and organizational reputation (Huang, 2012; Huang and Hagan, 2011). The participants were asked to indicate to what extent they agree with the descriptions of possible values that public relations can contribute to an organization (see Table I for all the 19 items used). A seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used.

Constructs	Mean	Standard Deviation	Cronbach's alpha	CR	AVE
<i>Interactivity effects</i>					
Liking			0.71	0.87	0.60
(1) Digital media should make the audience return to the platform because of his or her enjoyable experience	6.03	1.19			
(2) Digital media should have a likeable visual layout	5.94	1.22			
(3) Digital media should make the audience enjoy surfing this Web site	5.85	1.27			
(4) Digital media should be well-designed	5.75	1.23			
(5) Digital media should be aesthetically pleasing	4.43	2.20			
Involvement			0.72	0.85	0.65
(1) Digital media should make the audience feel compelled to make use of the contact information for further action	5.21	1.43			
(2) Digital media should invite the audience to participate in	5.57	1.28			
(3) Digital media should motivate the audience for action	5.63	1.26			
Perceived customization			0.76	0.89	0.80
(1) The features of digital media should help the audience to find information that is personally relevant to them	5.72	1.27			
(2) Digital media should be personally relevant to the audience	5.44	1.27			
<i>Benefits of digital media usage</i>					
Business intelligence			0.84	0.90	0.68
(1) Understanding the interests and lifestyles of publics	5.76	1.17			
(2) Analysis of various publics and environmental scanning	5.80	1.06			
(3) Information gathering about attitudes of publics	5.67	1.19			
(4) Analysis of publics' complaints	5.06	1.45			
Corporate Communications Management			0.71	0.83	0.54
(1) Effective implementation of corporate communications programs	5.78	1.12			
(2) Effective management of corporate crises	4.87	1.42			
(3) Effective management of employee	4.48	1.60			
(4) Effective management of investor relations	4.95	1.46			
Clients' Profitability			0.70	0.82	0.54
(1) Enhancing clients' reputation	5.59	1.21			
(2) Achieving communication goals	5.75	1.23			
(3) Increasing clients' sales	5.08	1.34			
(4) Reducing the communication costs	5.43	1.46			
<i>Public relations values</i>					
Media publicity			0.78	0.87	0.70
(1) Increase in the amount of media exposure and publicity	5.87	1.35			
(2) Decrease in negative media coverage	5.17	1.60			
(3) Increase in positive media coverage	5.58	1.39			
Organizational reputation			0.85	0.90	0.70

Table I.
Descriptive statistics, validity and reliability coefficients of the multi-item constructs

(continued)

Constructs	Mean	Standard Deviation	Cronbach's alpha	CR	AVE
(1) Increase in public impression that my organization is an environmentally responsible organization	5.50	1.38			
(2) Increase in public impression that my organization supports good causes	5.47	1.34			
(3) Increase in public impression that my organization maintains high standards in the way it treats people	5.36	1.29			
(4) Increase in public impression that my organization offers high quality products and services	5.23	1.38			
Organization–public relationship			0.77	0.87	0.69
(1) Increase in new networks building	5.59	1.35			
(2) Maintaining important networks	5.51	1.25			
(3) Increase in relationship maintenance and cultivation with stakeholders	5.22	1.25			
Revenue generation			0.81	0.88	0.64
(1) Increase in stock value	4.03	1.57			
(2) Increase in return on investment	3.96	1.52			
(3) Increase in financial performance	3.79	1.55			
(4) Increase in business and sales	4.11	1.42			
Cost reduction			0.86	0.90	0.64
(1) Reduction of cost resulting from crises	4.78	1.48			
(2) Decrease in or resolution of conflict in organization–public relationships	5.18	1.42			
(3) Reduction of cost resulting from opposition and activist pressure	4.20	1.51			
(4) Reduction of cost resulting from lawsuit	4.12	1.55			
(5) Reduction of cost resulting from public complaint	4.62	1.41			

Table I.

Additional information was obtained for further analysis on the practitioners' gender, education level, number of years of professional experience and seniority, and on the type of organization or organizational unit that each practitioner worked for (e.g. in-house public relations department, public relations agency, in-house marketing department, marketing agency, in-house corporate communication department or in-house public relations and marketing department) (Huang and Hagan, 2011).

Results

Responses were provided by 242 practitioners, and 241 cases were retained after data cleaning. The case excluded had missing data. More female than male practitioners participated in the study (female: 78%; male: 22%). Almost all of the participants (98%) had a Bachelor's degree or above. About a third of the participants were from public relations agencies (19%) or in-house public relations departments (11%). Another third were from marketing agencies (10%) or in-house marketing departments (21%). The remainder was from in-house corporate communication departments (20%) or public relations and marketing departments (16%), and a few participants (3%) said that they did not belong to any of these six work units. The participants had an average of 7.1 years' experience of organizing public relations activities. All of the participants worked full time, and 49% were at the managerial grade or above.

Preliminary analysis

A preliminary analysis was conducted to examine the relationships between participants' work units (i.e. type of organization or organizational unit that each practitioner worked for) and other four variables, namely market-oriented relations, interactivity effects, benefits of digital media usage in public relations and public relations value, respectively. One-way between-subjects ANOVAs were conducted based on the data from 234 practitioners working in six specific work units, namely public relations agencies, in-house public relations departments, marketing agencies, in-house marketing departments, in-house corporate communication departments and public relations and marketing departments. Results showed that there was a significant difference of practitioners' contribution to market-oriented relations according to their work units, $F(5, 228) = 3.37, p < 0.01$. Post hoc comparisons using the Tukey HSD test indicated that the mean score of practitioners' contribution to market-oriented relations was significantly higher for practitioners working in public relations agencies ($M = 7.67, SD = 1.49$) than that for practitioners working in in-house marketing departments ($M = 6.20, SD = 1.99$), while there was no significant difference among all other mean scores of practitioners' contribution to market-oriented relations across their work units. In addition, there was no significant difference of practitioners' perceptions of interactivity effects [liking: $F(5, 228) = 1.77, p > 0.05$; involvement: $F(5, 228) = 0.233, p > 0.05$; perceived customization: $F(5, 228) = 1.42, p > 0.05$], benefits of digital media usage in public relations [business intelligence: $F(5, 228) = 0.71, p > 0.05$; corporate communication management: $F(5, 228) = 1.08, p > 0.05$; client's profitability: $F(5, 228) = 0.81, p > 0.05$] and public relations value [media publicity: $F(5, 228) = 0.67, p > 0.05$; organization–public relationship: $F(5, 228) = 0.62, p > 0.05$; organizational reputation: $F(5, 228) = 0.72, p > 0.05$; revenue generation: $F(5, 228) = 1.38, p > 0.05$; cost reduction: $F(5, 228) = 0.70, p > 0.05$] across practitioners' work units.

Structural equation modeling (SEM) analysis

Based on prior research on the evaluation of measurement model (Fornell and Larcker, 1981; Hair *et al.*, 2010), all of the scales had adequate Cronbach's alpha values and composite reliability (CR) coefficients above 0.70, so the items were all retained for further analysis (see Table I). All of the average variance extracted (AVEs) values were above the 0.50 threshold (Hair *et al.*, 2010). The means and standard deviations for each item were also included in Table I.

To examine simultaneous relationships among multiple dependent variables and multiple independent variables, namely market-oriented relations, public relations value ($\alpha = 0.85$), interactivity effects ($\alpha = 0.76$) and benefits of digital media usage in public relations ($\alpha = 0.85$), SEM analysis using AMOS Graphics was conducted. A single item was used to measure the observed variable of market-oriented relations. Multiple items were used to measure the latent variables of public relations value, interactivity effects and benefits of digital media usage, and these variables were measured by the factor scores obtained from the factor analyses on the related scales.

Estimates were obtained using the maximum likelihood method and a covariance matrix was used for the analysis. A sample size of 200 was believed to be adequate and has met the critical level of running SEM analysis (Garson, 2015; Hair *et al.*, 2010; Kline, 2016; Stevens, 2009). Although different rules of thumb have been established for the sample size requirements of SEM analysis, the sample size of this study was appropriate to the number of variables and parameters used, exceeding the critical threshold for running SEM analysis (Garson, 2015). The measurement model was finalized (see Figure 2) based on the hypotheses and identified modification indices. With reference to Byrne's (2010) argument, covariances among error terms were added based on modification indices for further explanation of common factors of the items. Overall, neither negative error variances nor extremely large

standard errors for coefficients were found, the study showed no symptoms of identification problems (Hair *et al.*, 2010; Stevens, 2009). Model fitting was conducted without the failure to converge on a solution.

The evaluation of model fit according to various goodness-of-fit measures has received extensive attention from researchers (Garson, 2015; Hair *et al.*, 2010; Kline, 2016; Stevens, 2009). In this study, the value of the normed chi-square (χ^2/df) was less than 3.00 (Kline, 2016), with χ^2 (46, $N = 241$) = 88.95, $p < 0.001$. The model fit was supported by the data based on a range of evaluation criteria, with root mean square error of approximation (RMESA) = 0.06, standardized root mean square residual (SRMR) = 0.05, Tucker–Lewis index (TLI) = 0.96 and comparative fit index (CFI) = 0.97.

As a study on practitioners' perceptions, practitioners' contribution to market-oriented relations had significant positive effects on their perceptions of interactivity effects ($\beta = 0.18$, $p < 0.01$) and the benefits of digital media usage in public relations ($\beta = 0.15$, $p < 0.01$). All of the standardized regression weights between the two latent variables, namely interactivity effects and benefits of digital media usage in public relations, and their respective factors were greater than 0.70, supporting H1 and H2. Interactivity effects had a significant positive effect on benefits of digital media usage in public relations ($\beta = 0.63$, $p < 0.001$). Therefore, H3 was also supported.

The practitioners' engagement in market-oriented relations was found to have a significant positive impact on their perceptions of public relations value ($\beta = 0.26$, $p < 0.001$). The standardized regression weights between the latent variable of perceived public relations value and its related factors, namely organizational reputation ($\beta = 0.93$), organization–public relationship ($\beta = 0.83$) and media publicity ($\beta = 0.82$), were greater than 0.80, whereas the standardized regression weights between perceived public relations value

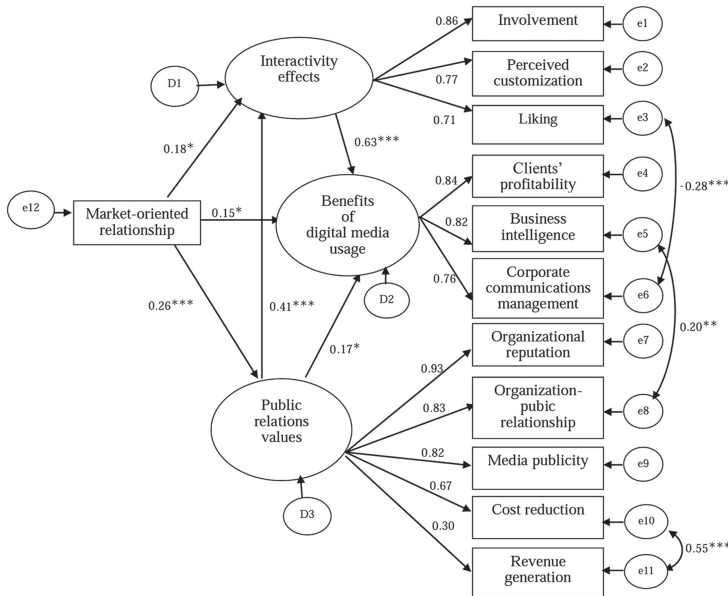


Figure 2. Proposed structural model on perceptions of practitioners (with standardized parameter estimate)

Paths were significant at:
Note(s): *** $p < 0.001$, ** $p < 0.05$, * $p < 0.01$

and its factors namely cost reduction ($\beta = 0.67$) and revenue generation ($\beta = 0.30$) were much lower than for the other factors. In other words, market-oriented practitioners, who focused on customer or consumer relations, valued the contribution made by public relations to organizational reputation, organization–public relationship and media publicity over its contribution to cost reduction and revenue generation. Therefore, H4a and H4b were strongly supported.

In addition, the analysis showed that the value attributed by the practitioners to the contributions made by public relations had a significant positive impact on their perceptions in terms of benefits of digital media usage in public relations ($\beta = 0.17, p < 0.01$) and interactivity ($\beta = 0.41, p < 0.001$). H5 and H6 were also supported.

The modification indices also revealed that indicators of public relations value were significantly correlated. Revenue generation and cost reduction were slightly correlated ($r = 0.55, p < 0.001$). Organization–public relationship, another indicator of public relations value, also correlated with business intelligence, an indicator of benefits of digital media usage in public relations ($r = 0.20, p < 0.05$). Corporate communications management, another indicator of benefits of digital media usage, significantly correlated with liking, an indicator of interactivity ($r = -0.28, p < 0.001$).

Overall, interactivity effects ($R^2 = 0.24$) and benefits of digital media usage in public relations ($R^2 = 0.61$) were well explained by multiple factors in the model. A small proportion of the variance in practitioners' perceptions of public relations value ($R^2 = 0.07$) was explained by a single factor, namely practitioners' engagement in market-oriented relations.

Discussion and conclusion

A structural model of market-oriented relations in the digital era, based on practitioners' perceptions, was developed. Figure 2 illustrates the results of the proposed structural model, which showed that the practitioners' perceptions toward the relationships among interactivity effects, public relations value and benefits of digital media usage were affected by the extent of practitioners' engagement with market-oriented relations in the workplace. Whereas prior research has categorized practitioners into two groups (i.e. public relations versus marketing) for analysis (Ha and Ferguson, 2015), this model consolidated the conception of market-oriented relations as a continuum defined by the contribution made by public relations to establishing and maintaining relationships between organizations and their customers or consumers. This conceptualization is expected to better accommodate the convergence of public relations practices in the industries of public relations and marketing in the digital era. Overall, this study suggests that in the digital era, given the growing influence of digital media and the increasingly significant role of customers or consumers in public relations and marketing, it is less likely to differentiate public relations and marketing in terms of their common role in establishing and maintaining market-oriented relations with customers or consumers. It is not surprising that the preliminary ANOVA results revealed significant variations of practitioners' involvement in managing market-oriented relations across their work units. Yet, public relations and marketing practitioners who worked in six different work units did not have significant perceptual differences on interactivity effects, benefits of digital media usage in public relations and public relations value. Such findings reinforced that, consistent with past discussion, the prominent use of digital media enables the convergence of public relations practices, in particular on market-oriented relationship building, performed by the practitioners of public relations and marketing (Gesualdi, 2019).

It is also worth noting that, based on the ANOVA results, market-oriented relations nowadays occupied a significant role in public relations agencies, with a significantly higher mean score of practitioners' contribution to market-oriented relations ($M = 7.67, SD = 1.49$) than that of in-house marketing departments ($M = 6.20, SD = 1.99$). It implies that

market-oriented relations is an important specialty in today's public relations agencies. In addition, regardless of the type of organization or organizational unit that each practitioner worked for, the mean score of practitioners' involvement in market-oriented relations was high in general ($M = 6.96$, $SD = 1.94$). It means that customers and consumers as a group of stakeholders is also significant for practitioners responsible for organizing public relations activities across all work units in public relations and marketing. The proposed structural model further illustrates that practitioners' engagement with market-oriented relations in today's digitalized working environment indeed had significant effects on how they perceived both interactivity effects and benefits of digital media usage. In other words, practitioners who have been actively engaged with market-oriented relations in the digital context, contrasting to practitioners who involved less in market-oriented relations, possessed stronger perceptions on the significance of interactivity effects ($\beta = 0.18$, $p < 0.01$) and benefits of digital media usage ($\beta = 0.15$, $p < 0.01$). Future research is advised to consider examining the underlying reasons of such perceptions and extending the analysis of practitioners' perceived public relations value (Huang, 2012) into the digital context so as to obtain a more comprehensive picture of organizational practices in the digital era.

Results revealed that, in terms of practitioners' perceptions of public relations value, public relations effectiveness is the most significant concern for practitioners in the digital context. The standardized regression weights showed that, consistent with past research (Huang and Hagan, 2011), practitioners focusing on establishing and maintaining market-oriented relations attributed more value to public relations effectiveness (organizational reputation: $\beta = 0.93$; the organization–public relationship: $\beta = 0.83$; media publicity: $\beta = 0.82$) than to organizational effectiveness (cost reduction: $\beta = 0.67$; revenue generation: $\beta = 0.30$). It is worth noting that, among all five factors of perceived public relations value, the standardized regression weights of revenue generation ($\beta = 0.30$) was much lower than other four factors. It indicates that, when managing market-oriented relations, practitioners perceived revenue generation as the least significant value of which public relations contributes to the organization. In addition, two types of perceived public relations value, namely cost reduction and revenue generation, were found to be slightly correlated ($r = 0.55$, $p < 0.001$). This finding is not surprising as revenue generation and cost reduction are both indicators of organizational effectiveness and are related to organizations' financial performance. It is also noteworthy that organization–public relationship, an indicator of public relations value, was correlated with business intelligence ($r = 0.20$, $p < 0.05$), an indicator of the benefits of digital media usage in public relations. This implies that practitioners who value organization–public relationship more are more likely to use digital media for environmental scanning, for example, conducting research on or gathering information about target stakeholders. Moreover, corporate communications management, which focuses on effective management of crises, investor relations and employee relations, is negatively correlated with liking ($r = -0.28$, $p < 0.001$), which represents a type of interactivity effects. It seems that practitioners who value the contribution of digital media usage to corporate communications management most do not seem to perceive liking as an important effect of interactivity.

As a study on practitioners' perceptions, the proposed structural model (Figure 2) indicated that practitioners' perceived public relations value had a stronger perceptual impact on interactivity effects ($\beta = 0.41$, $p < 0.001$) than on benefits of digital media usage ($\beta = 0.17$, $p < 0.01$). The practitioners' market orientation affected their perceptions of the benefits of digital media usage both directly and indirectly, with an indirect effect via their perceptions of interactivity effects. This study revealed that an enhancement to clients' profitability ($\beta = 0.84$) was perceived as the most significant advantage of using digital media in public relations, followed by an advancement of business intelligence ($\beta = 0.82$). However, digital media usage was perceived as less likely to improve corporate communications management

($\beta = 0.76$). In addition, involvement was the most representative effect of interactivity ($\beta = 0.86$), whereas liking ($\beta = 0.71$) was the least important. This implies that practitioners who are more market-oriented emphasize more on involvement, which generally favors contingency interactivity over functional interactivity and believe that engaging target stakeholders with the content of the digital media is the most important way to establish and maintain relationships with stakeholders (Guillory and Sundar, 2014). In contrast, practitioners who are more market-oriented are less concerned with the interactivity effect of liking, which is closely associated with functional interactivity (Guillory and Sundar, 2014).

Limitations and future research

It is worth noting that this study only explores the perceptual dimension of market-oriented relations. It means that, for pragmatic reasons, the participants in this study were asked to report their perceptions subjectively. Therefore, they probably answered the questions according to their own perceptions rather than based on their organizations' actual practices. The measurement items in this survey study, including the single-item measurement of market-oriented relations (Huang and Hagan, 2011), were adapted from past studies (Guillory and Sundar, 2014; Huang, 2012; Huang and Hagan, 2011; Triantafillidou and Yannas, 2014). Although building on prior research study (Huang and Hagan, 2011), market-oriented relations was only measured by a single item in this survey. Interpretation of research implication from this study should pay attention to such limitation.

Although the sample size of 200 exceeded the critical threshold for running SEM analysis (Garson, 2015; Hair *et al.*, 2010; Kline, 2016; Stevens, 2009), a larger sample would undoubtedly yield more robust effects for the variables (Garson, 2015). Therefore, future research could test the conceptual model with a bigger sample. In this study, the types of departments to which the practitioners belonged were fairly balanced. However, further research could offer comparison of a greater range and more equal distribution of departments. It is worth noting that, although all participants in this study have been engaged in market-oriented relations, their perceptions may vary a lot as they worked in different types of departments. This may weaken the reliability of some factors in terms of Cronbach's alpha (α), for example, clients' profitability ($\alpha = 0.70$).

This study did not examine the encroachment issues among public relations and other functions (e.g. Ha and Ferguson, 2015; Lauzen, 1992). The proposed structural model only illustrates that, as an organizational function, managing market-oriented relations, particularly customer or consumer relations, has occupied a significant role in both public relations and marketing industries. Future research could explore the mechanisms underlying the significance of market-oriented relations in the digital context. As Gesualdi (2019) notes, the consequences of further convergence of the digital public relations practices in the fields of public relations and marketing should also be further examined.

Lastly, future research could administer the study from an organizational perspective, with the company as the unit of analysis. Invitations to complete the questionnaire could be sent to companies rather than individuals. Also, as this study only explores the situation in Hong Kong, it would be fruitful to further validate the proposed model in different countries and cultural contexts. Despite these limitations, this study provides practitioners with useful references for understanding the role of digital media in managing market-oriented relationships between organizations and their stakeholders.

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