

Research Article

Factors Influencing the Adoption of Interpersonal Communication Media among Small and Medium Enterprises in Hong Kong

Olivine Lo* 

Department of Journalism and Communication, Hong Kong Chu Hai College, Hong Kong, China

Abstract

This research paper investigates the factors influencing the adoption of interpersonal communication media among small and medium enterprises (SMEs) in Hong Kong. With SMEs representing a significant portion of Hong Kong's economy, understanding the communication strategies that enhance their competitiveness is crucial. This study examines how industry types and entrepreneur characteristics affect the selection and effectiveness of various communication media. Utilizing quantitative surveys, the research identifies key trends and correlations that can inform strategy development for SMEs. In terms of communication media preferences, surprisingly, FtF communication is the most preferred by all four industry types. However, the different industry types also exhibited some differences in their choice of mediated-interpersonal communication media aside from FtF. Two industry types of Hong Kong SMEs - the garment and the manufacturing industries - prefer traditional media (i.e., emails and postage) while the service industry do not. Entrepreneurs' communicative adaptabilities, social experience has the strongest correlation with three types of communication media preferences, face-to-face (FtF) communication, followed by new mobile messaging media and old messaging media; social confirmation has the second strongest correlation with two types of mediated-interpersonal communication media, new mobile messaging media and old messaging media; while articulation adaptability was found to only be significantly correlated with FtF, and appropriate disclosure was not found to be correlated with any of the communication media preferences. This study found that, in the Hong Kong case, younger SMEs' entrepreneurs with appropriate disclosure in communicative adaptability and who are working in less established but larger sized SMEs tended to be able to achieve positive financial performance. In addition, they have to meet up with their mainland Chinese business acquaintances through FtF communication that is supplemented with other mediated-interpersonal communication media, such as emails, text/voice messages, faxes, mobile instant messages, and post, to improve their personal connection as well as the business operation process. The findings also pointed out that appropriateness is the most important communicative adaptability for entrepreneurs; therefore, articulation adaptability is not important as long as the communicators can interpret the meaning underneath the messages. The Chinese are more concerned with appropriate behavior than accuracy.

Keywords

Small-and Medium-Sized Enterprises, Interpersonal Communication Media, Entrepreneur, Personality Traits, Communicative Adaptability

*Corresponding author: olivinelo@chuhai.edu.hk (Olivine Lo)

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1. Introduction

Small and medium-sized enterprises (SMEs) are essential to the economic framework of Hong Kong, contributing to over 98% of all registered businesses and employing approximately 47% of the workforce in the private sector. Despite their significance, SMEs face many challenges, including limited resources, intense competition, and the need for effective communication strategies to maintain their market position. Thong and Yap, [55] indicated that competitiveness of the business environment means the competition faced by the business within its particular industry. Previous studies, e.g., Porter & Millar, [45] have identified five competitive forces that all businesses face: new entrants, the threat of substitute products or services, bargaining power of customers, bargaining power of suppliers, and rivalry amongst current competitors. Additionally, different business sectors vary widely in any number of ways, including the degree of competition present within each [55]. Therefore, the more intense the competition in a given sector, the greater the potential for strategic uses of specific needs in a business. Thong and Yap's [55] study also finds that competitiveness of environment and information intensity is positively correlated with CEO attitude towards IT adoption. Lumpkin and Dess, [39] also find that internal organization characteristics and external environments may affect firm performance and financial resources are vital to entrepreneurial strategies. Studies on business venturing argue that firms that face dynamic environments with high unpredictability of customers, competitors, and market trends may achieve better business performance than firms that are content with existing operations [60].

Effective communication thus is vital for SMEs, as it fosters relationships with clients, suppliers, and other stakeholders. The choice of communication medium can significantly affect the quality and efficiency of these interactions. Media richness theory posits that richer communication channels—such as face-to-face interactions—are more effective for complex information exchanges than leaner channels, like emails [9, 12]. This paper aims to explore the factors influencing the adoption of interpersonal communication media among SMEs in Hong Kong, focusing particularly on how different industry types and the characteristics of entrepreneurs shape these decisions.

2. Literature Review

2.1. Media Richness Theory

The media richness theory advanced by Daft and Lengel, [12-14] suggests that richer media are better for handling more equivocal information tasks, especially those that involve relationship management, where FtF communication is preferred. For example, Trevino, Lengel, Gerloff, and Muir, [56] state that media can be arrayed along a "media richness"

continuum based on four criteria: (1) the availability of instant feedback, (2) the ability to use multiple cues, (3) the ability to present a user's natural language, and (4) a personal focus on the media. Each of these criteria contributes to a medium's ability to transmit rich information (i.e., facilitate shared meaning and consensual understanding), see Figure 1 [13]. Media richness is the potential of a particular medium to transmit rich information. FtF is considered the richest communication medium because it allows rapid mutual feedback, uses multiple cues to convey meaning, uses natural language, and can convey emotions. Following FtF on the media richness continuum are the telephone, electronic messaging systems, addressed written documents, unaddressed written documents, and numeric documents, such as statistical reports. Daft and Lengel's [12-14, 31] studies find that managers who are more skilled at selecting appropriate communication channels have been rated as being more effective in carrying out their managerial roles. Therefore, rich media are selected for equivocal messages because only rich media have the capacity to resolve the ambiguity and multiple interpretations of an equivocal message. Thus, in low-equivocality situations, managers would have more freedom to choose media based on their own personalities and preferences, and therefore, individual differences are more likely to emerge to influence the media choice. Due to individual differences, past empirical findings are not consistent. For examples, Rice and Love, [49] find some users perceived emails as a richer medium than other media; on the contrary, Schmitz and Fulk, [50] find users in a large organization perceived email as less rich than a personally written text. The more recent study of the preference between email and instant messaging among college students has shown that younger students preferred the more synchronous media, instant messaging, [33]. With the popularity of mediated-interpersonal communication technologies in sending text messages via computer (emails) and mobile phone (SMS, IM), the logic of media richness may not be able to answer the questions regarding why traditionally perceived lean media like electronic messaging are becoming more popular than traditionally perceived rich media like the telephone in this mobile communication era. Thus, past research may undervalue the capability of "low-richness" media in their communication functions. Trevino et al, [56] further suggest that media choices could be influenced by an individual's characteristics and when the media are being used. Licoppe, Heurtin, and Smoreda [34-36] point out that the medium, purposes, and the participants would influence how one chooses, uses, and perceives different media. Therefore, this study aims to find out how Hong Kong SME entrepreneurs' characteristics (i.e., communicative adaptability and guanxi importance) would influence their choice of communication media in their daily interaction with their business acquaintances in mainland

China.

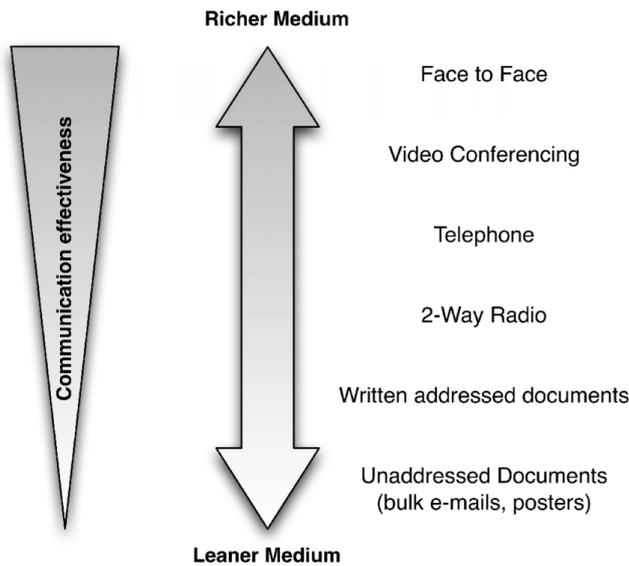


Figure 1. Media Richness Theory [13].

2.2. Interpersonal Communication Media Preferences

Interpersonal communication media include a range of channels, from face-to-face meetings to digital messaging platforms. The choice of communication media can influence not only the clarity of the message but also the relationship quality between parties. Previous research suggests that different industries may favour different media based on their unique operational needs and customer interactions, [29].

Information exchange is a key goal of human communication, and communicators have used a variety of media to maintain relationships through traditional FtF interactions and the formats of written media like letters. The advancement of mediated-interpersonal communication media like the telephone in the mid-20th century started the development of synchronic media for sustaining relationships, particularly enabling geographically distanced relationships. The technology continued with more interactive media; the Internet has brought along numerous interpersonal communication tools that allow the transmission of multi-media format messages like text, voice, video, and animation via email, IM, and MIM. Although these synchronous tools are gaining popularity, they are facilitating relationship maintenance in everyday life and complementing instead of replacing the more conventional FtF or telephone communication [4, 5]. Therefore, this research aims to study Hong Kong entrepreneurs' preference of various interpersonal communication media in their daily interactions with their mainland Chinese business acquaintances and the relation to their relationship cultivation strategies plus other variables in this research framework (See Table 2 for details).

The following work will review relevant literature, especially on FtF communication and other mediated-interpersonal communication media.

2.2.1. Face-to-Face Communication

According to the media richness theory, face-to-face (FtF) is the most information-rich medium and has the highest potential for transmitting the complex personal information needed in relationship building. In the workplace, FtF is sometimes costly and disruptive, but it can establish and nurture human relationships in ways that no other mediated-communication media can achieve. Those ways include facilitating social bonding and serving as symbolic expressions of commitment, [42-44]. However, during FtF interaction, individuals who are shy may experience anxiety and lack confidence in their communication, [26, 27] and they may search for other mediated-interpersonal communication media. Therefore, it is important to know which communication medium the Hong Kong entrepreneurs would use for their daily interactions with their mainland Chinese business acquaintances.

As mentioned, mediated-interpersonal communication can be an alternative to FtF interaction, especially for those who lack communication competence in traditional oral communication. Besides, mediated-interpersonal communication media allow communicators to use various online tools to acquire social information that is not available from a FtF interaction, [47]. However, most of the nonverbal cues (e.g., facial expression, speaking tone, and body language) cannot be represented, though there are emoticons, voice, and video formatted messages available. Given these quality differences, a FtF meeting with business acquaintances may convey more respect than a phone call. Attending a "not-so" important social gathering may be a way of giving face; sending a handwritten note may seem less formal than an email but may be considered sincere; a simple note with an emoticon sent by MIM may show concern for relationships.

2.2.2. Mediated Interpersonal Communication

Past studies on mediated communication conclude that asynchronous communication is the last motivational component, while text messaging has started to play a central role in mobile communication, [54, 58]. This shows communication technologies have changed users' perceptions and applications of different media over time, [51-53]. Users do not rely on a single medium for interaction but will use a variety of media in achieving their communication objectives. Their preferences will be based on a variety of reasons.

2.2.3. Traditional Media for Hong Kong SMEs (Email and Fax)

The advancement of telecommunication technologies has not changed the nature of email being a text-based and

asynchronous computer-mediated system that can enable written messages to be composed and edited on a computer and can be sent, received, and saved alongside their attached files over the computer network. Emails can be sent to either individual or multiple recipients, [24] and have replaced faxes and the handwritten letter in most business documentation. The advancement in mobile telecommunication devices has even freed email from the location constraint of traditionally being sent from desktop computers. Now, users can send and receive emails from smartphones, tablets, notebooks, and personal computers. Therefore, email is still the most prevalent form of traditional CMC within organizations.

Email, is still considered a less rich medium in the media richness theory spectrum because it is mostly used for the management and coordination of activities, not for personal relationships, [6], however, email can better facilitate an instrumental communication style. Some early studies have found that women are more likely than men to use emails in communicating with friends and families and to sustain distant friendships, [7], and “email...is a more reflective medium than the phone or instant messaging”, [7]. But email is still seen as an instrumental communication tool for saving time, and it is perceived as more reliable and more efficient for relationship management than a FtF meeting or telephone conversation, [15] because documents can be recorded and filed for legal references.

Some studies show that users' increased competence in employing computer-mediated media allows them to be more capable of multitasking, i.e., using different media for different tasks. For example, users can conduct several textual conversational interactions with emails, faxes, and IM simultaneously, [18]. However, despite the popular use of new communication media and easy access to the Internet, it is found that many of the Hong Kong SMEs still use the faxes as part of their daily communication media, particularly among the older generations that are less competent with the new technologies.

2.2.4. Old Messaging Media (SMS, Phone Voice Messages, Instant Messaging)

The short message service (SMS) is the early text service on mobile phones and is a popular handheld-based communication tool. Despite the decreasing popularity of SMS among mobile phone users in Hong Kong, [32] it still has its place in mediated- interpersonal communication, particularly among 4G users who live and work in the sub-urban and industrial areas. For example, Ling, [37] studied Norwegian teenagers who prefer SMS in their daily interactions to email, instant messaging (IM), mobile voice, or landline telephone calls. Leaving voice mail messages on a mobile phone has been nothing new since the development of the mobile phone. It is more convenient and easier to use than the traditional voice message recorder (or answering machine) for a fixed-line phone in the past and still is widely used

among mobile phone users.

Instant messaging is another popular messaging media that is a synchronous electronic communication medium that enables real-time communication between two or more users in exchanging textual, voice, and symbol via Internet-based devices, [24]. It was first made widely available when the ICQ network was introduced in 1996 and gained popularity among Hotmail and Yahoo users, who can communicate with others on their self-created buddy lists or even chat with strangers. IM thus became very popular among teenagers and adults because of its anonymous feature, which allows them to express themselves freely, [47]. Besides, IM enables users to interact in a more immediate manner than other text-based CMC methods like email and helps to reduce disruption in voice conversations, [43, 47]. Li, Chau, and Lou, [38] studied the adoption of IM by college students and found that the perceived usefulness and enjoyment of using IM will lead to continuous use of the technology. They defined “perceived usefulness” as IM's enhancement in building and maintaining interpersonal relationships in a social context, whereas their perceived enjoyment of using IM entailed fun, enjoyment, and pleasure in the process. Besides, IM has a function to post a user's status, for example, “I am away from my desk,” “I'll be back in X minutes,” etc., which is the equivalent of the voice messages left on a telephone or mobile phone but is easier to retrieve.

Other studies on communication media preferences have shown that “multi-functions” were considered an important predictor for college students in their choice of IM over email, [33]. Besides, the ‘synchronous’ feature that the medium can provide also serves an important predictor for the younger generation to prefer IM over email to satisfy their needs for instant gratification. Their study also finds that the younger generation is more likely to use IM in maintaining relationships with friends and relatives. Even in making new friends, the younger generation finds that IM can meet their demand to use the medium for “sociability.” Because of later developments with smartphones and Internet connections, users can send more multimedia messages like audio files, video formats, and text messages that meet the requirements of businesspeople despite geographic limitations. These studies show that IM can handle more than simple communication; it is also useful for more complex tasks like relationship building. Despite the advancement in CMC technologies, they are still comparatively less rich than FtF communication according to the media richness spectrum.

2.2.5. New Mobile Instant Messaging App (Mobile Media Messaging, Multi-media Messages)

Mobile instant messaging (MIM) is the transformational version of IM, not only because of its mobility feature, where applications can be downloaded to any smartphone for free, but also because of its multi-functional capacity. MIM is a synchronous communication tool that works on any Internet-based device and is mostly used on smartphones,

where users can create different chat groups from their mobile phone contact list. The most popular MIM application providers in Hong Kong and China are WhatsApp, Line, and WeChat. These enable users to have more control over the usage of the medium, which becomes another contributing factor to their popularity. For example, the creator of a chat group has the authority to add and remove members while members have the independence to accept the invitation or leave the group freely. Besides, group members can design their own layout profile with different backgrounds and photos of their choice anytime. According to the statistics provided by the Businessofapps.com, as of 2024, there are about three billion people using the mobile messaging apps which enables users to send texts, pictures, and audio and video files as well as supports video calls, real-time conversations, and other extended functions like multi-person real-time voice chatting, searching music by shaking the device, voice reminders, and location navigation. Although WhatsApp (has more than 2.5 billion users) is the most popular mobile messaging app used in Hong Kong, many have downloaded the China based mobile messaging app, WeChat (has more than 1.37 billion users) to communicate with their friends, family, and business acquaintances in China.

Logically, any new medium that is equipped with richer features resembling FtF communication should be more likely to be adopted in social interaction because it can achieve greater communication efficiency, [30, 58]. Following the logic of media richness theory, MIM should surpass the older version of IM media and be ranked the next richest medium after FtF. MIM is designed to meet users' various interaction needs at different relationship stages, [17], and therefore, it is most likely to have maximized efficiency for facilitating friendship formation.

2.2.6. Instant Messaging Used in the Workplace

Previous research identifies some general usage patterns of Instant Messaging (IM): (1) users can engage in other activities while using IM, for example, talking on the telephone or processing documents or emails, which allows them to multi-task; (2) an IM conversation is brief and addresses a single purpose with an emphasis on rapid exchanges of questions and answers; (3) IM is often used for task coordination, for example, scheduling FtF meetings; and (4) media switching when the conversation becomes too complex to continue in IM, participants may switch to phone or FtF interaction activities, [43, 44]. More studies were conducted to learn how IM is being used in the workplace. For example, Isaacs, Walendowski, Whittaker, Schiano, and Kamn, [25] summarize from other research that "informal face-to-face communication has been shown to serve many important functions in organizations, including complex coordination, problem solving, and social learning" (p. 11). Some past studies identified several unique characteristics of IM users in the workplace. For example, Isaacs et al., [25] find

two styles of IM users: (a) "working together" refers to those who heavily use IM for a range of collaborative activities like multipurpose discussion and scheduling, their conversations are intensive and less inclined to close their conversations; (b) "coordination" refers to those who are light users and they use IM for managing activities in other media like FtF meetings or telephone conversations. Besides, they find that light IM users will not respond to messages immediately; they are aware of the information received but do not act on it. Thus, they use IM as "sticky notes," that is, reminders. These users even find IM is more useful than email because IM is more visible with the sound alert on a smartphone and IM is more convenient than voice messages in retrieving messages from the phone. Nardi et al., [43, 44] identified other functions of IM at the workplace: (1) for quick questions and clarifications; (2) organization and scheduling work tasks; (3) coordinating impromptu social meetings; and (4) keeping in touch with friends and family, which focuses on the social uses of IM. However, these studies did not include any specificity of organizational characteristics like the types of business, relationship types of the communicators, and business size.

Since Morgan and Hung, [41] identified that communication is an important ingredient in building relationships between an organization and its customers or stakeholders, how people choose to use the various interpersonal communication media is influenced by their organizational characteristic relationship types, including their geographical distance and individuals' pre-existing sociability, [14, 16]. This study, therefore, aims to find out the effects of organizational characteristics on the choice of communication media of the SMEs entrepreneurs in Hong Kong. Consequently, this study proposes the following research question.

RQ1: To what extent can organizational characteristics (industry types, business size, years of establishment, years of experience with Chinese business, role of company, and competitiveness of business environment) predict entrepreneurs' communication media preferences?

2.3. Definition of Entrepreneurship

Importance of Entrepreneurial Characteristics

The subjects of this study are the owners and senior management of the SMEs in Hong Kong; this study will use the term "entrepreneurs" to identify them. However, there are different definitions of the term "entrepreneurs" in different disciplines. In business management, entrepreneurs are those who have the intention to start up his/her own business instead of working for a corporation; therefore, they share some special characteristics that are different from the non-entrepreneurs. They also define the owners of the SMEs as not entrepreneurs because their businesses have been established for some years. Consequently, there are different measurements regarding how one becomes an entrepreneur, [48].

Past research studied the relations of an entrepreneur's personality traits and technology development. Antoncic, [1, 2] emphasized that "[T]echnological newness and innovativeness are important aspects of small firm development, growth and wealth creation" (p. 236), and his study is in line with studies of Cupach and Spitzberg, [11] and Lumpkin and Dess, [39] research. Besides, other researchers suggest that entrepreneurship is based on the personality of the entrepreneur, which is crucial for small firm-related decisions, [1, 3, 8, 48].

Entrepreneurial attitude studies stem from personality trait research and are often examined as part of the entrepreneurial tendencies of an individual. Zhao, Seibert, and Lumpkin, [62] conclude that only two personality traits—openness to experience and conscientiousness—are most associated with entrepreneurial intentions (EI). Yildiz, [61] states that "innovativeness helps entrepreneurs support the innovations in firms" (p. 84) and innovation is the viewpoint of the entrepreneurs. Antoncic, [1, 2] study reveals two personality factors of entrepreneurship that are predictive of technological developments: openness (positive impact) and neuroticism (negative impact). Other personality factors (conscientiousness, extraversion, and agreeableness) of entrepreneurs are not considered important for their firms' technological developments. Yildiz, [61] summarized from past studies on entrepreneurs' traits as: autonomy, creativity, innovation, risk-taking, the need for achievement, locus of control, avoidance of ambiguities, self-confidence, and high tolerance of risk. Past studies on SMEs have shown that entrepreneurs' innovativeness has brought economic value to the firms with the spread of the knowledge-based economy, globalization, and the pressure of international competition, [10].

In addition to the predominantly studied behaviors of entrepreneur orientation (EO), [39, 48], other approaches to personality like entrepreneurial self-efficacy (ESE) and the most important, five factors of the personality trait approach, [21], later called OCEAN (openness, conscientiousness, extraversion, agreeableness, and neuroticism) are also found to be linked to entrepreneurship activities, [1]. ESE is defined as "a person's belief in his or her capability to perform a task in the relationship, between proactive personalities (PP) and entrepreneur intent (EI)", [46]. Markman, Balkin, and Baron, [40] found that, in high-tech industries, inventors with higher self-efficacy choose to exploit their inventions by launching new businesses, whereas inventors with lower self-efficacy prefer to work for established companies. These studies imply that perceived ESE aids in exploring new opportunities and venturing out.

Despite the extensive studies on entrepreneurship and entrepreneurs' personal traits, EO, and ESE, researchers mainly focus on their characteristics and have neglected other important factors like cultural beliefs and communication competence, which also contribute to organizational performance, particularly in international business, when

businesspeople encounter a different culture, [23]. As Ward, [57] has already pointed out, ESE should include a social network and the ability to perform tasks in relationships. Thus, this study will focus on studying the entrepreneur's characteristic: communication adaptability which reflects on communicators' social communication competence. This study will test their associations which are believed to influence the SMEs' organizational performance. The following sections will further discuss the literature.

2.4. Entrepreneurial Personality Traits

Communicative Adaptability

Communicative adaptability is developed from communication competence, which has a long history in communication studies and has been found to be related to communication apprehension, self-esteem, [19], and communication effectiveness, [59]. Duran conceptualized communicative adaptability, [20] as social communication competence, which means, "the ability to perceive socio-interpersonal relationships and adapt one's interaction goals and behaviors accordingly". The construct of communicative adaptability emphasizes the importance of adaptation on various communication contexts that are essential for business communication. Duran further explained that:

"The salient aspects of communicative adaptability are: 1) The requirement of both cognitive (ability to perceive) and behavioral (ability to adapt) skills; 2) Adaptation not only of behaviors but also interaction goals; 3) The ability to perceive and adapt to the requirements posed by different communication contexts; and 4) The assumption that perceptions of communicative competence reside in the dyad" [20].

Duran, [20] added four more dimensions (i.e., social composure, wit, articulation, and appropriate disclosure) to the original, [28] two dimensions (social experience and social confirmation) and developed the Communicative Adaptability Scale (CAS) in 1992. This study adopted four dimensions of CAS (i.e., social experience, social confirmation, articulation, and appropriate disclosure) because they can represent the characteristics of the Hong Kong SME entrepreneurs, in particular, those who have business connections with mainland China. As stated in the earlier section that interpersonal networks and entrepreneurship play key roles in SMEs' performance, the Hong Kong entrepreneurs' capabilities in communication and adaptability in relationship management will become vital for doing business in China. Past studies on communicative adaptability have shown that CAS was strongly correlated with communicative competence and self-esteem, [11]. Besides, appropriate disclosure, social experience, and social confirmation were main contributors in communication satisfaction in interpersonal interactions, [19]. Therefore, through measuring the Hong Kong entrepreneurs'

communicative adaptability and their influence on relationship quality with their mainland Chinese business partners, this study could enhance the knowledge of existing SME studies. The following are definitions of the four CAS dimensions, according to Duran, [20]:

(1) *Social Confirmation* is the ability to acknowledge another's presence and recognize his or her projected image of communication partners in the communication process. This ability is important for the Chinese style of communication because the Chinese are concerned more about "face" in their relationships because the rate of responsiveness also accounts to the degree of "face" given in the communication progress. Without this adaptability, the Hong Kong entrepreneurs may cause their mainland Chinese business acquaintances to lose face and jeopardize their business potential.

Although no relevant studies have been conducted about CAS and communication media preferences, in Duran and Kelly's study on interaction involvement, social confirmation is related with responsiveness, [19]. Although FtF communication can provide most direct responses than other mediated-communication methods, in business environment, FtF is not possible for all business occasions.

(2) *Social Experience* refers to the communicator's experience in communicating in different social contexts where he or she has also been exposed to interacting with different individuals. An assumption is that entrepreneurs would have been exposed to more varieties of social contexts than college students; the more social experience they have, the better they can handle different communication situations with different types of people. This ability, therefore, would be essential for doing business in different cultural contexts, as the differences may cause embarrassment.

Duran and Zakahi's study of conversational style, [19] found social experience is positively related to the use of other pronouns, which means oral communication. Duran and Kelly (1994) further found social experience influences self-perceptions of communication competence, and therefore, social experiences can provide confidence and the desire to explore and meet requirements from different social contexts. Other research also found social experience is related to communication apprehension, [21]; it also is related to attentiveness, [19]. These two factors are beneficial to FtF communication. With this understanding, this study proposes that entrepreneurs who have more social experience will project a more confident and attentive image, and therefore, they will prefer meeting in person with their business acquaintances rather than engage in mediated interpersonal communication.

(3) *Appropriate Disclosure* is the ability to identify appropriate timing and the amount and the level of intimacy of the information being disclosed of oneself and others during the communication process. It also measures the communicator's sensitivity to the cues sent from communication partners to determine if information should be

disclosed.

In the business environment, this ability is essential as entrepreneurs would need to know which and what kind of information can be disclosed when interacting with different parties in the communication process. This ability could gain themselves trust from others. Besides, in Duran and Kelly's study on interaction involvement, appropriate disclosure is related to responsiveness, [20]. In business talks, entrepreneurs will prefer face-to-face meeting where they can gain immediate feedback to questions, to seal a business deal to eliminate any uncertainty, and keep business information such as quotations of prices, terms of the contract confidential.

(4) *Articulation* is about the communicator's ability to express his or her ideas during communication in regards to word choices, language, pronunciation, and grammatical structure. This is important for business presentation. Duran and Zakahi's study of conversational style, [19] found articulation was positively related to talk time. Therefore, if entrepreneurs are confident in their articulation ability, they would prefer FtF communication. Conversely, past studies have demonstrated that respondents feel more relaxed and find it easier to express themselves through using CMC. For example, unlike FtF, CMC is low in social presence, and the use of IM (in text format) and emails can hide all the personal cues, like facial expression, tone of voice, and body language. Socially anxious individuals therefore find CMC preferable. Hovick, Meyers and Timmerman, [22] found that higher communication apprehension was negatively related to the use of oral and/or voice technologies; Lo and Leung, [33] also found college students would use both IM and emails to express themselves freely, [14, 31]. Despite the benefits CMC brings to less competent people, the Hong Kong entrepreneurs who are strong in articulation adaptability would not shy away from direct interaction.

Entrepreneurs' communicative adaptability reflects their level of social communication ability and which is believed to be closely linked with their preferences of communication medium in building and maintaining relationships with their mainland Chinese business partners. However, no previous studies have tested their correlations. Therefore, the following research question is proposed to find out their unexplored relationships:

RQ2: To what extent can entrepreneurs' personality traits (communicative adaptability) predict their communication media preferences?

Besides, this study would like to explore if the demographic status of the entrepreneurs will affect their communication media preferences. Thus, another research question is proposed:

RQ3: To what extent can entrepreneurs' demographic status (age, gender, education level, job position) predict their communication media preferences?

3. Methodology

Sampling Procedure and Data Collection

SMEs vary widely, ranging from small grocery stores to manufacturing firms. In Hong Kong, the definition of SMEs typically hinges on employee numbers and financial metrics. For instance, manufacturing firms with fewer than 100 employees and non-manufacturing firms with fewer than 50 employees are classified as SMEs (Hong Kong Trade and Industry Department). The contribution of SMEs to innovation and job creation underscores the need for effective communication strategies to enhance their competitiveness.

The library of the SME Centre of the Trade and Development Council provides a set of databases produced by a commercial organization, the Hong Kong Business Directory, which is also available for public purchase. Thus, in order to draw a random sample for this study, the latest available version of this set of databases produced by ApaLink Business Information Limited was purchased. The database consists of 11 volumes for eight industry types, including garment (two volumes), manufacturing (two

volumes), service (two volumes), building and related (one volume), electronics (one volume), metal and machinery (one volume), plastics (one volume), and trading and logistics (one volume). The total number of SMEs in the database was 47,690, and the detailed breakdown for each industry is listed in Table 1. Since three industries, garment, manufacturing, and service make up half of the total number of SMEs in Hong Kong, this study will only draw samples from them.

For each SME, the database provides the name of the company, the name of the owner or senior management, the mailing address, the office telephone and fax number, and the number of staff members in both Chinese and English. The three industries comprise of 21,750 companies. Samples from each industry were randomly drawn using the Microsoft Windows Access application by inputting the column numbers and line numbers structured by the database. Out of the total randomly drawn sample of 4,400 drawn from a database, a total of 2,271 SMEs were contacted during the survey period and of these, 984 agreed to participate in the study and were mailed questionnaires. A total of 351 questionnaires were return and 323 were valid.

Table 1. Eight Different Industries in the Sample Site.

Industry Type in English	Industry Type in Chinese	No. of SMEs
1. Garment Industry - Vol. 1	香港成衣製造業指南 - 上冊	4,560
Garment Industry - Vol. 2	香港成衣製造業指南 - 下冊	4,800
2. Manufacturing Industry - Vol. 1	香港製造行業指南-上冊	4,110
Manufacturing Industry - Vol. 2	香港製造行業指南-下冊	4,110
3. Service Industry - Vol. 1	香港服務行業指南-上冊	4,110
Service Industry - Vol. 2	香港服務行業指南-下冊	4,170
4. Building Industry	香港建築行業指南	4,280
5. Electronics Industry	香港電子工業指南	4,240
6. Metal and Machinery	香港金屬連系工業指南	4,080
7. Plastics Industry	香港塑膠工業指南	4,100
8. Trading & Logistics	香港貿易及運輸業指南	5,160
Total		47,690

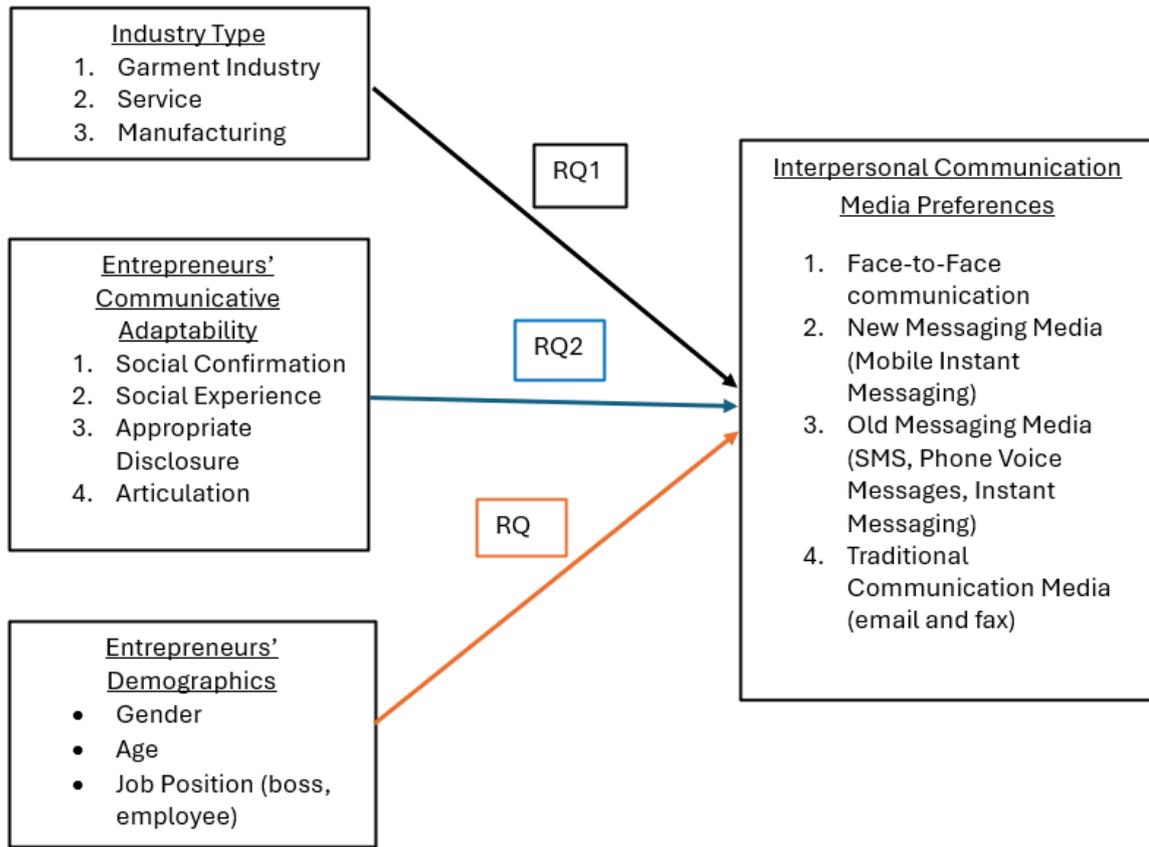


Figure 2. Research Framework.

4. Findings

4.1. Entrepreneur’s Demographics

The basic demographic information about the participants, including gender, age, job title, and education level. There was a total of 323 valid responses within the criteria of SMEs in Hong Kong. There were 220 males (68.1%) and 103 females (31.9%). Respondent ages were divided into eight categories: (1) aged 26 to 30 (11.8%); (2) aged 31 to 35 (9%); (3) aged 36 to 40 (13%); (4) aged 41 to 45 (12.4%); (5) aged 46 to 50 (14.9%); (6) aged 51 to 55 (18.6%); (7) aged 56 to 60

(11.1%); and (8) aged over 60 (9.3%). The mean score was 4.56, which means the average age of the participants was between 41 and 50. Job titles were categorized into: (1) owners (34.7%); (2) directors (15.5%); (3) managing directors (11.5%); (4) managers (17.3%); and (5) supervisors (21.1%). Education levels were categorized into: (1) primary school education (2.5%); (2) secondary school (32.8%); (3) matriculation level (Form 7, 9.3%); (4) diploma (11.1%); (5) university degree (31.9%); and (6) post-graduate education (12.4%). The mean score was 3.74, which means the average education level of the entrepreneurs was the matriculation level (Form 7). The details of the demographic frequency are listed in Table 2.

Table 2. Entrepreneur’s Demographics Profile.

Characteristics		Frequency	Percentage	Mean	Total
Gender	Male	220	68.1	4.56	100%
	Female	103	31.9		
Age	26-30	38	11.8		
	31-35	29	9		
	36-40	42	13		

Characteristics	Frequency	Percentage	Mean	Total
	41-45	40		
	46-50	48		
	51-55	60		
	56-60	36		
	60+	30		100%
Job Title	Owner	112	34.7	2.75
	Director	50	15.5	
	Managing Director	37	11.5	
	Manager	56	17.3	
	Supervisor	68	21.1	
Education	Primary school	8	2.5	3.74
	Secondary school	106	32.8	
	Matriculation	30	9.3	
	Diploma	36	11.1	
	University	103	31.9	
	Post-graduate	40	12.4	

N = 323

4.2. SME Entrepreneurs’ Communication Media Preferences

In order to study the SME entrepreneurs’ choice of communication media preferences when communicating with their Mainland Chinese business acquaintances on a daily basis, an exhaustive list of communication activities was explored in the questionnaire (see details in Table 3).

Respondents were asked to indicate their daily usage frequency (1 = never, 5 = very often) for various communication media, which were defined in 21 items. Frequency analysis found that the SME entrepreneurs mostly used mediated communication methods instead of FtF when communicating daily with their Mainland Chinese business acquaintances. The ranking of frequency usage for the 21 communication methods are detailed in Table 3, and they are: (1) sending e-mails (M = 3.95, SD = .94); mobile media (2) - talking on smartphone (M = 3.73, SD = .99); using traditional communication media (3) - fixed-line phones to make phone calls (M = 3.67, SD = 1.00); using traditional communication media (4) - sending documents or sample products by post (M=3.56, SD= 1.04); (5) using mobile phones to send

documents or photos (M = 3.35, SD = 1.18); (6) texting via Whatsapp/Line/WeChat, etc. (M = 3.14, SD = 1.26); (7) meeting FtF at their Mainland Chinese business partners’ offices in China (M = 3.13, SD = .95); (8) sending facsimiles (M= 3.12, SD= 1.19); (9) leaving voice messages when no one answers (M = 2.93, SD = 1.01); (10) leaving voice messages via Whatsapp/Line/WeChat, etc. (M = 2.94, SD = 1.25); (11) using instant messaging (IM) via Yahoo Massager/Hotmail/Gmail/QQ/Weiboo, etc. (M = 2.94, SD = 1.29); (12) sending SMS (short messages) via mobile phones (M = 2.84, SD = 1.13); (13) meeting in their own Hong Kong offices (M = 2.74, SD = .91); (14) meeting in the mainland after office hours (M = 2.59, SD = 1.00); (15) meeting in Hong Kong after office hours (M = 2.50, SD = .96); (16) meeting outside the mainland business partner’s office in China (M = 2.49, SD = .95); (17) meeting outside of the Hong Kong office (e.g., at a coffee shop) (M = 2.40, SD = .92); (18) using emoticons (e.g., (^o^), 🤪) (M = 2.10, SD = 1.09); (19) using video-conferencing in the office (M = 1.87, SD = .93); (20) communicating via websites/forums, etc. (M = 1.73, SD = .86); and (21) using video-conferencing via smartphones (M = 1.60, SD = .80). The detailed rankings are listed in Table 3.

Table 3. SME Entrepreneurs' Communication Media Preferences.

How often do you use the following channels to communicate with your Mainland Chinese business acquaintances on a daily basis?	Mean	SD	Ranking
1. Sending e-mails	3.95	.94	1
2. Talking on a smartphone.	3.73	.99	2
3. Talking on a fixed-line phone.	3.67	1.00	3
4. Sending documents/samples via post.	3.56	1.04	4
5. Using a mobile phone to send documents/photos.	3.35	1.18	5
6. Texting via Whatsapp/Line/WeChat, etc.	3.14	1.26	6
7. Meeting at your mainland business partner's office in China.	3.14	.95	6
8. Sending faxes.	3.12	1.19	7
9. Leaving voice messages when no one answers the phone.	2.93	1.01	8
10. Leaving voice messages via Whatsapp/Line/WeChat, etc.	2.94	1.25	9
11. Instant messaging (IM) via Yahoo Messenger/ Hotmail/Gmail/QQ/Weiboo, etc.	2.94	1.29	9
12. Sending SMS (short messages) via mobile phones.	2.84	1.13	10
13. Meeting face-to-face in your Hong Kong office.	2.74	.91	11
14. Meeting in the mainland after office hours.	2.59	1.00	12
15. Meeting in Hong Kong after office hours.	2.50	.96	13
16. Meeting in your mainland business partner's office in China.	2.49	.95	14
17. Meeting outside of your Hong Kong office (e.g., coffee shop).	2.40	.92	15
18. Using emoticons (e.g., (^o^),  , etc.) when communicating with your mainland business partners online.	2.10	1.09	16
19. Using video-conferencing in the office.	1.87	.93	17
20. Communicating via websites/forums, etc.	1.73	.86	18
21. Using video-conferencing via a smartphone.	1.60	.80	19

Note. Scale: 1 = Never and 5= Very frequent. N=315-323.

Exploratory factor analysis was first conducted on the 21 items. The analysis yielded five different types of communication media preferences, not only according to the richness of the medium, but also according to the level of synchronicity of the medium. However, two items (video conferencing using smartphones and in the office) were taken out because their frequencies were very low ($M = 1.87$ and $M = 1.60$, respectively) despite their factor loadings being very high (.91 and .88 respectively). This indicated that only a few SMEs had used these two communication channels. Therefore, factor analysis was conducted again with the remaining 19 items, and 6 more items (items 2, 3, 11, 13, 18, and 20) were deleted because they did not fall into other factors. This yielded four broad communication media preferences. They are: face-to-face (FtF); new mobile instant messaging (NMM); old messaging media (OMM); and traditional media (TM). The total variance explained was 67.86%.

The first factor, *face-to-face communication*, has five items ($\alpha = .85$; eigenvalue = 4.14; 24.11% of the variance explained) and reflects those entrepreneurs of Hong Kong SMEs prefer meeting face-to-face with their Mainland Chinese business acquaintances except for meeting them in their Hong Kong offices. Other meeting places included coffee shops in Hong Kong during or after office hours and in or outside of the mainland business partners' offices during or after office hours. The second-most-preferred method is *new mobile instant messaging* ($\alpha = .87$; eigenvalue = 2.13; 18.80% of the variance explained), which includes both voice- and text-based instant messaging via WhatsApp/Line/WeChat/QQ, etc. and sending documents and pictures using smart-phones. The third factor is *old messaging media* ($\alpha = .56$; eigenvalue = 1.47; 12.55% of the variance explained), which refers to leaving voice messages on the phone, sending short messages (SMS), and sending faxes. The reason for the low Cronbach's

alpha was the low frequency of the item “sending SMS” because in Hong Kong, sending SMS costs more than calling long distance and data services. The fourth factor is *traditional media* ($\alpha = .63$; eigenvalue = 1.08; 12.41% of the variance explained), which refers to the use of sending e-mails and sending documents or product samples via post. The name of the factor for these two items is based on the common usage of e-mail and postage among the SMEs in Hong Kong.

Another interesting finding from the factor analysis is that

two items - talking with a smartphone and with a fixed-line phone - did not yield any satisfactory factor loadings. It seems that the entrepreneurs either preferred very rich media, like face-to-face communications with their Mainland Chinese business partners, or using other media, through which the messages sent, can be documented. Details of the factor analysis for the communication media preferences can be found in [Table 4](#).

Table 4. Factor Analysis of Communication Media Preferences.

	Mean	SD	Factor			
Face-to-Face Communication			1	2	3	4
1. Meeting at your mainland business partners’ office in China.	2.49	.95	.83			
2. Meeting in Hong Kong after office hours.	2.50	.96	.80			
3. Meeting outside of Hong Kong office.	2.40	.92	.79			
4. Meeting in the mainland after office hours.	2.59	1.00	.79			
5. Meeting at your mainland business partner’s office in China.	3.14	.95	.69			
New Mobile Instant Messaging						
6. Texting via Whatsapp/Line/WeChat, etc.	3.14	1.26		.92		
7. Leaving voice messages via Whatsapp/Line/WeChat, etc.	2.94	1.25		.88		
8. Use smart phones to send documents/photos.	3.35	1.18		.73		
Old Messaging Media						
9. Leaving voice messages when no one answering the phone.	2.93	1.01			.78	
10. Send faxes.	3.12	1.19			.72	
11. Sending SMS (short messages) via mobile phones.	2.84	1.13			.59	
Traditional Media						
12. Send documents/samples via post.	3.56	1.04				.83
13. Send e-mails.	3.95	.94				.79
Eigenvalues			4.14	2.13	1.47	1.08
Variance explained (%)			24.11	18.80	12.55	12.41
Cronbach’s alpha			.85	.87	.56	.63

Note. Scale: 1=Never and 5=Very Often. Total variance: 67.86%. N=315-323.

4.3. Effects of Organizational Characteristics on Communication Media Preferences

RQ1 asked the extent to which organizational

characteristics (e.g., industry type, company size, years of establishment, years of experience with Chinese businesses, and company role) can predict entrepreneurs’ communication media preferences. To answer this research question, four parallel regressions were conducted with the four types of communication media preferences (face-to-face, new mobile

messaging media, old messaging media, and traditional media) as dependent variables. Organizational characteristics information, including industry types and company role, were transformed into dummy variables and entered into the regression equations. A frequency analysis was conducted for industry types, and four industries of the eight accounted for the most companies. They are: the service industry (23.2%), the manufacturing industry (18.3%), and the garment industry (16.1%). In order to learn more about the predictability of this variable, these industries were selected for separate analysis. As for company role, a dummy variable was set with “seller” = 1 and both “buyer” and “both seller and buyer” = 0.

(1) *Service Industry*: The industry type variable was dummy coded with “service industry” = 1 and all other industry types = 0. The results showed that a *face-to-face* communication media preference was not predicted by any of the organizational characteristics. *New mobile messaging media* (sending messages and documents via smartphone using WhatsApp, WeChat, etc.) was negatively predicted by years of establishment ($\beta = -.24, p < .01$) and positively predicted by company size ($\beta = .11, p < .05$) and external

environment competitiveness ($\beta = .19, p < .01$). *Old messaging media* (sending SMS, voice messages) was negatively predicted by service industry type ($\beta = -.16, p < .01$), but positively predicted by external environment competition ($\beta = .20, p < .001$). *Traditional media* (e-mail and postage) was negatively predicted by industry type ($\beta = -.27, p < .001$), but positively predicted by external business environment competition ($\beta = .18, p < .001$). Details of the regression statistics are listed in Table 5.

The results indicate that those SMEs that are not in the service industry and that face keen external business environment competition will tend to prefer old messaging media and traditional media. Those that are larger in size and less established in years and that face more external business environment competition will tend to prefer new mobile messaging media only. Despite the industry types, when SMEs are facing keen external environment competition, they will prefer mediated-interpersonal communication instead of meeting face-to-face, perhaps due to the synchronicity feature that FtF cannot provide. The three significant regression equations accounted for 7% to 11% of the variance.

Table 5. Regression Analysis for Organizational Characteristics (Service Industry) on Communication Media Preferences.

Predictors	FtF	NMM	OMM	TM
	β	β	β	β
Industry Type (service=1)	.07	-.01	-.16**	-.27***
Company Size	.05	.11*	-.09	.05
Established Years	.09	-.24**	.03	-.08
Exp. with mainland	-.03	.05	.05	.07
Role of company (seller=1)	.00	-.02	-.03	-.023
Internal Competition	-.06	-.01	.10	-.01
External Competition	.06	.19***	.20***	.18***
R ²	.01	.09	.11	.13
Final Adjusted R ²	-.01	.07	.09	.11
F	.53	4.46***	5.57***	6.74***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. N=313-322.

FtF=Face-to-Face Communication; NMM = New Mobile Messaging; OMM= Old Messaging Media; TM = Traditional Media

(2) *Manufacturing Industry*: With the industry-type variable dummy coded with “manufacturing industry” = 1 and other industry types = 0, the results show that a *face-to-face* communication media preference was not predicted by any of the organizational characteristics. *New mobile messaging media* was positively predicted by company size ($\beta = .12, p < .05$) and external environment competitiveness ($\beta = .18, p$

$< .01$) and negatively predicted by years of establishment ($\beta = -.24, p < .01$). *Old messaging media* was positively predicted by external environment competitiveness ($\beta = .20, p < .001$) only. *Traditional media* was positively predicted by industry type ($\beta = .13, p < .01$) and external environment competitiveness ($\beta = .21, p < .001$). Details of the regression statistics are listed in Table 6.

Similar to in the service industry, the findings show that manufacturing companies that face tougher external business environment competition will prefer traditional media. Moreover, those that are not in the manufacturing industry,

but are larger in size, have shorter histories of establishment, and face keen external environment competition will prefer using new mobile messaging media. The three significant regression equations explained 7% to 8% of the variance.

Table 6. Regression Analysis for Organizational Characteristics (manufacturing industry) on Communication Media Preferences.

Predictors	FtF	NMM	OMM	TM
	β	β	β	β
Industry Type (manufacturing=1)	.05	.07	.09	.13*
Company Size	-.04	.12*	.08	.03
Established Years	-.07	-.24**	-.01	-.04
Exp. with mainland	-.04	-.05	.08	.12
Role of company (seller=1)	-.00	-.04	-.06	-.07
Internal Competition	-.06	-.01	.10	-.00
External Competition	.05	.18**	.21***	.21***
R^2	.01	.10	.10	.08
Final Adjusted R^2	-.01	.08	.08	.06
F	.44	4.71***	4.72***	4.08***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. N=313-322.

FtF=Face-to-Face Communication; NMM = New Mobile Messaging; OMM= Old Messaging Media; TM = Traditional Media

(3) *Garment Industry*: This is a dummy variable with “garment industry” = 1 and other industry types = 0. Results showed that a *face-to-face* communication media preferences was not predicted by any of the organizational characteristics. *New mobile messaging media* (sending messages and documents via smartphone using WhatsApp, Wechat, etc.) was negatively predicted by years of establishment ($\beta = -.23$, $p < .01$) and positively predicted by company size ($\beta = .11$, $p < .05$) and external environment competitiveness ($\beta = .18$, $p < .01$). *Old messaging media* (sending SMS, voice messages) was positively predicted by service industry type ($\beta = .13$, $p < .05$) and external business environment competition ($\beta = .21$, $p < .001$). *Traditional media* (e-mail and postage) was positively predicted by industry type ($\beta = .24$, $p < .001$) and external business environment competition ($\beta = .20$, $p < .001$). Details of the regression statistics are listed in Table 7.

The results indicate that those SMEs that are in the garment industry, have more experience with Chinese businesses, and face keen external competition will tend to use traditional media. Those that are not in the garment industry but are larger in size, are less established in years, and face more external business environment competition will tend to prefer new mobile messaging media. Meanwhile, those non-garment industry SMEs with keen external business environment competition will tend to prefer old messaging media in their daily communication with their Mainland Chinese business partners. Similar to the other three industry types, when SMEs in the garment industry face keen external environment competition, they will prefer mediated-interpersonal communication instead of meeting face-to-face. The three significant regression equations accounted for 8% to 10% of the variance.

Table 7. Regression Analysis for Organizational Characteristics (garment industry) on Communication Media Preferences.

	FtF	NMM	OMM	TM
Predictors	β	β	β	β
Industry Type (garment =1)	.07	.10	.14	.24***
Company Size	-.05	.11*	.07	.02
Established Years	.07	-.23**	.00	-.02
Exp. with mainland	-.05	.03	.06	.09*
Role of company (seller=1)	.01	-.01	-.03	-.03
Internal Competition	-.06	-.01	.09	-.01
External Competition	.05	.18**	.21***	.20***
R ²	.01	.10	.11	.12
Final Adjusted R ²	-.01	.08	.09	.10
F	.54	4.93***	5.23***	6.15***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. N=313-322.

FtF=Face-to-Face Communication; NMM = New Mobile Messaging; OMM= Old Messaging Media; TM = Traditional Media

To conclude this research question's findings, two industry types of Hong Kong SMEs - the garment and the manufacturing industries - prefer traditional media (i.e., emails and postage) while the service and trading and logistics industries do not. In particular, the service industry does not prefer old messaging media or traditional media. This may indicate a unique character within the industry's practice, communication media preferences which will require further investigation.

Besides industry type, company size, established years, and external competition are the other major predictors for communication media preferences. Regardless of the industry type selected for analysis, when SMEs are larger in size, are younger in establishment, and face keen external environment competition, they tend to prefer mediated-communication media, including both new and old messaging media and traditional media. However, none of the industry types prefer face-to-face communication. These results show an interesting fact in that FtF communication is the least preferred communication method among Hong Kong SMEs. This may be explained by the nature of the communication, which requires more time and effort, particularly when interacting with Mainland Chinese counterparts located across the border. Hong Kong SMEs will find mediated-communication channels more efficient in handling their daily routine communication tasks. For example, Hong Kong entrepreneurs can use mobile instant messaging via smartphone, leave voice/text messages via mobile phone and send emails to reach their Mainland Chinese business acquaintances. Moreover, they can use postage to send

samples and documents, for which the postal service in Hong Kong is reliable and efficient.

4.4. Communicative Adaptability and Communication Media Preferences

RQ2: To examine the correlations between the entrepreneurs' communicative adaptability with and communication media preferences when communicating with their Mainland Chinese business acquaintances

Results showed that entrepreneurs who score higher in "social confirmation" will prefer mediated-interpersonal communication to face-to-face communication. The statistical results reported in Table 8 show that *social confirmation* was significantly and positively correlated with two mediated-interpersonal communication media preferences: new mobile messaging media ($r = .16, p > .01$) and old messaging media ($r = .11, p > .05$) but not with face-to-face ($r = .09, n.s.$) or traditional media ($r = .07, n.s.$). However, their correlations were weak. The results of this study reflect that even the Hong Kong SME entrepreneurs has the ability in acknowledging others' presence and recognize their projected image, their desire on using the new and old messaging media is slightly stronger than their choice over face-to-face interactions with their mainland Chinese acquaintances. Although the correlations between social confirmation and the two-messaging media are weak, the findings support Duran and Zakahi's (1990) study on conversation style, which showed that social confirmation was negatively related to talk time in FtF communication. Texting can allow more time for

the respondents to think through their feedback in order to avoid any confusion or speaking the wrong words like talking on the phone or FtF communication. The use of text messaging media can also enhance relationship building because they can send messages after office hour or just to express non-work-related matters. Moreover, the Hong Kong entrepreneurs also need quick responses in coordinating with different parties at different locations; therefore, the messaging media can meet their needs in this regard. Besides, traditional media are mostly used for tasks-oriented purposes, like posting for product samples and emails for document exchanges. Therefore, social confirmation is found not related to traditional media.

Results showed that Hong Kong entrepreneurs who score higher in “social experience” will prefer face-to-face communication to mediated-interpersonal communication. Results showed that social experience was significantly and positively correlated with face-to-face communication ($r = .22, p > .001$), new mobile messaging media ($r = .18, p > .01$), and old messaging media ($r = .16, p > .01$), but again their correlations were weak. Also, it was not correlated with traditional communication media ($r = .04, n.s.$). Social experience refers to the communicator’s experience with communicating in different social contexts and with different

individuals. Previous studies have showed that social experience is related to a relaxed and dominant communication style in FtF communication (Duran & Zakahi, 1990). Despite the weak correlations found, the results in this study show that the Hong Kong entrepreneurs who have more social experience and enjoy socializing with different people will tend to prefer all three richer media (i.e., face-to-face communication and both new and old messaging media), which can provide synchronous features, like sending voice/text messages via smartphone or sending SMS rather than mailing in their daily interactions with their Mainland Chinese business counterparts. The results indicate that, with advanced personal communication media, people will not rely on one single medium to maintain relationships. Instead, Hong Kong entrepreneurs who have more social experience and higher adaptability in socializing with different people will prefer to use all richer media to demonstrate their ability. Although this variable is weakly correlated with all three richer communication media preferences, Pearson’s r for face-to-face communication is higher than that for the other two mediated-interpersonal communication media preferences. This also shows that face-to-face communication is still the most appropriate medium for people who have rich social experience.

Table 8. Summary of the Correlation Results for Communicative Adaptability and Communication Media Preferences.

	FtF	NMM	OMM	TM
Communicative Adaptability				
Social Confirmation	.09	.16**	.11*	.07
Social Experience	.22***	.18**	.16**	.04
Appropriate Disclosure	.09	-.02	.01	-.03
Articulation	.12*	.08	.02	-.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. N from 314 to 323.

FtF=Face-to-Face Communication; NMM = New Mobile Messaging; OMM= Old Messaging Media; TM = Traditional Media

Results showed that entrepreneurs who score higher in “appropriate disclosure” will prefer face-to-face communication to mediated-interpersonal communication. Appropriate disclosure refers to the ability to identify the appropriate timing and the amount and level of intimacy for the information being disclosed about oneself and others during the communication process. However, the results show that appropriate disclosure is not significantly correlated with any of the communication media preferences: FtF ($r = .09, n.s.$), new mobile messaging media ($r = -.02, n.s.$), old messaging media ($r = .01, n.s.$), and traditional media ($r = -.03, n.s.$). Duran and Zakahi’s (1990) study indicated that appropriate disclosure was one of the main contributors to

communication satisfaction in interpersonal interaction. Other communication studies have found that mediated-interpersonal communication media can provide reduced-cue environments compared to FtF interaction (Sheeks, & Birchmeier, 2007). However, this study’s results did not support their findings, and the reason may be due to the different social statuses of the respondents. In previous studies, college students were the primary subjects who were usually less cautious about disclosure of confidential information than the respondents being studied in this study who were SME entrepreneurs. They were more mature in terms of working experience and, therefore, might be more careful in disclosing personal or business-related information

through FtF and mediated-communication channels. Besides, this study had confined the communication condition in specific business environment and with specific communication partners - mainland Chinese business acquaintances - and which were very different in nature from previous studies. Thus, the results suggest that the Hong Kong entrepreneurs' appropriate disclosure adaptability has no influence on their preference for using any particular communication channel.

Results showed that entrepreneurs who are stronger in articulation will prefer face-to-face communication to mediated-interpersonal communication. Results show that the correlations between articulation and face-to-face communication is significant and positive but weak ($r = .12, p < .05$), and it is not correlated with the three mediated-communication media preferences: new mobile messaging media ($r = .03, n.s.$), old messaging media ($r = .08, n.s.$), and traditional media ($r = -.01, n.s.$). This result indicates that entrepreneurs who are stronger in articulation, which is the ability to express ideas during communication, will prefer face-to-face communication over the other mediated-interpersonal communication channels like talking on the phone or sending messages via mobile phones, etc. This result supports a previous study by Duran and Zakahi's (1990), which showed that articulation was positively related to talk time.

In summary, the results showed that traditional media, including emails and postage, were not correlated with any of the communicative adaptabilities, mainly because they were used as functional tools for fulfilling specific tasks in the work process instead of for interpersonal communication. Among them, social experience has the strongest correlation with three types of communication media preferences, particularly face-to-face communication (followed by new mobile messaging media and old messaging media). Social confirmation has the second strongest correlation with two types of mediated-interpersonal communication media, particularly new mobile messaging media (followed by old messaging media). Articulation adaptability was found to

only be significantly correlated with FtF, and appropriate disclosure was not found to be correlated with any of the communication media preferences.

4.5. Effects of Entrepreneurs' Demographics on Communication Media Preferences

RQ3 asked the extent to which entrepreneurs' demographics (i.e., age, gender, education level, and job position) can predict their communication media preferences. To answer this research question, four parallel regressions were conducted with the four types of communication media preferences as dependent variables. Demographic information, including gender, and job title were transformed into dummy variables and entered in the regression equations. The dummy variable for gender was transformed into "male" = 1 and "female" = 0 and the dummy variable for job title was transformed into "owner" = 1 and the rest = 0. Results show that male gender ($\beta = .17, p < .01$) and education level ($\beta = .12, p < .05$) predicted face-to-face communication media preferences and accounted for 5% of the variance. Moreover, younger, ($\beta = -.23, p < .001$) male entrepreneurs ($\beta = .12, p < .05$) used new mobile messaging media and accounted for 4% of the variance. Also, female entrepreneurs ($\beta = -.13, p < .05$) with higher education levels ($\beta = .11, p < .05$), who were not the owners ($\beta = -.12, p < .05$), predicted the use of traditional media and accounted for 4% of variance. No demographic information predicted the use of old messaging media. The regression statistics are reported in Table 9. The results show some interesting findings regarding gender, age, education level, and job title among the entrepreneurs in Hong Kong in connection with their communication media preferences. The gender factor showed significant differences with regard to communication media choice. Male entrepreneurs tend to prefer FtF and new messaging media, while female entrepreneurs prefer traditional media. Younger entrepreneurs with higher education levels prefer FtF, new messaging media, and traditional media, whereas only those who are not the owners particularly prefer traditional media.

Table 9. Regression Analysis for Demographics on Communication Media Preferences.

Predictors	FtF	NMM	OMM	TM
	β	β	β	β
Gender (male=1)	.17**	.12*	.07	-.13*
Age	-.10	-.23***	.08	-.00
Edu. Level	.12*	-.03	-.03	.11*
Job Title (owner=1)	.07	.04	.05	-.12*
R ²	.06	.06	.02	.06

	FtF	NMM	OMM	TM
Predictors	β	β	β	β
Final Adjusted R ²	.05	.04	.01	.04
F	5.14***	4.64****	1.56	4.69**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. N=322-323.

FtF=Face-to-Face Communication; NMM = New Mobile Messaging; OMM= Old Messaging Media; TM = Traditional Media

5. Discussion

Effect of Entrepreneurs' Communicative Adaptability on Communication Media Preferences

In communication literature, effectiveness and appropriateness are two important criteria for interpersonal communication, [52]. Effectiveness refers to the communicator's objectives achieved, while appropriateness refers to the perception of suitable behaviors during communication interactions, such as avoiding violations of communication rules and social norms. These qualities are reflected in the entrepreneurs' communicative adaptability characters, that is their social communication competence. These qualities are particularly important for doing business in the Chinese market where personal networks/guanxi is essential.

Media richness theory has explained the relationships between the complexity of message and media choice, but it does not explain which communicator's qualities can contribute to making such media choices for such tasks in reaching effective communication results. This study found empirical evidence that the Hong Kong entrepreneurs' communicative adaptability was closely related to their communication media preferences when they were interacting with their mainland Chinese business acquaintances.

This study revealed that the Hong Kong SME entrepreneurs who had rich social experience would adopt a mixture of interpersonal communication media to meet the needs of their mainland Chinese business acquaintances. For example, Hong Kong entrepreneurs will meet them in person even after office hours and outside the office environment, they will also communicate with them via various types of text messaging media (i.e., sending "grooming messages") to enhance their relationship connectedness. Ling, [37] explains that these types of messages can help show affection and are considered important for interpersonal communication. These findings are in line with past studies, that those who frequently meet FtF also communicate more with their mobile devices [25, 37] concluded that higher social skills were associated with a greater use of PC emails (a text-based medium). The results of this research also resonated with previous communication studies, that the use of instant messaging fulfils the demand

for "sociability", [33, 47].

Also stated in earlier research, "context" is an important factor influencing interpersonal behavior, meaning that communicators need to conform to the contextual aspects that continuously reframe their interaction in face-to-face communication. This is reflected in the communication media preferences of those Hong Kong entrepreneurs who are strong in social confirmation adaptability. They tend to prefer the two types of mediated interpersonal communication media, that is, NMM and OMM. Their communication media preferences truly reflected they had utilized the "contextual mobility" feature provided by mobile phones, [25] and which allows them to pre-determine which medium to use to match the specific communication context that also suits the needs of their recipients. For example, Hong Kong entrepreneurs can check their recipients' online status, and if "I am in a meeting, will call back later" showed on MIM applications like WhatsApp, Line, or WeChat, talking on the phone is not appropriate. Then, they would choose the less intrusive MIM instead of making phone calls to avoid causing any embarrassment. In addition, Hong Kong entrepreneurs will also use these mediated communication media to fulfill other task-oriented purposes like following up on projects.

Articulation is only found a positive and weak correlation with FtF communication. Although the Hong Kong entrepreneurs' mother-tongue is Cantonese, many Hong Kong entrepreneurs can also speak fluent Mandarin with their mainland Chinese business acquaintances, therefore, expressing themselves clearly is not an issue in their daily communication. Furthermore, appropriate disclosure is the only quality found to be unrelated to any of the communication media preferences. Appropriate disclosure refers to the entrepreneurs' ability to sense the cues sent from their communication partners in terms of when the best time is to communicate and the amount of intimate information to disclose. Past research suggested that this is related to FtF communication because, according to the media richness theory, FtF communication provides the richest communication information compared to other mediated-communication formats. However, with the rapid technological development of NMM, many Hong Kong entrepreneurs have already using them as an alternative to FtF communication. Therefore, the distinction between rich and leaner media, especially regarding FtF and NMM

communication, has become blurred. This may explain why appropriate disclosure has no special effect on any of the communication preferences.

In terms of communication media preferences, surprisingly, FtF communication is most preferred by all four industry types. However, the different industry types also exhibited some differences in their choice of mediated-interpersonal communication media aside from FtF. The garment industry also used traditional communication media because they need to send product samples to their mainland Chinese business partners, which plays an important part in their industry. Without constant inspections of samples during the production process, they may lose their credibility which affects their financial performance. The manufacturing industry also prefers OMM, which may be due to the multiple business partners involved in their business model, as explained earlier. Due to the fact that their suppliers are widely distributed across the country, they may need different types of communication media, especially those older formats of messaging media, to communicate with their suppliers in remote areas where Internet and other advanced communication devices are not available.

The last predictor for financial performance was the long-term relationship dimension of relationship quality, and this applied across all four industry types. Again, the result showed that long-term relationship is the most important relationship quality to achieve positive financial performance.

Another surprising finding is that no relationship cultivation strategies were found to be significant predictors of financial performance. Their effect may be embedded in the long-term relationship dimension and the FtF communication media preferences because the relationship cultivation strategies have significant correlations with these two constructs. All six strategies were found to be significantly and positively correlated with the long-term relationship dimension and with all four communication media preferences except the relationship between networking and TM.

To summarize, there are some common factors for all four industry types that can contribute to positive financial performance. This study found that, in the Hong Kong case, younger SMEs' entrepreneurs with appropriate disclosure in communicative adaptability and who are working in less established but larger sized SMEs tended to be able to achieve positive financial performance. In addition, they have to meet up with their mainland Chinese business acquaintances through FtF communication that is supplemented with other mediated-interpersonal communication media, such as emails, text/voice messages, faxes, mobile instant messages, and post, to improve their personal connection as well as the business operation process. As explained in earlier sections, appropriateness is the most important communicative adaptability for entrepreneurs; therefore, articulation adaptability is not important as long as the communicators can interpret the meaning underneath the messages. The Chinese are more concerned with appropriate behaviour than accuracy.

Besides, mediated-interpersonal communication media are found to enhance interpersonal relationships, and they can also contribute to relationship quality even though FtF communication is still the most popular communication medium among the Hong Kong SMEs.

Abbreviations

SMEs	SMALL and Medium Enterprises
FtF	Face-to-Face
SMS	Short Message Service
IM	Instant Messaging
MIM	Mobile Instant Messaging
CMC	Computer-Mediated Communication
NMM	nEw Mobile Instant Messaging
OMM	Old Messaging Media
TM	Traditional Media
EO	Entrepreneur Orientation
ESE	Entrepreneurial Self-efficacy
PP	Proactive Personalities
EI	Entrepreneur Intent
CAS	Communicative Adaptability Scale

Author Contributions

Olivine Lo is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

References

- [1] Antoncic, Bostjan. "The entrepreneur's general personality traits and technological developments." *World Academy of Science, Engineering and Technology* 53.3 (2009): 236-41. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=db0ec9ebce50042d67771c214c4f802b29505c57>
- [2] Antoncic, Bostjan, et al. 'The Big Five Personality-Entrepreneurship Relationship: Evidence from Slovenia'. *Journal of Small Business Management*, vol. 53, no. 3, Informa UK Limited, July 2015, pp. 819-841, <https://doi.org/10.1111/jsbm.12089>
- [3] Baum, J. R., et al. 'Entrepreneurship as an Area of Psychology Study: An Introduction'. *The Psychology of Entrepreneurship*, edited by J. R. Baum et al., Lawrence Erlbaum Associates Inc, 2007, pp. 1-18. <https://www.researchgate.net/publication/312606307>
- [4] Baym, N. *Intergroup Dimensions of Internet*. Edited by J. Harwood and H. Giles, Peter Lang Publishers, 2005, pp. 213-238. https://www.researchgate.net/publication/239551257_Intergroup_Dimensions_of_Internet

- [5] Baym, Nancy K., Yan Bing Zhang, and Mei-Chen Lin. "Social interactions across media: Interpersonal communication on the internet, telephone and face-to-face." *New media & society* 6.3 (2004): 299-318. <http://dx.doi.org/10.1177/1461444804041438>
- [6] Berghel, Hal. "Email—The good, the bad, and the ugly." *Communications of the ACM* 40.4 (1997): 11-15. Retrieved from <https://dl.acm.org/doi/pdf/10.1145/248448.248450>
- [7] Boneva, Bonka, Robert Kraut, and David Frohlich. "Using e-mail for personal relationships: The difference gender makes." *American behavioral scientist* 45.3 (2001): 530-549. <https://www.dhi.ac.uk/san/waysofbeing/data/communication-zangana-boneva-2001.pdf>
- [8] Chell, Elizabeth. *The Entrepreneurial Personality: A Social Construction*. Routledge, 2008. <https://doi.org/10.4324/9780203938638>
- [9] Chen, Ni. "Public relations in China: The introduction and development of an occupational field." *International Public Relations*. Routledge, 2013. 121-153.
- [10] Chen, Wenhong, Jeffrey Boase, and Barry Wellman. "The global villagers: Comparing Internet users and uses around the world." *The Internet in everyday life* (2002): 74-113. <https://doi.org/10.1002/9780470774298>
- [11] Cupach, William R., and Brian H. Spitzberg. "Trait versus state: A comparison of dispositional and situational measures of interpersonal communication competence." *Western Journal of Speech Communication* 47.4 (1983): 364-379. <https://doi.org/10.1080/10570318309374131>
- [12] Daft, Richard L., and Robert H. Lengel. "Information richness: A new approach to managerial behavior and organizational design." *Research in organizational behavior* (1984).
- [13] Daft, Richard L., Robert H. Lengel, and Linda Klebe Trevino. "Message equivocality, media selection, and manager performance: Implications for information systems." *MIS quarterly* (1987): 355-366. <https://doi.org/10.2307/248682>
- [14] Derks, Daantje, and Arnold B. Bakker. "The impact of e-mail communication on organizational life." *Cyberpsychology* 4.1 (2010). <http://cyberpsychology.eu/view.php?cisloclanku=2010052401&article=4>
- [15] Dimmick, John, Susan Kline, and Laura Stafford. "The gratification niches of personal e-mail and the telephone: Competition, displacement, and complementarity." *Communication research* 27.2 (2000): 227-248. <https://doi.org/10.1177/009365000027002005>
- [16] Dourando, D., et al. *Proceedings of the 9th Annual Conference on World Wide Web Applications: Investigation into the Usage of Mobile Instant Messaging in Tertiary Education*. 2007.
- [17] Dresner, Eli, and Segev, Barak. "Conversational multitasking in interactive written discourse as a communication competence." *Communication Reports* 19.1 (2006): 70-78. <https://doi.org/10.1080/08934210600588312>
- [18] Duran, Robert L., and Lynne Kelly. "The cycle of shyness: A study of self - perceptions of communication performance." *Communication Reports* 2.1 (1989): 30-38. <https://doi.org/10.1080/08934218909367478>
- [19] Duran, Robert L., and Walter R. Zakahi. "Competence or Style: What's in a Name?." *Communication Research Reports* 1.1 (1984): 42-47. <https://doi.org/10.1080/17464099.1984.12289892>
- [20] Duran, Robert L. "Communicative adaptability: A review of conceptualization and measurement." *Communication Quarterly* 40.3 (1992): 253-268. <https://doi.org/10.1080/01463379209369840>
- [21] Goldberg, Lewis R. "An alternative "description of personality": The Big-Five factor structure." *Personality and personality disorders*. Routledge, 2013. 34-47.
- [22] Hovick, Shelly RA, Renee A. Meyers, and C. Erik Timmerman. "E - mail communication in workplace romantic relationships." *Communication Studies* 54.4 (2003): 468-482. <https://doi.org/10.1080/10510970309363304>
- [23] Hung, C.J. F. *Paper Presented at the Public Relations Division in the 53rd Annual Conference of International Communication Association: Culture, Relationship Cultivation, and Relationship Outcomes: A Qualitative Evaluation on Multinational Companies' Relationship Management in China*. 2003.
- [24] Hung, Shin-Yuan, et al. "Comparing the task effectiveness of instant messaging and electronic mail for geographically dispersed teams in Taiwan." *Computer Standards & Interfaces* 29.6 (2007): 626-634. <https://doi.org/10.1016/j.csi.2007.03.001>
- [25] Isaacs, Ellen, Alan Walendowski, and Dipti Ranganthan. "Hubbub: A sound-enhanced mobile instant messenger that supports awareness and opportunistic interactions." *Proceedings of the SIGCHI conference on Human factors in computing systems*. 2002. <https://doi.org/10.1145/503376.503409>
- [26] Kelly, Lynne, and James A. Keaten. "Development of the affect for communication channels scale." *Journal of Communication* 57.2 (2007): 349-365. <https://doi.org/10.1111/j.1460-2466.2007.00346.x>
- [27] Kelly, Stephen, and Don Scott. "Relationship benefits: Conceptualization and measurement in a business-to-business environment." *International Small Business Journal* 30.3 (2012): 310-339. <https://doi.org/10.1177/0266242610381297>
- [28] Kerlinger, F. N. (1966). *Foundations of behavioral research*. Holt, Rinehart and Winston: New York.
- [29] Ki, E. J., and L. C. Hon. 'Relationship Maintenance Strategies and Relationship Quality in a Business Context'. *Journal of Communication Management*, vol. 13, no. 3, 2009, pp. 237-254.
- [30] Kock, Ned. "The psychobiological model: Towards a new theory of computer-mediated communication based on Darwinian evolution." *Organization science* 15.3 (2004): 327-348. <https://doi.org/10.1287/orsc.1040.0071>

- [31] Lengel, Robert H., and Richard L. Daft. "The selection of communication media as an executive skill." *Academy of Management Perspectives* 2.3 (1988): 225-232. <https://doi.org/10.5465/ame.1988.4277259>
- [32] Leung, Louis. "Unwillingness-to-communicate and college students' motives in SMS mobile messaging." *Telematics and informatics* 24.2 (2007): 115-129. <https://doi.org/10.1016/j.tele.2006.01.002>
- [33] Lo, Olivine Wai-Yu, and Louis Leung. "Effects of gratification-opportunities and gratifications-obtained on preferences of instant messaging and e-mail among college students." *Telematics and Informatics* 26.2 (2009): 156-166. <https://doi.org/10.1016/j.tele.2008.06.001>
- [34] Licoppe, Christian, and Jean Philippe Heurtin. "Managing one's availability to telephone communication through mobile phones: A French case study of the development dynamics of mobile phone use." *Personal and ubiquitous computing* 5 (2001): 99-108.
- [35] Licoppe, Christian. "Two modes of maintaining interpersonal relations through telephone: From the domestic to the mobile phone." *Machines that become us*. Routledge, 2017. 171-185.
- [36] Licoppe, Christian, and Zbigniew Smoreda. "Are social networks technologically embedded?: How networks are changing today with changes in communication technology." *Social networks* 27.4 (2005): 317-335. <https://doi.org/10.1016/j.socnet.2004.11.001>
- [37] Ling, Rich. *The mobile connection: The cell phone's impact on society*. Elsevier, 2004.
- [38] Lou, Hao, Patrick YK Chau, and Dahui Li. "Understanding individual adoption of instant messaging: An empirical investigation." *Journal of the Association for information systems* 6.4 (2005): 5. <https://doi.org/10.17705/1jais.00066>
- [39] Lumpkin, G. Tom, and Gregory G. Dess. "Clarifying the entrepreneurial orientation construct and linking it to performance." *Academy of management Review* 21.1 (1996): 135-172. <https://doi.org/10.5465/amr.1996.9602161568>
- [40] Markman, Gideon D., David B. Balkin, and Robert A. Baron. "Inventors and new venture formation: The effects of general self-efficacy and regretful thinking." *Entrepreneurship theory and practice* 27.2 (2002): 149-165. <https://doi.org/10.1111/1540-8520.00004>
- [41] Morgan, Robert M., and Shelby D. Hunt. "The commitment-trust theory of relationship marketing." *Journal of marketing* 58.3 (1994): 20-38. <https://doi.org/10.1177/002224299405800302>
- [42] Nardi, Bonnie A., Steve Whittaker, and Erin Bradner. "Interaction and outeraction: Instant messaging in action." *Proceedings of the 2000 ACM conference on Computer supported cooperative work*. 2000. <https://doi.org/10.1145/358916.35897>
- [43] Nardi, Bonnie A., and Steve Whittaker. "The place of face-to-face communication in distributed work." *Distributed work* 83.112 (2002): 10-7551.
- [44] Nardi, Bonnie A., Steve Whittaker, and Heinrich Schwarz. "NetWORKers and their activity in intensional networks." *Computer Supported Cooperative Work (CSCW)* 11 (2002): 205-242.
- [45] Porter, Michael E., and Victor E. Millar. "How information gives you competitive advantage." (1985): 149-174.
- [46] Prabhu, Veena P., et al. "Proactive personality and entrepreneurial intent: is entrepreneurial self - efficacy a mediator or moderator?." *International Journal of Entrepreneurial Behavior & Research* 18.5 (2012): 559-586.
- [47] Ramirez Jr, Artemio, et al. "Information-seeking strategies, uncertainty, and computer-mediated communication: Toward a conceptual model." *Human communication research* 28.2 (2002): 213-228. <https://doi.org/10.1111/j.1468-2958.2002.tb00804.x>
- [48] Rauch, Andreas, and Michael Frese. "Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship." (2007).
- [49] Rice, Ronald E., and Gail Love. "Electronic emotion: Socioemotional content in a computer-mediated communication network." *Communication research* 14.1 (1987): 85-108. <https://doi.org/10.1177/009365087014001>
- [50] Schmitz, Joseph, and Janet Fulk. "Organizational colleagues, media richness, and electronic mail: A test of the social influence model of technology use." *Communication research* 18.4 (1991): 487-523. <https://doi.org/10.1177/0093650910180040>
- [51] Spitzberg, B. H., and W. R. Cupach. *Interpersonal Communication Competence*. Sage, 1984.
- [52] Spitzberg, Brian H. "What is good communication?." *Journal of the Association for Communication Administration* 29.1 (2000): 7.
- [53] Spitzberg, Brian H. "Preliminary development of a model and measure of computer-mediated communication (CMC) competence." *Journal of Computer-Mediated Communication* 11.2 (2006): 629-666. <https://doi.org/10.1111/j.1083-6101.2006.00030.x>
- [54] Thurlow, Crispin, and Alex Brown. "Generation Txt? The sociolinguistics of young people's text-messaging." *Discourse analysis online* 1.1 (2003): 30. Retrieved from <http://www.crispinthurlow.net/papers/Thurlow%282003%29-DAOL.pdf>
- [55] Thong, James YL, and Chee-Sing Yap. "CEO characteristics, organizational characteristics and information technology adoption in small businesses." *Omega* 23.4 (1995): 429-442. [https://doi.org/10.1016/0305-0483\(95\)00017-1](https://doi.org/10.1016/0305-0483(95)00017-1)
- [56] Trevino, Linda Klebe, et al. "The richness imperative and cognitive style: The role of individual differences in media choice behavior." *Management Communication Quarterly* 4.2 (1990): 176-197. <https://doi.org/10.1177/0893318990004002003>

- [57] Ward, Thomas B. "Cognition, creativity, and entrepreneurship." *Journal of business venturing* 19.2 (2004): 173-188. [https://doi.org/10.1016/S0883-9026\(03\)00005-3](https://doi.org/10.1016/S0883-9026(03)00005-3)
- [58] Whittaker, Steve. 'Theories and Methods in Mediated Communication'. *The Handbook of Discourse Processes*, edited by M. Graesser and S. Gernsbacher, 2002, pp. 243-286.
- [59] Wiemann, John M. "Explication and test of a model of communicative competence." *Human communication research* 3.3 (1977): 195-213. <https://doi.org/10.1111/j.1468-2958.1977.tb00518.x>
- [60] Wiklund, Johan, and Dean Shepherd. "Entrepreneurial orientation and small business performance: a configurational approach." *Journal of business venturing* 20.1 (2005): 71-91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>
- [61] Yıldız, Sebahattin. "THE RELATIONSHIP BETWEEN ENTREPRENEURSHIP TRAITS AND PERSONALITY TYPE: A RESEARCH IN TURKEY." *International Journal of Academic Research* 4.3 (2012).
- [62] Zhao, Hao, Scott E. Seibert, and G. Thomas Lumpkin. "The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review." *Journal of management* 36.2 (2010): 381-404. <https://doi.org/10.1177/01492063093351>