

青少年透過新通訊科技與父母溝通之行爲：探索家庭關係的關鍵影響因素與結果

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摘要

行動通訊對於「數位原生代」的日常生活已是不可或缺的使用工具；過去相關議題研究大多著重於青少年使用新媒體科技後的負面影響，鮮少關注其對家庭關係影響層面的探究。據此，本研究發展出一套實證模式探索青少年使用新媒體科技與父母溝通的動機、關係維繫與親密關係為何，以瞭解青少年使用新媒體科技為家庭帶來了何種影響。根據307份有效樣本的統計結果，顯示青少年主要以即時通訊與父母聯繫，而此較能激勵青少年對父母表達自身的感覺與信賴感；其「居住區域」與「家庭溝通模式」亦會間接影響青少年與父母溝通的動機、關係維繫與親密關係的感知。此模式同時印證了新媒體科技對鞏固青少年與家庭親密程度能發揮極大的輔助作用。

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Adolescents' Use of Information and Communication Technologies for Communication with Parents: The Key Determinants and Consequences of Family Relationship

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Abstract

The widespread Internet and mobile access to new technologies has affected adolescents' daily lives. Prior studies have attributed the influences of emerging technologies to the negative effects of adolescent behavior, while little attention was given to the results of family relationships. Drawing from the perspectives of communication motives and family relationships, this study develops an empirical model by investigating the connections between adolescents' communication motives and their perceptions of relational maintenance and intimacy with their parents.

A group of 307 adolescents were surveyed and analyzed by statistical methods. The results show that adolescents prefer using instant messaging to communicate with their parents, which motivates them to express their feelings and assurances. In addition, geographical location and family communication patterns affect adolescents' perceptions of communication motives, relational maintenance, and intimacy. Finally, the empirical model is proved to not only compare the adolescents' perceptions of using different media in family communication but also reveal the consequences that correspond to the parent-adolescent dyads relationships. The implications are expected to consolidate adolescent-parent relationships through the complement of new communication media.

◎ Keywords: adolescence, new media technology, family communication patterns (FCP),

relational maintenance, intimacy

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Introduction

The widespread and mobile access to new technologies has affected adolescents' daily lives. They are labeled as digital natives or the n-generation (Tapscott, 2009). Prior studies have argued that most adolescents squander their time in online communities and have reduced the amount of time spent in communicating with friends and family members in person, and thus created negative effects such as Internet addiction, relational isolation, and family conflicts. The phase of adolescence in the process of human development is normally fragile and sensitive and it requires much attention from parents to understand the importance of communication technologies in family relationships.

In addition, within the field of media effect, in recent years scholars have continued to investigate the influences of new media technologies on media users, ranging from TV, personal computer, to Internet and mobile phones (Carvalho, Francisco, & Relvas, 2015). However, the communication contexts and content vary when compared to face to face and online communication (Ledbetter, 2009b; Lundy & Drouin, 2016). The conclusions are not capable of explaining the effects derived from new technologies and the consequences of adolescence, such as the levels of relational satisfaction, intimacy and media usage patterns. The family relationship of adolescents, measured by the frequency and duration of using the new technologies does not explain the interrelations of the family members, technology uses, and adolescents' behavior. Different results have been published based on constant evaluations of adolescents' access to various technologies (Blackshaw, 2009; Boase, Horrigan, Wellman, & Rainie, 2006; Lenhart, Madden, Macgill, & Smith, 2005; Macgill, 2007). According to a survey by Pew Internet Project in 2013, over half of adolescents use smartphones and spend more time online than with their parents (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). Other studies also show both adolescents and parents' use of technologies are subject to the differences in gender, age, family income, and parents' education (Brown, Childers, Bauman, & Koch, 1999). More parents and adolescents regard new technologies as a tool to communicate with others (Boase et al., 2006; Lenhart et al.,

2005; Macgill, 2007; Madden et al., 2013; Schwartz, 2004), which motivate us to explore this topic in detail.

The conclusions of the impact of new technologies on adolescents tend to be more negative than positive. Scholars argued that adolescents are overly immersed in virtual communities based on the conditions of time and frequency and lack of communication and relational development with the physical world (Mesch, 2003; Nie, Hillygus, & Erbring, 2002; Subrahmanyam & Greenfield, 2008). In contrast, the lack of physical cues might yield more benefits for people to express their inner thoughts and emotions by avoiding physical contact with others (Riva, 2002). Schwartz (2004) offered some advantages of computer-mediated communication between adolescents and parents, such as eliminating tensions, more organized thoughts, or new ways of communication by filtering the non-verbal cues. In Taiwan, long school hours and activities have created invisible pressure and tensions toward relationships between adolescents and parents. The adolescents' use of new technologies has been described to deteriorate their relationships in the family in terms of more addition to technologies and less contact with parents. However, studies of adolescents' use of new technologies have been accredited to the investigation of adolescents' attitude and behavior toward the use of new technologies (Su, 2011). Prior study of adolescent-parent relationship is scarce and further investigation of this relationship in a mediated communication is yet to be revealed (Huang, Li, & Wang, 2014). The reluctant of foreseeing the impact of new technologies intervention within adolescent-parent relationship may result in the lacks of diversity in family and communication research. Acknowledging the emerging requests to assess the intervention of new media technology and the impact of family relationships, the aim of this study is to develop an empirical model to understand the intention of new technologies utilized by adolescents, which results in their motivations and relationships with parents.

Literature Review

Family communication is critical to the adolescent development stage. The effectiveness

of family communication is associated with positive development of adolescents' capabilities in different perspectives, such as attachment, social comprehensions, and abilities of cognition and emotion (Vuchinich, Ozretich, Pratt, & Kneedler, 2002). Olson (1993) defines positive adolescent–parent communication as when either adolescents or parents can utilize the communication skills to maintain the family relationships and increase the adaptabilities and cohesion of family members, and thereby establish a healthy family environment. Most family studies explored the connections between communication media and results of relationships rather than interactive processes and behaviors. Their scopes of exploration are also limited to a specific family group, such as spouse, sibling, and adolescents rather than the dyads relationship between adolescents and parents. Vogl-Bauer, Kalbfleisch, and Beatty (1999) considered whether the adolescents' or parents' strategies of relational maintenance would influence how they communicate with each other and the consequences of their relationships. Potential indicators can also be drawn from external factors, such as media usage, family communication patterns or individual differences can be assumed to direct the adolescents' motivations and relationships while communicating with parents online (Ledbetter, 2008, 2009b, 2014; Schrodt et al., 2009).

Adolescent-parent communication in the use of new media technologies

Like other generation, scholars consider the uses of new technologies, such as the Internet and social networking sites, are mainly for communication and maintaining relationship with others (Carvalho et al., 2015). Hence, most studies argue that adolescents would seek support and relational ties through online communications with peers (Gunuc & Dogan, 2013; Lee, 2009; Lenhart et al., 2005). New patterns of communication can be established by the emergence of new technologies that people use, which also make prior studies adjust their framework based on the use contexts of new technologies (Lenhart, Lewis, & Rainie, 2006)

Lee (2009) summarized the related works on Internet use by adolescents and concludes with four principles: substitution, reinforcement, consolidation, and social compensation.

Prior studies that support the principle of substitution argue the time spent on new technology has occupied the time span on social life and directing the feelings of individuals (Gunuc & Dogan, 2013; Kraut et al., 2002; Mesch, 2003; Nie et al., 2002). In contrast to the viewpoint of substitution, the scholars who support the principle of complement believe that people can expand new relationships and intimacy with others, which are irrelevant to their usage on the Internet. According to their findings, adolescents' feeling of family communication and social support increase along with the increase of online usage (Mesch, 2003). Following the principle of consolidation, scholars conclude that adolescents' online relationships can be consolidated in combination with their existing social network. In other words, adolescents may feel a stronger need to contact with peers after online communications with the same groups. Finally, the principle of social compensation is attributed to the adolescents' personality. Adolescents who are introverted and socially anxious can gain help from the applications of new media technologies, such as E-mail and instant messaging, to expand their peer communication and relationships. Hence, researchers are in consensus that the adolescents' usage of new technology and development in their personal relationships are complex. Insights of connections between technology usage and adolescents' relationships can be comprehended by comparing different communicators, technologies, level of relationships, and results (Carvalho et al., 2015; Mesch & Talmud, 2006).

The motivations of interpersonal communication

To further understand the determinants that family members communicate with each other, prior studies applied theories from social psychology, such as Motivation Theory (Dweck & Leggett, 1988) or Theory of Reasoned Action (TRA) (Ajzen & Madden, 1986) to understand how individuals create motivations through the needs of cognitions and provide an overall assessment based on the surrounding environment and personal abilities toward generations of human behaviors. Meanwhile, individuals are inclined to utilize tools or resources to satisfy their needs, which are assumed to be goal-oriented. Hence, it is crucial to understand the individuals' motivations and perceptions in order to explain

their behaviors in the use of new technologies. Originated from Motivation Theory, Schutz (1966) and Rubin, Perse, and Barbato (1988) incorporate the needs of others and develop the scales for measuring the individuals' motivations of interpersonal communication. Schutz (1966) believes that people interact with each other because they want to satisfy their needs from others. Hence, he believed there are three motivations that initiate from interpersonal communication, such as inclusion, control and affection. Later, Rubin et al. (1988) added three interpersonal motives: pleasure, escape and relaxation.

According to the original scales of interpersonal communication motives by Rubin et al. (1988), six dimensions are illustrated as pleasure, affection, inclusion, inclusion, escape, relaxation, and control. The measurement of interpersonal communication motives are also verified by other scholars to achieve both reliability and validity (Barbato & Perse, 1992; Graham, Barbato, & Perse, 1993; Martin & Anderson, 2009; Myers, Brann, & Rittenour, 2008).

Relational maintenance

The initiation and termination of interpersonal relationships is a gradual development evolved with different time spans and formats of interactions. Altman and Taylor (1973), in their theory of social penetration, use the profile of an onion to show the width and depth of personal relationships. The process of interpersonal relationships is involved with relational establishment, reinforcement, maintenance, delusion, and termination. Through message communication and self-disclosure, individuals are capable of increasing or maintaining relationships with others. It is also critical to verify the causal links between interpersonal communication and relational maintenance. The applications of such connections can be also applied to specific groups of communicators, such as spouses, friends, and relatives (Canary, Stafford, Hause, & Wallace, 1993; Dindia & Canary, 1993). Unlike the subjects in prior studies, adolescence is a stage of human development with huge transitions in both physical and psychological aspects. Hence, the adolescents' relational maintenance with parents is requires further attention (Thorton, Orbuch, & Axinn, 1995). Stafford and Canary

(1991) propose the development of relational maintenance in two dimensions: the phases of relationship, referred to as the four stages of human relationship, and the relational strategy, which people utilize to connect with the others. The composition of relational maintenance consists of five dimensions: positivity, openness, assurance, social network, and task sharing. Synthesized from prior works of relational maintenance, most studies emphasize friends and intimate partners. Little research was found that portrays the maintenance of family relationships, especially the relational maintenance between adolescents and parents (Caughlin, Koerner, Schrodt, & Fitzpatrick, 2011). In addition, the intervention of new media technologies, such as the Internet, led to the various comparisons between individual relationships in online and offline environments. Most research topics are surrounded by friendship maintenance and are not extended to the scope of new technologies and relational maintenance between adolescents and parents.

Intimacy

Intimacy in general refers to the level of disclosure and mutual share of personal thinking, feeling, common interests or even imagination. As mentioned above, the phase of adolescence is when young children begin separating from their parents' protection and control and gradually evolve to establish intimate relationships with others. Researchers have compared adolescence with other stages of human development and concluded that the relationships between adolescents and parents are full of tensions and contradictions. The adolescents may hold different opinions to their parents and are expected to generate family conflicts that deteriorate their personal relationships and intimacy at school and further expand into society (Roming & Bakken, 1992). Solomon, Warin, Lewis, and Langford (2002) hold the belief that intimate conversation between adolescents and parents is associated with family communication and benefits maintaining a good family relationship. Hu, Wood, Smith, and Westbrook (2004) revealed the connections between personal uses of instant messaging and intimate relationships, but their study was limited to exploring new relationship between friends and was not extended to intimate relationships between adolescents and parents.

Meanwhile, Subrahmanyam and Smahel (2011) believed that individuals' perceptions and consequences of intimacy are determined by different communicative partners. Few studies has been conducted to explore the connections between relational maintenance and level of intimacy during the intervention of new communication contexts and further attention should be given to this (Parks & Floyd, 1996).

The intimacy of interpersonal relationship is regarded as a multi-dimensional construct. Miller and Lefcount (1982) examined how social intimacy affects individuals' relational satisfaction. Tolstedt and Stokes (1983) further divided the concept of intimacy into intimate relationships in terms of verbal, affection and physical contact. Moss and Schwebe (1993) explored the marriage relationship and pinpointed that the intimacy of loving partners exists within cognition, affection and physical contact, including both physical and psychological commitment. Considering the determinants of adolescent-parent communication and relationships, we aim to answer the following research question:

RQ1: Which new media technology is mostly used by adolescents to communicate with their parents?

RQ2: What are the factors that determine the adolescent-parent communication and relationship via new media technologies?

The relationship between adolescents and parents is genetic-bound and cannot be forced to be separated by any mean. The intervention of new media relied on the long-term and mutual interactions between both parties. Other factors associated with psychological determinants should also consider their effects respectively, such as adolescents' gender, age, family background, communication media, and family communication patterns.

Family Communication Patterns (FCP)

Family communication is regarded as a long-term and crucial indicator in human relationship development. With the advent of TV into family life, the media uses and family relationship becomes a central subject among communication studies (Brown et al., 1999; Chaffee, McLeod, & Atkin, 1971; Lull, 1980). Acknowledging the importance of

family communication patterns toward personal relationships and media choice, Koerner and Fitzpatrick (2002) extend the concept of McLeod and Chaffee (1972) and propose two major patterns, conversation-oriented and conformity oriented. The conversation orientation describes a family scenario where every family member can freely discuss and participate in all kinds of topics, including sharing individual activities, thoughts and feelings on family occasions. In contrast, the conformity orientation emphasizes the homogeneity of each family member's attitude, value and beliefs in a family. The principle of family communication is determined by harmony, conflict avoidance and interdependence. In traditional family contexts, children often follow the suggestions and decision making from their parents. Based on this anatomy, family communication patterns can be further categorized as consensus (i.e., high conceptual and high social) and pluralistic (i.e., high conceptual and low social), protective (i.e., low conceptual and high social) and laissez-faire (i.e., low conceptual and low social) (Koerner & Fitzpatrick, 2002). It is shown to be a reliable tool to understand and evaluate the impact of family communication on the development of personal relationships, such as psychological responses, conflict management and relational quality. Marketing researchers consider how the patterns of family communication would affect individuals' motivations in media use and interpersonal relationships and further affect their social learning and decision making, respectively (Moore & Moschis, 1983; Moschis, 1985). Researchers attempt to evaluate the impact of family communications on other aspects, such as parent-adolescent relationships and peer relationships. Ritchie and Fitzpatrick (1990) pointed out that the communication patterns between father and mother are varied in their communication with children. Ledbetter (2009a) believed that family communication patterns directly affect adolescents' peer relationship and level of intimacy. Barbato, Graham, and Perse (2003) believed that family communication patterns are associated with communication motives. As the subjects of family communication patterns were previously examined in western countries, Zhang (2007) believes that the effects of Confucianism and structure of Asian family should be also taken into account.

Communication reticence

Reticence is defined as individuals avoid communicating with others as a result of believing that the more they talk the more mistakes can happen. They choose to remain silent (Phillips, 1984). Researchers show that the evaluation of students' reticence is helpful in finding students' problems of verbal communication ability (Phillips, 1991). Past studies also revealed that they tend to use computer-mediated communication if they are shy, silent, and preferred thinking (Kelly & Keaten, 2007; Kelly, Keaten, Larsen, & West, 2004; Stritzke, Nguyen, & Durkin, 2004). The measurement of reticence, developed by (Keaten, Kelly, & Finch, 1997) includes six dimensions—anxiety, knowledge of communicative topics, time control, organization of thoughts, memory and reticence. Reticence is applied to compare the students' differences in the use of various communication media, such as E-mail (Kelly, Duran, & Zolten, 2001), instant messaging (Kelly, Keaten, Hazel, & Williams, 2010) and collaborative learning systems (Sherblom, Withers, & Leonard, 2013). The extant research has never applied the measurement of reticence in the effects of adolescents' communicative motives, relational maintenance and perceived intimacy toward communicating with parents.

The gender of adolescents

Males and females are shown to be biological different in using technologies and dealing with their relationships with others (Lin & Yu, 2008). Stafford and Canary (1991) concluded that gender is one of the determinants affecting the relational maintenance. Gender is also found to influence adolescents to develop intimate relationships and family cohesion (Roming & Bakken, 1992). Gender also shows different patterns in the uses of technology in terms of usage and content on the Internet Gross (2004). Furthermore, the parent's role in the family also plays a part in influencing the children (Shin & Kang, 2016). For instance, the mother has more authority than the father in a family as they always influence the children's behavior based on the standpoint of protection and nursing care and are more often to be rejected by her children (Golish, 2000). The dyads relationships between parents

and adolescents are also worth of further examination. Martin and Anderson (1995) explore fathers' communication motives, self-disclosure and relational satisfaction with adolescents. Repinski and Zook (2005) revealed the level of intimacy based on children with different age groups, including adolescents. Ritchie and Fitzpatrick (1990), in their measurement of family communication patterns, also studied children with different age groups and examined the relationships based on different communicators in the family. Hence, the association of gender between adolescents and parents should be verified in detail.

The choices of communication media

The theory of media effect can be divided into channel choice and media usage (Brandtzæg, 2010). The mix of media channels are posited to affect individuals' media uses and their relationships (Haythornthwaite, 2005; Meng, Williams, & Shen, 2015). Compared with face-to-face communication, individuals can communicate via computer-mediated communication in different time and space, which is assumed to affect interpersonal relationships generated online and offline (Parks & Roberts, 1998; Walther, 1992; Walther & Parks, 2002). Meanwhile, the choice of communication medium should be determined by both senders and recipients (Table 1) and is regarded to affect their relational behavior and level of closeness/or intimacy (Ledbetter, Taylor, & Mazer, 2016; Ramirez & Broneck, 2009).

Table 1. The characteristics and communicator of new media technologies

	One to many	One to one
Asynchronous communication	Facebook	E-mail
Synchronized communication	Video chat	Instant messaging

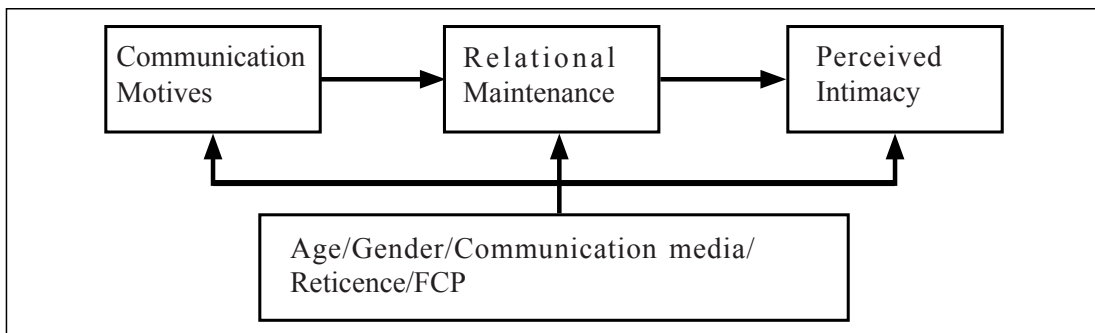
Adapted from Walther (1996)

Synthesized from the literature above, this study incorporates the constructs of interpersonal communication motives and family relationships to understand the determinants that drive adolescents to interact with parents from the interventions of new communication technologies. Prior studies have verified the hypothesis that the uses of new media technologies are inclined to affect different family members, such as parents and peers (Rudi, Dworkin, Walker, & Doty, 2015). The mediated framework of interpersonal motives, relational maintenance and perceived intimacy has been verified by previous research to study the parent-adolescent relationship but it is not granted to apply to the scenario of adolescent-parent relationship without any modification (Chang, 2015). The scenarios of such communication from different communicators and media technologies have been verified from the parents' perspectives, while it is still unknown whether the theoretical framework is still valid from the adolescents' viewpoints.

Furthermore, the adolescents' family situation and the intervention of technologies are varied; it is also critical to take the influences of external factors into account. For instance, the wide applications of family communication patterns can be used to verify that adolescents in different family styles may be varied in their family relationships. In summary, this study applies five external factors to examine the moderation effects of adolescents' communication motives, relational maintenance and intimacy, such as age, gender, choices of communication technology, reticence, and family communication patterns. The method of integrating mediation and moderation effects is expected to generate more solid results than relying solely on the interpretations of linear relationship (Edwards & Lambert, 2007; Hayes, 2013). The hypothesized mediation-moderation framework is illustrated in Figure 1.

This study explores the related literature associated with the uses of technology by adolescents and develops an empirical model by examining the connections among adolescents' communication motives, relational maintenance and intimacy with their parents. Meanwhile, we also examine the external effects by family communication patterns, choice of media technology, communication reticence, and individual differences toward the adolescent–parent relationships.

Figure 1. The conceptual framework



Participants

‘Adolescent’ in this study is defined as teenagers aged from 12 to 18 years old with experiences in using new communication devices or applications to communicate with their parents. The survey was conducted by using the online questionnaire and convenient sampling. The process of data collection was conducted from May 20 to June 15, 2014. Comparing to the distribution of adolescent samples in a nation-wide survey, we collect samples by randomly selecting regions, age groups and school types by the helps of high school community. The respondents were randomly selected by school authority and completed the questionnaire in the computer lab. The high school teachers were trained to serve as the survey administrators and each teacher was given a \$50 gift voucher in return of their assistant. After excluding samples who did not use any online applications or only face-to-face communicate with their parents, a total of 352 valid responses was collected.

Instruments

Referring to the ICTs uses in the family communication contexts by Rudi et al. (2015), the communication by adolescents was evaluated by the frequency of new media technology that he/she mostly use to communicate (i.e. every day, two to three times per week, four to five times per week, once per week, at least two to three times in two weeks, once per two weeks and at least once per month) and with specific recipient (i.e. father or mother). The questionnaire was developed by an adapted version of the interpersonal communication motives scale (Rubin et al., 1988), the relational maintenance scale (Canary & Stafford, 1992), and the intimacy scale (Hu et al., 2004). The measures were adapted so the subjects were reporting why and how they communicate with parents. The responses were solicited on a 5-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree). However, for the adolescents to comprehend the meaning of questionnaire, the original scales were translated from English to Chinese. Based on the principle of cross-culture study, this study followed the principle by Breslin (1970) and conducted back translation with the assistance of two communication scholars and one native English editor to check the comprehension of translation is equal to the original one. In addition, a pretest was performed by selecting ten high school students to verify anything unclear in the survey questionnaire. The results showed that both reliability and validity were achieved and enabled us to proceed to the next phase of data analysis (Churchill, 1979).

Procedures

Participants were asked to complete an online survey about their uses of new media technologies to communicate with their parents. After consenting to participate in this study, participants provided basic demographic information. The survey program then inquired the participants to choose from a list of new media technologies they often use to communicate with their parents. Based on the technology selected, the survey program assigned the participants to specify the parents they mostly utilize. The questionnaire was

then automatically adjusted based on the contexts participants selected above.

The online questionnaire consisted of three sections. The first section asks adolescents about the medium technology and usage frequency they use to communicate with their parents. The second section asks about adolescents' perceptions of using new media technology, such as motivation, relational maintenance, and intimacy in comparison with face-to-face communication with parents. Other self-report psychological scales were also included, such as family communication patterns and communication reticence. The third section asks for the background information and family situation of the adolescents, such as gender, age, residence, parents' education, and number of family members.

Results

In 352 valid samples, most adolescents use instant messaging and social networking sites to communicate with parents (87.2%). To avoid a few cases affecting the stability of statistical results, we excluded respondents who use E-mail, microblog, and VoIP phone, and 307 samples are included in the data analysis.

Adolescent samples were consisted of 192 females and 114 males; and most were in high school (77.9%). Apart from face-to-face communication, the majority of adolescents use instant messaging to communicate with their parents (71.3%), followed by social networking sites (28.7%). Comparing to another samples in our study, a similar proportion is shown in both parties, further inferring that both adolescents and parents may have similar preferences in their choices of communication medium. Participants were collected from southern Taiwan (47.6%), northern Taiwan (31.9%), and central Taiwan (0.2%). Due to a larger proportion of female respondents, the number of daughter–mother communication is higher than other groups (Table 2).

Table 2. Descriptive statistics of respondents' characteristics (N=307)

Measure	Category	Frequency	Percent (%)
Gender	Male	114	37.1%
	Female	193	62.9%
Choice of communication medium	Social networks	88	28.7%
	Instant message	219	71.3%
Residence	Northern	98	31.9%
	Central	62	20.2%
	Southern	146	47.6%
	Eastern	1	.3%
Family communication Patterns	Consensus	125	40.7%
	Pluralistic	35	11.4%
	Protective	66	21.5%
	Laissez-faire	81	26.4%

Model testing

The revised 26-item interpersonal communication motives scale consists of six individual motives. Coefficient alphas for the motives in this study were .96 for affection, .92 for pleasure, .92 for escape, and .95 for relaxation. The 22-item relational maintenance scale was adapted from original measures for maintenance behavior, which consists of two dimensions. Coefficient alphas for the dimensions in this study were: .98 for positivity and .96 for shared task. The revised 14-item perceived intimacy scale consists of four dimensions. Coefficient alphas for the dimensions were: .94 for verbal, .96 for affective, .90 for virtual, and .86 for social (Table 3). The instrument is assessed for achieving the accepted threshold reliability above the value of .7 (Nunnally, 1978).

Table 3. The mean values, standard deviations and reliability of research instruments

Dimension	Indicator	Mean	SE	Reliability
Communication motives	Affection	3.34	.93	.96
	Pleasure	3.56	.87	.92
	Escape	3.11	.98	.92
	Relaxation	3.50	.91	.95
Relational maintenance	Positivity	3.37	.96	.98
	Shared tasks	3.34	.94	.96
Intimacy	Verbal	3.24	1.03	.94
	Affective	3.21	1.03	.96
	Virtual	3.15	1.06	.90
	Social	3.23	1.05	.86

According to the literature, the interpersonal communication motives (Barbato et al., 2003), family communication patterns (Ledbetter, 2009a), family role (Martin & Anderson, 1995), and communication reticence (Kelly et al., 2010) have resulted in their connections with adolescents' motivation, relational maintenance strategies, and perceived intimacy. Unlike other studies which attribute the factors of family communication patterns, family role and communication reticence to be the determinants of adolescents' attitude and behavior, we use them as moderators to verify their effects to the model indirectly.

There are two approaches to verify the existence of moderators. The first one is to verify the interaction effects between moderators and independent indicators (Baron & Kenny, 1986). Another approach is to reveal the group differences, such as a Sobel Test (Hayes, 2009; Sobel, 1982) to assess the effects of moderation. Considering the characteristics of family communication patterns, family role and communication reticence are treated as categorical variables, this study applies the second approach to verify the moderation effect.

This study took adolescents' demographics, choices of communication medium, parents' marriage, and family roles in a group comparison with their communication motives, relational maintenance and perceived intimacy in communication with parents. The results show that adolescents would use different communication media to chat with parents when they need to relax ($p < .05$). Parents who live together or are divorced may have different

effects on adolescents' sharing motivation. This result might be worth noting as adolescents who live with their parents are more willing to share interesting information with parents via new communication media. In contrast, new communication media may have limitations in bridging the communication gap for adolescents with divorced parents. Gender and age did not show significant effect on adolescents' motivation, relational maintenance and perceived intimacy (Table 4).

Table 4. The cross-analysis between adolescents' information and psychological factors

	Gender		Age		Parents' marriage		Communication medium	
	T	<i>p</i>	T	<i>p</i>	T	<i>p</i>	T	<i>p</i>
Affection	1.03	.30	-.14	.89	1.29	.2	-1.04	.30
Pleasure	-.08	.94	.36	.72	-.01	.99	-1.54	.13
Escape	1.36	.18	.85	.39	1.2	.23	-.42	.68
Relaxation	-.23	.82	.21	.83	1.00	.32	-2.50	.01*
Positivity	1.47	.14	.11	.92	1.51	.13	-.27	.79
Sharing tasks	.65	.52	1.13	.26	2.07	.04*	-.50	.62
Intimacy	.46	.64	-.37	.71	1.47	.14	-1.24	.22

* $p < .05$, ** $p < .01$, *** $p < .001$

To identify the effect of individual situations, we use one-way ANOVA to verify effects of individual groups among adolescents' communication motivations, relational maintenance and intimacy in the communication with parents (Table 5).

The above results show that adolescents' residences have significant influence on adolescents' communication motivation, relational maintenance, and intimacy. A further analysis was conducted using the method of Scheffe to locate the differences. The adolescents in southern Taiwan may have a stronger escape motivation, hold a positive and mutual sharing attitude and higher level of intimacy to communicate with parents than adolescents residing in other regions. This result may contradict the general opinion that adolescents in northern Taiwan live in a higher density of metropolitan area where people frequently use new communication technologies to talk with each other. A possible explanation is that adolescents in southern Taiwan are more adapted to use new communication channels to interact with parents. The school adolescents attend is more far away and this requires more opportunities for family contact when they are traveling back and forth from school and home. Further evidence is required to provide insights for this result. In addition, adolescents' family communication patterns show significant effects when comparing adolescents' perceptions with communicating with parents via new communication media. The results show adolescents from consensus families have stronger motivations, relational maintenance and intimacy to use new media tools in communicating with parents. In contrast, adolescents from protective families only show significant differences in the expression of their intimacy with parents.

Table 5. The cross-comparison between external indicators and psychological factors

	Residence		Communication reticence		FCP	
	F	<i>p</i>	T	<i>p</i>	F	<i>p</i>
Affection	3.78	.11	.49	.62	32.16	.00***
Pleasure	2.40	.07	.42	.68	26.46	.00***
Escape	4.31	.005**	-3.38	.001***	18.6	.00***
Relaxation	1.15	.33	1.12	.27	23.42	.00***
Positivity	2.93	.034*	.14	.89	28.99	.00***
Sharing tasks	6.44	.00***	.37	.71	39.91	.00***
Intimacy	4.9	.002***	1.24	.22	34.52	.00***

p* < .05, *p* < .01, ****p* < .001

To test the hypothesis that adolescents' motivation and relational maintenance influences the subsequent level of intimacy, we conduct regression analysis to examine the model fitness and the strength of relationship among variables. After four rounds of model testing, the model explained 69.47% of the variance. The result can be described in the following formula.

$$\text{Intimacy} = (.35) (\text{Affection}) + (-.24) (\text{Pleasure}) + (-.03)(\text{Escape}) + (.11)(\text{Relaxation}) + (.29)(\text{Positivity}) + (.42) (\text{sharing tasks})$$

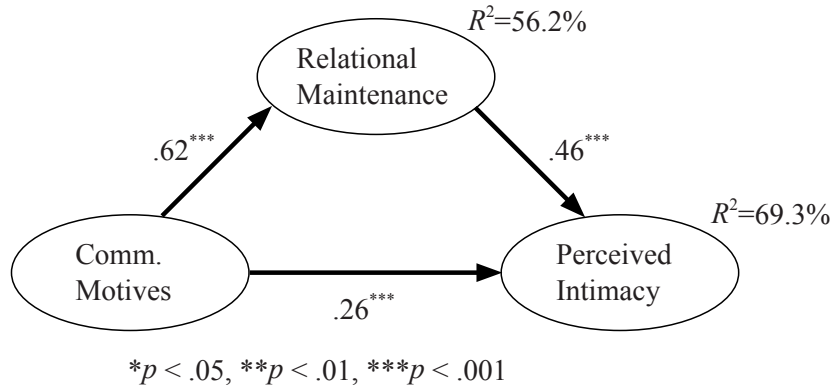
We also conducted path analysis to examine the direct and indirect effects among communication motivations, relational maintenance and intimacy (Table 6). The results show their relationships are positive. The relational maintenance plays a mediating role between communication motivations and perceived intimacy and is attributed to be partial mediated based on the comparison of unstandardized regression weights and statistical significance (Figure. 2).

Table 6. The results of path analysis

Relationship	<i>B</i>	<i>S.E.</i>	<i>p</i> -value
Communication motives→Relational maintenance	.62	.02	.00***
Communication motives→Intimacy	.26	.02	.00***
Relational maintenance→Intimacy	.46	.02	.00***

p* < .05, *p* < .01, ****p* < .001

Figure 2. Path coefficients of model testing



According to the results of the regression analysis, the reason for young people to use new communication technologies to communicate with their parents were mainly derived from affection, pleasure, positivity and sharing tasks. Overall, adolescents perceive affection to be the strongest motivation that they communicate with parents. The sharing of emoticon and funny moments could be the activities that adolescents want to share with parents when they are in a joyful mood. Regarding their status of relational maintenance, adolescents believe that sharing tasks and positive assurances can help them to maintain strong ties wherein they are assisted by the new communication media, which further complements the level of intimate relationships with parents.

Conclusion

Adolescents are increasing their usage on sending messages and images as a way to connect with friends and family members daily, especially in Chinese family (Huang & Leung, 2010). Evidence shows that more adolescents have attempted to chat with parents through instant messaging than social networking sites. Hence, new communication technology is certainly an issue that adolescents can exploit when communicating with parents instead of attributing to technology addictions. Some adolescents consider using new technologies to report their daily routine as convenient (Kornblum, 2011) while others reject their parents as the disclosure of personal privacy online (Shin & Kang, 2016). This

study shows that the affection and relaxation are the motivations that drive adolescents to communicate with parents by means of new communication technologies. Adolescents may also regard positive assurance and task sharing as their strategy to consolidate their relationships and intimacy with parents. The results have broken through the limitation of prior research within the study of the same peer group (e.g., loving partners or friends) or implications from a single result from communication (e.g., relational satisfaction or closeness) and reveal the dynamic structure of communication between adolescents and parents. In contrast to face-to-face communication, both adolescents and parents should have an open mind to discuss or share information online with each other, which also reflects the assumptions by Solomon et al. (2002). They argue that parents used to direct the access to media use in the family. However, the emergence of new communication technology not only equalizes the power structure between adolescents and parents, but also create an open space for encouraging self-disclosure and emotional sharing in the family.

The effects of family communication patterns have been regarded as determinants that directly formulate the adolescents' relationships. In contrast to the mediator approach by Ledbetter (2014), this study took a different approach by categorizing adolescents with different family communication patterns and observing the changes in their communication motives, relational strategies and perceived intimacy, correspondingly. Compared to the study of Chinese family communication patterns by Zhang (2007), this study also shows the family communication patterns in adolescents' communication strategies with parents has shifted from conformity to consensus. The best communication strategy for a consensus family is collaboration rather than escape. For a pluralistic family, it is suitable for competition rather than collaboration. The communication motives, relational maintenance and intimacy between adolescent and parent in the use of new communication technologies are varied and thus each type of family should adjust their communication strategy to improve the level of intimacy in their relationships.

The communication between adolescents and parents is worth more attention as more technology tools are pervasive in our daily life. Little research has been found that explicitly

discusses the impact of communication technologies on family relationships (Rudi, Walkner, & Dworkin, 2014). Some studies specified the intervention of certain mediums, such as social media (Kanter, Afifi, & Robbins, 2012), Internet (Williams & Merten, 2011) and the comparisons of different media (Lundy & Drouin, 2016), to evaluate the intervention of computer-mediated communication toward family relationships. This study compared the adolescents' use of two communication technologies—instant messaging and social networking sites—in communication with parents and concludes that the preferences and uses of specific communication medium may have a moderate impact on the interaction process and consequences of adolescent–parent relationship. The attempt of comparing various interpersonal communication media also extends prior assumptions of media effect as most studies were pertained to the effects of specific communication media (Ledbetter et al., 2016). The effects of media modality, as rooted in the Media Multiplexity Theory (MMT), are evaluated based on the cognitive process and can be linked to the interventions of adolescent-parent relationship.

The stage of adolescence is critical to the development of interpersonal relationships and social cognition. The finding of this study may provide useful guidelines for social workers and parents to provide appropriate assistants with healthy communication and solid relationships. For instance, results from our prior study on parents (Chang, 2015) also show parents and adolescents can have the feel of sharing and instant response through new communication tools may mitigate the tension of parent-adolescent relationships, such as communications through online chatting, photo sharing, and check-in from Facebook. In addition, the benefits of resolving family tasks through online communication, such as arranging daily activities by mobile applications or through instant messaging, can strength family bonds and more adapted to the daily routine. The emphasis of family communication patterns also provides a good reference for adolescents to pertain better strategy and family relationship with parents through online communication. The guidelines of parenting programs or consulting services can be refined based on the family communication patterns identified in the computer-mediated communication environment.

Appendix

附錄一：原始問卷

親愛的同學您好：

我們是世新大學的研究團隊！首先，我們衷心的感謝您撥空填寫問卷，協助我們的研究！本研究是執行科技部專題研究計畫的部分內容。我們主要是想透過這份問卷，瞭解行動媒體對於家庭成員間的關係以及人際互動的影響狀況。本研究針對父母與子女，進行雙方面的想法和經驗探討以瞭解數位媒體時代家庭溝通內涵的型態轉變與互動模式。

研究者：世新大學傳播管理學系張伯謙
通識教育中心林承宇

敬上

本份問卷總共分為八個部份，請依照題目試想你和爸/媽的關係與相處經驗，以勾選你對於題目的同意程度，分為「非常同意／同意／普通／不同意／非常不同意」五個選項。感謝你的協助配合！

構面	問項							
第一部份：媒體使用狀況								
1、目前你是否使用智慧型手機？ <input type="checkbox"/> 是 <input type="checkbox"/> 否								
2、目前你是否使用手機上網？ <input type="checkbox"/> 是 <input type="checkbox"/> 否								
3、截至目前為止你使用網路有多少年？_____年								
4、相較於面對面接觸，請問你較常使用新媒體與父母溝通？ <input type="checkbox"/> 爸爸 <input type="checkbox"/> 媽媽 <input type="checkbox"/> 從未使用（問卷結束）								
5、請問你最常使用下列那一種媒體與父母溝通？								
媒體 \ 頻率	每天	一周 4-5 天	一周 2-3 天	一周 1 天	2 周 至 少 1 天	2 周 至 少 2-3 天	一 個 月 至 少 1 天	從 未 使 用 過
社群網站(例如：臉書 FB, Google Plus)。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
即時通訊(例如：Line, WhatsApp, WeChat 等)。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
微網誌(例如：Plurk, Twitter 等)。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
網路電話(例如：Skype)。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
電子郵件(例如：Gmail, Hotmail 或 MS Outlook)。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
其他，請說明：_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

注意：

若未使用上述媒體，僅有面對面接觸，請停止填答以下問卷。

說明：本網路問卷第 6~110 題的「空格」部分，係以您第 5 題所填實際內容「新媒體：社群網站、即時通訊、微網誌、網路電話、email 或其他」與面對面比較後的填答。空格會依照您所填實際狀況由系統跳出相關內容。

	非常同意	同意	普通	不同意	非常不同意
第二部份：溝通動機 (與面對面溝通比較，...)					
6. 透過_____溝通，是比較有趣。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. 透過_____溝通，是比較令人興奮。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. 透過_____溝通，讓我與爸/媽擁有愉快的時光。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. 透過_____溝通，是比較扣人心弦的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. 透過_____溝通，是比較刺激的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. 透過_____溝通，是比較具有娛樂性的。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. 透過_____溝通，讓我很享受。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. 透過_____溝通，使我受到了鼓舞。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. 透過_____溝通，可以讓我幫助爸/媽。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. 透過_____溝通，可以讓爸/媽明白我在乎他們。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. 透過_____溝通，可以讓我對爸/媽進行感謝。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. 透過_____溝通，可以讓我對爸/媽進行鼓勵。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. 透過_____溝通，可以讓我對爸/媽進行關心。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. 透過_____溝通，我可以得到爸/媽的陪伴。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. 透過_____溝通，我可以向爸/媽傾訴我遇到的問題。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. 透過_____溝通，我感覺比較不寂寞。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. 透過_____溝通，我感覺欣慰、感覺爸/媽在身邊。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. 透過_____溝通，我可以因此推拖掉我應該做的事。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. 透過_____溝通，我可以因此抽離我正在做的事。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. 透過_____溝通，是因為我沒別的更好的事可做。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. 透過_____溝通，我感覺可以擺脫壓力和責任。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. 透過_____溝通，可以使我比較輕鬆。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. 透過_____溝通，這種溝通方式允許我放鬆。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. 透過_____溝通，是一種愉悅的休閒方式。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. 透過_____溝通，可以讓我跟爸/媽溝通時感覺比較不緊繃。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. 透過_____溝通，是因為有事情希望得到爸/媽的幫助。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. 透過_____溝通，是因為想告訴爸/媽應該怎麼做。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. 透過_____溝通，是因為想得到某些我沒有的東西。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. 透過_____溝通，我與爸/媽方便討論事情。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
第三部份：關係維護量表					
35. 透過_____溝通，我可以讓爸/媽感受到我的樂觀和正面的態度。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. 透過_____溝通，我可以展現我對爸/媽相互地關心。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. 透過_____溝通，我可以表現得很興奮的樣子，即便我並沒有那樣的心情。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. 透過_____溝通，我可以展現我的努力並讓爸/媽高興。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | | |
|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 39. 透過_____溝通，我可以表達我對爸/媽的情感。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. 我使用_____與爸/媽分享並且不被其他人知道。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. 我使用_____與爸/媽討論我們在關係上的問題。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. 我使用_____與爸/媽談論以前發生的事情。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 43. 我使用_____告訴爸/媽我的生活經驗。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 44. 當爸/媽做了什麼事讓我生氣，我會透過_____告訴他/她。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 45. 透過_____，我們可以相互傾聽並且沒有批評。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 46. 透過_____溝通，我可以鼓勵爸/媽追求個人成就和目標。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 47. 透過_____溝通，我們彼此安慰和支持對方。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 48. 透過_____溝通，我試圖達到爸/媽的要求。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 49. 透過_____溝通，我可以展現我對爸/媽真實的情感。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 50. 透過_____，我試圖接受爸/媽的朋友，即便我並不認識他們。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 51. 透過_____，我會介紹我的家人給其他的朋友。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 52. 透過_____溝通，我們共同分擔家務事(例如打掃、整理、倒垃圾等) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 53. 透過_____溝通，我們感覺彼此在一起。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 54. 透過_____溝通，我們可以約定一起參加聚會活動。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 55. 透過_____溝通，我們會彼此約定時間聊天談心事。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 56. 透過_____溝通，我們偶爾會約定一起去拜訪其他的親戚。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

總 經 普 偶 從
是 常 通 爾 未

第四部份：親密感

- | | | | | | |
|--------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 57. 透過_____溝通，我可以跟爸/媽談任何事情。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 58. 透過_____溝通，我比較可以接受爸/媽評論我。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 59. 透過_____溝通，我感受爸/媽的鼓勵。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 60. 透過_____溝通，我可以跟爸/媽分享今天發生在我們身上的事情。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 61. 透過_____溝通，我感覺爸/媽真的瞭解我。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 62. 透過_____溝通，我感覺我與爸/媽親近。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 63. 透過_____溝通，我們之間產生了溫暖的氛圍。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 64. 透過_____溝通，我會想要跟爸/媽見面。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 65. 透過_____溝通，我會瞭解爸/媽的感覺。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 66. 透過_____溝通，我可以在爸/媽沮喪的時候安慰他/她。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 67. 透過_____溝通，我感覺爸/媽就在我身旁。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 68. 透過_____溝通，我會迫不及待想要看到爸/媽。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 69. 透過_____溝通，我覺得我們之間的談話相當膚淺。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 70. 透過_____溝通，我覺得可以與爸/媽討論家庭事務。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 71. 透過_____溝通，我覺得可以與爸/媽安排家庭聚會活動。 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

非常 非常
同意 不同意
同 普
意 通
意 意

第五部份：家庭溝通型態之觀念取徑

- 72. 在家裡我和爸/媽可以自由地談論任何議題，就算會有意見不同的情況。
- 73. 家裡所有的成員都可以在家庭決策過程中表達自己的想法。
- 74. 在家庭聚會討論時，我爸/媽會詢問我的意見。
- 75. 我的爸/媽認為我應該懂得比他們更多。
- 76. 我的爸/媽鼓勵我去挑戰他們的想法或觀念。
- 77. 我的爸/媽認為我有自己的想法是很重要的，即便有些人並不喜歡。
- 78. 我的爸/媽會鼓勵我用不同的角度觀察週遭的事物。

第六部份：家庭溝通型態之社會取徑

- 79. 我的爸/媽常跟我說，等我長大後自然就會知道。
- 80. 我的爸/媽總是告訴我，他們的想法是正確的，而我不應該有懷疑。
- 81. 我的爸/媽常告訴我，小孩不應該向父母親爭論他們的看法。
- 82. 我的爸/媽認為現實生活中總是充滿了對與錯的事情。
- 83. 我的爸/媽認為在現實生活中有些事情是不應該被討論的。
- 84. 我的爸/媽認為遠離危險最好的方向就是不要去做。
- 85. 我的爸/媽認為凡事應以和為貴，不應該惹他人生氣。
- 86. 我的爸/媽期望，我在家能遵守他們所定下的規則。

第七部份：新媒體科技溝通技能量表

- 87. 透過_____溝通，我與他人溝通時不會感到緊張。
- 88. 透過_____溝通，我知道我應該說什麼。
- 89. 透過_____溝通，我隨時可以暢所欲言。
- 90. 透過_____溝通，我可以組織我的思想後與他人對談。
- 91. 透過_____溝通，我在對談中不會忽然停頓。
- 92. 透過_____溝通，我能在對談中想起我要說的話。
- 93. 透過_____溝通，在對談中我感到放鬆。
- 94. 透過_____溝通，我不會去注意該說什麼不該說什麼。
- 95. 透過_____溝通，我能在想要的時間點說出想要講的話。
- 96. 透過_____溝通，我的思考會被打亂。
- 97. 透過_____溝通，我能清楚表達我要說的話。
- 98. 透過_____溝通，我會在對談中忘記我要講的話。
- 99. 透過_____溝通，在對談中我感覺壓力很大。
- 100. 透過_____溝通，我知道該討論什麼事情不該討論什麼事。
- 101. 透過_____溝通，我會遲疑太久而沒有說出我想要講的話。
- 102. 透過_____溝通，我可以在談話過程中整理我的想法。
- 103. 透過_____溝通，我會喃喃自語。
- 104. 透過_____溝通，我能在談話中記得我該說的話。
- 105. 透過_____溝通，我在談話中感到自在。
- 106. 透過_____溝通，我會對我所講過話產生陌生的感覺。
- 107. 透過_____溝通，我可以在我要的時間點說出我想講的事。
- 108. 透過_____溝通，我的思緒變得複雜。
- 109. 透過_____溝通，我能夠馬上表達出我要講的話。

110. 透過_____溝通，我沒辦法在對談當中掌握我所要講的話。

第八部份：基本資料

- 性別：男 女
- 年齡：____歲
- 年級：_____
- 居住區域：北部 中部 南部 東部
- 家庭成員人數：同住____幾位／不同住____幾位
- 爸爸／媽媽的教育程度：國中以下 高中 五專 大學 研究所以上
- 爸爸媽媽的婚姻狀況為何？(單選)
 - 爸爸媽媽住在一起 爸爸媽媽分居 爸爸媽媽離婚 爸爸媽媽離婚但仍同居
 - 爸爸已經過世 媽媽已經過世 其他，請說明_____
- 你現在與誰同住？(單選)
 - 與爸媽(生父、生母)同住 與爸爸、繼母同住 與媽媽、繼父同住
 - 與爸爸同住 與媽媽同住 與其他人同住，請說明_____

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