

Taiwanese Adolescents' Self-Disclosures on Private Section of Facebook, Trusts in and Intimacy with Friends in Different Close Relationships

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Abstract

The study investigates self-disclosure by adolescents in Taiwan on the private section of Facebook, and their trust in, and intimacy with, Facebook friends in different close relationships. This study further determines the predictors of intimate self-disclosure that are mediated by trust in Facebook friends. In total, 1370 Taiwanese adolescents, via stratified random cluster sampling, filled out the validated questionnaire between March and May 2013. One-way repeated measures analysis of variance and structural equation modeling were applied to analyze data on self-disclosure, intimacy, and trust, respectively, among five levels of Facebook friends. The study demonstrates that as the closeness of friends' increases, the amount of self-disclosure, intimacy, and trust increases. Additionally, the level of self-disclosure can predict the level of intimacy with Facebook friends. Adolescents' trust in friends in close relationships may strengthen the development of intimacy; however, there is no such reaction in the group of unfamiliar Facebook friends.

Keywords: self-disclosure, intimacy, adolescents, Facebook use

1. Introduction

Social networking is pervasive, especially on Facebook. Studies have shown that adolescents use Facebook to develop new social relationships and to reinforce pre-existing friendships (Mesch & Talmud, 2006; Subrahmanyam & Greenfield, 2008; Subrahmanyam, Reich, Waechter, & Espinoza, 2008; Valkenburg & Peter, 2007). Conversely, social relationship status impacts the verbal activities of a large proportion of adolescents during communication on Facebook (McAndrew & Jeong, 2012). Since adolescents are in a vital developmental stage and typically seek peer identification by developing friendships, even intimacy, through peer interactions (Zastrow & Kirst-Ashman, 2010), their verbal activities with different friends with which they have different relationships on social networking websites and their potential effects have renewed interest in educational research.

Many studies have focused on issues related to motivation to use Facebook to contact known friends (Baek, Holton, Harp, & Yaschur, 2011; Cheung, Chiu, & Lee, 2011; Dogruer, Menevis, & Eyyam, 2011; Raacke & Bonds-Raacke, 2008; Ross, Sisc, Arseneault, Simmering, & Orr, 2009). Self-expression for establishing social relationships with friends is a common motivation. Furthermore, self-disclosure in verbal activities becomes an interesting topic when one is concerned with how adolescents seek to sustain their social relationships for peer identification through social networks (Radmacher & Azmitia, 2006; Wang, Jackson, & Zhang, 2011; Valkenburg & Peter, 2011). Rosen, Cheever, Cummings and Felt (2008) asserted that self-disclosure is complex and is affected by close relationships with friends. People disclose their personal affection for close online friends (Pornsakulvanich, Haridakis, & Rubin, 2008) and further develop a deep friendship. While self-disclosure is associated with the stability of a personal relationship, self-disclosure by adolescents on Facebook may depend on friends in different close relationships and adolescents may develop different levels of intimacy with friends.

Self-disclosure is loosely defined as individuals verbally revealing their thoughts, feelings, and experiences to others (Derlega, Metts, Petronio, & Margulis, 1993, p. 1). Compared to real life, adolescents prefer making self-disclosures on the Internet (McKenna, Green, & Gleason, 2002). The purposes of self-disclosure are

typically receiving confirmation from friends (Reis & Shaver, 1988), attempting to get feedback or help (Derlega et al., 1993), and expressing care and support (Jamieson, 1998). On the other hand, self-disclosure is associated with narcissism (Kirkpatrick, 2010, p. 13). For example, adolescents, a digital generation, often exhibit their life photos and personal profiles on Facebook to gain self-acceptance, self-confidence and possibly even boast about them. Additionally, Facebook has two environments for users: a public wall and private section. Theoretically, self-disclosure based on narcissism on Facebook's public wall (e.g., exhibiting photos and checking in at some places) does not generally strengthen friendships due to a lack of psycho-emotional needs. Rather, Facebook users often make self-disclosures to specific friends on the private section, which can deepen friendships and for avoid interruptions from unfamiliar users. Thus, self-disclosure on the private section may embody emotional intensity. Since self-disclosure associated with personal emotions may benefit the development of close relationships and the formation of intimacy, the scope of exploring the effects of self-disclosures by adolescents on Facebook should focus on the private section (e.g., private messages and restricted access on Facebook's wall with enabled privacy settings).

As mentioned, adolescents often seek identification through self-disclosures and can develop their intimacy with friends and romantic partners. With close friends, adolescents typically disclose and receive intimate, private information and build friendships based on honesty and trust. However, not all adolescents feel sufficiently secure to forge intimate friendships (Steinberg, 2010). Some adolescents do not develop the capacity to be intimate with friends on the Internet. Trust mediates the development of intimacy by self-disclosure (Horvath & Van Diest, 1998). Thus, trust in various friends is a key factor impacting the relationships between self-disclosure and intimacy with Facebook friends.

Currently, Facebook requires all users to be at least 13 years old to create an account. In Taiwan, about 844,400 children are aged 13-15 (Ministry of Education, 2012). According to Checkfacebook.com (2013), these adolescents applied for 831,500 accounts. Reasonably, even though one may have many Facebook accounts, this number implies that most Taiwanese adolescents have used Facebook to contact their friends. These adolescents are generally moving away from family and parents and developing close ties with friends. As most adolescents use Facebook to contact various friends for peer identification and development of close relationships identifying an adolescent's Facebook contacts is increasingly important and affects the development of intimacy. This study investigates self-disclosure on Facebook's private section by Taiwanese adolescents, and their trust in and level of intimacy with friends in different close relationships. This study also examines the relationship between self-disclosure and intimacy, which may be mediated by trust in Facebook friends.

2. Literature Review

2.1 Facebook Friends in Different Close Relationships

The subjects with whom adolescents communicate on the Internet have been a concern (Chou & Peng, 2007; McCarty, Prawitz, Derscheid, & Montgomery, 2011). Countless adolescents use Facebook to communicate with their family, friends, classmates, teachers, and even strangers. However, adolescents do not necessarily contact all Facebook friends regularly, nor do they conduct verbal activities in the same ways.

For adults (i.e., college students), many studies have indicated that most only add people who they had met in real life to Facebook friends, while only a very small number look for new friends on social networking sites (Lenhart & Madden, 2007a; Pempek, Yermolayeva, & Galvert, 2009; Subrahmanyam, Reich, Waechter, & Espinoza, 2008; Wiley & Sisson, 2006). According to Hew (2011), most adults are unwilling to add a stranger as a Facebook friend to avoid, say, being stalked by a stranger.

However, findings of studies of Facebook use by adolescents differ from those for adults. Surprisingly, roughly half of adolescents, especially male adolescents, use social networking sites to make new friends, (Lenhart & Madden, 2007a), and converse with people they do not know personally (Wolak, Mitchell, & Finkelhor, 2002). However, only some Facebook users build online relationships with new friends. According to a Taiwanese study by Hsu, Wang and Tai (2011), adolescents typically interact with new friends mainly through games. Similar findings were obtained by Vasalou, Joinson, and Courvoisier (2010), who investigated the practices of 423 Facebook users from five countries, and found that Facebook games and applications were useful for meeting new friends and joining a group. Clearly, studies have suggested that adolescents use social networking sites to meet and form connections with known people, such as classmates, relatives, and family members, as well as with strangers.

Moreover, studies further determined that Facebook friends with different levels of closeness with these friends. Pempek et al. (2009) categorized Facebook friends as "friends seen regularly," "hometown friends not seen regularly," "college friends not seen regularly," "acquaintances," "siblings and cousins," "strangers," and

“parents.” Another study of levels of Facebook friends was conducted by Hsu et al. (2011) who investigated the acquaintanceships of Taiwanese users of Facebook, and classified friends as “new friends,” “acquaintances,” “familiar friends” and “close friends.” Hsu et al. further indicated that even though users generally interact with new friends via games, they wrote more on Facebook walls of their “familiar friends” and “close friends” than on the walls of their “new friends” and “acquaintances.” Tsai and Liu (2013), in a study of Facebook use by Taiwanese adolescents also categorized five levels of Facebook friends: “tending to be a stranger,” “acquaintance,” “familiar,” “intimate,” and “romantic interest” They indicated that as the closeness of friends increased, the trust in them by adolescents increased.

Overall, Facebook friends involve close relationships. Literature also suggested different Facebook friends have different degrees of closeness, and indicated that Facebook had the potential to change the course of some close friendships and certainly can be significant in the case of intimate relationships (Lewis & West, 2009). Clearly, individuals interact with relational partners with different levels of closeness on Facebook. In other words, even though the majority of Facebook friends are known, different levels of personal relationships exists on Facebook.

2.2 Self-Disclosure, Intimacy, and Trust for Adolescents on Facebook Use

Lurking, such as reading postings and viewing photos on Facebook without actively posting messages, comments, or photos, is a common activity (Park, Lee, & Kim, 2012). A study by Subrahmanyam, Reich, Waechter and Espinoza (2008) reported that reading comments, writing comments, and responding to comments/messages took considerable time. Lurking and browsing other people’s profile/walls help users keep track of their friends, the events in their lives, as well as their friend’s interactions with others. Verbal interactions between members of one’s network can help to fix problems in social relationships.

When conversing with friends on Facebook, self-disclosure by adolescents impacts relationship quality. Studies explored self-disclosure behaviors of adolescents on Facebook (Bane, Cornish, Erspamer, & Kampman, 2010; Park & Jin, 2011). Self-disclosure refers to an interaction between at least two individuals where one intends to deliberately divulge something personal to another (Greene, Derlega, & Mathews, 2006). The benefits of self-disclosure are many. Couples who share thoughts, feelings, experiences, memories, hopes, and dreams tend to remain together longer than those couples who do not share. Buhrmester and Prager (1995) indicated that adolescents can resolve identification issues using input from others. Identity challenges associated with early adulthood may be addressed through self-disclosure, particularly to peers. Since Facebook is a way of expressing publicly hoped-for possible selves, and because adolescents are typically concerned with peer acceptance, physical appearance and the impressions they convey, self-disclosure is a key component of Facebook use by adolescents who seek identification and to maintain friendships.

Moreover, the amount of self-disclosure by adolescents can predict their level of intimacy with friends (Bauminger, Finzi-Dottan, Chason, & Har-Even, 2008). Intimacy can be defined as a feeling of closeness and connectedness and represents the emotional component involved in an intimate relationship (Overbeek, Scholte, De Kemp, & Engels, 2007) that developed via personal disclosure between partners (Perlman & Fehr, 1987). People who value intimacy tend to express concern and tend to disclose emotional, personal, and relational content. Hsu et al. (2011) indicated that Facebook users typically use intimate activities when interacting with close friends. Thus, adolescents may seek to establish intimacy via interconnections with close friends and romantic partners while using Facebook.

However, Internet communication differs from face-to-face interaction. Park et al. (2011), who examined the relationship between self-disclosure and intimacy in the context of Facebook, indicated that self-disclosure was not associated with intimacy due to a lack of honesty and intent in self-disclosure. They inferred that Facebook is not a place where truthful and deep relationships can be sustained and building intimacy on Facebook is difficult. Bane et al. (2010) also suggested that people perceive real-life friendships as more likely than online friendships to possess intimacy-promoting interactions. Ideally, social networking websites provide adolescents with opportunities to seek warm, close, and validating experiences. Because of a lack of trust in Internet contacts, self-disclosure is not necessarily associated with intimacy on Facebook.

Studies have also addressed the issue of user trust in Facebook friends as well as the potential risks of contacting various online friends (Braun, 2013; Ljepava, Orr, Locke, & Ross, 2013). A Taiwanese study by Tsai and Liu (2013) suggested that adolescents put different degrees of trusts in, and make self-disclosures to, friends with different degrees of closeness when using Facebook. A lack of honesty may result in self-disclosure not positively affecting intimacy with friends. That is, the association between self-disclosure by adolescents and the level of intimacy with friends depends on the closeness of relationships and the degree of trust.

As recommended by Subrahmanyam, Reich, Waechter and Espinoza (2008), future research should determine

whether users of social networking sites accrue different levels of disclosure and intimacy depending on the closeness of relationships. This study investigates self-disclosures, intimacy and trust in Facebook friends by adolescents in relationships with different degrees of closeness. Moreover, as discussed in literature, self-disclosure by adolescents may predict their level of intimacy with friends, mediated by different levels of trust in Facebook friends. Thus, this study has two research questions.

- 1) Are adolescents' amount of self-disclosure to and levels of intimacy and trust in Facebook friends in relationships with different degree of closeness significantly different?
- 2) Can the amount of self-disclosure by adolescents predict their level of intimacy with friends when mediated by the level of trust in friends?

3. Methods

This study describes a large population from various locations in Taiwan and surveys this population from March to May 2013 to answer to the two research questions.

3.1 Sample

According to Cohen, Manion, and Morrison (2007), over 1000 adolescents is an adequate sample size at the 0.95 confidence level and 3% confidence intervals. Therefore, via stratified random cluster sampling of subjects, 1650 questionnaires were mailed. The final sample comprised 1370 junior high school students (response rate, 1370/1650, 83%), representing 27 junior high schools sampled from the 20 administrative districts in Taiwan. Each school received 30-120 questionnaires based on the number of classes in that school. The junior high school students who used Facebook to contact friends were invited to fill out the questionnaire.

3.2 Instruments

The survey questionnaire had three sections that obtained data on self-disclosure to friends in Facebook's private section, intimacy with Facebook friends, and trust in Facebook friends.

The items for self-disclosure were developed based the work by Derlega et al. (1993), who defined self-disclosure as what individuals verbally reveal about their thoughts, feelings, and experiences to others. The questionnaire guide was: What did you disclose about yourself to friends on Facebook's private section recently? Four items in the questionnaire were tailored to self-disclosure. All sampled students responded on a five-point Likert scale, ranging from 1 for "very little" to 5 for "very much."

The three items for intimacy with Facebook friends were based on the definition of intimacy as a feeling of closeness and connectedness that represents the emotional component in close relationships (Overbeek et al., 2007). Responses were again on a five-point Likert scale, ranging from 1 for "very little" to 5 for "very much."

Items for trust in Facebook friends were based on the study by Tsai and Liu (2013), which examined the trust in friends of Taiwanese adolescents and designed an item related to trust: *I believe that he or she would not lie to me when he or she contacts me*. Trust may be defined as "believability" (Tseng & Fogg, 1999, p. 39). That is, whether adolescents believe their Facebook friends reflects their trust in those friends. This study developed three items related to trust in Facebook friends. Responses to each item were on a five-point Likert scale, ranging from 1 for "strongly disagree" to 5 for "strongly agree."

Initial items were revised by five professors with expertise in education and communication. In total, 400 adolescents were recruited for a pilot test of the revised questionnaire, of which 349 questionnaires were valid, and 51 were eliminated as they were incomplete.

To assess constructive validity, confirmatory factor analysis was utilized to analyze the structure of each factor's (self-disclosure, intimacy, and trust) scale. Factor analysis results show that Bartlett's Test of Sphericity result was statistically significant for the three factors and Kaiser-Meyer-Olkin value was 0.803 for self-disclosure, 0.678 for intimacy, and 0.742 for trust (> 0.6). Table 1 lists factor loadings for the 10 items. Three factors with eigenvalues > 1 emerged from rating analysis, accounting for 77.50% for self-disclosure variance, 73.24% of intimacy variance, and 80.91% of trust variance. Prior to varimax rotation, responses had loadings > 0.6 on all factors. Cronbach's alpha coefficient was 0.903 for self-disclosure, 0.808 for intimacy, 0.879 for trust, and 0.918 for the total scale. That is, all questionnaire items were appropriate for assessing self-disclosure, intimacy and trust for adolescents.

Table 1. Factor loading of the three scales

Factors	Items	loading
Self-disclosure	1. Expressing thoughts on a current event.	0.744
	2. Venting emotions	0.814
	3. Describing experiences	0.802
	4. Describing dreams for the future	0.740
	5. Conversing about a private matter with Facebook friends	0.612
Intimacy	6. Talking to Facebook friends using intimate language.	0.799
	7. Sharing secrets about my body.	0.786
Trust	8. I think that the feelings expressed by my Facebook friends on Facebook were real.	0.807
	9. I think that the messages my Facebook friends wrote to me on Facebook were reliable.	0.831
	10. I believe that my Facebook friends would not lie to me when contacting me on Facebook.	0.789

After confirming the validity and reliability of initial items, all items were duplicated as five sub-scales for five levels of closeness for Facebook friends in the formal questionnaire. The closeness levels for Facebook friends were based on the categories used a Taiwanese study by Tsai and Liu (2013): “tending to be a stranger,” “acquaintance,” “familiar friend,” “intimate friend,” and “romantic friend.”

By comparing each definition for the five levels, the five professors revised the definitions. “Tending to be a stranger” was defined as an unknown person who is contacted through a Facebook game or to exchange entertainment recourses. “Acquaintance” refers to a student in the other class, a friend or a distant relative whom one seldom contacts. “Familiar friend” is a known person one contacts regularly and sometimes is a working partner. “Intimate friend” is an individual with whom users interaction and express themselves emotionally. This friend is the person who can listen and share private information and is a closer than an average friend. “Romantic friend,” as defined by Connolly and Konarski (1994), brings about a feeling of mutual attraction with a passionate emotional desire, often involving a degree of physical closeness. The above-mentioned features indicate the rank order of close relationships in different Facebook friends.

The following three instructions were located in front of the questionnaire items. 1) Please read the definitions for the five levels of Facebook friends. 2) Please name a Facebook friend who belongs to each level and then write down his/her name or nickname in the blank space. 3) What disclosure and with what frequency did you make to him/her on the Facebook private section recently? Each respondent then filled out the same five sub-scales, respectively.

3.3 Data Analysis

Data were analyzed using one-way repeated measures analysis of variance (ANOVA) and structural equation modeling (SEM). First, one-way repeated measures ANOVA was applied to compare responses to self-disclosure, intimacy, and trust items, respectively, among the five levels of Facebook friends. Post-hoc tests and planned comparisons with repeated measures were then conducted. Second, SEM was applied to determine whether self-disclosure predicted intimacy level for each category of Facebook friends mediated by degree of trust in Facebook friends.

4. Results

As some respondents lacked a Facebook friend in each category, they did not reply items relative to the specific categories of friends. Thus, the calculated number of friends in each category differed. In formal sampling, 584 respondents reported having a Facebook friend in each category. Table 2 lists mean scores and their standard deviations. Because Mauchly's Test of Sphericity was significant (sphericity was violated), the degree of freedom was adjusted. After the adjustment, the differences among five levels of Facebook friends were significant at the $p=0.001$ level for self-disclosures ($F = 474.72$, $df = 2.878$, $\eta^2 = 0.465$), intimacy ($F = 314.244$, $df = 2.906$, $\eta^2 = 0.350$) and for trust ($F = 270.825$, $df = 3.276$, $\eta^2 = 0.317$). By the guidelines proposed by Cohen (1988) (.01 = small effect, .06= moderate effect, .14= larger effect), the above three analytical results suggests a very large effect size.

Further post-hoc test results (Table 2) show a significant difference in adolescents' self-disclosure between any two categories of Facebook friends. That is, as closeness increased, self-disclosure frequency increased. Similar to self-disclosure, post-hoc tests show that intimacy with Facebook friends (Table 2) was significantly different

between any two categories of Facebook friends. This means that as closeness increased, intimacy increased. Trust in Facebook friends had the same trend as self-disclosure and intimacy.

Table 2. Descriptive statistics and pair-wise comparisons for adolescents' self-disclosure, intimacy and trust among all categories of Facebook friends ($N=584$)

Levels of Facebook friends	self-disclosures		intimate behaviors		trust	
	<i>M (SD)</i>	<i>Post-hoc</i>	<i>M (SD)</i>	<i>Post-hoc</i>	<i>M (SD)</i>	<i>Post-hoc</i>
tending to be a stranger	1.94 (0.94)	A<B, $t=-12.55^{**}$ A<C, $t=-23.32^{**}$	1.58 (0.72)	A<B, $t=-7.96^{**}$ A<C, $t=-14.56^{**}$	2.67 (0.87)	A<B, $t=-10.70^{**}$ A<C, $t=-17.49^{**}$
acquaintance friend	2.27 (0.92)	A<D, $t=-40.53^{**}$ A<E, $t=-27.62^{**}$	1.73 (0.73)	A<D, $t=-27.63^{**}$ A<E, $t=-23.69^{**}$	2.88 (0.90)	A<D, $t=-29.07^{**}$ A<E, $t=-22.57^{**}$
familiar friend	2.74 (0.99)	B<C, $t=-18.17^{**}$ B<D, $t=-40.75^{**}$	1.97 (0.89)	B<C, $t=-11.10^{**}$ B<D, $t=-27.29^{**}$	3.17 (0.95)	B<C, $t=-11.49^{**}$ B<D, $t=-25.97^{**}$
intimate friend	3.54 (1.09)	B<E, $t=-25.34^{**}$ C<D, $t=-31.21^{**}$	2.53 (1.09)	B<E, $t=-22.95^{**}$ C<D, $t=-22.28^{**}$	3.59 (1.04)	B<E, $t=-20.48^{**}$ C<D, $t=-18.39^{**}$
romantic friend	3.64 (1.24)	C<E, $t=-19.42^{**}$ D<E, $t=-2.86^{**}$	2.85 (1.21)	C<E, $t=-19.49^{**}$ D<E, $t=-8.00^{**}$	3.75 (1.12)	C<E, $t=-15.14^{**}$ D<E, $t=-5.43^{**}$

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

Moreover, SEM determined the significance of variances in the model of the effects of adolescents' self-disclosure on intimacy mediated by trust in the five categories of Facebook friends. According to Kline (2005), the suggested χ^2/df value is < 3 for large samples. For the five models, all χ^2/df values were < 3 . Additionally, according to guidelines suggested by Bollen (1989), Kline (2005), and Pedhazur (1997), all other values related to model fit indices were favorable; that is, the research models for the five categories of Facebook friends had a good fit to data. Table 3 lists model fit results.

Table 4 shows the coefficients for paths among each variable. For "familiar friend," "intimate friend," and "romantic friend," the all path estimates were significant. For "tending to be a stranger" and "acquaintance," the path coefficients of indirect effects of trust on intimacy were not significant. All path coefficients were positive. According to Kline (2005), interpretations of effect size are based on standardized path coefficients with absolute values: small effect, ≤ 0.1 ; medium effect, $> 0.1 < 0.5$; and large effect ≥ 0.5 . The total effects, consisting of direct effects and indirect effects, of the five groups of latent variables were calculated. The standardized direct effects of self-disclosure on intimacy were 0.474-0.801 and indirect effects were 0.013-0.106 for the five Facebook friends' categories. The total effect of adolescents' self-disclosure on intimacy mediated by trust during Facebook use was 0.907, 0.786, 0.504, 0.511, and 0.551 for "romantic friend," "intimate friend," "familiar friend," "acquaintance friend," "tending to be a stranger", respectively. That is, the total effects of adolescents' self-disclosure on intimacy in the five models were large.

Table 3. Model fit indices for the model of the effects of self-disclosure on intimacy mediated by trust in the five categories of Facebook friends

levels of friends (N)	Model fit indices (Suggested guidelines)								Fitted results.
	χ^2/df (<3)	RMR ($<.05$)	RMSEA ($<.08$)	GFI ($\geq .95$)	AGFI ($\geq .95$)	NFI ($\geq .95$)	IFI ($\geq .95$)	CFI ($\geq .95$)	
tending to be a stranger (1075)	2.220	.025	.034	.989	.978	.988	.994	.994	fitted
acquaintance friend (1255)	2.939	.024	.039	.986	.973	.987	.992	.992	fitted
familiar friend (1290)	2.775	.027	.037	.989	.976	.991	.994	.994	fitted
intimate friend (1326)	2.396	.028	.032	.991	.980	.993	.996	.996	fitted
romantic friend (672)	2.311	.036	.044	.981	.963	.988	.993	.993	fitted

Notably, the direct effects of adolescents' self-disclosure on intimacy in the five models were more than indirect effects through mediated by trust. Study findings reveal that trust in Facebook friends did not impact frequency of self-disclosure predicting intimacy with friends regardless of relationship closeness.

Table 4. Effect of adolescents' self-disclosure on intimacy mediated by trust during Facebook use

levels of Facebook friends	total effect	direct effect	indirect effect		comparison
			self-disclosure on trust	trust on intimacy	
tending to be a stranger	0.551	.538***	.013 .297***	.045 ^{n.s.}	direct > Indirect
acquaintance friend	0.511	.493***	.018 .332***	.054 ^{n.s.}	direct > Indirect
familiar friend	0.504	.474***	.030 .366***	.081***	direct > Indirect
intimate friend	0.786	.717***	.069 .550***	.126***	direct > Indirect
romantic friend	0.907	.801***	.106 .603***	.175***	direct > Indirect

* $p < .001$

5. Conclusions and Discussion

The study investigated Taiwanese adolescents' self-disclosure frequency, trust in, and intimacy with, friends in relationships with different degrees of closeness. Further, it identified the relationship between self-disclosure and intimacy mediated by trust in Facebook friends. We conclude that as the closeness of Facebook friends increases, self-disclosure frequency, intimacy, and trust increase. Additionally, regardless of friend category, adolescents' self-disclosure can positively predict their level of intimacy with their Facebook friends. For categories "tending to be a stranger" and "acquaintance," trust did not significantly mediate the predictions of self-disclosure frequency on intimacy; however, it did for the three remaining categories. This study infers that adolescents' trust in friends in close relationships may strengthen the development of intimacy generated by self-disclosure.

Analytical results indicate that adolescents disclosed themselves more and reported more intimacy to close friends in Facebook's private section than to ordinary friends. Previous studies found that during adolescence, self-disclosure to friends' increases (Buhrmester & Prager, 1995). The study is similar to that by Rosen et al. (2008), who argued that self-disclosure is affected by relationship closeness, indicating that adolescents self-disclose to close friends more than ordinary friends.

Previous studies indicated that adolescents make new friends from strangers (Lenhart & Madden, 2007a; Wolak et al., 2002) using Facebook games (Hsu et al., 2011). A survey by Lenhart and Madden (2007b) suggested that 32% of online teens were contacted by strangers, of which 23% reported feeling scared or uncomfortable because of that contact. Not surprisingly, this study reveals that adolescents disclose themselves on the private section to close friends more than to strangers. Adolescents may have fear when contacting friends who are not close, resulting in low trust in online friends. The adolescents who use Facebook primarily to maintain existing relationships with known friends selectively used the private section to limit their self-presentation on Facebook (Chen & Marcus, 2012).

Adolescents are facing with the task of establishing close relationships with peers. As reported by Buhrmester and Prager (1995), adolescents' self-disclosure is important because it helps them obtain input, seek identification, and maintain a position within a group, which can help them deal with issues they face in life. Since the need for identification or help from peers is increasing, adolescents reasonably disclose their emotions, share their experiences, and express their feelings to more trustful friends than strangers. During self-disclosure with trustful friends, a feeling of closeness and connectedness may be produced in an intimate context.

Another finding in the study supports that from Bauminger, et al. (2008), who indicated that adolescents' self-disclosure can predict their level of intimacy with Facebook friends. Even though Park et al. (2011) indicated that a lack of honesty cannot deepen close relationships, this study reveals that adolescents'

self-disclosure can predict their level of intimacy with Facebook friends regardless of their level of trust in those friends. When adolescents perceive their friends as people with whom they can share personal information and who can help them solve personal problems, they will disclose themselves. A developmental change toward intimate friendships then occurs.

Notably, for “familiar friend,” “intimate friend,” and “romantic friend,” adolescents’ trust in Facebook friends is slightly mediated the effects of self-disclosure on intimacy, while for the remaining two categories of relationships, “tending to be a stranger” and “acquaintance,” this was not the case. That is, in three closest relationship categories, adolescents’ trusts in Facebook friends somewhat strengthens the predictive effects of self-disclosure on intimacy.

Generally, adolescents feel comfort and safety when contacting close Facebook friends due to the high level of trust. Trust is defined as the reliability, fairness, and faith one has in his/her partner; without a certain level of trust the likelihood of intimate interactions is reduced (Prager, 1995). Trust allows each person in a relationship to feel comfortable and to self-disclose. Thus, trust is beneficial to the development of intimacy, and when a high level of trust emerges, the frequency of intimate interactions increases. However, researchers argued that self-disclosure does not always contribute to intimacy in a relationship (Camarena, Sarigiani, & Petersen, 1990). Another study indicated that participants’ comfort with disclosure was not related to their levels of trust (Frye & Dornisch, 2010). This study further clarifies that different trusts in friends in different close relationships slightly strengthen, but not change, the development of intimacy through self-disclosure for adolescents.

6. Implications

Previous literature revealed that adolescents put different degrees of trusts in, and make self-disclosures to, friends with different degrees of closeness when using Facebook. Additionally, the amount of self-disclosure by adolescents can predict their level of intimacy with friends. The study contributes to the literature by specifically revealing that adolescents’ trust in friends in close relationships (i.e., familiar friend, intimate friend, romantic friend) may strengthen the development of intimacy generated by self-disclosure; however, there is no such reaction in the group of unfamiliar Facebook friends (i.e., “tending to be a stranger” and “acquaintance”). Generally, as the closeness of friends increases, the amount of self-disclosure, intimacy, and trust increases; this study reveals more specific details compared to the previous literature.

As mentioned, adolescents’ self-disclosure helps them seek identification and build intimacy with Facebook friends. Zuckerberg, the founder of Facebook, originally conceived of Facebook as a service for communication between people who are acquainted in real life. Due to Internet communications differing from face-to-face interaction, a comparison of the divides of adolescents’ self-disclosures between on private section of Facebook and in real life is suggested in future study.

Moreover, the characteristics of each type of Facebook friends were difficult to be generalized with a uniform pattern due to different individual perceptions. This study confidently provides the rank order of close relationships in different Facebook friends rather than specific characteristics in each type of Facebook friends. One limitation of this study is that a potential gap may exist between the adolescents in definitions and perceptions on Facebook friends in different close relationships.

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