



# The Roles of Social Competence and Outcome Expectancy in Predicting Communication Activities on Social Networking Sites

## Kyungeun Jang<sup>1</sup> and Sang Yup Lee<sup>2,\*</sup>

- <sup>1</sup> Yonsei University; Ph.D.; kjang@yonsei.ac.kr
- Yousei University; Associate Professor; sangyuplee@yonsei.ac.kr
- \* Correspondence

https://doi.org/10.5392/IJoC.2022.18.3.021

Manuscript Received 08 February 2022; Received 23 September 2022; Accepted 23 September 2022

Abstract: Previous research has provided inconsistent findings as to whether socially (in)competent individuals benefit from social networking sites (SNSs) use. Based on the rich-get-richer model, some studies have shown that socially competent individuals expand their existing networks even further via SNSs use. Based on the poor-get-richer model, other studies have shown that those with poor social skills can achieve beneficiary outcomes from SNSs use by overcoming their deficient social resources of offline environments. The present study is devised to add evidence regarding how and why social skills are related to SNSs use. To this end, we tested the relationships between social competence and three types of Facebook communication activities: interaction, self-presentation, and passive observation. Further, drawing on the social cognitive theory, the mediating role of outcome expectancy in the relationship between social competence and Facebook communication activities was examined. Using an online survey in South Korea (N = 708), it was found that individuals with higher social competence were more likely than those with lower social competence to engage in interaction, self-presentation, passive observation on Facebook. Moreover, these relationships were mediated by outcome expectancy that the desired social outcomes could be achieved as a result of Facebook use.

**Keywords:** Facebook; Social competence; Outcome expectancy, Rich-get-richer model; Poor-get-richer model

#### 1. Introduction

Social networking sites (SNSs) such as Facebook and Instagram have received much scholarly attention from the social interaction perspective because a major function of SNSs is to facilitate communication behaviors essential for interpersonal relationships, including viewing how others are doing, presenting oneself, and interacting with others [1, 2]. Through the communication activities that SNSs afford, individuals can gain social benefits such as building or maintaining relationships [3], obtaining popularity [4], and receiving or perceiving social support [5]. Research has suggested that these benefits are favorable in terms of psychological well-being, as they help promote one's mental health or life satisfaction [6].

In response to the social and psychological impacts that SNSs can facilitate, one of the critical questions that is being consistently addressed is whether those with good or poor social skills are more likely to benefit from using SNSs [1, 7]. Specifically, SNSs have been discussed as a means for the socially poor to overcome their deficient social resources of offline environments (i.e., social compensation or poor-get-richer model) and for the socially-rich to further expand their existing networks (i.e., social enhancement or rich-get-richer model) [8, 9]. However, previous research based on the two competing perspectives has provided inconsistent findings. Thus, it is difficult to reach a consensus regarding who is more likely to benefit from SNSs use. More importantly, the mechanism by which individuals with more or less social skills take advantage of SNSs use has not been fully explained from a theoretical perspective.

To bridge this gap, the present study is devised to add evidence regarding how and why one's social skills are related to SNSs use. To this end, first, the present study examines the relationship between social competence and SNSs communication activities. In terms of communication activities, three types of performance—interaction, self-presentation, and passive observation—are explored. Second, the present study examines the role of outcome expectancies in mediating the relationship between social competence and SNSs communication activities. Social cognitive theory guides the present study to explain the mechanism by which social competence affects SNSs use. As for the types of SNS, the present study employs Facebook, one of the most frequently used SNSs worldwide. The results will help determine the beneficiaries of SNSs use and explain the reason why socially (in)competent individuals achieve such benefits.

## 2. Theoretical background and literature review

#### 2.1 Social skills and SNSs use

Social skills are defined as behavioral and cognitive capabilities required for successful performance to achieve positive outcomes from social interactions [10]. Specifically, social skills are related to the degree to which one initiates and maintains social interactions and makes desired impressions on others by presenting oneself effectively [11]. Using an extensive repertoire of social skills, socially competent individuals are adept at managing social situations and acquiring desired resources such as social networks, social support, and social capital [12, 13]. As a result, socially competent individuals are more likely to form a friend-rich environment and supportive networks, which, in turn, allow them to experience psychological well-being [12]. On the other hand, as socially incompetent individuals have difficulties engaging in social interactions and effective self-presentation, they often fail to obtain desired social outcomes, leading to social anxiety or psychological depression [14].

The advent of the Internet and social networking sites, however, has provided favorable environments for socially incompetent individuals to engage in social interactions and present themselves in an advantageous way. Specifically, given the characteristics of SNSs, which affords asynchronous and passive interactions (e.g., observing others' posts and profiles), individuals can have greater control over self-presentation and reduced risk of negative evaluation by others [15, 16]. Further, privacy settings allow individuals to control the type of content they share and the range of people with whom they share information [17]. Thus, socially incompetent individuals can feel safer, more efficacious, and more comfortable with social interaction on SNSs as compared to interactions in offline settings [9, 18]. In this regard, research endeavors have explored how those with poor social skills use SNSs and benefit from the outcomes of this usage.

As one possible approach, the social compensation perspective, also known as the poor-get-richer model, posits that computer-mediated communication (CMC) can be used for less sociable individuals to compensate for poor social outcomes experienced offline [19, 20]. The poor-get-richer model suggests that those with poor social skills find CMC advantageous because it helps minimize potential social risks such as self-misrepresentation by enabling them to manage information about the self in the desired way [16, 21]. Previous research based on the poor-get-richer model demonstrates that individuals experiencing loneliness or social anxiety are likely to prefer online social interaction over face-to-face communication [22, 23], spend more time on SNSs [18], and use the Internet for developing online friendships [24]. Further, it has been proposed that lonely or socially anxious individuals could improve their psychological well-being through SNSs use by having more opportunities for self-presentation [25, 26] and social support perception [27, 28] as compared to offline contexts.

However, many other studies have shown the opposite results, supporting the social enhancement perspective, also known as the rich-get-richer model. The rich-get-richer model posits that socially competent individuals in offline settings are better off in computer-mediated environments as well because they already know how to interact effectively with others and use mediated communication tools to enhance their social outcomes [8, 29]. For example, extroverts are more likely to become involved in online social communities [30], actively use Facebook's social functions such as statuses and photo updates [31], and gain popularity on Facebook [32]. In contrast, individuals with high social anxiety were found to have high levels of interaction anxiety on Facebook as well; they have fewer Facebook friends [33], use Facebook in a passive manner, such as viewing others' posts or profiles without interacting [17], and rarely engage in social activities like writing comments on others' posts or exchanging messages [34].

Taken together, previous literature on the relationship between social skills and Facebook use has not yet reached a consensus. The present study assumes that the mixed results of previous research may be caused by the inappropriate use of the concept for measuring social skills. In attempting to identify the relationship between social skills and SNSs use or its outcomes, most studies have examined loneliness, social anxiety, and extroversion, instead of concepts that more precisely reflect social skills. Although social skills deficits may lead to loneliness [35] or social anxiety [36], they are distinct constructs from social skills in that socially competent individuals can experience loneliness or social anxiety depending upon contexts [14]. Moreover, extroversion is a multi-faceted personality trait consisting of outgoingness, talkativeness, impulsiveness, and enthusiasm [37, 38], which should not necessarily be equated with sociability. Thus, examining the concept that accurately represents social skills, rather than using other relevant variables, would be a more justified way of identifying the role of social skills. In the present study, social competence, which manifests one's perceived capabilities in relationship initiation, social interaction, social support provision, and assertiveness [20], is employed to represent social skills.

Using the concept of social competence, the first aim of the present study is to test the relationship between social skills and Facebook use. In terms of Facebook use, the present study examines the degree to which one engages in three types of Facebook communication activities: (a) interactions with Facebook friends, (b) self-presentation, and (c) passive observation. People's engagement patterns in the three different types of activities will help explain how and why socially (in)competent individuals benefit more from Facebook use than others.

#### 2.2 A social cognitive approach to the social outcomes of SNSs use

The second aim of the present study is to provide a plausible explanation for why individuals achieve differentiated social outcomes as a consequence of SNSs use. As for the rich-get-rich phenomenon in SNSs, it has been suggested that the social setting of SNSs is similar to that of offline context [39] and that one's sociability expressed in online settings does not much differ from what is revealed in real life [33]. However, merely attributing to the characteristics of SNSs environments or invariance of one's sociability in different settings is not enough to fully explain the social behavior of individuals. Instead, the cognitive motivations that induce such behavior should be examined. In this regard, the present study examines the roles of outcome expectancy drawn from social cognitive theory.

To account for humans' behavioral choices, social cognitive theory assumes triadic reciprocal causations among individuals, environments, and behaviors [40]. It views humans as autonomous agents that self-organize, self-reflect, and self-regulate their behavior while interacting with surrounding environments [41]. Self-efficacy and outcome expectancy are proposed as key motivations for one's autonomous behavior. Self-efficacy refers to the belief that one can successfully perform a given behavior to produce outcomes [42]. Perceived self-efficacy affects one's decisions about the range or types of behaviors to undertake, the amount of effort to exert to overcome barriers, the persistence of coping efforts, and finally, eventual success [43]. For example, the more one perceives that she is capable of socializing, the more easily she knows what to do to form desired relationships, the more she is likely to strive to cope with difficulties when faced with conflicts, and the more she is likely to achieve successful interactions with peers [10].

Outcome expectancy is an estimation that a particular action will lead to certain consequences, which could be physical, social, monetary, or self-reflective [44]. Outcome expectancy influences one's behavior by reinforcing the belief that behaving in a particular way can generate anticipated benefits or prevent unfavorable results [42]. For example, when anticipating positive social outcomes (e.g., extending social networks, receiving desired information or social support) as a result of having a relationship with someone, one is more likely to make an effort to get to know that person and continue interactions [45, 46]. On the contrary, the more one expects negative evaluation from others about her impressions, the less the person engages in self-presentational conversations or social interactions [14, 47].

Outcome expectancy and self-efficacy are differentiated in that individuals can recognize that there are some beneficial outcomes when certain behavior is performed successfully, but doubt that they are capable of performing the behavior [42]. In this case, the behavior is not likely to occur. On the contrary, if individuals have convictions about their capabilities in a particular task, they are more likely to believe that they can produce those outcomes by successfully mastering a course of action and coping with challenges, which will lead to initiation and persistence of the behavior [42, 43]. In this sense, social cognitive theory notes that perceived self-efficacy not only determines behavior choice, but also reinforces the behavior through outcome expectations [42]. In other words, there is a mediation mechanism whereby self-efficacy influences behavior

choice through outcome expectancy. Based on the mediation mechanisms, [48] shows that confidence about Internet use affects one's amount and strength of Internet usage through various types of expectations including social, monetary, novel, activity, self-reactive, and status outcomes (e.g., finding desired information, feeling entertained, getting support from others, feeling a sense of belonging, etc.). Also, [49] reveals that knowledge-sharing efficacy enhances knowledge-sharing behavior in online communities through social outcome expectations (e.g., "If I share my knowledge with other community members, I will make more friends") and community-related outcome expectations (i.e., "My knowledge sharing would help this community achieve its goals or visions").

In interpersonal communication contexts, it has been suggested that the more one is confident about his or her social skills, the more positive evaluations from others the person expects as an outcome of interpersonal interactions [14]. Also, it has been found that individuals are more likely to make an effort to initiate communication and seek out information of others when a positive outcome is predicted [45, 46]. Applying a social cognitive perspective to previous research, it is plausible that individuals who perceive themselves capable of managing social interactions effectively are more likely to expect to be welcomed by others and strengthen ties as a result of communication activities. Then, these expectations will motivate them to engage in communication activities such as self-presentation, interactions, and passive observation more actively. Through expectation about social outcomes, which plays a role as incentives that reinforce those communication activities [42], socially competent individuals are more likely to strive to continue communication activities even when faced with challenges. On the contrary, socially incompetent individuals are less likely to believe that they can successfully achieve social outcomes by engaging in communication activities, which will affect their coping efforts required for continuous communication activities. As a result, socially incompetent individuals will be less likely to be motivated to engage in communication activities. Based on this line of reasoning, the present study expects the rich-get-richer phenomenon in Facebook (H1) and hypothesizes the mediation role of outcome expectancy between social competence and Facebook communication activities (H2). Figure 1 presents the mediation model hypothesized in the present study

- H1. Social competence will be positively associated with engagement in the three types of Facebook communication activities (i.e., interaction, self-presentation, passive observation).
- H2. Outcome expectancy will mediate the relationship between social competence and Facebook communication activities.

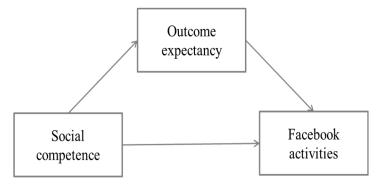


Figure 1. Hypothesized mediation model

#### 3. Results

#### 3.1 Data collection and sample characteristics

Data were collected through an online survey operated by a research company with 1,000,000 panel members in South Korea. Based on a quota sampling method, 708 respondents with a Facebook account and experience with Facebook use participated in the survey. All participants were Koreans aged 20–69 years. About half were male (50.3%), and the mean age was 37.9 (SD = 11.0, Mdn = 37). More than 60% reported having a bachelor's degree (69.4%) or completing graduate coursework (10.5%), and about 20% reported graduating high school (20.2%). The median household income level of the respondents was 4.00–4.99 million Korean won. Table 1 presents respondents' demographic characteristics.

Table 1. Demographic characteristics of the study sample

| Demographic characteristics       | Frequency | Percentage (%) |
|-----------------------------------|-----------|----------------|
| Gender                            |           |                |
| Male                              | 356       | 50.3%          |
| Female                            | 352       | 49.7%          |
| Age                               |           |                |
| 20–29                             | 187       | 26.4%          |
| 30–39                             | 216       | 30.5%          |
| 40–49                             | 195       | 27.5%          |
| 50–59                             | 110       | 15.5%          |
| Education level                   |           |                |
| High school                       | 14.       | 20.2%          |
| Some college or Bachelor's degree | 491       | 69.4%          |
| Master's degree or more           | 74        | 10.5%          |
| Monthly household income level    |           |                |
| < 1.0 million won                 | 24        | 3.4%           |
| 1.0 million–2.0 million won       | 72        | 10.2%          |
| 2.0 million-3.0 million won       | 102       | 14.4%          |
| 3.0 million—4.0 million won       | 112       | 15.8%          |
| 4.0 million-5.0 million won       | 144       | 20.3%          |
| 5.0 million–6.0 million won       | 101       | 14.3%          |
| 6.0 million-7.0 million won       | 71        | 10.0%          |
| 7.0 million–8.0 million won       | 34        | 4.8%           |
| ≥8.0 million won                  | 48        | 6.8%           |

#### 3.2. Measures

## 3.2.1 Facebook communication activities

Three types of activities—interaction, self-presentation, and passive observation—were assessed based on [26]. Regarding interactions, respondents were asked to indicate how often they engaged in each of eight activities on Facebook during the last week, including "Facebook chatting" and "writing comments on others' status updates." Responses were assessed on a 7-point scale, 1 = never to 7 = very often, and were averaged to compute a scale score (M = 3.37, SD = 1.39, Cronbach's  $\alpha = .92$ ). Self-presentation was measured based on six activities, including "updating my status" and "posting a picture of my life events" (M = 2.94, SD = 1.46, Cronbach's  $\alpha = .92$ ). Passive observation was assessed with three activities, including "checking out others' walls without leaving a message" and "checking out others' profile without leaving a message" (M = 3.87, SD = 1.68, Cronbach's  $\alpha = .90$ ). Statements and descriptive statistics for individual items used to measure three type of Facebook communication activities are presented in Table 2.

Table 2. Descriptive statistics of Facebook communication activities

| Communication Activities          | M(CD)      | Reliability    |  |
|-----------------------------------|------------|----------------|--|
| Communication Activities          | M(SD)      | (Cronbach's α) |  |
| Interaction                       | 3.37(1.39) | .92            |  |
| 1. Posted on other people's walls | 2.91(1.66) |                |  |
| 2. Sent an inbox message          | 3.15(1.68) |                |  |

| 3. Commented on others' photos                                  |            |     |
|---|------------|-----|
| 4. Facebook Chatted with others                                 | 3.61(1.76) |     |
| 5. Joined a group   | 2.78(1.72) |     |
| 6. Commented on others' "What's on your mind?"                  | 2.78(1.74) |     |
| 7. Pressed "Like" button on others' posts or photos.            | 3.44(1.74) |     |
| 8. Checked out "People you may know"                            | 4.34(1.88) |     |
| Self-presentation   | 2.94(1.46) | .92 |
| 1. Uploaded new photos  | 3.27(1.79) |     |
| 2. Updated "What's on your mind?"                               | 2.96(1.71) |     |
| 3. Changed my profile photo                                     | 2.62(1.69) |     |
| 4. Replied to others' comments on my profile photo, new         |            |     |
| photos, fan status, "What's on your mind" status, group status, | 3.14(1.77) |     |
| notes, and links  |            |     |
| 5. Posted a note on my profile                                  | 2.71(1.66) |     |
| 6. Posted a link  | 2.94(1.77) |     |
| Passive observation   | 3.87(1.68) | .90 |
| 1. Checked out others' walls without leaving a message          | 3.53(1.85) |     |
| 2. Checked out others' photos without leaving comments          | 4.00(1.84) |     |
| 3. Checked out others' notes, links, and various status without | 4.09(1.94) |     |
| leaving comments  | 4.08(1.84) |     |
|   |            |     |

### 3.2.2 Social competence

The Social Competence Scale [20] was adopted. Respondents rated how easy or difficult it was during the past 6 months to perform 19 types of behavior consisting of four subcomponents (i.e., initiation, supportiveness, self-disclosure, and assertiveness). The 19 items were rated on a 5-point scale, from 1 = very difficult to 5 = very easy, and were averaged to compute a scale score (M = 2.86, SD = 0.59, Cronbach's  $\alpha = .90$ ). To identify the underlying factor structure of the 19 items measuring the four subcomponents of social competence, we conducted an exploratory factor analysis using the maximum likelihood method with a direct Oblimin rotation. As shown in Table 3, the results confirm the original four-factor structure proposed by [20].

Table 3. Descriptive statistics and summary of exploratory factor analysis results for Social Competence Scale

| How easy or difficult was it for you in the past 6 $M(SD)$   |            | Factor | Factor | Factor | Facto |
|--|------------|--------|--------|--------|-------|
| months to  | M(SD)      | 1      | 2      | 3      | r 4   |
| <b>Factor 1: Initiation</b> (Cronbach's $\alpha = .90$ )     | 3.97(0.85) |        |        |        |       |
| 1. Start a conversation with someone you did not             | 2.00(1.02) | .81    |        |        |       |
| know very well?  | 3.99(1.02) |        |        |        |       |
| 2. Introduce yourself for the first time to someone?         | 3.92(0.96) | .84    |        |        |       |
| 3. Start a new friendship?                                   | 3.97(0.98) | .85    |        |        |       |
| 4. Call someone whom you wanted to get to know               | 4 14(1 02) | .82    |        |        |       |
| better?  | 4.14(1.03) |        |        |        |       |
| 5. Ask someone to get together and do something?             | 3.84(1.02) | .75    |        |        |       |
| <b>Factor 2: Supportiveness</b> (Cronbach's $\alpha = .80$ ) | 3.00(0.65) |        |        |        |       |
| 6. Listen carefully to someone who told you about            | 2.74(1.02) |        | .71    |        |       |
| a problem he or she is experiencing?                         | 3.74(1.03) |        |        |        |       |

| 2.76(0.85) |   | .79   |  |   |
|------------|---|---|--|---|
| 2.72(0.87) |   | .80   |  |   |
| 2.85(0.84) |   | .72   |  |   |
| 2.95(0.84) |   | .68   |  |   |
| 2.98(0.65) |   |   |  |   |
| 3.17(0.87) |   |   | .75  |   |
| 3.17(0.87) |   |   | .81  |   |
| 3.05(0.85) |   |   | .66  |   |
| 2.97(0.84) |   |   | .66  |   |
| 2.52(0.92) |   |   | .69  |   |
| 2.76(0.72) |   |   |  |   |
| 2.37(0.92) |   |   |  | .67   |
| 2.87(0.86) |   |   |  | .77   |
| 2.94(0.90) |   |   |  | .75   |
| 2.88(0.84) |   |   |  | .80   |
|            | 3.25  | 3.80  | 2.51   | 2.23  |
|            | 2.72(0.87) 2.85(0.84) 2.95(0.84) 2.98(0.65) 3.17(0.87) 3.05(0.85) 2.97(0.84) 2.52(0.92) 2.76(0.72) 2.37(0.92) 2.87(0.86) 2.94(0.90) | 2.72(0.87) 2.85(0.84) 2.95(0.84) 2.98(0.65) 3.17(0.87) 3.17(0.87) 3.05(0.85) 2.97(0.84) 2.52(0.92) 2.76(0.72) 2.37(0.92) 2.87(0.86) 2.94(0.90) 2.88(0.84) | 2.72(0.87) .80<br>2.85(0.84) .72<br>2.95(0.84) .68<br>2.98(0.65)<br>3.17(0.87)<br>3.05(0.85)<br>2.97(0.84)<br>2.52(0.92)<br>2.76(0.72)<br>2.37(0.92)<br>2.87(0.86)<br>2.94(0.90)<br>2.88(0.84) | 2.72(0.87) .80 2.85(0.84) .72 2.95(0.84) .68  2.98(0.65) 3.17(0.87) .75 3.17(0.87) .81 3.05(0.85) .66  2.97(0.84) .66 2.52(0.92) .69  2.76(0.72) 2.37(0.92) 2.87(0.86)  2.94(0.90) 2.88(0.84) |

## 3.2.3 Outcome expectancy

Outcome expectancy was measured based on the degree to which individuals expect consequences of their self-presentation or interaction activities on Facebook using items adapted from [49]. The five items were rated on a 7-point scale, from 1 = strongly disagree to 7 = strongly agree, and were averaged to compute a scale score  $(M = 3.92, SD = 1.15, Cronbach's \alpha = .96)$ . Statements and descriptive statistics for individual items used to measure the outcome expectancy variable are presented in Table 4.

**Table 4.** Descriptive statistics of outcome expectancy

| Outcome expectancy   | M(SD)      |
|--|------------|
| 1. If I present my life events and interests on Facebook, I will gain more           | 3.84(1.28) |
| recognition and likes  |            |
| 2. If I use Facebook actively, I will make more friends.                             | 3.91(1.26) |
| 3. If I use Facebook actively, I will be seen as friendly and sociable               | 3.95(1.22) |
| 4. If I leave comments on my Facebook friends' posts, the tie between me and         | 3.94(1.23) |
| my Facebook friends will be strengthened   |            |
| 5. If I use Facebook actively, I will get better cooperation and benefits in return. | 3.96(1.23) |

# 3.2.4 Control variables

Respondents' age, gender, education level, monthly household income, and Facebook use time were controlled. Facebook use time was measured by asking the average daily Facebook usage time over the past week. Response options ranged from 1 = Did not use, 2 = 1 min. to 10 min., 3 = 10 min. to 30 min., 4 = 30 min. to 1 hour, 5 = 1 hour to 2 hours, 6 = 2 hours to 3 hours to 7 = more than 3 hours (M = 3.15, SD = 1.58). Zero-order correlations among all variables used in the present study are presented in Table 5.

**Table 5.** Zero-order correlations among variables

|                       | 1     | 2      | 3      | 4     | 5      | 6      | 7      | 8      | 9      |
|-----------------------|-------|--------|--------|-------|--------|--------|--------|--------|--------|
| 1. Gender             |       |        |        |       |        |        |        |        |        |
| 2. Age                | 20*** |        |        |       |        |        |        |        |        |
| 3. Education          | 05    | .22*** |        |       |        |        |        |        |        |
| 4. Income             | 09*   | .17*** | .18*** |       |        |        |        |        |        |
| 5. Facebook use time  | .01   | 31***  | 09*    | .02   |        |        |        |        |        |
| 6. Interaction        | 11**  | 04     | < .01  | .10** | .49*** |        |        |        |        |
| 7. Self-presentation  | 09*   | .07    | .08*   | .07   | .37*** | .79*** |        |        |        |
| 8. Lurking            | < .01 | 10*    | .01    | .10** | .52*** | .62*** | .54*** |        |        |
| 9. Social competence  | 12**  | 02     | .05    | .12** | .24*** | .47*** | .46*** | .26*** |        |
| 10.Outcome expectancy | 05    | .13*** | .09*   | .08*  | .23*** | .46*** | .45*** | .29*** | .40*** |

<sup>\*</sup> *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

#### 3.3 Analysis procedure

To test the direct effect of social competence on three types of Facebook communication activities, a series of hierarchical regression analyses were conducted. Control variables were entered in the first step and social competence was entered in the second step with each outcome variable (i.e., interaction, self-presentation, passive observation). In addition, to test the mediating effect of outcome expectancy, separate four-step regression procedures were conducted. According to [47], the following conditions should be met to support the mediating role of a variable: (1) the independent variable (X) is significantly related to dependent variable (Y), (2) X is significantly related to the mediator (M), (3) M is significantly related to Y, and (4) the effect of X on Y significantly decreases or disappears after controlling for M. After conducting the four-step regression procedures, the significance of the mediating effect was examined using a Sobel test. For a safer approach to the analyses, bootstrapping analysis, which does not impose a normality assumption, was also conducted using a PROCESS macro [50].

## 4. Results

H1 predicted the positive relationship between social competence and Facebook activities. As shown in Table 6, social competence was positively associated with interaction (b = 0.86, p < .001), self-presentation (b = 0.94, p < .001), and passive observation (b = 0.39, p < .001) on Facebook. Thus, H1 was supported.

H2 addressed the mediating role of outcome expectancy on the relationship between social competence and Facebook activities. As indicated in Table 7, both Sobel and bootstrapping tests confirmed significant mediating effects of outcome expectancy. Outcome expectancy mediated the relationship between social competence and interaction on Facebook (Sobel's Z = 7.51, p < .001; b = 0.22, CI [0.15, 0.30]), between social competence and self-presentation on Facebook (Sobel's Z = 7.30, p < .001; b = 0.15, CI [0.14, 0.31]), and between social competence and passive observation (Sobel's Z = 4.43, p < .001; b = 0.13, CI [0.05, 0.22]). In four-step regression procedures, the effect size of social competence on three types of Facebook communication activities significantly reduced after controlling for outcome expectancy but did not disappear, indicating partial mediation effects of outcome expectancy.

Table 6. Effects of social competence on interaction, self-presentation, and passive observation

|                     | Interaction   | Self-presentation      | Passive observation |
|---------------------|---------------|------------------------|---------------------|
| Intercept           | -0.70 (0.39)  | -2.12 (.43)***         | 0.08 (.50)          |
| Control variables   |               |                        |                     |
| Gender (female = 1) | -0.14 (0.09)  | -0.03 (0.09)           | 0.10 (.11)          |
| Age                 | 0.01 (0.01)** | .02 (0.01)***          | 0.01 (.01)          |
| Education           | < 0.01        | $0.15 (.09)^{\dagger}$ | 0.09 (.10)          |
| Income              | 0.02 (0.02)   | -0.01 (.02)            | 0.05 (.03)*         |

| Facebook use time     | 0.37 (0.03)*** | 0.32 (.03)***  | 0.54 (.04)*** |
|-----------------------|----------------|----------------|---------------|
| Incremental $R^2$ (%) | 26.3***        | 18.7***        | 28.7***       |
| Predictor             |                |                |               |
| Social competence     | 0.86 (0.07)*** | 0.94 (0.08)*** | 0.39 (.09)*** |
| Incremental $R^2$ (%) | 12.1***        | 12.9***        | 1.7***        |
| Total $R^2$ (%)       | 38.4***        | 31.6***        | 30.4***       |

Note. Entries are final unstandardized coefficients with standard errors in parentheses.

Table 7. Mediation test results using four-step regression and bootstrap analyses

| Dependent variable  | Direction of effect                           | Coefficient                      |
|---------------------|---|----------------------------------|
| Interaction         | $SC \rightarrow interaction$                  | 0.86 (0.07)***                   |
|                     | $SC \rightarrow OE$                           | 0.69 (0.07)***                   |
|                     | $OE \rightarrow interaction (SC controlled)$  | 0.31 (0.04)***                   |
|                     | $SC \rightarrow interaction (OE controlled)$  | 0.65 (0.08)***                   |
|                     | Indirect effect                               | 0.22 (0.06), 95% CI [0.15, 0.30] |
|                     |   | Sobel's $Z = 7.51***$            |
|                     | Total $R^2$ (%)                               | 43.7***                          |
| Self-presentation   | $SC \rightarrow presentation$                 | 0.94 (0.08)***                   |
|                     | $SC \rightarrow OE$                           | 0.69 (0.07)***                   |
|                     | $OE \rightarrow presentation (SC controlled)$ | 0.45 (0.04)***                   |
|                     | $SC \rightarrow presentation (OE controlled)$ | 0.72 (0.08)***                   |
|                     | Indirect effect                               | 0.15 (0.04), 95% CI [.14, .31]   |
|                     |   | Sobel's $Z = 7.30***$            |
|                     | Total $R^2$ (%)                               | 36.6***                          |
| Passive observation | SC → observation                              | 0.39 (0.09)***                   |
|                     | $SC \rightarrow OE$                           | 0.69 (0.07)***                   |
|                     | $OE \rightarrow observation$ (SC controlled)  | 0.24 (0.05)***                   |
|                     | $SC \rightarrow observation (OE controlled)$  | 0.26 (0.10)**                    |
|                     | Indirect effect                               | 0.13 (0.04), 95% CI [0.05, 0.22] |
|                     |   | Sobel's $Z = 4.43***$            |
|                     | Total $R^2$ (%)                               | 31.8***                          |

*Note.* Unstandardized coefficients entered with standard errors in parentheses. SC = social competence; OE = outcome expectancy. 95% CI = 95% bias-corrected confidence interval; 5,000 bootstrap resamples. For brevity, the effects of control variables were not included in this table.

#### 5. Conclusions

First, the present study shows a positive relationship between social competence and all three types of Facebook communication activities. These results indicate that individuals with better social skills in offline settings are more likely to interact with others, present their personal stories or events, and view how others are doing on Facebook. In other words, socially competent individuals are socially active on Facebook. Supporting the rich-get-richer perspective, our findings provide important implications regarding how socially competent people can benefit from SNSs use. Having social interaction and talking about the self is a precondition of

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001.

gaining social support [51]. Further, seeking information about others or circumstances in which social interaction takes place, whether it is active or passive, helps people enhance interpersonal relationships by reducing uncertainty about others and the context surrounding the relationship [52]. By actively engaging in the communication behavior that SNSs facilitate, those with better social skills may have more opportunities to achieve benevolent outcomes of SNSs use such as gaining social support and social capital extension, though those with poorer social skills may still have satisfactory social interactions on SNSs in a qualitative sense.

Further, the results shed light on why socially competent individuals are active communicators on SNSs from the perspective of outcome expectancy. Our study shows that outcome expectancy mediates the relationship between social competence and communication activities on Facebook. This indicates that socially competent individuals are more likely to expect that they can achieve positive outcomes such as recognition, favorable responses, being seen as likable and friendly, and strengthened relationships as a result of Facebook use, which lead to more active engagement in writing comments on others' posts, posting one's life events, and viewing others' posts. The mediation process among self-efficacy, outcome expectancy, and behavior engagement, has rarely been corroborated in communication contexts. Further, the role of outcome expectancy has been mostly neglected in previous studies examining the effect of social skills on Facebook use or its outcomes. By applying and testing the social cognitive perspective, the current study provides an important contribution to the literature. Future study is encouraged to replicate the mediation process suggested in the present study.

It is noteworthy that a positive relationship between social competence and passive observation was found in our study. Many studies have assumed that socially incompetent individuals may be more likely to passively observe (or lurk) how others are doing on SNSs because viewing others' posts is a safer way of communication that does not demand reciprocal interactions or self-disclosure [33, 39]. Contrary to this assumption, the present study reveals that socially competent individuals are more active even in passive observation in SNSs. This can be explained by the mediating effect of outcome expectancy that the greater expectations for positive social outcomes of Facebook use held by those with higher social competence encourage them to be interested in and closer to others even in a passive manner. Building on our finding, the relationship between social skills and passive communication patterns can be better understood by examining whether socially incompetent individuals prefer and spend more time on passive observation as compared to actual interaction or self-presentational activities on SNSs. This can be an intriguing agenda for future research.

This study has some limitations. Due to the cross-sectional nature of the data, the causal inferences posited in this study should be interpreted with caution. Although the relationships among variables were established based on a theoretical foundation and previous literature, they should be interpreted as correlational. To confirm the causal inferences, experimental research replicating these findings is needed. In addition, this study analyzed self-report data, which involves the risk of recall bias and social desirability bias [53]. Specifically, when measuring the degree of social competence, respondents can reflect their desire to look sociable. Future research is encouraged to employ unobtrusive methods such as observation.

Despite the limitations, the present study provides meaningful insights into interpersonal communication and SNSs research. Regarding whether the poor get richer or the rich get richer on SNSs, previous research has shown mixed results and has rarely explained the mechanism by which social skills affect SNSs communication patterns or its outcomes. Based on a theoretical foundation and valid measures that assess social skills, outcome expectancies, and Facebook communication activities, the present study suggests that the socially rich get richer on Facebook by holding favorable expectations about the social outcomes of Facebook use, which in turn leads to more active engagement in interaction with others, self-presentation, and observation activities.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

#### References

- [1] J. B. Bayer, P. Trieu, and N. B. Ellison, "Social media elements, ecologies, and effects, "Annual Review of Psychology, vol. 71, no.1, pp. 471-497, 2020, doi: https://doi.org/10.1146/annurev-psych-010419-050944
- [2] J. Fox and B. McEwan, "Social media," in Media effects: Advances in theory and research, M. B. Oliver, A. A. Raney, and J. Bryant, Eds., 4th ed: Routledge, 2019, pp. 373–88.

- [3] A. Masciantonio, D. Bourguignon, P. Bouchat, M. Balty, and B. Rimé, "Don't put all social network sites in one basket: Facebook, Instagram, Twitter, TikTok, and their relations with well-being during the COVID-19 pandemic," PloS one, vol. 16, no. 3, 2021, doi: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0248384
- [4] E. Djafarova and O. Trofimenko, "'Instafamous' credibility and self-presentation of micro-celebrities on social media," Information, Communication & Society, vol. 22, no. 10, pp. 1432-1446, 2019, doi: https://doi.org/10.1080/1369118X.2018.1438491
- [5] J. Gunawan and Y. C. A. Liu, "Exploring the antecedents of social support on social network sites: A supplementary fit perspective," International Journal of E-Business Research, vol. 17, no. 4, pp. 40-53, 2021. doi: https://www.igiglobal.com/article/exploring-the-antecedents-of-social-support-on-social-network-sites/288343
- [6] L. Huang, D. Zheng, and W. Fan, "Do social networking sites promote life satisfaction? The explanation from an online and offline social capital transformation," Information Technology & People, 2021, doi: https://doi.org/10.1108/ITP-03-2020-0143
- [7] N. B. Ellison, C. Steinfield, and C. Lampe, "Connection strategies: Social capital implications of Facebook-enabled communication practices," New Media & Society, vol. 13, no. 6, pp. 873-892, 2011, doi: https://doi.org/10.1177/1461444810385389
- [8] B. C. Bouchillon, "Social networking for interpersonal Life: A competence-based approach to the rich get richer hypothesis," Social Science Computer Review, 2020, Art. no.0894439320909506, doi: https://doi.org/10.1177/0894439320909506
- [9] E. K. Ruppel, T. J. Burke, M. R. Cherney, and D. R. Dinsmore, "Social compensation and enhancement via mediated communication in the transition to college," Human Communication Research, vol. 44, no. 1, pp. 58-79, 2018, doi: https://doi.org/10.1111/jcc4.12091
- [10] S. H. Spence, C. Donovan, and M. Brechman-Toussaint, "Social skills, social outcomes, and cognitive features of childhood social phobia," Journal of Abnormal Psychology, vol. 108, no. 2, pp. 211-221, 1999, doi: https://doi.org/10.1037/0021-843X.108.2.211
- [11] C. Segrin and J. Flora, "Poor social skills are a vulnerability factor in the development of psychosocial problems," Human Communication Research, vol. 26, no. 3, pp. 489-514, 2000, doi: https://doi.org/10.1111/j.1468-2958.2000.tb00766.x
- [12] C. Segrin, M. McNelis, and P. Swiatkowski, "Social skills, social support, and psychological distress: A test of the social skills deficit vulnerability model," Human Communication Research, vol. 42, no. 1, pp. 122-137, 2016, doi: https://doi.org/10.1111/hcre.12070
- [13] J. J. Steffen and J. Redden, "Assessment of social competence in an evaluation-interaction analogue " Human Communication Research, vol. 4, no. 1, pp. 30-37, 1977, doi: https://doi.org/10.1111/j.1468-2958.1977.tb00593.x
- [14] B. R. Schlenker and M. R. Leary, "Social anxiety and self-presentation: A conceptualization model," Psychological Bulletin, vol. 92, no. 3, pp. 641-669, 1982, doi: https://doi.org/10.1037/0033-2909.92.3.641.
- [15] P. Bide and S. Dhage, "Comprehensive survey of user behaviour analysis on social networking sites," International Journal of Computer Applications in Technology, vol. 66, pp. 1-18, no. 1, 2021, doi: https://doi.org/10.1504/ijcat.2021.119601
- [16] J. S. Y. Lee and K. Jang, "Antecedents of impression management motivations on social network sites and their link to social anxiety," Media Psychology, vol. 22, no. 6, pp. 890-904, 2019, doi: https://doi.org/10.1080/15213269.2019.1580588
- [17] A. M. Shaw, K. R. Timpano, T. B. Tran, and J. Joormann, "Correlates of Facebook usage patterns: The relationship between passive Facebook use, social anxiety symptoms, and brooding," Computers in Human Behavior, vol. 48, pp. 575-580, 2015, doi: https://doi.org/10.1016/j.chb.2015.02.003
- [18] J. Morahan-Martin and P. Schumacher, "Loneliness and social uses of the Internet," Computers in Human Behavior, vol. 19, no. 6, pp. 659-671, 2003, doi: https://doi.org/10.1016/S0747-5632(03)00040-2
- [19] A. Reissmann, J. Hauser, E. Stollberg, I. Kaunzinger, and K. W. Lange, "The role of loneliness in emerging adults' everyday use of facebook An experience sampling approach," Computers in Human Behavior, vol. 88, pp. 47-60, 2018, doi: https://doi.org/https://doi.org/10.1016/j.chb.2018.06.011
- [20] P. M. Valkenburg and J. Peter, "Adolescents' identity experiments on the Internet: Consequences for social competence and self-concept unity," Communication Research, vol. 35, no. 2, pp. 208-231, 2008, doi: https://doi.org/10.1177/0093650207313164
- [21] E. K. Ruppel and T. J. Burke, "Complementary channel use and the role of social competence," Journal of Computer-Mediated Communication, vol. 20, no. 1, pp. 37-51, 2014, doi: https://doi.org/10.1111/jcc4.12091

- [22] S. E. Caplan, "A social skill account of problematic Internet use," Journal of Communication, vol. 55, no. 4, pp. 721-736, 2005, doi: https://doi.org/10.1111/j.1460-2466.2005.tb03019.x
- [23] K. Nagar, G. Singh, and R. Singh, "Mediating effect of WhatsApp addiction between social loneliness and preference for online social interaction: A cross-cultural study," Global Business Review, 2021, Art. no. 09721509211055603, doi: https://doi.org/10.1177/09721509211055603
- [24] M. Hood, P. A. Creed, and B. J. Mills, "Loneliness and online friendships in emerging adults," Personality and Individual Differences, vol. 133, pp. 96-102, 2018, doi: https://doi.org/10.1016/j.paid.2017.03.045
- [25] J. Kim and J.-E. R. Lee, "The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being," Cyberpsychology, Behavior, and Social Networking, vol. 14, no. 6, pp. 359-364, 2010, doi: https://doi.org/10.1089/cyber.2010.0374
- [26] C.-c. Yang and B. B. Brown, "Motives for using Facebook, patterns of Facebook activities, and late adolescents' social adjustment to college," Journal of Youth and Adolescence, vol. 42, no. 3, pp. 403-416, 2013, doi: https://doi.org/10.1007/s10964-012-9836-x
- [27] C. J. Billedo, P. Kerkhof, C. Finkenauer, and H. Ganzeboom, "Facebook and Face-to-Face: Examining the Short-and Long-Term Reciprocal Effects of Interactions, Perceived Social Support, and Depression among International Students," Journal of Computer-Mediated Communication, vol. 24, no. 2, pp. 73-89, 2019, doi: https://doi.org/10.1093/jcmc/zmy025
- [28] M. Indian and R. Grieve, "When Facebook is easier than face-to-face: Social support derived from Facebook in socially anxious individuals," Personality and Individual Differences, vol. 59, pp. 102-106, 2014, doi: https://doi.org/10.1016/j.paid.2013.11.016
- [29] K. Moshkovitz and T. Hayat, "The rich get richer: Extroverts' social capital on twitter," Technology in Society, vol. 65, 2021, Art. no. 101551, doi: https://doi.org/https://doi.org/10.1016/j.techsoc.2021.101551
- [30] K. Wang, Y. Lv, and Z. Zhang, "Relationship between extroversion and social use of social networking sites," Social Behavior and Personality, vol. 46, no. 10, pp. 1597-1609, 2018, doi: https://doi.org/10.2224/sbp.7210
- [31] T. Ryan and S. Xenos, "Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage," Computers in Human Behavior, vol. 27, no. 5, pp. 1658-1664, 2011, doi: https://doi.org/10.1016/j.chb.2011.02.004
- [32] J. Zywica and J. Danowski, "The faces of Facebookers: Investigating social enhancement and social compensation hypotheses; Predicting Facebook<sup>TM</sup> and offline popularity from sociability and self-esteem, and mapping the meanings of popularity with semantic networks," Journal of Computer-Mediated Communication, vol. 14, no. 1, pp. 1-34, 2008, doi: https://doi.org/10.1111/j.1083-6101.2008.01429.x
- [33] P. Sheldon, "The relationship between unwillingness-to-communicate and students' Facebook use," Journal of Media Psychology, vol. 20, no. 2, pp. 67-75, 2008, doi: https://doi.org/10.1027/1864-1105.20.2.67
- [34] B. McCord, T. L. Rodebaugh, and C. A. Levinson, "Facebook: Social uses and anxiety," Computers in Human Behavior, vol. 34, pp. 23-27, 2014, doi: https://doi.org/10.1016/j.chb.2014.01.020
- [35] W. H. Jones, S. A. Hobbs, and D. Hockenbury, "Loneliness and social skill deficits," Journal of Personality and Social Psychology, vol. 42, pp. 682-689, 1982.
- [36] M. R. Leary, "Social anxiousness: The construct and its measurement," Journal of Personality Assessment, vol. 47, no. 1, pp. 66-75, 1983, doi: https://doi.org/10.1207/s15327752jpa4701 8
- [37] L. R. Goldberg, "An alternative "description of personality": The Big-Five factor structure," Journal of Personality and Social Psychology, vol. 59, no. 6, pp. 1216-1229, 1990, doi: https://doi.org/10.1207/s15327752jpa4701 8
- [38] C. J. Soto and O. P. John, "Ten facet scales for the Big Five Inventory: Convergence with NEO PI-R facets, self-peer agreement, and discriminant validity," Journal of Research in Personality, vol. 43, no. 1, pp. 84-90, 2009, doi: https://doi.org/10.1016/j.jrp.2008.10.002
- [39] B. Jin, "How lonely people use and perceive Facebook," Computers in Human Behavior, vol. 29, no. 6, pp. 2463-2470, 2013, doi: https://doi.org/10.1016/j.chb.2013.05.034
- [40] A. Bandura, "Human agency in social cognitive theory," American Psychologist, vol. 44, pp. 1175-1184, 1989.
- [41] A. Bandura, "Social cognitive theory of mass communication," Media Psychology, vol. 3, no. 3, pp. 265-299, 2001, doi: https://doi.org/10.1207/S1532785XMEP0303\_03
- [42] A. Bandura, "Self-efficacy: toward a unifying theory of behavioral change," Psychological Review, vol. 84, no. 2, pp. 191-215, 1977, doi: https://doi.org/10.1037/0033-295X.84.2.191
- [43] A. Bandura, N. E. Adams, and J. Beyer, "Cognitive processes mediating behavioral change," Journal of Personality and Social Psychology, vol. 35, no, 3, p. 125-139, 1977, doi: https://doi.org/10.1037/0022-3514.35.3.125

- [44] A. Bandura, Social foundation of thought and action: A social-cognitive view. Prentice Hall, NJ: Englewood Cliffs, 1986.
- [45] M. Sunnafrank, "Predicted outcome value during initial interactions A reformulation of uncertainty reduction theory," Human Communication Research, vol. 13, no. 1, pp. 3-33, 1986, doi: https://doi.org/10.1111/j.1468-2958.1986.tb00092.x
- [46] M. Sunnafrank, "Predicted outcome value theory," in The International Encyclopedia of Interpersonal Communication, ed: John Wiley & Sons, Inc., 2015, doi: https://doi.org/10.1002/9781118540190.wbeic048
- [47] R. M. Baron and D. A. Kenny, "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," Journal of Personality and Social Psychology, vol. 51, no. 6, pp. 1173-1182, 1986, doi: https://doi.org/10.1037/0022-3514.51.6.1173
- [48] R. LaRose and M. S. Eastin, "A social cognitive theory of Internet uses and gratifications: Toward a new model of media attendance," Journal of Broadcasting & Electronic Media, vol. 48, no. 3, pp. 358-377, 2004, doi: https://doi.org/10.1207/s15506878jobem4803 2
- [49] M.-H. Hsu, T. L. Ju, C.-H. Yen, and C.-M. Chang, "Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations," International Journal of Human-Computer Studies, vol. 65, no. 2, pp. 153-169, 2007, doi: https://doi.org/10.1016/j.ijhcs.2006.09.003
- [50] K. J. Preacher and A. F. Hayes, "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models," Behavior Research Methods, vol. 40, no. 3, pp. 879-891, 2008, doi: https://doi.org/10.3758/BRM.40.3.879
- [51] S. Cohen, D. R. Sherrod, and M. S. Clark, "Social skills and the stress-protective role of social support," Journal of Personality and Social Psychology, vol. 50, no. 5, pp. 963-973, 1986, doi: https://doi.org/10.1037/0022-3514.50.5.963
- [52] C. R. Berger and R. J. Calabrese, "Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication," Human Communication Research, vol. 1, no. 2, pp. 99-112, 1975, https://doi.org/10.1111/j.1468-2958.1975.tb00258.x
- [53] D. G. Fischer and C. Fick, "Measuring social desirability: Short forms of the Marlowe-Crowne Social Desirability Scale," Educational and Psychological Measurement, vol. 53, no. 2, pp. 417-424, 1993, doi: https://doi.org/10.1177/0013164493053002011



© 2022 by the authors. Copyrights of all published papers are owned by the IJOC. They also follow the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.