# Social Media as a Personal Knowledge Management Tool for Knowledge Sharing and Intellectual Capital Acquisition

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#### Abstract

Enhancing intellectual capital is essential for organizations and individuals to seek competitive advantage in the competitive marketplace. This study used Facebook group usage data from Taiwan to explore if individuals could acquire new intellectual capital through knowledge-sharing behavior and benefit from social presence, and social capital. Structural equation modeling was employed to test a causal model comprising seven hypotheses formed by five research variables. The results showed that social presence significantly contributed to social capital and knowledgesharing behavior. Social capital significantly and positively affected knowledge-sharing behavior, intellectual capital exchange, and combination. Knowledge-sharing behavior positively affected intellectual capital exchange and combination, which, in turn, positively affected acquiring new intellectual capital. However, knowledge-sharing alone does not directly contribute to gaining new intellectual capital. These findings suggested that intellectual capital exchange and combination served as a critical bridge between knowledge-sharing activities and acquiring new intellectual capital, reaffirming the importance of structured knowledge integration processes. Enriching the social presence of user experience to encourage more interactive and engaging discussions through multimedia content and peer recognition to strengthen the sense of connection. The significant role of social capital in the collaborative learning process affirmed the value of fostering trust and reciprocity to enhance social capital.

**Key Phrases:** Social Presence, Social Capital, Knowledge-Sharing, Intellectual Capital Exchange and Combination, New Intellectual Acquisition, Social Media

#### Introduction

Acquiring new knowledge is essential for organizations and individuals to enhance competitive advantage. Today's business environment witnesses unprecedented uncertainty caused by rapid technological advancements and other related developments. New knowledge and insights are often required to resolve complex and dynamic issues confronting decision-makers. Knowledge workers in all sectors must respond to these challenges by updating and upgrading their knowledge stock to remain relevant in the marketplace. However, the amount of information and knowledge may be so overwhelming that learning alone is no longer sufficient. Plugging in with a community of learners with common professional interests to share knowledge is a desirable learning strategy. Knowledge management scholars have pointed out that sharing existing knowledge is as valuable as discovering new knowledge in learning (Ichiro & Nonaka, 2007). The Internet-enabled communication platforms and apps, collectively called social media, offer a convenient and affordable mechanism to facilitate knowledge-sharing among people engaged in collaborative learning.

Social media has received much attention regarding its tremendous impact on many vital aspects of human life. According to the Statista website, as of April 2024, 3,065 million active users of Facebook, among the numerous popular social media websites, have been reported worldwide (Statista, 2024). The high level of pervasiveness and other affordances of social media provide a convenient tool for realizing human needs for associating with the world. Most social network websites offer such socialization capabilities as connection, conversation, collaboration, content contribution, and community-building. These technology-enabled capabilities align well with the need for knowledge sharing. A bibliometric analysis conducted to review academic research in knowledge sharing and social media further confirmed the importance of investigating the role of social media in facilitating knowledge sharing (Yusof et al., 2024).

Our literature review in knowledge management and other related business research disciplines found that social media is a standard tool many companies encourage employees to share specialized knowledge with (e.g., Mladenovic & Krajina, 2020; Nahapiet & Ghoshal, 1998). However, most existing studies in the academic literature focused on the role of social media in online communal knowledge sharing (Majchrzak et al., 2013) or knowledge management strategies and initiatives (Gaál et al., 2015) in the context of organizational knowledge management. Are social media a powerful platform for fostering knowledge sharing among individual knowledge workers? Can users rely on social media as a practical learning vehicle to become more knowledgeable and effective in decision-making? Does empirical evidence support the benefit of social media use for increasing individual users' intellectual capital? Answering these questions can contribute to theory-building and aid decision-making in the related disciplines.

Personal knowledge management and sharing occur in social contexts. Social media users develop new social networks or join existing ones via the affordances of social media. Previous studies examined social media usage behaviors from this perspective. For example, Jih et al. (2017) investigated the effects of social presence and social capital on Facebook users' loyalty to the social networking website. Another study by Jih et al. (2022) examined the effects of enjoyment, social presence, perceived privacy, and self-disclosure on Facebook users' loyalty to the social networking website. Lin et al. (2012) conducted an exploratory study in Taiwan to examine the associations between office workers' Facebook usage behavior with user's backgrounds and work values. Bharati et al. (2015) found that social media use positively promoted organizational knowledge management. Existing research consistently confirmed the benefits of using social media to help an organization advance its stock of intellectual capital. There is a need for more studies to be conducted to validate and consolidate various research findings. In light of the significant roles of social presence and social capital in helping organizations leverage the benefits of social media for personal knowledge management, we conducted this empirical study to investigate if acquiring new intellectual capital could be facilitated through knowledge-sharing behaviors, social capital, and social presence among social media users.

In the following sections, we explain the research constructs and discuss their relationships to formulate our research hypotheses in light of the theoretical underpinning suggested by academic literature. We then presented the data collection and analysis methods. Subsequent sections document the data analysis results and summarize the hypothesis testing outcome, followed by a discussion of research findings and implications for theory-building and managerial practices. We point out the limitations and cautions readers must exercise in interpreting and applying the findings of this research. We also suggest the directions for future research.

#### **Social Presence**

Social presence refers to the degree to which individuals feel connected, engaged, and "present" with others in an online environment. The concept originated from a series of controlled experiments that Short et al. (1976) conducted to explain the sense of interpersonal connection and immediacy between individuals communicating via electronic connections. The analyses concluded that it is appropriate to view social presence as a subjective characteristic of a communication medium, and a high level of social presence was essential to facilitate effective online communications. Researchers in various academic fields have since further examined the concept of social presence to develop it into a more robust theory (Biocca et al., 2003). Most follow-up research appeared in computer-mediated communication (CMC) and online education. Research in information systems, marketing, and other fields also involves social presence as an independent or dependent variable, depending on the context. For example, Han et al. (2015) examined the social presence and gratification of social connection needs of Twitter users. Cyr et al. (2007) studied the role of social presence in establishing customer loyalty in e-service environments. Jih et al. (2017) examined the effect of social presence on Facebook users' perceived privacy risk, self-disclosure, and website loyalty. Widjaja (2024) investigated the role of social presence in consumer behaviors and found that social presence has significant and positive effects on impulsive buying and regret. Zeng et al. (2025) examined the impacts of augmented reality and social presence on customer experience and engagement behaviors. These studies confirmed the essential consideration of social presence in user experience design and management.

To build a broader social presence theory than initially proposed, Biocca et al. (2003) reviewed existing views and offered a set of criteria and scope conditions (e.g., transmission speed, signal representation, nature of interactions, and participating intelligent entities) to serve as the foundation for a more robust theory and measure of social presence. Research in this direction aims to enhance social presence in a networked world. A notable insight is that one should not simply view social presence as a stable property of the medium but as a dynamic aspect of individuals' subjective feelings interacting with the mediated others. Kehrwald (2010) echoed the subjectivity aspect of social presence in research about online learning. They contended that individuals dynamically reconstruct their sense of social presence when they engage with others within a mediated context of online education.

## **Social Capital**

Social capital is the networks, relationships, and ties facilitating collective action, resource sharing, and cooperation within a society or community. Meaningful knowledge-sharing requires trust, reciprocity, and other factors, such as communication skills and shared experience, among the participating parties of a social network (Lee & Han, 2024; Coleman, 1990). Social capital is the existing or potential value that the members of a social network derive from the community. Early research addressed personal relations and viewed social capital as the benefits embedded in personal social networks that nurtured trust and facilitated cooperation and collaboration (Jacobs, 1965). The definition broadened as the focus shifted to organizational and societal levels (Nahapjet & Ghoshal, 1998). Subsequent researches that have social capital as a research construct adopted the definition of social capital as the "sum of the actual and potential resources embedded within, available through, the derived from the network of relationships possessed by an individual or social unit" (Nahapjet & Ghoshal, 1998, p. 243). Adler & Kwon (2002) identified twenty definitions found in the academic literature in three categories: external, internal, and both. As individuals today use social media to exchange knowledge or share experiences within and across organizational boundaries, the scope distinction may not be as significant as it seems. Internal and external social capital share at least five characteristics: longevity, appropriateness, complementarity, and maintenance needs, which are hard to quantify (Adler & Kwon, 2002). Most benefits of social capital directly or indirectly arise from these five attributes.

Social capital is less tangible than human capital and much less than physical capital since "it exists in the relations among persons (Coleman, 1988, p. 100)". From a knowledge management point of view, social capital represents a subtle yet crucial form of a valuable resource in business activities. The source of this profound value is the obligations, expectations, and trustworthiness of the social structure that connects the actors (Coleman, 1988). In addition to directly contributing to desirable business activities such as knowledge-sharing, social capital may play a catalyst and a mediating role to enhance the positive effect of other organizational factors, such as learning organization culture, on knowledge-sharing performance (Lee & Han, 2024). Since organizational competitive advantage depends on how effectively management energizes knowledge-sharing to enhance innovation capabilities, investment in resources for improving the quality and the level of social capital becomes easier to justify.

Social capital is a multi-dimensional concept. Putnam (1995) discussed bonding and bridging social capital. Bonding is about close-knit relationships, like family or close friends, while bridging is more about connections with acquaintances or different groups. He also suggested linking social capital that connected people in different power hierarchies. Nahapiet & Ghoshal (1998) synthesized the various scholarly frameworks into three social capital dimensions: structural, cognitive, and relational. The structural dimension comprises the network structure and roles played by the nodes. The relational dimension entails trust, shared expectations, and obligations. Its quality also depends on the sense of membership and solidarity within the group. The cognitive dimension refers to common terminology and narratives that enable communication. However, implicit in nature, aligning values, beliefs, or objectives is also a significant element of social capital. These three dimensions interact to determine the functional outcomes of social capital.

Although most studies we found in the academic literature supported the positive role of social capital in promoting knowledge-sharing, some research had inconsistent findings. Chow & Chan (2008) surveyed managers in Kong Kong firms to examine the effects of three social capital factors (social network, social trust, and shared goals) on the volition to share knowledge. Social trust did not directly affect the attitude and subjective knowledge-sharing norm. This finding contended that social capital was a vital but subtle factor in human behavior. More research is necessary for a more systemic understanding.

Testing the following hypotheses can empirically validate the effect of social presence on social capital and how social capital, in turn, affected knowledge-sharing behavior and the exchange and combination of intellectual capital.

- H1: Social presence positively affects social capital
- H2: Social presence positively affects knowledge-sharing behavior
- H3: Social capital positively affects knowledge-sharing behavior
- H4: Social capital positively affects intellectual capital exchange and combination activities.

## **Intellectual Capital and Knowledge Sharing**

Intellectual capital, knowledge sharing, and social capital are intriguingly related. Social capital can enable knowledge sharing to grow knowledge stock and nurture intellectual capital at the organizational and individual levels. Intellectual capital as a crucial source of organizational advantage has received much attention in business academia (Grant, 1996; Nahapiet & Ghoshal, 1998). Intellectual capital lies at the core of all business operations to enable the proper functioning of other components, such as capital, machinery, and production processes. Although the term "intellectual capital" often appears in the organizational context and focuses on "the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community, or professional practice," as suggested by Nahapiet, J. & Ghoshal, S. (1998, P. 245), it also can apply to individual knowledge workers. Since an organization essentially is a network of individual knowledge workers, elevating the intellectual capital of the individuals also enhances the collective intellectual capital of the entire human network. Learning is not merely a solo act. Chatti (2012) proposed the concept of a "personal knowledge network" and knowledge ecology to emphasize this perspective of personal knowledge management. The network perspective complements a knowledge management tradition, which views knowledge management mainly as a thing or a process, by explicitly recognizing that individual learners participate in the constantly interacting process of knowledge exchange and validation activities along with other learners in the network. Our research echoed this knowledge ecological perspective and sought to empirically validate the links between social capital, knowledge sharing, and intellectual capital.

Explicit knowledge is more convenient to store, transmit, and share because it can exist in a format external to the knower. Tacit knowledge, however, only resides in the knower's head, requiring intentional efforts to discover. Meaningful knowledge exchange occurs through conscious interactions (conversations) between individual knowledge workers. Knowledge creation is a result of the synthesis of subjectivity and objectivity. Private knowledge owned by an individual integrates with the knowledge of others to form collective knowledge available to the group. This ongoing transformation process of private to collective (public) knowledge and vice versa is a strategic management issue in organizations that recognize the strategic value of knowledge (Nonaka & Toyama, 2007). The innovative practices driven by sound knowledge management measures help to ensure sustainable organizational competitive advantage. Personal knowledge management and organizational knowledge management are mutually reinforcing.

The mechanisms that facilitate knowledge exchange among individual learners must be an integral component of organizational efforts to increase the intellectual capital of the whole organization. These mechanisms typically comprise technological tools and organizational measures. While technological tools serve as the platform that enables convenient content creation and exchange, the organizational measures provide leadership and incentives to promote voluntary knowledge-capturing and exchange activities. Zuber-Sherritt (2005) proposed a comprehensive model of values and actions for personal knowledge management that outlined strategic and managerial actions for implementing systematic programs to advance personal knowledge management skills. Convenient and powerful technological tools are essential to getting the program into the virtuous cycle of continual improvement to keep up with relentless challenges in today's complex business environment. Individual knowledge workers use technologies to create and share knowledge, enhancing the organization's intellectual capital. Jefferson (2006) suggested that the bottom-up approach often worked better than the traditional top-down implementation in fostering knowledge-sharing.

The following three hypotheses allow for the testing of the causal relationships between knowledge-sharing behavior, intellectual capital exchange and combination, and acquiring new intellectual capital. Figure 1 graphically depicts how the five research variables relate to each other.

- H5: Knowledge-sharing behavior positively affects intellectual capital exchange and combination activities.
- H6: Knowledge-sharing behavior positively affects the acquisition of new intellectual capital.
- H7: Intellectual capital exchange and combination activities positively affect acquiring new intellectual capital.

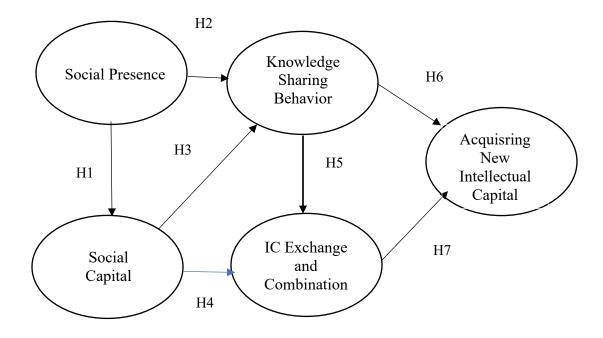


Figure 1: Conceptual Framework of the Research

#### **Data Collection and Analysis**

This study collected data on Facebook group usage in Taiwan to test the research hypotheses. As of April 2024, there were around 22.4 million Facebook users in Taiwan, accounting for around 93.6 percent of the island's population (Napoleoncat, 2025). A Facebook group provides a dedicated space within the platform to support online community members to share information and knowledge. We posted a 5-point Libert-type scale questionnaire, with questions derived from academic literature, on the public page of MY3Q to encourage Facebook users' participation. Among the 413 effective responses, 44.6% were male and 55.4% were female. Most respondents were young users, with 55.9% of the respondents within the age range of 19 to 29 and 29.5% for 18 or below. Most respondents were students, 71.9% in college and 19.6% in high school.

We evaluated the discriminant and convergent validity of the five research model dimensions - Social Presence, Social Capital, Knowledge-Sharing Behavior, Exchange and Combination of Intellectual Capital, and New Intellectual Capital. Convergent validity is how well a test item relates to other items that measure the same constructs. Discriminant or divergent validity measures how different constructs are measured differently. Both are types of construct validity that help determine if a test measures what it was designed to measure.

For convergent validity, our data's first-order confirmatory factor analysis showed acceptable results of the individual item's reliability (squared correlation coefficient, SMC, greater than 0.5). For each model dimension, the reliability measures were all greater than 0.7. The average variance extracted (AVE) values were all greater than 0.5, the minimum acceptable level (Fornell & Lacker, 1981). The values in Table 1 show that our measurement instrument passed the convergent validity test. The discriminant validity of the data collection instrument can be evaluated by comparing the average variance extracted from the two research variables with the squared correlation coefficient between these two variables (Komiak & Benbasat, 2006). The two variables' discriminant validity is acceptable when their squared correlation coefficient is not greater than the squared root of the individual average variance extracted. Table 2 shows that our measurement instrument has proper discriminant validity.

# **Model Testing**

Our research model consists of five constructs, i.e., social presence, social capital, knowledge-sharing behavior, exchange and combination of intellectual capital, and new intellectual capital (Fig. 1). We used AMOS 17.0, a structural equation modeling (SEM) and path analysis software, to evaluate each of the seven hypotheses formed with the five research variables. Each hypothesis represents a causal relationship between two variables, with the path coefficient indicating the strength of the relationship. The analysis examined seven cause-effect paths. Table 3 summarizes the standardized structural coefficients and the corresponding t-values of each path. It also shows five indices (GFI, AGFI, NFI, CFI, and RMSEA) associated with assessing how the proposed model fits the observed data. GFI (Goodness-of-Fit index) measures the proportion of variance and covariance explained by the model. The value ranges from 0 to 1, with values closer to 1 indicating a better fit. The GFI value of our model was 0.910, more significant than the cut-off suggested by the literature (Seyal et al., 2002; Scott, 1994; Bentler & Bonett, 1989; Hair, et al., 1992). The AGFI (Adjusted Goodness-of-fit index) is a modified version of GFI that adjusts for the number of estimated parameters in the model. It's 0.887, more significant than the cut-off point of 0.8. The NFI (Normed Fit index) compares the proposed to a baseline (independent) model. The suggested acceptable level is 0.90. The NFI value of our model was 0.924. The CFI (Comparative Fit index) is a revised version of NFI by adjusting for sample size and is less sensitive to small samples. Our CFI value was 0.955. The suggested cut-off point is 0.90. A CFI value greater than 0.95 is considered a good fit. The RMSEA (Root Mean Square Error of Approximation) value measures how well the model approximates the data, adjusting for model complexity. An RMSEA acceptable level is  $\leq 0.08$ . Our value was 0.056.

Table 1: Reliability and Convergent Validity of Research Constructs

Constructs	Measurement Items	Standardized Coefficients	Cronbach's α	SMC	Average Variance Extracted	Composite Reliability
Social Presence	I can freely express my emotions.	0.727		0.529	0.5602	0.8641
	I feel a pleasant atmosphere.	0.733	0.863	0.537		
	This website is user-friendly.	0.744		0.554		
	I feel a sense of closeness.	0.799		0.638		
	I feel keen here.	0.737		0.543		
Knowledge- Sharing Behavior	I post travel articles on this website.	0.875	0.890	0.766	0.6485	0.9010
	I repost travel information on this website.	0.833		0.694		
	I recommend this website to friends.	0.730		0.533		
	I respond to questions posted on this website.	0.800		0.640		
	I will continue to share my travel experience on this website.	0.781		0.610		
Social Capital	Structural dimension	0.849	0.872	0.721	0.702	0.8759
	Relational dimension	0.866		0.750		
	Cognitive dimension	0.797		0.635		
IC Exchange and Combination	Access	0.847	0.895	0.717	0.6777	0.8937
	Value Anticipation	0.797		0.635		
	Motivation	0.831		0.691		
	Combination Capability	0.817		0.667		

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	I can acquire new knowledge from this website	0.811		0.658		
	I can learn from others' experiences shared at this website	0.788		0.621		
New Intellectual Capital	I can develop new knowledge by combining others' opinions	0.778	0.894	0.605	0.6304	0.895
	This website can stimulate new thoughts and ideas	0.776		0.602		
	This website contributes to my new knowledge by combining and exchanging knowledge	0.816		0.666		

Table 2: Discriminant Validity of Research Constructs

Constructs	Social Presence	Knowledge- Sharing Behavior	Social Capital	Exchange and Combination of Intellectual Capital	New Intellectual Capital
Social Presence	0.748				
Knowledge- Sharing Behavior	0.357	0.805			
Social Capital	0.505	0.459	0.838		
Intellectual capital exchange and combination activities	0.438	0.454	0.698	0.823	
New Intellectual Capital	0.391	0.394	0.625	0.728	0.794

Note: Diagonal values are squared roots of average variances extracted. Others are correlation coefficient squared

Table 3: Summary of Model Testing Results

Causal Relationship Paths		Hypotheses	Hypothesi zed Results	Theoretical Model		
				Standardized Structural Coefficients (β)	t-values	
Social Presence -> So	Social Presence -> Social Capital			0.579	9.981***	
Social Presence -> Knowledge-Sharing Behavior		H2	+	0.172	2.642**	
Social Capital -> Knowledge-Sharing Behavior		Н3	+	0.385	5.873***	
Social Capital -> Exchange and Combination of Intellectual Capital		H4	+	0.742	13.641***	
Knowledge-Sharing -> Exchange and Combination of Intellectual Capital		Н5	+	0.122	2.708**	
Knowledge-Sharing -> Creation of New Intellectual Capital		Н6	+	0.048	1.111	
Exchange and Combination of Intellectual Capital -> Creation of New Intellectual Capital		Н7	+	0.799	14.202***	
Fit Indices	Criteria	Model Value		Model Fit	Reference	
GFI	> 0.8	0.910		Good	Seyal et al. (2002)	
AGFI > 0.8		0.887		Good	Scott (1994)	
NFI > 0.9		0.924		Good	Bentler & Bonett (1989)	
CFI	> 0.9	0.955		Good	Bentler & Bonett (1989)	
RMSEA	< 0.08	0.056		Good	Hair et al. (1998)	

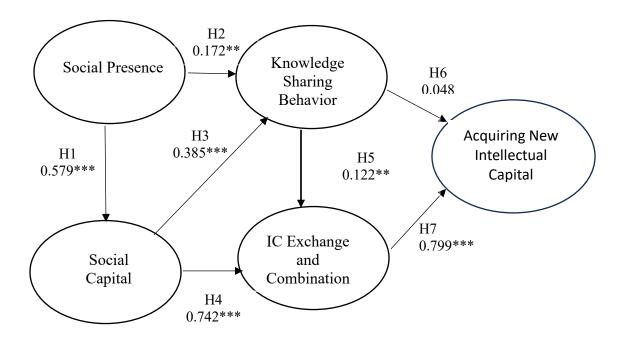
Significance level indicators: \*\* for p < 0.05; \*\*\* for p < 0.01

## **Results of Hypotheses Testing**

In structural equation modeling, three values help determine whether to accept or reject a hypothesis. The standardized structural coefficient (β) represents the strength and direction of the relationship between variables. The t-value determines whether a hypothesis should be accepted or rejected. The p-value indicates the significance of the standardized structural coefficient. The first hypothesis (H1), that social presence positively affects social capital, passed the significance test with the  $\beta$  value of 0.579, t-value of 9.981, and a p-value < 0.001, The second hypothesis (H2) postulates that social presence positively affects knowledge-sharing behavior. The β value was 0.172 with a t-value of 2.642 at the 0.05 significance level. The hypothesis was accepted, though not with a very high confidence level, indicating that these variables are composite constructs. In addition, the respondents might have different interpretations of the questions designed to measure those constructs. The third hypothesis (H3), social capital positively affects knowledge-sharing behavior, had a β value of 0.385 and t-value of 5.873 at the 0.01 significance level. The fourth hypothesis (H4), Social capital positively affects intellectual capital exchange and combination activities, had a β value of 0.742 and a t-value of 13.641 at 0.01 the significance level. Both H3 and H4 were accepted with strong confidence. The fifth hypothesis (H5), knowledge-sharing behavior positively affects intellectual capital exchange and combination activities, passed the significance test ( $\beta = 0.122$ , t = 2.708) at a 0.05 significance level. Our interpretation is similar to H2. The sixth hypothesis (H6), knowledge-sharing behavior positively affects acquiring new intellectual capital, was not accepted with a low value of standardized structural coefficient ( $\beta = 0.048$ , t = 1.111). The final hypothesis (H7), intellectual capital exchange and combination activities positively affect the acquisition of new intellectual capital, was accepted with a β value of 0.799 and a t value of 14.202 at a significance level of 0.001. The fact that H6 did not pass the significance test, but both H5 and H7 suggested that knowledge-sharing behavior affected the acquisition of new intellectual capital through intellectual capital exchange and combination activities. The strong causal effect of intellectual capital exchange and combination activities on new intellectual capital acquisition indicated the crucial role of two-way knowledge flow and integration in the learning process.

The results of hypothesis testing are summarized below.

- H1: Social presence positively affects social capital (Accepted)
- H2: Social presence positively affects knowledge-sharing behavior (Accepted)
- H3: Social capital positively affects knowledge-sharing behavior (Accepted)
- H4: Social capital positively affects intellectual intellectual capital exchange and combination activities. (Accepted)
- H5: Knowledge-sharing behavior positively affects intellectual capital exchange and combination activities. (Accepted)
- H6: Knowledge-sharing behavior positively affects acquiring new intellectual capital. (Not Accepted)
- H7: Intellectual capital exchange and combination activities positively affect acquiring new intellectual capital. (Accepted)



#### **Discussion and Conclusion**

Enhancing intellectual capital is critical as individuals and organizations in all sectors strive to improve competitive advantage. Sharing knowledge and experience among community members of shared interest is important in growing new intellectual capital. In order to further understand how Web 2.0 users interact to become "smarter," this study explored the causal relationships between social presence, social capital, and knowledge-sharing behaviors in the context of Taiwanese Facebook travel groups, focusing on intellectual capital exchange, combination, and acquisition. The findings confirm that social presence strengthens social capital and encourages knowledge-sharing behavior. Social capital, in turn, facilitates both knowledge-sharing and intellectual capital exchange and combination. Additionally, intellectual capital exchange and combination significantly contribute to acquiring new intellectual capital, whereas knowledge-sharing alone does not directly lead to new intellectual capital acquisition.

Regarding the research questions this study sought to answer: Are social media a powerful platform for fostering knowledge sharing among individual knowledge workers? Can users rely on social media as a practical learning vehicle to become more knowledgeable and effective in decision-making? Does empirical evidence support the benefit of social media use for increasing individual users' intellectual capital? This answer is Yes with a high confidence.

These findings provide several theoretical contributions to social capital theory, knowledge management, and intellectual capital development in the following ways:

- 1. Extending Social Capital Theory The study reinforces that online social presence enhances social capital, which is essential for fostering collaboration and knowledge-sharing in digital communities.
- 2. Refining Knowledge-Sharing Models While previous studies have emphasized the importance of knowledge-sharing in learning environments, this study highlights the need for knowledge transformation rather than mere sharing to generate new intellectual capital.
- 3. Advancing Intellectual Capital Theory The results suggest that intellectual capital exchange and combination serve as a critical bridge between knowledge-sharing activities and acquiring new intellectual capital, reaffirming the importance of structured knowledge integration processes.

For the professionals in community management, education, innovation, knowledge management, and the travel industry looking to enhance knowledge development via online groups, the findings suggest the following strategies:

1. Enhance Social Presence – Encourage more interactive and engaging discussions through multimedia content, live Q&A sessions, and peer recognition to strengthen the sense of connection.

- 2. Strengthen Social Capital Foster trust and reciprocity among group members by recognizing valuable contributors, implementing reward systems, and facilitating offline meet-ups or networking opportunities.
- 3. Move Beyond Simple Knowledge-Sharing To ensure that shared knowledge translates into intellectual capital, implement structured discussions, expert-led webinars, and collaborative projects, encouraging members to analyze, refine, and apply information.
- 4. Create Knowledge Integration Mechanisms Develop knowledge repositories, FAQs, and expert-curated content summaries to help users organize and synthesize shared information.

The less-than-perfect coefficients between the research variables suggest the existence of other significant variables. For example, further research can be conducted in different contexts to validate our findings. Different instrument designs may produce different relationship results. Therefore, readers should exercise caution in interpreting and applying the findings.

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