Research Article

Validating the Relationships Between LINE Group Use, User Satisfaction, Emotional Social Support, and Perceived Spiritual Awakening Guidance Based on the IS Success Model

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Abstract

The journey of spiritual awakening lacks standardized rules and is a lengthy process. Therefore, dynamic group interactions play a vital role in facilitating progress. LINE, a social app, offers a convenient, time- and location-independent means of communication. This study is motivated by the need to investigate the consequences of the use and user satisfaction of LINE groups on individuals' seeking spiritual awakenings based on the IS success model. Data from a total of one hundred and twenty-four valid respondents were collected and analyzed using PLS (Partial Least Square). The findings reveal that the utilization and satisfaction with LINE groups for spiritual awakenings significantly contribute to increased emotional social support and perceived spiritual awakening guidance. These results shed light on the role of social apps in the spiritual awakening process and offer valuable insights into how they can aid individuals on their spiritual journeys. The empirical results can also be referenced in the research on spiritual awakenings.

Keywords:

Spiritual awakenings • Social apps, Emotional social support • Perceived spiritual awakening guidance • Use • User satisfaction

Introduction

Spiritual awakenings represent a distinct dimension of spiritual life in our busy world. Viewing life from a more spiritual perspective can lead individuals onto a path of awakening (Regan, 2023; Richardson, 2018). Recently, numerous groups have emerged centered around spiritual awakenings, even though they constitute a relative minority. These group interactions may serve religious purposes or simply seek spiritual awakenings, embodying humanity's quest for a deeper spiritual dimension in life.

Research into spiritual awakenings explores their phenomenology, triggers, and outcomes across various fields, including psychology, spirituality and recovery, and neuroscience (Bell et al., 2023; Woollacott & Shumway-Cook, 2022). In general, spiritual awakenings are a lengthy process for ordinary people. Thus, spiritual awakenings can also be challenging and may lead to feelings of isolation due to concerns about misunderstanding (Woollacott & Shumway-Cook, 2022). Consequently, individuals' participation in groups for spiritual awakenings is vital. Interactions within these groups provide valuable insights into spiritual awakenings, offering information and even guiding one's spiritual awakening journey.

However, people still must contend with work and life's demands. This makes online group interactions a crucial mode of engagement in the spiritual awakening process. Social apps provide an effective solution for individuals to come together virtually and interact at any time and from different locations. Nevertheless, research among those seeking spiritual awakenings remains limited, and the use of social apps for their spiritual guidance interactions is also relatively constrained. This raises the critical issue of understanding the behavior of using social apps among those seeking spiritual awakenings.

In recent years, social apps have seen increased use for both interpersonal and group interactions. LINE, a popular social app in Taiwan, is commonly used. This study is therefore motivated to clarify the impact of LINE group usage among individuals seeking spiritual awakenings.

Emotional social support is a significant concern for people engaged in group interactions (Cutrona & Suhr, 1992; Ko et al., 2013). Additionally, spiritual awakening guidance represents the ultimate goal for these individuals seeking spiritual awakenings using social apps. Consequently, this study aims to illuminate the influence of LINE usage among people seeking spiritual awakenings on their emotional social support and perceived spiritual awakening guidance.

Literature Background

Spiritual Awakenings and Social Apps

Spiritual awakenings, often referred to as the process of discovering one's true self or enlightenment, signify a profound transformation. As Regan (2023) aptly puts it,

'Spiritual awakening begins the moment a person can step back and 'awaken' to their life with a new sense of being in this world.' It's an experience that involves 'a shift in consciousness in which a person moves from identifying with the physical body and mind to recognizing a deeper connection with the divine or the oneness of the universe' (Burgin, 2023; Corneille & Luke, 2021). Life, in essence, is a journey of expanding awareness, consciousness, and understanding (Korzaan, 2020).

Spiritual awakenings are a diverse and time-consuming process, often marked by various signs. Those who embark on this path seek guidance and confirmation of their chosen journey. Thus, mutual support and interaction among individuals become crucial. However, in the midst of life's demands, people often find it challenging to engage in face-to-face interactions. This is where social apps step in as a convenient alternative. Through messaging and sharing experiences, individuals can discuss the signs of their spiritual awakenings, such as synchronicity, thoughts, findings, and even progress. They can also share videos, links to websites, or pictures, fostering a sense of community and providing guidance on the road to spiritual awakenings.

In recent years, spiritual awakenings have gained prominence, with a minority of individuals actively engaging in the process. Yet, this journey is far from easy. The interactions among those who seek spiritual awakenings have become a significant factor in supporting and sustaining their progress. These interactions need to be dynamic, and they should transcend time and space constraints. Social apps have emerged as a crucial tool in this context, facilitating communication and connection. LINE, WhatsApp, and Instagram are examples of such platforms, with LINE being particularly popular in Taiwan. LINE offers free messaging and the ability to share images, allowing individuals to express themselves, share information, and connect with others. Therefore, this study aims to explore the relationship between LINE group usage among people seeking spiritual awakenings and their emotional social support and perceived spiritual awakening guidance.

The IS Success Model

The IS success model, as articulated by DeLone and McLean (1992; 2003), elucidates the impact of usage and user satisfaction of information systems on the consequences. This model proposes the significant influence of both usage and user satisfaction, which are motivated by various quality attributes of information systems, as well as the impact of usage on user satisfaction (DeLone & McLean, 1992; 2003).

The original IS success model, initially proposed by DeLone and McLean in 1992, comprises six dimensions: information quality, system quality, usage, user satisfaction, individual impact, and organizational impact. These dimensions collectively reflect the core aspects of the IS success model. In 2003, after a decade

of research, DeLone and McLean introduced an updated version of the original IS success model. This revision incorporates additional constructs, specifically service quality and usage intention, while merging the individual impact and organizational impact into a unified measure known as net benefits. This updated model serves as the foundation for understanding the relationships among usage, user satisfaction, and net benefits.

Social apps provide a convenient, time- and location-independent means of communication for the interactions among those who seek spiritual awakenings in supporting and sustaining their progress. To investigate the connection among LINE group usage, user satisfaction, users' emotional social support and perceived spiritual awakening guidance, this study relies on the framework provided by this model in understanding the relationships among usage, user satisfaction, and net benefits (DeLone & McLean, 2003).

Research Hypotheses

The Impact of Information Quality, System Quality, and Service Quality

When LINE group interaction is important to spiritual awakenings, the qualities of information, system functionality, and service provision become vital. Information quality measures the accuracy and adequacy of information transmitted through LINE groups (DeLone & McLean, 2003). System quality evaluates the efficiency and user-friendliness of the LINE platform (DeLone & McLean, 2003). Lastly, service quality assesses the competitiveness of LINE as a social app compared to other alternatives (DeLone & McLean, 2003). In the pursuit of spiritual awakenings, LINE group interactions should exhibit high standards of information quality, system quality, and service quality. These factors serve as motivators for both usage and user satisfaction. Consequently, to investigate the impact of these three quality dimensions on LINE group usage and user satisfaction in the context of spiritual awakenings, the following hypotheses are proposed:

H1: The information quality in the LINE group for spiritual awakenings influences users' use of the group.

H2: The information quality in the LINE group for spiritual awakenings affects users' satisfaction with the group.

H3: The system quality of the LINE group for spiritual awakenings impacts users' use of the group.

H4: The system quality of the LINE group for spiritual awakenings influences users' satisfaction with the group.

H5: The service quality of the LINE group for spiritual awakenings influences users' use of the group.

H6: The service quality of the LINE group for spiritual awakenings affects users' satisfaction with the group.

The Impact of Use and User Satisfaction

When users utilize LINE groups for interactions related to spiritual awakenings, they gain access to new and enriched information about the spiritual awakening process. This often leads to the experience of emotional social support from fellow members during the challenging and introspective journey of spiritual awakenings (Cutrona & Suhr, 1992; Ko et al., 2013). Additionally, these interactions may facilitate knowledge transfer, allowing individuals to acquire fresh insights and understanding about spiritual awakenings (e.g., Liyanage et al., 2009). Such knowledge transfer can significantly contribute to their spiritual awakening experience. In light of these considerations, this study seeks to elucidate the impact of LINE group usage and user satisfaction in the context of spiritual awakenings on emotional social support and perceived spiritual awakening guidance.

H7: The usage of the LINE group for spiritual awakenings influences emotional social support.

H8: The usage of the LINE group for spiritual awakenings influences perceived spiritual awakening guidance.

H9: User satisfaction with the LINE group for spiritual awakenings significantly affects emotional social support.

H10: User satisfaction with LINE the group for spiritual awakenings significantly affects perceived spiritual awakening guidance.

Moreover, in alignment with the IS success model proposed by DeLone and McLean (2003), it is understood that usage influences user satisfaction. Therefore, the following hypothesis is proposed.
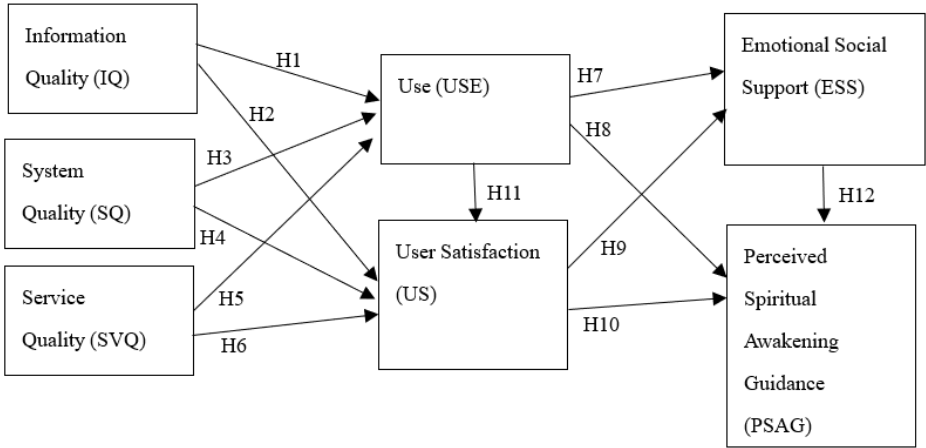
H11: The usage of the LINE group for spiritual awakenings significantly affects user satisfaction.

Lastly, emotional social support is posited to influence perceived spiritual awakening guidance. Emotional social support characterizes acceptance by individuals or groups in guiding spiritual awakening (Burgin, 2023; Cutrona & Suhr, 2008; Regan, 2023). The hypothesis is also proposed.

H12: Emotional social support affects perceived spiritual awakening guidance.

The conceptual model of the study is shown in Figure 1.

Figure 1
The Conceptual Model of the Study

Method

To clarify the link of users' LINE group use to their emotional social support and perceived spiritual awakening guidance, the survey method was adopted. The constructs include information quality, system quality, service quality, use of the LINE group for spiritual awakenings, user satisfaction, emotional social support and perceived spiritual awakening guidance. The operational definitions of the constructs are listed below.

Information quality. Information quality pertains to users' perception of the accuracy and sufficiency of information provided by the LINE group dedicated to spiritual awakenings within this study (Chen, 2010). This measurement is adapted from the studies of Wu and Wang (2006) and Chen (2010).

System quality. System quality reflects users' perception of the systematic and user-friendly aspects of the LINE group used for spiritual awakenings in this study (Chen, 2010). This measure draws from the research of Wu and Wang (2006) and Chen (2010).

Service quality. Service quality encompasses users' perception of the quality and competitiveness of the LINE group designed for spiritual awakenings within this study (Wu & Wang, 2006). This measurement is adapted from Tan and Chou (2008).

Use and user satisfaction. The use of the LINE group for spiritual awakenings signifies users' dependence on the LINE group within this study (DeLone & McLean, 1992; 2003). User satisfaction measures users' satisfaction with the LINE group for spiritual awakenings in the context of this study (DeLone & McLean, 1992; 2003). These measures are adapted from Chen (2010) and Wu and Wang (2006).

Emotional social support. Emotional social support characterizes the type of social support related to emotions in this study (Cutrona & Suhr, 2008).

Perceived spiritual awakening guidance. Perceived spiritual awakening guidance refers to the influence of LINE group interactions on guiding spiritual awakening within this study (Burgin, 2023; Corneille & Luke, 2021; Regan, 2023). The measure of the construct of perceived spiritual awakening guidance is also adapted from the study of Chen (2010). The question items include: 'the interactions of the LINE group guide my direction of spiritual awakenings', 'the interactions of the LINE group guide my development of spiritual awakenings', and 'the interactions of the LINE group guide my growth of spiritual awakenings'.

An online questionnaire was administered, with the questionnaire link shared across various LINE groups. Respondents were initially asked for their consent to participate. Subsequently, they were queried about their experience with using LINE for group interactions related to spiritual awakenings. Respondents were then directed to answer the questionnaire based on their experiences within the LINE groups dedicated to spiritual awakenings.

Over a period of more than five months, the study received responses from a total of one hundred and twenty-four valid participants. A summary of the respondents' characteristics is presented in Table 1.

Table 1
The description of the respondents

Items	Frequency	Percent	Items	Frequency	Percent
Gender			Marriage		
Male	32	74.19%	Singe	36	29.03%
Female	92	25.81%	Married	88	70.97%
Group Characteristic			Age		
Buddhism	100	80.65%	26-30	1	0.81%
Aheetha	2	1.61%	31-35	5	4.03%
Yiguantao	18	14.52%	36-40	10	8.06%
Taoism	4	3.22%	41-45	20	16.13%
Education			46-50	18	14.52%
High School	4	3.22%	51-55	29	23.39%
College	11	8.87%	56-60	17	13.71%
University	41	33.07%	Above 60	24	19.35%
Graduate School	68	54.84%	Total	124	100.00%

Given the limited sample size, the Partial Least Squares (PLS) approach was chosen. The ratio of the sample size to the number of paths exceeded the recommended threshold of ten, as outlined by Hair et al. (2017), thereby satisfying the requisite conditions for PLS analysis. Data analysis was conducted using SmartPLS 4.0, as recommended by Ringle et al. (2022).

Table 2 presents the values for Average Variance Extracted (AVEs), Composite Reliability (CRs), and Cronbach's α. All AVE values exceeded the threshold of 0.5, and all CR values surpassed 0.7. Additionally, all Cronbach's α values were above 0.7. In summary, these results demonstrate acceptable levels of construct convergent validity and reliability.

Table 2
Construct validity and reliability

Items	AVE	CR	Cronbach's α	Loadings	p values
Information Quality (IQ)					
IQ1				0.89	0.000
IQ2	0.83	0.95	0.93	0.92	0.000
IQ3				0.89	0.000
IQ4				0.94	0.000
System Quality (SQ)					
SQ1				0.87	0.000
SQ2	0.76	0.93	0.90	0.83	0.000
SQ3				0.91	0.000
SQ4				0.88	0.000
Service Quality (SVQ)					
SVQ1				0.95	0.000
SVQ2	0.85	0.95	0.91	0.93	0.000
SVQ3				0.89	0.000
Use (USE)					
USE1				0.90	0.000
USE2	0.84	0.96	0.94	0.92	0.000
USE3				0.94	0.000
USE4				0.92	0.000
User Satisfaction (US)					
US1				0.93	0.000
US2	0.88	0.96	0.93	0.92	0.000
US3				0.96	0.000
Emotional Social Support (ESS)					
ESS1				0.88	0.000
ESS2	0.81	0.95	0.92	0.89	0.000
ESS3				0.93	0.000
ESS4				0.91	0.000
Perceived Spiritual Awakening Guidance (PSAG)					
PSAG1				0.96	0.000
PSAG2	0.94	0.98	0.97	0.98	0.000
PSAG3				0.97	0.000

Table 3 provides insights into construct discriminant validity. The results indicated that only the correlations between information quality and system quality, and between system quality and service quality, exceeded the square roots of their respective Average Variance Extracted (AVE) values. Notably, information quality, system quality, and service quality were treated as independent variables in the study. Thus, the findings support the assertion of acceptable construct discriminant validity. Overall, the study exhibited acceptable measurement quality.

Table 3
Construct discriminant validity

| Construct	Informa-tion Quality	System Quality	Service Quality	Use	User Satis-faction	Emotional Social Support	Perceived Spiritual Awakening Guidance
IQ	0.91*						
SQ	0.93	0.87*					
SVQ	0.81	0.88	0.92*				
USE	0.65	0.73	0.74	0.92*			
US	0.80	0.81	0.83	0.81	0.94*		
SS	0.67	0.73	0.67	0.85	0.80	0.90*	
PSAG	0.68	0.70	0.74	0.75	0.81	0.68	0.97*

*: The squareroots of AVEs were shown on the main diagonal.

Results

Figure 2 displays the analysis path results, revealing several key findings. Notably, information quality was found to have a significant positive impact on user satisfaction but did not significantly affect usage. Service quality, on the other hand, significantly increased both usage and user satisfaction. However, system quality did not have a significant effect on either usage or user satisfaction. Consequently, the study supported hypotheses H2, H5, and H6, while hypotheses H1, H3, and H4 were rejected.

Regarding the influence of usage, it was observed that usage not only significantly increased user satisfaction but also had positive impacts on emotional social support and perceived spiritual awakening guidance. Concerning user satisfaction, it significantly increased emotional social support and significantly enhanced perceived spiritual awakening guidance. The results indicated that LINE group interactions played a crucial role in providing emotional social support and perceived spiritual awakening guidance to users seeking spiritual awakenings. However, emotional social support did not significantly affect perceived spiritual awakening guidance. Therefore, the study supported hypotheses H7, H8, H9, H10, and H11, but not H12.

Figure 2
The Analysis Results of the Study
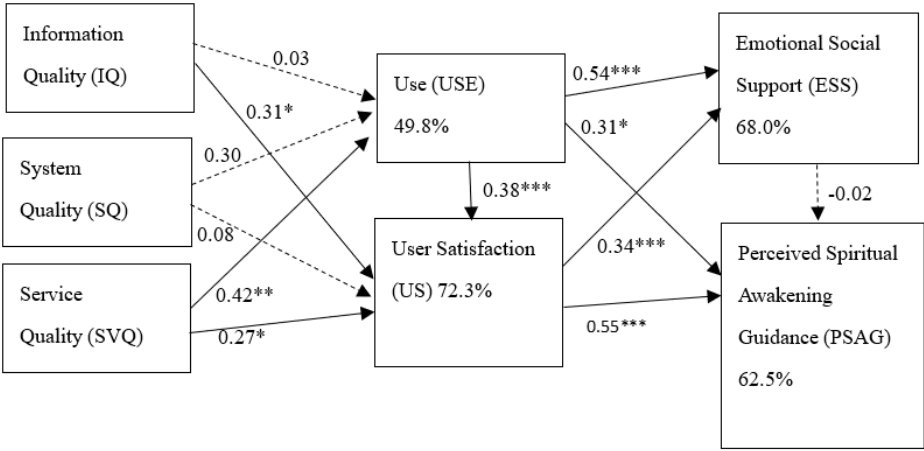
Discussion

Spiritual awakenings are a journey that lacks a standardized process, making interactions with others crucial to navigating their challenging and introspective path. Social apps offer a means for such interactions, enabling communication that is independent of time and space. As a result, this study aims to elucidate the connection between users' utilization of the LINE groups on social apps for spiritual awakenings and their experiences of emotional social support and perceived spiritual awakening guidance.

The study's findings clarify the significance of service quality in motivating both the use and user satisfaction of LINE groups dedicated to spiritual awakenings. Additionally, information quality was found to be a crucial factor in motivating user satisfaction. However, system quality did not exhibit a significant impact on either usage or user satisfaction. The ease of use did not motivate users' use behavior of LINE groups for spiritual awakening guidance; on the contrary, information quality and service quality were important motivators. This observation could potentially be attributed to the relatively straightforward nature of LINE's functions compared to other, more complex social apps. The design of LINE in system quality thus did not motivate users' use behavior for the spiritual awakening process. The design of LINE is suggested to provide more diverse functions to support users in their spiritual awakening.

The study's results also reflect the pivotal role of usage and user satisfaction in facilitating emotional social support and perceived spiritual awakening guidance. In the pursuit of spiritual awakenings, individuals seek to uncover the profound meaning and true essence of their inner selves. This journey is often shrouded in ambiguity,

lacking standardized guidelines. Effective interactions with others through LINE groups then provide a clearer path toward understanding this inner truth. They also reduce isolation and enhance emotional social support (Woollacott & Shumway-Cook, 2022).

In practical terms, the constraints of time and space necessitate the use of social apps for group interactions. LINE groups, in particular, play a significant role in this context, facilitating knowledge transfer during the quest to discover the path to one's inner self. Additionally, individuals gain crucial emotional social support throughout this transformative journey, enhancing their emotional stability as they seek and receive support from like-minded individuals.

Conclusion

Spiritual awakenings are an increasingly important and yet understudied topic. Additionally, the role of social apps in facilitating group communication has grown significantly, primarily due to constraints related to time and space. In response to these dynamics, this study aims to elucidate the relationship between the use and user satisfaction of LINE groups dedicated to spiritual awakenings and users' experiences of emotional social support and perceived spiritual awakening guidance.

Given the relatively small population of individuals actively seeking spiritual awakenings, data were collected from a sample of only one hundred and twenty-four valid respondents. Subsequently, SmartPLS 4.0 was employed for data analysis. The findings offer substantial support for the IS success model.

The results unequivocally demonstrate that both the use and user satisfaction of LINE groups play a pivotal role in enhancing users' emotional social support and perceived spiritual awakening guidance. These findings underscore the profound impact of usage and user satisfaction of social apps in alleviating the challenges associated with the often arduous journey of spiritual awakenings. Users not only gain invaluable emotional social support but also receive crucial guidance along this transformative path. These dual benefits stabilize users emotionally and reduce the uncertainties they may encounter during their spiritual awakening process.

These results enhance understanding of social apps' role in facilitating users' spiritual awakening process. Furthermore, they offer valuable insights that can aid individuals in advancing their spiritual awakening journey.

The results of the study facilitate educators and practitioners to use social apps for linking individuals seeking spiritual awakenings. This increases emotional social support, decreasing isolation in the spiritual awakening process (Woollacott & Shumway-Cook, 2022).

Limits and Suggestions

Given the constraints of limited resources, the sample size in this study was inevitably restricted. Consequently, it is advisable for future research endeavors to aim for larger sample sizes, particularly in diverse cultural contexts. Furthermore, future studies could benefit from including samples drawn from a broader range of religious and non-religious groups. Case studies are also suggested to deepen the understanding of how social apps support users' process of spiritual awakening.

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