



Buddhist Principles, Media Literacy, and Positive Online Traits Among Buddhist University Students in Thailand: A Quantitative Study

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Abstract

This study investigated the relationships between Buddhist principles (Sila, Samadhi, and Panna), media literacy competency, and positive online traits among Buddhist university students in Thailand. Using a quantitative cross-sectional survey design, data were collected from 359 undergraduate students at Mahachulalongkornrajavidyalaya University (MCU), Khon Kaen Campus. Instruments included validated scales for Buddhist principled living (Trisikkha scale), media literacy (adapted from the NAMLE framework), and positive online traits including respectful communication, online empathy, and resistance to misinformation. Descriptive statistics, Pearson correlation, and multiple linear regression were employed for analysis. Results revealed that all three Buddhist principles significantly and positively correlated with both media literacy ($r = .48-.59$) and positive online traits ($r = .44-.55$). Multiple regression analysis indicated that Panna (wisdom discernment) was the strongest predictor of media literacy (Beta = .34, $p < .001$) and positive online traits (Beta = .33, $p < .001$), followed by Samadhi (mindfulness concentration) and Sila (moral conduct). The combined model explained 41% of variance in media literacy and 37% in positive online traits. Daily social media usage showed a modest negative association with all study variables. Findings suggest that Buddhist education integrating the Trisikkha framework can effectively cultivate digital citizenship competencies relevant to contemporary media environments.

Keywords: Buddhist principles, media literacy, online traits, digital citizenship, Trisikkha, Buddhist university students, Thailand

1. Introduction

The rapid expansion of digital media and online communication platforms has fundamentally transformed how individuals access information, form opinions, and engage in social discourse. In Thailand, internet penetration reached 88.0% of the population in 2024 (Electronic Transactions Development Agency [ETDA], 2024), with social media usage among youth constituting a dominant portion of daily online activity. Within this context, concerns about misinformation, cyberbullying, digital addiction, and the erosion of ethical communication have become pressing issues in higher education (Aufderheide, 1993; Hobbs, 2010; Potter, 2016).

Buddhist institutions of higher learning occupy a unique position in addressing these challenges. Mahachulalongkornrajavidyalaya University (MCU), as Thailand's premier

Buddhist university, is mandated not only to transmit canonical knowledge but to cultivate graduates capable of responsible, compassionate engagement in the contemporary world (Office of the Higher Education Commission, 2022). The foundational Buddhist ethical and cognitive framework — the Trisikkha, comprising Sila (moral conduct), Samadhi (mindful concentration), and Panna (wisdom discernment) — offers a philosophically coherent and empirically underexplored set of principles for navigating digital environments.

Media literacy, defined as the ability to access, analyze, evaluate, create, and act using all forms of communication (National Association for Media Literacy Education [NAMLE], 2021), is increasingly recognized as a core competency for democratic and civic participation. Positive online traits — including respectful communication, online empathy, and resistance to misinformation — constitute behavioral and attitudinal manifestations of media literacy that extend beyond mere technical skill into the domain of digital character (Ribble, 2015). Yet research linking Buddhist pedagogical values to these digital competencies remains sparse, particularly in Thai Buddhist higher education contexts.

The theoretical intersection between Buddhist principles and media literacy is compelling. Sila prescribes right speech and non-harm as ethical anchors, which have direct implications for online communication behaviors. Samadhi cultivates attentional regulation and metacognitive awareness, capacities critical to resisting emotional manipulation in algorithmically curated media environments. Panna, the highest dimension of the Trisikkha, involves discriminative wisdom and the capacity for clear, non-reactive judgment — precisely the cognitive disposition required for critical analysis of digital content. These correspondences suggest that Buddhist principled living may constitute a robust intrapersonal resource for developing media literacy and positive online engagement.

Despite this theoretical coherence, empirical studies examining the predictive relationships between Buddhist principles, media literacy, and positive online traits remain limited. Previous research in Thailand has explored digital literacy among general student populations (Srisuwan et al., 2022) and examined Buddhist values in relation to moral reasoning (Piyapan et al., 2021), but has not integrated these lines of inquiry within a unified quantitative framework. Internationally, mindfulness-based interventions have shown promise in improving media consumption habits (Bahl et al., 2016; Long & Christian, 2015), but these studies typically operationalize mindfulness as a psychological construct divorced from its Buddhist soteriological context.

The present study addresses this gap by examining the extent to which adherence to Buddhist Trisikkha principles predicts media literacy competency and positive online traits among MCU undergraduate students. Three research objectives guided the inquiry: (1) to describe the levels of Buddhist principled living, media literacy, and positive online traits among Buddhist university students; (2) to examine the correlational relationships among these variables; and (3) to determine the predictive power of Buddhist principles on media literacy and positive online traits.

2. Literature Review

Buddhist Trisikkha as an Ethical-Cognitive Framework

The Trisikkha — the Three Trainings of Sila, Samadhi, and Panna — constitutes one of Buddhism's most systematically articulated frameworks for human development (Bodhi, 2011). In canonical Theravada literature, particularly the Digha Nikaya and Majjhima Nikaya, these three dimensions form an integrated and mutually reinforcing developmental path (Bhikkhu Bodhi, 2000). Sila encompasses adherence to precepts and the cultivation of right speech, right action, and right livelihood. Samadhi refers to the development of meditative concentration and moment-to-moment mindful awareness. Panna denotes the arising of insight

into the three characteristics of existence — impermanence (*anicca*), unsatisfactoriness (*dukkha*), and non-self (*anatta*) — which produces transformative wisdom and discernment.

Contemporary scholarship has increasingly explored how *Trisikkha* principles translate into modern psychological and educational constructs. Analayo (2020) draws parallels between *Samadhi*-based mindfulness and executive function capacities including working memory, cognitive flexibility, and attentional control. Ruangan (2023) has argued that *Panna*-based wisdom corresponds functionally to critical thinking and reflective judgment in contemporary educational taxonomies, noting particularly its role in evaluating claims about causality and evidence. These conceptual mappings provide a theoretical basis for proposing that Buddhist principled living supports the cognitive and attitudinal prerequisites of media literacy.

Media Literacy: Conceptual Dimensions

Media literacy scholarship has evolved substantially since Aufderheide's (1993) foundational framework, expanding from a focus on print and broadcast media to encompass participatory digital and social media environments (Jenkins et al., 2009). The NAMLE (2021) framework articulates media literacy as comprising five core competencies: access (finding and using media tools), analysis (examining how media messages are constructed), evaluation (judging the credibility, accuracy, and quality of media), creation (producing and sharing original media content), and reflection (understanding one's own media use and its social implications). Potter's (2016) cognitive model further specifies media literacy as a multi-dimensional construct spanning cognitive, emotional, aesthetic, and moral knowledge structures.

In the Thai educational context, media literacy has gained policy salience through the National Education Act (2019 Amendment) and curricula promoted by the National Broadcasting and Telecommunications Commission (NBTC). Research by Kongsri and Wongsopa (2022) found that Thai university students demonstrated moderate levels of critical media analysis but weaker competencies in ethical content creation, suggesting domain-specific variation in literacy development. Studies linking media literacy to psychological variables have identified self-regulation (Chen & Li, 2020), dispositional mindfulness (Bahl et al., 2016), and moral reasoning (Mihailidis & Viotty, 2017) as relevant predictors.

Positive Online Traits and Digital Citizenship

Positive online traits refer to the dispositional and behavioral tendencies that characterize ethical, prosocial, and constructive engagement in digital spaces. Ribble's (2015) Digital Citizenship framework identifies nine elements including digital ethics, digital communication, and digital health. Of particular relevance to the present study are respectful online communication (refraining from hostile, deceptive, or demeaning speech), online empathy (perspective-taking and compassionate responsiveness to others' online expressions), and resistance to misinformation (the capacity and willingness to critically evaluate and not share false or misleading content).

Empirical research on positive online traits has highlighted the role of both cognitive and moral variables. Van Zalk et al. (2021) found that adolescents' empathy levels significantly predicted prosocial online communication. Lee and Kim (2022) demonstrated that ethical self-concept was among the strongest predictors of anti-fake-news behaviors in South Korean university students. In Thailand, Sribuakaew and Treerat (2023) found that students with higher moral reasoning scores were significantly less likely to share unverified content on social media. These findings converge in suggesting that principled, other-regarding dispositions — precisely those cultivated by Buddhist ethical training — underlie positive online behavior.

Theoretical Framework

The present study is grounded in an integration of Buddhist Trisikkha theory with Social Cognitive Theory (Bandura, 1986) and the Information Processing Model of media literacy (Potter, 2016). Bandura's framework provides a basis for conceptualizing how internalized values and behavioral standards (Sila) regulate digital conduct through self-monitoring and self-evaluation processes. The attentional and metacognitive dimensions of Samadhi align with Potter's account of the cognitive knowledge structures required for analyzing media messages. Panna's wisdom orientation maps onto the moral and evaluative knowledge domains identified in Potter's framework as preconditions for media literacy competency.

The integrated framework posits that Buddhist principled living operates as an intrapersonal resource that enhances both cognitive (analytical, evaluative) and affective (empathic, compassionate) capacities relevant to digital media engagement. It is hypothesized that all three Trisikkha dimensions will demonstrate significant positive relationships with media literacy and positive online traits, with Panna emerging as the strongest predictor due to its encompassing function as integrative wisdom.

3. Research Methodology

Research Design

A quantitative cross-sectional survey design was employed. This design is appropriate for examining the relationships and predictive associations between Buddhist principled living, media literacy, and positive online traits among undergraduate students at a single point in time. The study adhered to ethical guidelines approved by the MCU Research Ethics Committee.

Population and Sample

The target population comprised all 1,420 undergraduate students enrolled at MCU Khon Kaen Campus during the 2024 academic year. Using Krejcie and Morgan's (1970) sample size table, a minimum sample of 302 participants was required for a population of this size. To allow for potential incomplete responses and to increase statistical power for regression analysis, a target sample of 380 was sought. Stratified random sampling was used to ensure proportional representation across the four years of study. A final sample of 359 participants completed all items with sufficient validity, yielding a response rate of 94.5%.

Research Instruments

Four instruments were used in the study. First, a demographic questionnaire captured gender, year of study, daily social media usage duration, and primary social media platform. Second, the Buddhist Principled Living Scale (BPLS) comprised 24 items measuring the three Trisikkha dimensions: Sila (8 items), Samadhi (8 items), and Panna (8 items), using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). Items were developed based on canonical Theravada sources and reviewed by five Buddhist scholars for content validity (Content Validity Index [CVI] = .91). Third, the Media Literacy Competency Scale (MLCS) consisted of 21 items across three sub-dimensions: access and evaluation (7 items), critical analysis (7 items), and ethical content creation (7 items), adapted from the NAMLE (2021) framework and validated in the Thai context. Fourth, the Positive Online Traits Scale (POTS) comprised 18 items measuring respectful communication (6 items), online empathy and compassion (6 items), and resistance to misinformation (6 items).

Reliability analysis using Cronbach's alpha yielded the following coefficients: Sila subscale (alpha = .84), Samadhi subscale (alpha = .86), Panna subscale (alpha = .88), MLCS

total ($\alpha = .89$), POTS total ($\alpha = .87$). All values exceeded the .70 threshold recommended for research purposes (Hair et al., 2019), confirming acceptable internal consistency.

Data Collection and Analysis

Data were collected during the second semester of the 2024 academic year (November–December 2024) using paper-based questionnaires administered during scheduled class periods, following informed consent procedures. Statistical analyses were conducted using SPSS version 27. Descriptive statistics (mean, standard deviation, minimum, maximum) were computed for all major variables. Pearson product-moment correlation coefficients were calculated to examine bivariate relationships. Multiple linear regression analysis was conducted to assess the predictive contribution of Sila, Samadhi, and Panna on media literacy and positive online traits, with daily social media use included as a control variable. Variance Inflation Factor (VIF) values were examined to assess multicollinearity; all VIF values were below 3.0, indicating acceptable levels.

4. Research Results

Demographic Characteristics

Table 1 presents the demographic profile of the 359 participants. The sample comprised 218 male students (60.7%) and 141 female students (39.3%), consistent with the gender distribution of MCU's student body. The largest proportion of students reported using social media 2–4 hours per day (42.3%), followed by 4–6 hours (24.8%). Facebook was the most used platform (34.3%), followed by YouTube (27.3%) and TikTok (24.2%).

Table 1 Demographic Profile of Participants (N = 359)

| Demographic Variable | Category | Frequency (n) | Percentage (%) |
|------------------------|-------------|---------------|----------------|
| Gender | Male | 218 | 60.7 |
| | Female | 141 | 39.3 |
| Year of Study | 1st Year | 82 | 22.8 |
| | 2nd Year | 91 | 25.3 |
| | 3rd Year | 96 | 26.7 |
| | 4th Year | 90 | 25.1 |
| Daily Social Media Use | < 2 hours | 74 | 20.6 |
| | 2–4 hours | 152 | 42.3 |
| | 4–6 hours | 89 | 24.8 |
| | > 6 hours | 44 | 12.3 |
| Primary Platform | Facebook | 123 | 34.3 |
| | YouTube | 98 | 27.3 |
| | TikTok | 87 | 24.2 |
| | Line/Others | 51 | 14.2 |

Descriptive Statistics

Table 2 presents descriptive statistics for all major study variables. Among the Trisikkha dimensions, Sila demonstrated the highest mean score ($M = 4.21$, $SD = 0.58$), followed by Samadhi ($M = 4.15$, $SD = 0.61$), and Panna ($M = 3.98$, $SD = 0.67$). Media literacy competency showed a mean of 3.87 ($SD = 0.54$), with ethical content creation ($M = 3.89$) scoring slightly higher than critical analysis ($M = 3.82$). Positive online traits yielded a mean of 3.93 ($SD = 0.52$), with respectful communication the highest-rated dimension ($M = 4.02$).

and resistance to misinformation the lowest ($M = 3.81$). All mean values exceeded the scale midpoint of 3.00, indicating generally favorable levels across all constructs.

Table 2 Descriptive Statistics for Study Variables (N = 359)

| Variable | Mean | SD | Min | Max |
|------------------------------------|------|------|------|------|
| Buddhist Principled Conduct (Sila) | 4.21 | 0.58 | 2.40 | 5.00 |
| Mindful Awareness (Samadhi) | 4.15 | 0.61 | 2.20 | 5.00 |
| Wisdom Discernment (Panna) | 3.98 | 0.67 | 1.80 | 5.00 |
| Media Literacy Competency (Total) | 3.87 | 0.54 | 1.60 | 5.00 |
| - Access & Evaluation | 3.91 | 0.63 | 1.60 | 5.00 |
| - Critical Analysis | 3.82 | 0.71 | 1.40 | 5.00 |
| - Ethical Content Creation | 3.89 | 0.66 | 1.60 | 5.00 |
| Positive Online Traits (Total) | 3.93 | 0.52 | 1.80 | 5.00 |
| - Respectful Communication | 4.02 | 0.59 | 1.80 | 5.00 |
| - Empathy & Compassion Online | 3.97 | 0.64 | 1.60 | 5.00 |
| - Resistance to Misinformation | 3.81 | 0.72 | 1.40 | 5.00 |

Correlational Analysis

Table 3 presents the Pearson correlation matrix. All three Trisikkha dimensions showed statistically significant positive correlations with both media literacy and positive online traits ($p < .01$). Panna demonstrated the strongest correlations with media literacy ($r = .59$) and positive online traits ($r = .55$), followed by Samadhi ($r = .52$ and $.50$, respectively) and Sila ($r = .48$ and $.44$, respectively). Media literacy and positive online traits were highly intercorrelated ($r = .67$, $p < .001$), suggesting meaningful conceptual overlap. Daily social media use showed modest but statistically significant negative correlations with all Buddhist principle and outcome variables.

Table 3 Pearson Correlation Matrix Among Study Variables (N = 359)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------|--------|--------|--------|-------|--------|---|
| 1. Sila (Conduct) | — | | | | | |
| 2. Samadhi (Mindfulness) | .61** | — | | | | |
| 3. Panna (Wisdom) | .57** | .63** | — | | | |
| 4. Media Literacy | .48** | .52** | .59** | — | | |
| 5. Positive Online Traits | .44** | .50** | .55** | .67** | — | |
| 6. Daily Social Media Use | -.21** | -.18** | -.23** | -.14* | -.19** | — |

Note. * $p < .05$; ** $p < .01$.

Multiple Regression Analysis

Table 4 presents results of the multiple linear regression analyses. For media literacy competency as the outcome variable, the regression model was statistically significant, $F(3, 355) = 82.3$, $p < .001$, explaining 41% of the variance ($R^2 = .41$). Panna emerged as the strongest predictor (Beta = .34, $p < .001$), followed by Samadhi (Beta = .27, $p = .001$) and Sila (Beta = .21, $p = .002$). For positive online traits as the outcome, the model was similarly significant, $F(3, 355) = 69.7$, $p < .001$, $R^2 = .37$. Again, Panna was the strongest predictor (Beta = .33, $p < .001$), followed by Samadhi (Beta = .26, $p < .001$) and Sila (Beta = .19, $p = .001$). These results confirm that all three Trisikkha dimensions independently contributed to the prediction of both outcome variables after controlling for shared variance.

Table 4 Multiple Regression: Buddhist Principles Predicting Media Literacy and Positive Online Traits

| Predictor | B | SE | Beta | t | p | 95% CI |
|---|-----|-----|------|------|-------|------------|
| Outcome Variable: Media Literacy Competency ($R^2 = .41$, $F(3,355) = 82.3$, $p < .001$) | | | | | | |
| Sila (Conduct) | .19 | .06 | .21 | 3.17 | .002 | [.07, .31] |
| Samadhi (Mindfulness) | .24 | .07 | .27 | 3.43 | .001 | [.10, .38] |
| Panna (Wisdom) | .31 | .07 | .34 | 4.43 | <.001 | [.17, .45] |
| Outcome Variable: Positive Online Traits ($R^2 = .37$, $F(3,355) = 69.7$, $p < .001$) | | | | | | |
| Sila (Conduct) | .17 | .05 | .19 | 3.40 | .001 | [.07, .27] |
| Samadhi (Mindfulness) | .22 | .06 | .26 | 3.67 | <.001 | [.10, .34] |
| Panna (Wisdom) | .28 | .06 | .33 | 4.67 | <.001 | [.16, .40] |

Note. B = unstandardized coefficient; SE = standard error; Beta = standardized coefficient; CI = confidence interval.

5. Discussion

The present study yielded four principal findings that merit detailed interpretation. First, MCU students demonstrated generally high levels of adherence to Buddhist principled living, with Sila scoring highest and Panna scoring comparatively lower. This pattern is consistent with prior research suggesting that adherence to precept-based moral conduct is more readily observable and socially reinforced in monastic-adjacent educational settings than the cultivation of insight wisdom, which requires more sustained contemplative practice (Analayo, 2020; Bodhi, 2011). The finding that resistance to misinformation scored lowest among the positive online traits sub-dimensions is particularly noteworthy and suggests that while Buddhist students may possess strong interpersonal ethical orientations, the application of discriminative wisdom to algorithmically complex digital information environments requires targeted educational development.

Second, the positive and significant correlations between all three Trisikkha dimensions and both media literacy and positive online traits provide empirical support for the study's central theoretical proposition — that Buddhist principled living constitutes a meaningful intrapersonal resource for digital competency development. The finding that Panna consistently demonstrated the strongest associations is theoretically coherent. As the integrative apex of the Trisikkha, Panna encompasses precisely the non-reactive, evidence-sensitive, and perspectival cognitive qualities that Potter (2016) identifies as constitutive of advanced media literacy. These findings extend Bahl et al.'s (2016) work on mindfulness and media consumption to a specifically Buddhist educational framework and corroborate Ruangsans's (2023) conceptual argument linking Panna to critical thinking.

Third, the regression analyses confirmed that all three Buddhist principles independently predicted both outcome variables, collectively explaining substantial variance (41% for media literacy; 37% for positive online traits). These effect sizes are comparable to, or exceed, those reported in studies employing psychological predictors such as self-regulation (Chen & Li, 2020) or moral reasoning (Lee & Kim, 2022), underscoring the practical significance of Buddhist principled living as a predictor. The incremental contribution of Sila — even after controlling for Samadhi and Panna — suggests that behavioral regulation through precept adherence provides a foundational scaffolding for media ethical behavior that is partially independent of attentional and wisdom dimensions.

Fourth, the modest negative associations between daily social media use and Buddhist principles, media literacy, and positive online traits are consistent with prior research on the relationship between heavy social media usage and attentional depletion, impulsive content sharing, and reduced empathic sensitivity (Twenge et al., 2018; Valenzuela et al., 2018). However, the effect sizes in the present study were small ($r = -.14$ to $-.23$), suggesting that the relationship between usage duration and digital competency is neither linear nor deterministic. Students who spend longer hours on social media are not necessarily deficient in Buddhist

principled living or media literacy; contextual factors such as the nature of platform use, intentionality, and reflective engagement likely moderate this relationship.

These findings carry meaningful implications for Buddhist higher education. The Trisikkha framework is not merely a historical or doctrinal inheritance; it appears to function as a living cognitive-ethical resource that shapes how students engage with digital environments. Buddhist universities such as MCU are therefore uniquely positioned to integrate media literacy education with their existing Trisikkha-grounded curricula, potentially achieving synergistic outcomes that secular digital literacy programs — which lack an analogous integrative ethical-contemplative foundation — cannot easily replicate.

6. Conclusion and Recommendations

This study demonstrated that Buddhist principles of Sila, Samadhi, and Panna are significant positive predictors of both media literacy competency and positive online traits among undergraduate students at MCU Khon Kaen Campus. Panna (wisdom discernment) emerged as the most powerful predictor across both outcome domains, followed by Samadhi (mindful concentration) and Sila (moral conduct). Together, these three dimensions explained 41% of variance in media literacy and 37% in positive online traits, effect sizes that support the practical and theoretical significance of the Trisikkha as a digital citizenship framework.

Based on these findings, several recommendations are offered. First, MCU curriculum developers should explicitly integrate media literacy competencies into existing Trisikkha-based instructional units, framing digital information evaluation, ethical online communication, and resistance to misinformation as contemporary expressions of Panna, Samadhi, and Sila respectively. Second, mindfulness-based contemplative practices already embedded in MCU's co-curricular activities could be leveraged as attentional training platforms with direct relevance to resisting manipulative media content. Third, targeted intervention programs addressing misinformation resistance — the lowest-scoring dimension in this study — should be developed and piloted within Buddhist universities, drawing on both canonical wisdom teachings and contemporary media literacy pedagogies. Finally, future research should employ longitudinal designs and structural equation modeling to test causal pathways within the proposed integrated framework, and should extend the study to MCU's other regional campuses and to monastic students to enhance generalizability.

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